



THE CITY OF WINNIPEG

TENDER

TENDER NO. 672-2022

CONSTRUCTION OF WTP SITE FLOOD PROTECTION UPGRADES

TABLE OF CONTENTS

PART A - BID SUBMISSION

- Form A: Bid/Proposal
- Form B: Prices
- Form G1: Bid Bond and Agreement to Bond

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Confidentiality	2
B6. Addenda	2
B7. Substitutes	3
B8. Bid Components	3
B9. Bid	4
B10. Prices	4
B11. Disclosure	5
B12. Conflict of Interest and Good Faith	5
B13. Qualification	6
B14. Bid Security	7
B15. Opening of Bids and Release of Information	8
B16. Irrevocable Bid	8
B17. Withdrawal of Bids	9
B18. Evaluation of Bids	9
B19. Award of Contract	9

PART C - GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Form of Contract Documents	1
D3. Scope of Work	1
D4. Definitions	1
D5. Contract Administrator	2
D6. Contractor's Supervisor	2
D7. Notices	2
D8. Accessible Customer Service Requirements	3
D9. Furnishing of Documents	3

Submissions

D10. Authority to Carry on Business	3
D11. Safe Work Plan	3
D12. Insurance	4
D13. Contract Security	4
D14. Subcontractor List	5
D15. Detailed Work Schedule	5

Schedule of Work

D16. Commencement	6
D17. Work By Others	7
D18. Working Days	7
D19. Critical Stages	8
D20. Substantial Performance	8
D21. Total Performance	8
D22. Liquidated Damages	9

D23. COVID-19 Schedule Delays	9
Control of Work	
D24. Job Meetings	10
D25. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	11
D26. The Workplace Safety and Health Act (Manitoba) – Qualifications	11
D27. Payment	11
Warranty	
D28. Warranty	12
Dispute Resolution	
D29. Dispute Resolution	12
Third Party Agreements	
D30. Funding and/or Contribution Agreement Obligations	13
Form H1: Performance Bond	16
Form H2: Labour and Material Payment Bond	18
Form J: Subcontractor List	20
PART E - SPECIFICATIONS	
General	
E1. Applicable Specifications and Drawings	1
General Requirements	
E2. Facility Access	2
E3. Office Facilities	2
E4. Environmental Protection	3
E5. Shop Drawings	6
E6. Site Security and Safety	7
E7. Operating Constraints for Work in Close Proximity to Aqueducts	8
E8. Scope of Works and Method of Payment	11
E9. Supply and Installation of Fabricated Sluice Gates	14
E10. Excavation, Shoring, and Backfill	16
E11. Chamber Piping and Appurtenances	17
E12. Submersible Pumps	19
E13. Cast-in-Place Concrete	24
E14. Concrete Accessories	26
E15. Reinforcing Steel	26
E16. Access Hatches	27
E17. Aluminum Fabrications	27
PART F - SECURITY CLEARANCE	
F1. Security Clearance	1
APPENDICES	
Appendix A Site Photos	
Appendix B Relevant Record Drawings	

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 CONSTRUCTION OF WTP SITE FLOOD PROTECTION UPGRADES

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, October 4, 2022.

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

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Contract Administrator or an authorized representative will be available at the Water Treatment Plant (WTP) at 9:00 AM on September 23, 2022 to provide Bidders access to the Site.

B3.2 The Bidder is advised to register for the Site investigation at least 48 hours in advance by contacting the Contract Administrator (identified in D5). Directions to the Site and Site access procedures will be provided to the Bidder upon registration for the Site investigation.

B3.3 Bidders registered for the Site investigation must provide the Contract Administrator with a Global Sanctions & Politically Exposed Persons (PEP) Check obtained not earlier than one (1) year prior to the Site investigation.

- (a) The Global Sanctions & PEP Check must be obtained from Sterling Talent Solutions. Bidders will need to setup a Sterling Talent Solutions account prior to requesting individual background checks. This process should be done 72 hours prior to requesting the first check. The account can be setup using the following link:

<https://forms.sterlingbackcheck.com/partners/platform2-en.php?&partner=winnipegcity>

Note that the check will take up to 48 hours to complete. Refer to F1.1.1 of PART F - Security Clearance for further information.

- (b) The results of the Global Sanctions & PEP Check must be received by the Contract Administrator directly through Sterling Talent Solutions. Bidders must set up an account with Sterling Talent Solutions directly under their company name and grant Sterling Talent Solutions permission to share the results of the Global Sanctions & PEP Check with the City.

B3.4 The Bidder is advised that, at minimum, hard hats, safety boots, safety vest and eye protection are mandatory for all Persons attending the Site.

B3.5 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B3.6 The Bidder/Proponent is responsible for inspecting the Site, the nature of the Work to be done and all conditions that might affect his/her Bid/Proposal or his/her performance of the Work, and shall assume all risk for conditions existing or arising in the course of the Work which have been or could have been determined through such inspection.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D5.1.

- B4.2 If the Bidder finds errors, discrepancies or omissions in the Tender, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Tender will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Tender will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.
- B4.6 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 Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
- (a) was known to the Bidder before receipt hereof; or
 - (b) becomes publicly known other than through the Bidder; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Tender to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Tender, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at www.merx.com.
- B6.4 The Bidder 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 Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D5.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Tender.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.
- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B18.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid/Proposal;

- (b) Form B: Prices;
- (c) Form G1: Bid Bond and Agreement to Bond.

B8.2 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.

B8.3 The Bid shall be submitted electronically through MERX at www.merx.com.

B8.3.1 Bids will **only** be accepted electronically through MERX.

B8.4 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B18.1(a).

B9. BID

B9.1 The Bidder shall complete Form A: Bid/Proposal, making all required entries.

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

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
- (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
- (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.

B9.3 In Paragraph 3 of Form A: Bid/Proposal, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B9.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B9.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

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

B10. PRICES

B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

- B10.1.1 Prices stated on Form B: Prices shall not include any costs which may be incurred by the Contractor with respect to any applicable funding agreement obligations as outlined in D30. Any such costs shall be determined in accordance with D30.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B10.5 The Bidder shall enter the Total Bid Price from Form B: Prices into the Total Bid Price field in MERX.
- B10.5.1 Bidders are advised that the calculation indicated in B18.4 will prevail over the Total Bid Price entered in MERX.

B11. DISCLOSURE

- B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B11.2 The Persons are:
- (a) N/A

B12. CONFLICT OF INTEREST AND GOOD FAITH

- B12.1 Further to C3.2, Bidders, by responding to this Tender, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B12.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:
- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;
- that could or would be seen to:
- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
- (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the Tender process or the Work; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Tender process) of strategic and/or material relevance to the Tender process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.

- B12.3** In connection with its Bid, each entity identified in B12.2 shall:
- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
 - (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Tender process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the 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.
- B12.4** Without limiting B12.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- B12.5** Without limiting B12.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
 - (b) require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B12.4 to avoid or mitigate a Conflict of Interest; and
 - (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B12.6** The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B13. QUALIFICATION

- B13.1** The Bidder 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; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B13.2** The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf>

- B13.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
 - (d) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B13.5 and D8)
 - (e) upon request of the Contract Administrator, provide the Security Clearances in accordance with PART F - Security Clearance.
- B13.4 Further to B13.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) in the form of:
 - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).
- B13.5 Further to B13.3(d), the Bidder acknowledges they and all Subcontractors have obtained training required by the Accessibility for Manitobans Act (AMA) available at <http://www.accessibilitymb.ca/training.html> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.
- B13.6 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B13.7 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B14. BID SECURITY

- B14.1 The Bidder shall include in its Bid Submission bid security in the form of a digital bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in Form G1: Bid Bond and Agreement to Bond, available on The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://www.winnipeg.ca/MatMgt/templates/files/eBidsecurity.pdf>.
- B14.2 Bid security shall be submitted in a digital format meeting the following criteria:
- (a) The version submitted by the Bidder must have valid digital signatures and seals;

- (b) The version submitted by the Bidder must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
- (c) The version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
- (d) The verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
- (e) The results of the verification must provide a clear, immediate and printable indication of pass or fail regarding B14.2(a).

B14.3 Bonds failing the verification process will not be considered to be valid and the bid shall be determined to be non-responsive in accordance with B18.1(a).

B14.4 Bonds passing the verification process will be treated as original and authentic.

B14.4.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B14.5 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly formed with the successful Bidder and the contract securities are furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B14.6 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Tender.

B15. OPENING OF BIDS AND RELEASE OF INFORMATION

B15.1 Bids will not be opened publicly.

B15.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated and pending review and verification of conformance with requirements) will be available on the MERX website at www.merx.com.

B15.3 After award of Contract, the name(s) of the successful Bidder(s) and their Contract amount(s) will be available on the MERX website at www.merx.com.

B15.4 The Bidder is advised that any information contained in any Bid 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).

B15.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder 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.

B16. IRREVOCABLE BID

B16.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B16.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly formed and the contract securities have been furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B17. WITHDRAWAL OF BIDS

B17.1 A Bidder may withdraw his/her Bid without penalty at any time prior to the Submission Deadline.

B18. EVALUATION OF BIDS

B18.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Tender, or acceptable deviation there from (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B18.2 Further to B18.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B18.3 Further to B18.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is qualified.

B18.4 Further to B18.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B18.4.1 Bidders are advised that the calculation indicated in B18.4 will prevail over the Total Bid Price entered in MERX.

B18.4.2 Further to B18.1(a), in the event that a unit price is not provided on Form B: Prices, the City may determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B18.5 Further to B18.1(c), the Total Bid Price shall be the total price as evaluated in B18.4, adjusted, if necessary, as follows:

- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price bid; or
- (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Price of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting Unit Prices in the order listed:
 - (i) Form B: Prices Item 5 (a) through Item 5 (g) in its entirety.

B18.6 Further to B18.1(c), the Award Authority may reject a Bid as being non-responsive if it exceeds the funds available as shown in D3.3.

B19. AWARD OF CONTRACT

B19.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B19.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be qualified, and the Bids are determined to be responsive.

B19.2.1 Without limiting the generality of B19.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;

- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid 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.

B19.3 If funding for the Work is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Bidders are advised that the terms of D30 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.

B19.4 Where an award of Contract is made by the City, the award shall be made to the qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B18.

B19.4.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2020-01-31) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Tender to a section, clause or subclause with the prefix “C” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. FORM OF CONTRACT DOCUMENTS

D2.1 Notwithstanding C4.1(c) and C4.4, the Contract Documents will be provided to the Contractor electronically and there will be no requirement for execution and return to the City by the Contractor. Accordingly, the provisions under C4.4(a) and C4.4(b) are no longer applicable.

D3. SCOPE OF WORK

D3.1 The Work to be done under the Contract shall consist of modifications to existing infrastructure and installation of new infrastructure at the WTP to improve flood protection at the WTP.

D3.2 The major components of the Work are as follows:

- (a) DBPS Storm Pit Weeping Tile valves and automation - Supply and installation of actuated butterfly valves in the DBPS storm sump pit including electrical, control, and associated piping modifications.
- (b) DBPS High Level Alarm -Supply and installation of station high level flood alarm, including electrical, and controls, and interface with existing alarm.
- (c) Modifications to plant LDS outfall and plant overflow (MH-1) including installation of new 1500 mm sluice gate, cast-in-place extension of structure to grade, new removable roof hatches, and new ladder.
- (d) Replacement of plant LDS outfall and plant overflow (MH-2) riser with 1200 mm diameter riser.
- (e) Clearwell weeping tile outlet modifications including:
 - (i) Abandonment of existing catch basin and culvert
 - (ii) Supply and installation of 375 mm LDS piping
 - (iii) Supply and installation of 100 mm force main piping
 - (iv) Supply and installation of check valve
 - (v) Supply and installation of new ditch inlet CB and lead
 - (vi) Regrading of existing ditch
 - (vii) Reseeding of existing ditch
- (f) Supply and installation of WTP underdrain sump pumps, electrical, controls, and high water alarms.
- (g) Site grading and gravel surfacing of Civil Maintenance Building parking area.

D3.3 The funds available for this Contract are \$1,000,000.00.

D4. DEFINITIONS

D4.1 When used in this Tender:

- (a) “**Acceptable**” or “**Acceptance**”, etc. shall be understood to mean acceptable to the Contract Administrator as conforming to the requirements of the Contract Documents;
- (b) “**Approval**” or “**Approved**”, etc. shall be understood to mean approved by Authorities having jurisdiction as conforming to Codes, Standards, By-Laws, etc.;

- (c) "**ANSI**" means American National Standards Institute;
- (d) "**ASTM**" means American Society for Testing and Materials;
- (e) "**AWWA**" means American Water Works Association;
- (f) "**CSA**" means Canadian Standards Association;
- (g) "**DBPS**" means Deacon Booster Pumping Station;
- (h) "**Instructions**" or "**As Instructed**" or "**Where Instructed**", etc. shall be understood to mean as instructed in writing by the Contract Administrator;
- (i) "**Manufacturer**" or "**Manufacturer's Representative**" means the Person(s) responsible for the manufacture and fabrication of equipment provided to the City for the completion of the Work;
- (j) "**ODW**" means Office of Drinking Water;
- (k) "**OIT**" means Operator Interface Terminals;
- (l) "**PLC**" means Programmable Logic Controller;
- (m) "**PPE**" means Personal Protective Equipment;
- (n) "**Provide**" shall be understood to include labour, materials, and services necessary to supply, install and make functional the items or Work referenced;
- (o) "**SCADA**" means Supervisory Control and Data Acquisition, and
- (p) "**WTP**" means Water Treatment Plant.

D5. CONTRACT ADMINISTRATOR

D5.1 The Contract Administrator is AECOM, represented by:

Mr. Mike Gaudreau, P.Eng.
Municipal Engineer

Telephone No. 204-928-8384
Email Address mike.gaudreau@aecom.com

D5.2 At the pre-construction meeting, Mr. Gaudreau will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D6. CONTRACTOR'S SUPERVISOR

D6.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D7. NOTICES

D7.1 Except as provided for in C22.4, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid/Proposal.

D7.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D7.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D5.

D7.3 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:

The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155

D8. ACCESSIBLE CUSTOMER SERVICE REQUIREMENTS

- D8.1 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.
- D8.1.1 The Contractor 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.
- D8.1.2 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.

D9. FURNISHING OF DOCUMENTS

- D9.1 Upon award of the Contract, the Contractor will be provided with 'issued for construction' Contract Documents electronically, including Drawings in PDF format only.

SUBMISSIONS

D10. AUTHORITY TO CARRY ON BUSINESS

- D10.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D11. SAFE WORK PLAN

- D11.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D11.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgmt/Safety/default.stm>.

D11.3 Notwithstanding B13.4 at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good Standing. A Contractor, who fails to provide a satisfactory COR Certificate or Annual Letter of good Standing, will not be permitted to continue to perform any Work.

D12. INSURANCE

D12.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability, broad form property damage cover and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.
- (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D12.2 Deductibles shall be borne by the Contractor.

D12.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, as applicable.

D12.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D13. CONTRACT SECURITY

D13.1 The Contractor shall provide and maintain the performance bond and the labour and material payment bond until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; and
- (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H2: Labour and Material Payment Bond), in an amount equal to fifty percent (50%) of the Contract Price.

D13.1.1 Where the contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the contract security must meet the following criteria:

- (a) the version submitted by the Contractor must have valid digital signatures and seals;
- (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
- (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.

- (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
 - (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D13.1(b).
- D13.1.2 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in its discretion, exercised reasonably, allows.
- D13.1.3 Digital bonds passing the verification process will be treated as original and authentic.
- D13.2 The Contractor shall provide the City Solicitor with the required performance and labour and material payment bonds within seven (7) Calendar Days of notification of the award of the Contract by way of an award letter and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D13.3 The Contractor shall, as soon as practicable after entering into a contract with a Subcontractor:
 - (a) give the Subcontractor written notice of the existence of the labour and material payment bond in D13.1(b); and
 - (b) post a notice of the bond and/or a copy of that bond in a conspicuous location at the Site of the Work.

D14. SUBCONTRACTOR LIST

- D14.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract Documents, if applicable.

D15. DETAILED WORK SCHEDULE

- D15.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least ten (10) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents if applicable.
- D15.2 The detailed work schedule shall consist of the following:
 - (a) a Gantt chart for the Work acceptable to the Contract Administrator.
- D15.3 Further to D15.2(a), the schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path.
 - (a) Mobilization to Site
 - (b) DBPS Storm Pit Weeping Tile Valves and Automation
 - (i) Mechanical
 - (ii) Electrical and Controls
 - (iii) Commissioning

- (c) DBPS High Level Flood Alarm
 - (i) Electrical and Controls
 - (ii) Commissioning
- (d) Plant LDS and Overflow Modifications (MH 1 and MH 2)
 - (i) Excavation and shoring
 - (ii) Demolition
 - (iii) Cast-in Place Concrete
 - (iv) Supply and Installation of Sluice Gate
 - (v) Supply and Installation of hatches
 - (vi) Commissioning
 - (vii) Restoration
 - (viii) Replacement of MH 2 Riser
- (e) Clearwell Weeping Tile Outlet Modifications
 - (i) Supply and Installation of LDS
 - (ii) Supply and Installation of CB and CB Lead
 - (iii) Supply and Installation of force main
 - (iv) Regrading of Ditches
 - (v) Restoration
- (f) WTP Underdrain Pump System
 - (i) Mechanical
 - (ii) Electrical and Controls
 - (iii) Installation of force main and Connection to the 2100 LDS
 - (iv) Commissioning
- (g) Civil Maintenance Building Grading
- (h) Substantial Performance
- (i) Total Performance.

D15.4 Further to D15.2(a), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

SCHEDULE OF WORK

D16. COMMENCEMENT

- D16.1 The Contractor shall not commence any Work until he/she is in receipt of an award letter from the Award Authority authorizing the commencement of the Work.
- D16.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D10;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D11;
 - (iv) evidence of the insurance specified in D12;
 - (v) the contract security specified in D13;
 - (vi) the Subcontractor list specified in D14;
 - (vii) the Detailed Work Schedule specified in D15;
 - (viii) the direct deposit application form specified in D27, and
 - (ix) security clearances as identified in E6.1 and PART F - Security Clearance.

- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D16.3 The Contractor shall commence the Work on the Site within fourteen (14) Working Days of receipt of the award letter.

D16.4 The City intends to award this Contract by November 4, 2022

D16.4.1 If the actual date of award is later than the intended date, the dates specified for Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D17. WORK BY OTHERS

D17.1 Further to C6.25, the Contractor's attention is directed to the fact that other Contractors, the personnel of Utilities and the staff of the City may be working within the project limit, approach roadway, adjacent roadways or right-of-way. The activities of these agencies may coincide with the Contractors execution of Work and it will be the Contractor's responsibility to cooperate to the fullest extent with other personnel working in the area, and such cooperation is an obligation of the Contractor under the terms of Contract.

D17.2 Work by others on or near the Site will include but not necessarily be limited to:

- (a) 640-2022 Construction of Deacon Booster Pumping Station Suction Header Split.
- (b) 265-2022 DBPS Supply of Large Diameter Butterfly Valve and Inspection of Valve Installation.

D17.2.1 Further to D17.1 the Contractor shall cooperate and coordinate all activities with all parties performing required Work by Others identified in D17.1 and accommodate the necessary area on Site required for the Work by Others to complete the Work

D17.3 No additional costs associated with demobilization and remobilization resulting from suspension of contract time will be considered.

D18. WORKING DAYS

D18.1 Further to C1.1(tt), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.

D18.2 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.

D18.3 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.

D18.4 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

D18.5 Notwithstanding C1.1(tt), if the Contractor chooses to work on a Saturday, Sunday, or statutory or civic holiday and is able to complete at least seven (7) hours of work during the period between 7:00 a.m. Winnipeg time or the time the Contractor's operations normally commence, whichever is earlier, and 7:00 p.m. Winnipeg time the day shall be considered a Working Day.

D18.6 Planned Breaks in Construction

- (a) The Contractor will be permitted two (2) planned suspensions of on-site construction to facilitate procurement of materials and seasonal weather breaks where contract work is not completed. Working Days will not be incurred during these periods.
- (b) All planned breaks in on-site construction activity must be clearly identified in the Contractor's detailed construction schedule and notice must be provided in writing a minimum of two (2) Business Days prior to the planned suspension of work. Failure of the Contractor to provide adequate notice, in the opinion of the Contract Administrator, may result in Working Days being incurred.
- (c) During these periods, the Site must be made secure, roadways completely operational, and all existing facilities and work in progress be protected from weather or other potentially harmful effects. All site activities other than general security must cease.
- (d) Upon recommencement of site activities after long breaks (greater than 1 month), the Contractor shall provide an updated schedule and notification to the Contract Administrator a minimum of five (5) Business Days prior to recommencement of work.
- (e) No changes to the Contract completion dates resulting from suspension of contract time as described herein will be considered

D19. CRITICAL STAGES

D19.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) Critical Stage – Work within the DBPS must be completed by January 27, 2023.
- (b) Critical Stage -Clearwell Weeping Tile Outlet Modifications as defined in D3.2(e) Items (i) to (v) by March 1, 2023

D20. SUBSTANTIAL PERFORMANCE

D20.1 The Contractor shall achieve Substantial Performance within fifty (50) Working Days of the commencement of the Work as specified in D16.

D20.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D20.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D21. TOTAL PERFORMANCE

D21.1 The Contractor shall achieve Total Performance by June 15, 2023.

D21.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D21.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D22. LIQUIDATED DAMAGES

- D22.1 If the Contractor fails to achieve Critical Stages, Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
- (a) Critical Stage – Work within the DBPS – Two Thousand Dollars (\$2,000).
 - (b) Critical Stage - Clearwell Weeping Tile Outlet Modifications – Two Thousand Dollars (\$2,000)
 - (c) Substantial Performance – Two Thousand Dollars (\$2000).
 - (d) Total Performance – Five Hundred Dollars (\$500).
- D22.2 The amounts specified for liquidated damages in D22.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve, Critical Stages, Substantial Performance or Total Performance by the days fixed herein for same.
- D22.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D23. COVID-19 SCHEDULE DELAYS

- D23.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Work shall be performed by the Contractor 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 Contract Administrator.
- D23.2 If the Contractor is delayed in the performance of the Work by reason of the COVID-19 pandemic, the Work schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D23.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether COVID-19 will affect the start date. The Contractor shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of Material or work by others.
- D23.4 For any delay related to COVID-19 and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D23.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D23.5 The Work schedule, including the durations identified in D19 to D21 where applicable, will be adjusted to reflect delays accepted by the Contract Administrator. No additional payment will be made for adjustment of schedules except where seasonal work, not previously identified in the Contract, is carried over to the following construction season.
- D23.6 Where Work not previously identified is being carried over solely as a result of delays related to COVID-19, as confirmed by the Contract Administrator, the cost of temporary works to maintain the Work in a safe manner until Work recommences, will be considered by the Contract Administrator. Where the Work is carried over only partially due to COVID-19, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.
- D23.7 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

CONTROL OF WORK

D24. JOB MEETINGS

- D24.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D24.2 Within fifteen (15) Business days after award of the Construction Contract, the Contract Administrator will request a preconstruction meeting to discuss and resolve administrative procedures and responsibilities.
- D24.2.1 Location of the preconstruction meeting to be selected by the Contract Administrator.
- D24.2.2 Preconstruction meetings to be attended by:
- (a) Contract Administrator's representatives, including field inspectors;
 - (b) Contractor's representatives;
 - (c) major Subcontractors' representatives; and
 - (d) City's representatives.
- D24.2.3 Preconstruction meeting agenda to include:
- (a) Appointment of official representative of participants in the Work;
 - (b) Schedule of Work;
 - (c) Schedule of submission of Shop Drawings;
 - (d) Delivery schedule of specified equipment or parts;
 - (e) Site security;
 - (f) Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements;
 - (g) Record drawings;
 - (h) Operating and Maintenance manuals;
 - (i) Take-over procedures, acceptance;
 - (j) Monthly progress claims, administrative procedures, photographs, hold backs;
 - (k) Appointment of inspection and testing agencies or firms; and
 - (l) Insurances, transcript of policies.
- D24.2.4 The Contract Administrator will record meeting minutes for the preconstruction meeting and distribute to team members.
- D24.3 Weekly job meetings will be held at the Site.
- D24.3.1 The progress of the Work will be reviewed at each regular weekly job meeting.
- D24.3.2 Weekly job meetings to be attended by:
- (a) Contract Administrator's representatives, including field inspectors;
 - (b) Contractor's representatives;

- (c) major Subcontractors' representatives; and
 - (d) City's representatives.
- D24.3.3 Representatives of the Contractor, Subcontractor, and Suppliers attending the meetings will be qualified and authorized to act on behalf of the party each represents.
- D24.3.4 Weekly job meeting agenda to include:
 - (a) Review, approval of minutes of previous meeting;
 - (b) Review of Work progress since previous meeting;
 - (c) Field observations, problems, conflicts;
 - (d) Problems which impede construction schedule;
 - (e) Review of off-site fabrication delivery schedules;
 - (f) Corrective measures and procedures to regain projected schedule;
 - (g) Revision to construction schedule;
 - (h) Updated Project Schedule and expected progress during succeeding work period;
 - (i) Review submittal schedules;
 - (j) Maintenance of quality standards;
 - (k) Review proposed changes for effect on construction schedule and on completion date; and
 - (l) Other business.
- D24.3.5 The Contract Administrator will record meeting minutes for the weekly job meetings and distribute to team members.
- D24.4 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.
- D25. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**
- D25.1 Further to C6.26, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).
- D26. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS**
- D26.1 Further to B13.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B13.4.
- D27. PAYMENT**
- D27.1 Further to C12, the City shall make payments to the Contractor by direct deposit to the Contractor's banking institution, and by no other means. Payments will not be made until the Contractor has made satisfactory direct deposit arrangements with the City. Direct deposit application forms are at https://winnipeg.ca/finance/files/Direct_Deposit_Form.pdf.

WARRANTY

D28. WARRANTY

D28.1 Warranty is as stated in C13.

DISPUTE RESOLUTION

D29. DISPUTE RESOLUTION

D29.1 If the Contractor disagrees with any opinion, determination, or decision of the Contract Administrator, the Contractor shall act in accordance with the Contract Administrator's opinion, determination, or decision unless and until same is modified by the process followed by the parties pursuant to D29.

D29.2 The entire text of C21.4 is deleted, and amended to read: "Intentionally Deleted"

D29.3 The entire text of C21.5 is deleted, and amended to read:

- (a) If Legal Services has determined that the Disputed Matter may proceed in the Appeal Process, the Contractor must, within ten (10) Business Days of the date of the Legal Services Response Letter, submit his 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 Contract Administrator. The Contractor may not raise any other disputes other than the Disputed Matter in his Appeal Form.

D29.4 Further to C21, prior to the Contract Administrator's issuance of a Final Determination, the following informal dispute resolution process shall be followed where the Contractor disagrees with any opinion, determination, or decision of the Contract Administrator ("Dispute"):

- (a) In the event of a Dispute, attempts shall be made by the Contract Administrator and the Contractor's equivalent representative to resolve Disputes within the normal course of project dealings between the Contract Administrator and the Contractor's equivalent representative.
- (b) Disputes which in the reasonable opinion of the Contract Administrator or the Contractor'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 Contractor representative levels:
 - (i) The Contract Administrator;
 - (ii) Supervisory level between the Contract Administrator and applicable Department Head;
 - (iii) Department Head.

D29.4.1 Names and positions of Contractor representatives equivalent to the above City position levels shall be determined by the Contractor and communicated to the City at the pre-commencement or kick off meeting.

D29.4.2 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.

D29.4.3 Both the City and the Contractor 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.

D29.4.1 If the Dispute is not resolved to the City and Contractor's mutual satisfaction after discussions have occurred at the final escalated level as described above, or the time period set out in D29.4.3, as extended if applicable, has elapsed, the 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 C21.

THIRD PARTY AGREEMENTS

D30. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D30.1 In the event that funding for the Work of the Contract is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, the following terms and conditions shall apply, as required by the applicable funding agreements.
- D30.2 Further to D30.1, in the event that the obligations in D30 apply, actual costs legitimately incurred by the Contractor as a direct result of these obligations ("Funding Costs") shall be determined by the actual cost to the Contractor and not by the valuation method(s) outlined in C7.4. In all other respects Funding Costs will be processed in accordance with Changes in Work under C7.
- D30.3 For the purposes of D30:
- (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.
- D30.4 Modified Insurance Requirements
- D30.4.1 If not already required under the insurance requirements identified in D12, the Contractor will be required to provide wrap-up liability insurance in an amount of no less than two million dollars (\$2,000,000) inclusive per occurrence. Such policy will be written in the joint names of the City, Contractor, Consultants and all sub-contractors and sub-consultants and include twelve (12) months completed operations. The Government of Manitoba and its Ministers, officers, employees, and agents shall be added as additional insureds.
- D30.4.2 If not already required under the insurance requirements identified in D12, the Contractor will be required to provide builders' risk insurance (including boiler and machinery insurance, as applicable) providing all risks coverage at full replacement cost, or such lower level of insurance that the City may identify on a case-by-case basis, such as an installation floater.
- D30.4.3 The Contractor shall obtain and maintain third party liability insurance with minimum coverage of two million dollars (\$2,000,000.00) per occurrence on all licensed vehicles operated at the Site. In the event that this requirement conflicts with another licensed vehicle insurance requirement in this Contract, then the requirement that provides the higher level of insurance shall apply.
- D30.4.4 Further to D12.3, insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Work as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.
- D30.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D30.5 Indemnification By Contractor
- D30.5.1 In addition to the indemnity obligations outlined in C17 of the General Conditions for Construction, the Contractor 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 Contractor or arising from this Contract or the Work, or from the goods or services provided or required to be provided by the Contractor, 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.

- D30.5.2 The Contractor 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.

D30.6 Records Retention and Audits

D30.6.1 The Contractor shall maintain and preserve accurate and complete records in respect of this Contract and the Work, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Work 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.

D30.6.2 In addition to the record keeping and inspection obligations outlined in C6 of the General Conditions for Construction, the Contractor 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 D30.6.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.

D30.7 Other Obligations

D30.7.1 The Contractor 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.

D30.7.2 If the Lobbyists Registration Act (Manitoba) applies to the Contractor, the Contractor 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.

D30.7.3 The Contractor 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 Work.

D30.7.4 The Contractor shall properly account for the Work 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.

D30.7.5 The Contractor 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.

D30.7.6

The Contractor 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 Contractor or of a Subcontractor, and that no such member is entitled to any benefits arising from this Contract or from a contract with the Contractor or a Subcontractor concerning the Work.

FORM H1: PERFORMANCE BOND
(See D13)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$_____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

TENDER NO. 672-2022

CONSTRUCTION OF WTP SITE FLOOD PROTECTION UPGRADES

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

FORM H2: LABOUR AND MATERIAL PAYMENT BOND
(See D13)

KNOW ALL MEN BY THESE PRESENTS THAT

his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Principal"), and

his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), for the use and benefit of claimants as herein below defined, in the amount of

_____ dollars (\$_____)

of lawful money of Canada, for the payment whereof we, the Principal and the Surety jointly and severally bind ourselves firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

TENDER NO. 672-2022

CONSTRUCTION OF WTP SITE FLOOD PROTECTION UPGRADES

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall promptly make payment to all claimants as hereinafter defined, for all labour, service and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void, otherwise it shall remain in full force and effect subject, however, to the following conditions:

- (a) A claimant is defined as one having a direct contract with the Principal for labour, service and material, or any of them, used or reasonably required for use in the performance of the contract, labour, service and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment (but excluding rent of equipment where the rent pursuant to an agreement is to be applied towards the purchase price thereof) directly applicable to the Contract;
- (b) The above-named Principal and Surety hereby jointly and severally agree with the Obligee that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work, labour or service was done or performed, or materials were furnished by such claimant, may sue on this bond, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon;
- (c) No suit or action shall be commenced hereunder by any claimant
 - (ii) unless claimant shall have given written notice to the Principal and the Surety above-named, within one hundred and twenty (120) days after such claimant did or performed the last of the work, labour or service, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work, labour or service was done or performed. Such notice shall be served by mailing the same by registered mail to the Principal, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the Province of Manitoba;

- (iii) after the expiration of one (1) year following the date on which Principal ceased work on said Contract; including work performed under the guarantees provided in the Contract;
 - (iv) other than in a court of competent jurisdiction in the Province of Manitoba.
- (d) The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.
- (e) The Surety shall not be liable for a greater sum than the specified penalty of this bond.

The Principal and Surety hereby agree that The Guarantors' Liability Act (Manitoba) shall apply to this Bond.

IN TESTIMONY WHEREOF, the Principal has hereunto set its hand affixed its seal, and the Surety has caused these presents to be sealed and with its corporate seal duly attested by the authorized signature of its signing authority this

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B7.
- E1.4 The following are applicable to the Work:

<u>Specification No.</u>	<u>Specification Title</u>
26 05 00	COMMON WORK RESULTS FOR ELECTRICAL
26 05 01	SCOPE OF ELECTRICAL WORK
26 02 02	STARTING OF ELECTRICAL EQUIPMENT AND SYSTEM
26 05 03	COMMISSIONING OF ELECTRICAL SYSTEMS
26 05 20	WIRE AND BOX CONNECTORS 0-1000 V
26 05 21	WIRES AND CABLES 0 - 1000 V
26 05 28	GROUNDING
26 05 29	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
26 05 31	SPLITTERS, JUNCTION BOXES, PULL BOXES AND CABINETS
26 05 32	OUTLET BOXES, CONDUIT BOXES AND FITTINGS
26 05 34	CONDUITS, CONDUIT FASTENINGS AND CONDUIT FITTINGS
26 05 81	PROCESS MOTORS LESS THAN 150 KW
26 12 17	DRY TYPE TRANSFORMERS UP TO 600 V - PRIMARY
26 24 17	PANELBOARDS – BREAKER TYPE
26 27 26	WIRING DEVICES
26 28 21	MOULDED CASE CIRCUIT BREAKERS
26 28 23	DISCONNECT SWITCHES FUSED AND NON-FUSED UP TO 600 V - PRIMARY
26 29 10	MOTOR STARTERS TO 600 V
40 61 96	PROCESS CONTROL NARRATIVE
40 72 00	LEVEL MEASUREMENT
40 90 00	INSTRUMENTATION AND CONTROL FOR PROCESS SYSTEMS
40 90 01	INSTRUMENT STANDARD DETAILS
40 95 13	CONTROL PANELS

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1-0601-G0001-001	KEY PLAN AND DRAWING LIST
1-0601T-C0001-001	SITE PLAN
1-0601T-C0002-001	375 LDS PLAN AND PROFILE
1-0601Y-C0003-001	MANHOLE No. 1 AND No. 2 SECTIONS AND DETAILS
1-0601B-C0004-001	WTP UNDERDRAIN DEWATERING MH
1-0101D-C0005-001	STORM SUMP PIT PLAN AND SECTIONS LOWER LEVEL LAYOUT ABOVE 227.000m

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1-0601V-C0001-001	DRAINAGE AND LOT GRADE PLAN
1-0601D-P0001-001	PROCESS & INSTRUMENTATION DIAGRAM LEGEND
1-0601B-P0002-001	PROCESS & INSTRUMENTATION DIAGRAM WTP UNDERDRAIN MANHOLES
1-0601D-P0020-001	PROCESS & INSTRUMENTATION DIAGRAM DBPS SUMP PIT AUTOMATION
1-0601Y-S0001-001	MANHOLE No. 1 STRUCTURAL DETAILS
1-0601B-E0001-001	SITE PLAN
1-0601D-E0002-001	PARTIAL PLANS LOWER LEVEL LAYOUT ABOVE 227.000m UPPER LEVEL LAYOUT ABOVE 230.8m
1-0601B-E0003-001	TYPICAL CONTROL PANEL SCHEMATIC
1-0601B-E0003-002	TYPICAL CONTROL PANEL SCHEMATIC
1-0601D-E0004-001	PANEL SCHEMATIC LOCAL VALVE CONTROL STATION
1-0601B-E0005-001	SCHEDULE
1-0601B-E0006-001	DETAILS

E1.5 The following appendices are provided to aid in the Contractor s evaluation of Site conditions:

<u>Appendix</u>	<u>Title</u>
A	Site Photos
B	Relevant Record Drawings

GENERAL REQUIREMENTS

E2. FACILITY ACCESS

- E2.1 The normal operating hours of the WTP are 7:30 am to 4:00 pm, Monday to Friday. Work by the Contractor shall occur within these hours unless prior arrangement have been made with the Contract Administrator.
- E2.2 Contractor personnel with Security Clearances in accordance with F1 will be provided with a radio frequency identification (RFID) access key to the WTP facility. These keys must be returned to the WTP following completion of the Work.

E3. OFFICE FACILITIES

- E3.1 The Contractor shall supply office facilities meeting the following requirements:
- The field office shall be conveniently located within the Winnipeg WTP site at a location approved by the City.
 - The building shall have a minimum floor area of 20 square metres, with window area of 3 square metres and a door entrance with suitable lock satisfactory to the Contract Administrator.
 - The building shall be suitable for all-weather use. It shall be capable of maintaining a temperature range between 16°C and 25°C.
 - The building shall be supplied with adequate lighting and 120 Volt power supply.
 - The building shall be furnished with one desk, one meeting table, one drafting table, one filing cabinet and six chairs, all satisfactory to the Contract Administrator.
 - A separate toilet with door lock shall be supplied for the Contract Administrator.
 - The field office shall be cleaned weekly immediately prior to the Job Site Meetings to the satisfaction of the Contract Administrator.
 - The provision of the field office with the aforementioned furnishings and equipment shall also include maintenance and removal of the field office, operating costs and any service installation costs.

E4. ENVIRONMENTAL PROTECTION

- E4.1 The Contractor shall be aware that feeder mains and associated infrastructure is for potable water and no contamination by fuel, chemicals, etc. shall be permitted at any time. Fuels or chemicals shall not be stored within 30 metres of the existing chambers, excavations, etc.
- E4.2 The Contractor shall plan and implement the Work of this Contract strictly in accordance with the requirements of the environmental protection measures as herein specified.
- E4.3 The Contractor is advised that at least the following Acts, Regulations, and By-laws apply to the Work.
- E4.3.1 Federal
- (a) Canadian Environmental Protection Act (CEPA) c.16;
 - (b) Canadian Environmental Assessment Act (CEAA) c.37;
 - (c) Transportation of Dangerous Goods Act and Regulations c.34; and
 - (d) Migratory Birds Convention Act, 1994
- E4.3.2 Provincial
- (a) The Dangerous Goods Handling and Transportation Act D12;
 - (b) The Endangered Species Act E111;
 - (c) The Environment Act c.E125;
 - (d) The Fire Prevention Act F80;
 - (e) The Manitoba Heritage Resources Act H39.1;
 - (f) The Manitoba Noxious Weeds Act N110;
 - (g) The Manitoba Nuisance Act N120;
 - (h) The Public Health Act c.P210;
 - (i) The Workplace Safety and Health Act W210; and
 - (j) And current applicable associated regulations.
- E4.3.3 Municipal
- (a) The City of Winnipeg By-law no. 1/2008;
 - (b) The City of Winnipeg Waterway By-Law no. 5888/92; and
 - (c) Other applicable Acts, Regulations and By-laws.
- E4.4 The Contractor is advised that the following environmental protection measures apply to the Work.
- E4.4.1 Materials Handling and Storage
- (a) Construction materials and debris shall be prevented from entering drainage pipes or channels.
 - (b) Construction materials and debris shall also be prevented from accumulating on local roadways and sidewalks when tracked out of the Site by trucks hauling excavated materials.
 - (c) The Contractor shall provide on-Site measures to mitigate the tracking of sediment off-Site and, therefore, reduce the amount of street cleaning required. These measures may take the form of a truck wheel wash (automated or manually operated) or other measures as approved by the Contract Administrator.
- E4.4.2 Fuel Handling and Storage
- (a) The Contractor shall obtain all necessary permits from Manitoba Conservation for the handling and storage of fuel products and shall provide copies to the Contract Administrator.

- (b) All fuel handling and storage facilities shall comply with The Dangerous Goods and Transportation Act Storage and Handling of Petroleum Products Regulation and any local land use permits.
- (c) Fuels, lubricants, and other potentially hazardous materials as defined in The Dangerous Goods and Transportation Act shall be stored and handled within the approved storage areas.
- (d) The Contractor shall ensure that all fuel storage containers are inspected daily for leaks and spillage.
- (e) Products transferred from the fuel storage area(s) to specific Work Sites shall not exceed the daily usage requirement.
- (f) When servicing requires the drainage or pumping of fuels, lubricating oils or other fluids from equipment, a groundsheet of suitable material (such as HDPE) and size shall be spread on the ground to catch the fluid in the event of a leak or spill.
- (g) Refuelling of mobile equipment and vehicles shall take place at least 100 metres from a watercourse.
- (h) The area around storage Sites and fuel lines shall be distinctly marked and kept clear of snow and debris to allow for routine inspection and leak detection.
- (i) A sufficient supply of materials, such as absorbent material and plastic oil booms to clean up minor spills shall be stores nearby on-site. The Contractor shall ensure that additional material can be made available on short notice.

E4.4.3 Waste Handling and Disposal

- (a) The construction area shall be kept clean and orderly at all times during and at completion of construction.
- (b) At no time during construction shall personal or construction waste be permitted to accumulate for more than one day at any location on the construction site, other than at a dedicated storage area as may be approved by the Contract Administrator.
- (c) All resulting debris shall be deposited at a Waste Disposal Ground operating under the authority of Manitoba Regulation #150/91. Exceptions are liquid industrial and hazardous wastes which may require special disposal methods (see SC:21.4 D).
- (d) Indiscriminate dumping, littering, or abandonment shall not take place.
- (e) No on-site burning of waste is permitted.
- (f) Waste storage areas shall not be located so as to block natural drainage.
- (g) Run-off from a waste storage area shall not be allowed to cause siltation of a watercourse.
- (h) Waste storage areas shall be left in a neat and finished appearance and/or restored to their original condition to the satisfaction of the Contract Administrator.
- (i) Equipment shall not be cleaned near watercourses; contaminated water from onshore cleaning operations shall not be permitted to enter watercourses.

E4.4.4 Dangerous Goods/Hazardous Waste Handling and Disposal

- (a) Dangerous goods/hazardous waste are identified by, and shall be handled according to, The Dangerous Goods Handling and Transportation Act and Regulations.
- (b) The Contractor shall be familiar with The Dangerous Goods Handling and Transportation Act and Regulations.
- (c) The Contractor shall have on-site staff that is trained and certified in the handling of the dangerous/hazardous goods, when said dangerous/hazardous goods are being utilized on-site for the performance of the Work.
- (d) Different waste streams shall not be mixed.
- (e) Disposal of dangerous goods/hazardous wastes shall be at approved hazardous waste facilities.

- (f) Liquid hydrocarbons shall not be stored or disposed of in earthen pits on-site.
- (g) Used oils shall be stored in appropriate drums, or tankage, until shipment to waste oil recycling centres, incinerators, or secure disposal facilities approved for such wastes.
- (h) Used oil filters shall be drained, placed in suitable storage containers, and buried or incinerated at approved hazardous waste treatment and disposal facilities.
- (i) Dangerous goods/hazardous waste storage areas shall be located at least 100 metres away from the high water line and be diked.
- (j) Dangerous goods/hazardous waste storage areas shall not be located so as to block natural drainage.
- (k) Run-off from a dangerous goods/hazardous waste storage area shall not be allowed to cause siltation of a watercourse.
- (l) Dangerous goods/hazardous waste storage areas shall be left in a neat and finished appearance and/or restored to their original condition to the satisfaction of the Contract Administrator.

E4.4.5 Emergency Response

- (a) The Contractor shall ensure that due care and caution is taken to prevent spills.
- (b) The Contractor shall report all major spills of petroleum products or other hazardous substances with the potential for impacting the environment and threat to human health and safety to the Contract Administrator and Manitoba Environment, immediately after occurrence of the environmental accident, by calling the 24-hour emergency telephone phone number (204) 945-4888. The Contract Administrator shall also be notified.
- (c) The Contractor shall designate a qualified supervisor as the on-site emergency response coordinator for the project. The emergency response coordinator shall have the authority to redirect manpower in order to respond in the event of a spill.
- (d) The following actions shall be taken by the person in charge of the spilled material or the first person(s) arriving at the scene of a hazardous material accident or the on-site emergency response coordinator:
 - (i) Notify emergency-response coordinator of the accident:
 - identify exact location and time of accident;
 - indicate injuries, if any;
 - request assistance as required by magnitude of accident (Manitoba Environment 24-hour Spill Response Line (204) 945-4888, Police, Fire Department, Ambulance, company backup).
 - (ii) Attend to public safety:
 - ◆ stop traffic, roadblock/cordon off the immediate danger area;
 - ◆ eliminate ignition sources;
 - ◆ initiate evacuation procedures if necessary.
 - (iii) Assess situation and gather information on the status of the situation, noting:
 - personnel on site;
 - cause and effect of spill;
 - estimated extent of damage;
 - amount and type of material involved;
 - proximity to waterways and the Aqueduct.
 - (iv) If safe to do so, try to stop the dispersion or flow of spill material:
 - approach from upwind;
 - stop or reduce leak if safe to do so
 - dike spill material with dry, inert sorbent material or dry clay soil or sand;
 - prevent spill material from entering waterways and utilities by diking;
 - prevent spill material from entering Aqueduct manholes and other openings by covering with rubber spill mats or diking.

- (v) Resume any effective action to contain, clean up, or stop the flow of the spilled product.
- (e) The emergency response coordinator shall ensure that all environmental accidents involving contaminants shall be documented and reported to the Manitoba Environment according to The Dangerous Goods Handling and Transportation Act Environmental Accident Report Regulation 439/87.
- (f) When dangerous goods are used on-site, materials for containment and cleanup of spill material (e.g. absorbent materials, plastic oil booms, and oversized recovery drums) shall be available on-site.
- (g) Minor spills of such substances that may be contained on land with no significant impact on the environment may be responded to with in-house resources without formal notification to Manitoba Environment.
- (h) City emergency response, 9-1-1, shall be used if other means are not available.

E4.5 Vegetation

- (a) Vegetation shall not be disturbed without written permission of the Contract Administrator. The Contractor shall protect plants which may be at risk of accidental damage. Such measures may include protective fencing or signage.
- (b) Herbicides and pesticides shall not be used adjacent to any surface watercourses.
- (c) All landowners adjacent to the area of application of herbicides or pesticides shall be notified prior to the Work.
- (d) Trees and shrubs shall not be felled into watercourses.
- (e) Areas where vegetation is removed during clearing, construction, and decommissioning activities, shall be revegetated as soon as possible in accordance the requirements outlined herein, or as directed by the Contract Administrator.

E4.6 Measurement and Payment

- (a) The work covered in this section will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

E5. SHOP DRAWINGS

E5.1 Description

- (a) This Specification shall revise, amend, and supplement the requirements of CW 1110 of the City of Winnipeg's Standard Construction Specifications.

E5.2 Submit all Shop Drawings in accordance with CW 1110 except as modified herein.

E5.3 The Contractor shall submit specified Shop Drawings to the Contract Administrator for review. All submissions must be in metric units. Where data is in imperial units, the correct metric equivalent shall also be shown on all submissions for Engineering review.

E5.4 Allow for a five (5) Business Day period for review by the Contract Administrator of each individual submission and re-submission, unless noted otherwise in the Contract Documents.

E5.5 Shop Drawings not meeting the requirements of CW 1110 or the requirements specified herein will be returned to the Contractor without review for resubmission.

E5.6 Review of Shop Drawings by the Contract Administrator will be limited two (2) reviews per Shop Drawing. This shall include a review of the initial submission and a review of the revised submission. Costs associated with subsequent reviews will be billed of the Contractor.

E5.7 Measurement and Payment

- (a) The provision of Shop Drawings shall be considered incidental to the Work and will not be measured for payment and no additional payment will be made.

E6. SITE SECURITY AND SAFETY

E6.1 Security

E6.1.1 The Contractor shall be responsible for site security and safety, as stated below:

- (a) All personnel on site are required to obtain a Global Sanctions & PEP Check **and** a Police Information Check as included in F1 Security Clearance. The Contractor shall submit copies of the Criminal Record Search Certificates to the Contract Administrator identified in D5.
- (b) Report all site trespassing or suspicious activity immediately to Water Control Centre at 986-4781.
- (c) Refrain from providing statements with respect to water supply, site security or emergency situations to the media. All media inquiries in this regard shall be directed to the City of Winnipeg Customer Services.
- (d) Provide secure temporary site storage compound for all specialized components such as valves, fittings and supplies, from the time they are delivered to the Site until they are incorporated into the Works. Permitted locations for on-site storage compounds shall be as generally located on the drawings.
- (e) Permit access to the Site at all times to City Personnel for operation of Site facilities.

E6.2 Safety

E6.2.1 Be fully responsible for all aspects of site and public safety, in compliance to D25.

E6.2.2 Arrange for all required safety watches in the vicinity of buried and overhead hydro utilities, and pay all required safety watch fees.

E6.3 Install Contractor's locks on City installed lock-out devices, on WTP valves and appurtenances at the following locations:

- (a) WTP Supernatant discharge to LDS. HV-R025A.
- (b) Clearwell Sump Pump.

E6.4 Lock-out and Tag-out Procedures

E6.4.1 The City of Winnipeg will endeavor to provide redundant valve closures (double blocking) of pressurized pipelines that enter the work space where possible. However, there are locations within the system where it is impractical to provide double blocking without widespread service disruption. Where regional water system network does not allow double blocking, non-redundant valve closures (single blocking) will be provided.

E6.4.2 At locations where only single valve blocking is practical, additional safety measures and monitoring will be required in order to provide a safe work environment for employees. Development of adequate safety plans in accordance to the Workplace Safety and Health Act and Regulation 217/06 are the responsibility of the Contractor, but as a minimum shall include:

- (a) Provision of adequate egress from confined spaces including removal of removable roof slabs and manhole covers, and provision of ladders and other means of site exit
- (b) Use of body harnesses and safety hoisting equipment at all times when pressurized systems are disassembled and protected only by single block valves.
- (c) Monitor and assess water leakage in closed system prior to disassembly of system. Monitor water leakage rate and advise Contract Administrator immediately of change in inflow rates. Evacuate confined space if necessary.

E6.4.3 The Contractor, City of Winnipeg Water and Waste Department, and Contract Administrator will all be required to lock out all valves closed in order to facilitate this work. Where site access and lockout space on system valves is limited, the following lockout/tag out procedures will be implemented;

- (a) Lockout locations for valves will be identified by the City.
- (b) City of Winnipeg will provide a single lock, chains and other devices to adequately secure valves within pits and chambers. The Contractor has the right to inspect the installation and satisfy that the lockout system is adequate. All locks utilized will be commonly keyed.
- (c) Key(s) for single locked valves will be placed in secure lock box at the site. City staff, Contractors, and Contract Administrator will place personal/company locks complete with identification and tag out information on this lock box.
- (d) Key(s) placed within the secure lock box will not be removed until all City staff, Contractor, and Contract Administrator locks have been removed from the lock box, and verified that the work is completed.
- (e) City staff will then unlock all valves, and will commence with restoration of the systems to service.

E6.5 Photographs

- E6.5.1 All site photographs required for construction documentation shall be approved by City of Winnipeg Water Services Division representative, as identified by the Contract Administrator.

E7. OPERATING CONSTRAINTS FOR WORK IN CLOSE PROXIMITY TO AQUEDUCTS

E7.1 Description

- E7.1.1 This Section details operating constraints for all work to be carried out in close proximity to the City Aqueducts and other critical water infrastructure. Close proximity shall be deemed to be any construction activity within a 5 m horizontal offset from the centerline of the pipeline, within 5 m of valve chambers and other appurtenances, and any other infrastructure identified below.

- E7.1.2 The following shall be considered critical pipelines and water infrastructure for this project:
 - (a) All WTP facility piping.

E7.2 General Considerations for Work in Close Proximity to Aqueducts, Feeder Mains, and Critical Infrastructure

- E7.2.1 Aqueducts and Feeder mains are a critical component of the City of Winnipeg Regional Water Supply System and work in close proximity to infrastructure shall be undertaken with an abundance of caution. Aqueducts and Feeder mains cannot typically be taken out of service for extended periods to facilitate construction and inadvertent damage caused to the pipe would likely have catastrophic consequences.
- E7.2.2 Work around feeder mains shall be planned and implemented to minimize the time period that work is carried out in close proximity to the pipe and to ensure that the pipeline is not subjected to excessive construction related loads, including excessive vibrations and/or concentrated or asymmetrical lateral loads during backfill placement.
- E7.2.3 Large diameter pressure pipe generally has limited ability to withstand increased earth and live loading. Therefore, every precaution must be undertaken to ensure that applied loading during all phases of construction is within accepted loading parameters.
- E7.2.4 The Aqueduct and drain piping adjacent to the work area is cast iron pipe with leaded joints. Care shall be taken to ensure joints are not dislodged.
- E7.2.5 Construction in close proximity to critical infrastructure shall not commence until both the equipment and construction method statements have been submitted, reviewed, and accepted by the Contract Administrator.

E7.3 Submittals

E7.3.1 Submit proposed construction equipment specifications to the Contract Administrator for review a minimum of five (5) Business Days prior to construction. The equipment submission shall include:

- (a) equipment operating and payload weights;
- (b) equipment dimensions, including wheel or track base, track length or axle spacing, track widths or wheel configurations; and
- (c) load distributions in the intended operating configuration.

E7.3.2 Submit a construction method statement to the Contract Administrator a minimum of five (5) business days prior to construction. The construction method statement shall contain the following minimum information:

- (a) proposed construction plan including excavation locations, haul routes, excavation equipment locations, and loading positions.
- (b) excavation plans, including shoring designs, for excavations occurring in close proximity to feeder mains (within 5 m horizontal of the pipe's centerline) where the excavation to be extended below the top of the feeder mains embedment zone (150 mm above the pipe).
- (c) any other pertinent information required to accurately describe the construction activities in close proximity to the feeder main and permit the Contract Administrator to review the proposed construction plans.

E7.4 Pre-Work, Planning and General Execution

E7.4.1 No work shall commence in close proximity to feeder mains, chambers, and critical infrastructure until the equipment specifications and construction method statement have been submitted and accepted, and feeder main locations have been clearly delineated in the field. Work over feeder mains shall only be carried out with equipment that has been reviewed and quantified in terms of its loading implications on the pipe.

E7.4.2 Contact the City of Winnipeg Water and Waste Department, Construction Services Coordinator prior to construction.

E7.4.3 Locate feeder mains and confirm their position horizontally and vertically at the proposed the following locations prior to undertaking work in close proximity to the identified feeder mains. Note, exact locations to be identified in the field.

E7.4.4 Visually delineate all critical infrastructure identified herein on Site by use of paint, staking/flagging, construction fencing, snow fencing, or other suitable methods

E7.4.5 Only utilize construction practices and procedures that do not impart excessive vibratory loads on feeder mains and chambers or that would cause settlement of the subgrade below feeder mains and critical pipelines.

E7.4.6 Where the existing road structure must be removed, crossing of critical infrastructure shall be prohibited from the time the existing roadway structure is removed until the completion of granular base construction. At all times prior to completion of final paving; reduce equipment speeds to levels that minimize the effects of impact loading to the critical infrastructure.

E7.4.7 Only equipment and construction practices stipulated in the accepted construction method statement and the supplemental requirements noted herein may be utilized in close proximity to feeder mains, chambers, and other critical infrastructure identified herein.

E7.4.8 Construction operations should be staged in such a manner as to limit multiple construction loads at one time, (e.g., offset crossings sufficiently from each other, rollers should remain a sufficient distance behind spreaders to limit loads. A reasonable offset distance is 3 m between loads).

- E7.4.9 Granular material, construction material, soil, and/or other material shall not be stockpiled on the pipelines or within 5 m of any feeder main, valve chamber, or other critical infrastructure identified herein.
- E7.4.10 Construct access roads, place pads or bridging to facilitate pipeline crossings without surface rutting. Crossing materials shall not increase load over pipeline by more than 6.9 KPa (1 psi).
- E7.4.11 Vibratory equipment shall not be utilized within 5 metres of the centreline of pipelines.
- E7.4.12 The Contractor shall ensure that all crew members understand and observe the requirements of working near feeder mains, valve chambers, and critical infrastructure. Prior to commencement of on-Site work, the Contractor shall jointly conduct an orientation meeting with the Contract Administrator, all superintendents, foreman, and heavy equipment operators to make all workers on the Site fully cognizant of the limitations of altered loading on, the ramifications of inadvertent damage to, and the constraints associated with work in close proximity to feeder mains and critical pipelines. New personnel introduced after commencement of the Project need to be formally orientated as outlined herein. It is recommended that restrictions associated with the crossing, consistent with the Contractor's submitted method statement be posted on Site and near the crossing.
- E7.5 Excavation and Shoring
- E7.5.1 Expose sides of pipelines by hydro excavation prior to installing piles or shoring
- E7.5.2 Pre-bore piles to below invert of pipelines
- E7.5.3 Minimum offset from closest edge of piles or shoring to pipelines is 300 mm
- E7.5.4 Shoring shall not impart lateral loads on pipelines.
- E7.5.5 Excavation shall only utilize smooth edge buckets when within 1 metre of the critical pipelines in any direction.
- E7.5.6 Excavation shall proceed evenly such that differential loads are not imparted on shoring or critical pipelines. A maximum differential elevation of 0.6m shall be maintained.
- E7.5.7 Shoring shall be monitored during excavation and daily while shoring is in place. A maximum of 25 mm differential movement shall be immediately reported to the Contract Administrator.
- E7.5.8 Removal of piles and/or sheeting shall be completed in a way to not result in lateral loading on the Aqueduct.
- E7.6 Craning and Lifting
- E7.6.1 Craning and lifting equipment shall not operate over pipelines.
- E7.6.2 Ancillary mass including counter weights, auxiliary booms, jibs, blocks and other devices shall be assembled on site where practical.
- E7.6.3 Crane pads and working platforms shall be located a minimum of 3 metres from the centreline of pipelines to the closest point of the crane pad or working platform.
- E7.7 Backfill
- E7.7.1 Backfilling shall be completed without use of heavy vibratory compaction equipment or equipment that would impart excessive loads on pipes and joints. Small vibratory compaction equipment such as plate packers up to 350 kilograms will be permitted.
- E7.8 Measurement and Payment
- (a) Work covered in this section will be considered incidental and will not be measured for payment. No separate payment will be made.

E8. SCOPE OF WORKS AND METHOD OF PAYMENT

E8.1 Description

- (a) This Specification outlines the scope of the work and method of payment

E8.2 Scope of Work

- (a) DBPS Storm Sump Pit Weeping Tile Valve Automation
- (i) Install three (3) electrically actuated butterfly valves on existing weeping tile inlets to the storm pit as per E11.
 - (ii) Install electrical components as per drawings and specified in Division 26.
 - (iii) Install new level switch, valve controls as shown on Drawings and specified in Division 40.
- (b) DBPS High Level Flood Alarm
- (i) Install new station high level switch in west sump pit as shown on Drawings and specified in Division 40.
- (c) WTP LDS Modifications
- (i) Modify existing MH 1 as shown on the drawings and specified in E15, E16, and E17.
 - (ii) Replace MH Riser on MH 2 as shown on the Drawings and as per CW 2030.
 - (iii) Supply and Installation of 1524mm AWWA C561 SS Sluice Gate as per E9.
 - (iv) Supply and installation of sod with imported topsoil.
- (d) Clearwell Weeping Tile Outlet Modifications
- (i) Install main line piping, manholes and catch basin leads trenchlessly where possible.
 - (ii) Install pipe as per CW 2130.
 - (iii) Expose and confirm elevations of mains crossing within 1 metre of proposed grades.
 - (iv) Supply and install 68x13 corrugated, 2 mm thick, galvanized steel culverts as per CW 3610.
 - (v) Regrade existing ditch invert and slope as shown on the Drawings. Dispose of excess vegetation on site as per E10.
 - (vi) Regrading in general be completed earth balanced within the area being regraded. Any minor fill areas can incorporate other site excavation. Any excess fill can be disposed of on site.
 - (vii) Reseed regraded areas as per CW 3520. Strip and reuse any available topsoil. Imported topsoil is not required.
 - (viii) Where required, remove and replace concrete curb and gutter.
 - (ix) Where required, restore asphaltic pavements including subbase, base course and asphaltic concrete pavement as shown on the Drawings.
 - (x) Where required, resurface gravel roads upon completion of the Work as per CW 3150.
- (e) Supply and Install Pumping system from WTP Weeping Tile Manholes
- (i) Supply and install sump pump discharge piping and connect to existing LDS as shown on the Drawings and per E11 and CW 2130.
 - (ii) Supply and install new submersible pump as per E12.
 - (iii) Where required, restore asphaltic pavements including subbase, base course and asphaltic concrete pavement as shown on the Drawings.
 - (iv) Supply and install electrical and control systems as shown on the Drawings and as per Division 26 and Division 40.
 - (v) Supply and installation of sod with imported topsoil.
- (f) Site Grading and Gravel Surfacing of Civil Maintenance Building Parking Area
- (i) Excavation of areas as shown on the Drawings and per E10 and CW 3110.

- (ii) Ditch excavation, placement of topsoil, and seeding as shown on the Drawings.
- (iii) Sub-grade compaction of areas as shown on the Drawings and as per CW 3110.
- (iv) Placement of geotextile fabric as shown on the Drawings and as per CW 3130.
- (v) Supply and placement of Granular A Base Course material as shown on the Drawings and as per CW 3110.
- (vi) Supply and placement of 50 mm Granular A Sub-base material as shown on the drawings and as per CW 3110.
- (vii) Placement of salvaged 20 mm limestone sub-base material as shown on the Drawings.
- (viii) Supply and installation of downspout splashpads as shown on the Drawings.

E8.3 Method of Measurement and Basis of Payment

(a) DBPS Storm Sump Pit Weeping Tile Valve Automation

- (i) Supply and Installation of electrically actuated butterfly valves shall be paid at the lump sum price for each size of valve as listed on Form B: Prices. The work shall include all piping modifications required for the installation including flange adaptors, pipe, bushings, valve stem extensions, actuator mounting brackets and fasteners required to complete the Work.
- (ii) Removal of existing abandoned sump pump will be measured and paid on a lump sum basis. The work will include disconnection and removal of pump, removal of pump base, removal and disposal of discharge piping and disconnection of electrical cables. All material shall be properly disposed of off site.
- (iii) Removal and replacement of existing backwater valve will include removal of existing backwater valve, and replacement with a terminal backwater valve downstream of the new actuated butterfly valve, and shall include all pipe, flanges, and fasteners to complete the Works.
- (iv) Electrical Instrumentation and Control will be measured and paid on a Lump Sum Basis. The price shall include all wires, cables, control panels, junction boxes, breakers, connectors, float switches and other items to complete the Work. I/O connection to existing SCADA system will be to existing I/O inputs as indicated.

(b) DBPS High Level Flood Alarm

- (i) DBPS High level Alarm will be measured and paid in a lump sum basis. The price shall include all wires, cables, control panels, junction boxes, breakers, connectors, float switches and other items to complete the Work. I/O connection to existing SCADA system will be to existing I/O inputs as indicated.

(c) WTP LDS Modifications

- (i) MH 1 Modification will be measured on a lump sum basis. The price measured and paid will include site preparation, excavation, shoring (if required), cutting and demolition, dowelling, reinforcing, cast-in-place concrete, miscellaneous metals, hatches, access covers, backfill, grading and all other miscellaneous items to complete the Work.
- (ii) MH 2 Riser Replacement will be measured on a lump sum basis. The price measured and paid will include site preparation, excavation, shoring (if required), cutting and demolition, dowelling, reinforcing, cast-in-place concrete, backfill, grading and all other miscellaneous items to complete the Work.
- (iii) Supply and Installation of 1524mm AWWA C561 SS Sluice Gate will be measured and paid on a lump sum basis. The price measured and paid shall include design of the gate, shop drawings, supply of the gate, installation of the gate including all required fasteners, supply of wall mount, operating pedestal, testing, commissioning and all other items required to successfully complete the installation in accordance to the specifications.
- (iv) Supply and Installation of Sod with Imported Topsoil will be measured and paid on a square metre basis.

- (d) Clearwell Weeping Tile Outlet Modifications
- (i) Supply and installation of 100 mm DR 17 Force Main will be measured and paid on a length basis as per CW 2130. All fittings and connection to the existing force main will be considered incidental to the work, and no separate payment will be made.
 - (ii) Supply and installation of 375 mm PVC LDS will be measured and paid as per CW 2130.
 - (iii) Exposing mains to confirm elevations will be considered incidental to the Work. No separate payment shall be made.
 - (iv) Supply and Installation of manholes will be measured and paid as per CW 2130.
 - (v) Supply and Installation of 300 mm PVC Catch Basin Lead will be measured and paid as per CW 2130.
 - (vi) Supply and Installation of 1200 mm Catch Basin C/W Beehive Cover will be measured and paid as per CW 2130.
 - (vii) Supply and Installation of Duckbill Check Valve will be measured and paid as a lump sum including stainless steel clamp.
 - (viii) Connection to Existing 2134 mm Overflow will be measured and paid on a lump sum basis. The price will include all preparation, excavation, material, and labour required to complete the connection.
 - (ix) Plug and Abandon Existing 100 mm Force Main will be measured and paid as per CW 2130.
 - (x) Abandoning of existing catch basins will be measured and paid on a lump sum basis as per CW 2130.
 - (xi) Asphalt Road Restoration will be paid on a square metre basis. The price measured and paid will be the number of square metres successfully placed in accordance with the Specifications including all excavation, compaction, sub base, base course and asphaltic concrete pavement installed in accordance to City of Winnipeg Standard Construction Specifications.
 - (xii) Abandoning of existing 250 mm LDS will be measured and paid on a lump sum basis as per CW 2130.
 - (xiii) Construction of Swale, Regrading and Reseeding will be measured and paid on a square metre basis. The price measured and paid will be the number of square metres regraded and reseeded including disposal of excess fill material, disposal of vegetation, and excavation.
 - (xiv) Supply and Installation of New 300 mm CSP Culvert will be paid on a linear metre basis as per CW 3610.
 - (xv) Road surfacing will be measured on weight basis and paid for at the Contract Unit Price for "Limestone Gravel Road Surfacing" per tonne.
- (e) Supply and Install Pumping System from WTP Weeping Tile Manholes
- (i) Supply and installation 50 mm HDPE Force Main will be measured and paid on a length basis as per CW 2130. All fittings and valves shall be considered incidental to the supply and installation of the 50 mm HDPE Force Main, and no separate payment will be made.
 - (ii) Connection to Existing 2134 mm Overflow will be measured and paid on a lump sum basis. The price will include all preparation, excavation, material, and labour required to complete the connection.
 - (iii) Supply and Installation of FOR Sump Pump will be measured and paid on a lump sum basis.
 - (iv) Supply and Installation of RWPS Sump Pump will be measured and paid on a lump sum basis.
 - (v) Electrical Instrumentation and Control will be measured and paid on a Lump Sum Basis. The price shall include all wires, cables, control panels, junction boxes, breakers, connectors, float switches and other items to complete the Work. I/O connection to existing SCADA system will be to existing I/O inputs as indicated.

- (vi) Asphalt Road Restoration will be paid on a square metre basis. The price measured and paid will be the number of square metres successfully placed in accordance with the Specifications including all excavation, compaction, sub base, base course and asphaltic concrete pavement installed in accordance to City of Winnipeg Standard Construction Specifications.
- (vii) Supply and Installation of Sod with Imported Topsoil will be measured and paid on a square metre basis.
- (f) Site Grading and Gravel Surfacing of Civil Maintenance Building Parking Area
 - (i) Excavation will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "Excavation". The volume to be paid for will be the total number of cubic metres excavated in accordance with CW 3110.
 - (ii) Ditch excavation, regrading, placement of topsoil and seeding will be measured on an area basis at the Contract Unit Price per square metre for "Ditch Excavation, Topsoil and Seeding".
 - (iii) Sub-grade compaction will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Sub-Grade Compaction". The area to be paid for will be the total number of square metres of sub-grade compacted in accordance with CW 3110.
 - (iv) Supply and installation of geotextile fabric will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Geotextile Fabric". The area to be paid for will be the total number of square metres of geotextile fabric supplied and installed in accordance with CW 3130.
 - (v) Supplying, placing and compaction of base course material will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for the "Supplying and Placing Base Course Material – Granular A". The volume to be paid for will be the total number of cubic metres of base course material supplied and placed in accordance with CW3110.
 - (vi) Supplying, placing and compaction of sub-base material will be measured on a weight basis and paid for at the Contract Unit Price per tonne for the "Supplying and Placing Sub-base Material – 50 mm Granular A". The weight to be paid for will be the total number of tonnes of sub-base material supplied and placed in accordance with CW 3110.
 - (vii) Salvaging and placing of 20 mm Limestone Sub-base material will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "Salvaged 20 mm Limestone Sub-base".
 - (viii) Supply and installation of downspout splashpads will be paid for on a unit basis and paid for at the Contract Unit Price for each "Supply and Installation of Downspout Splashpads" as shown on the Drawings.

E9. SUPPLY AND INSTALLATION OF FABRICATED SLUICE GATES

E9.1 Description

- (a) This Specification shall cover the supply and installation of fabricated water control sluice gates.

E9.2 Materials

- (a) Fabricated Stainless Steel Sluice Gates (Contractor Supplied), 1524 by 1524 millimetre fabricated stainless steel sluice gate, conforming to AWWA C561.
 - (i) Suitable for flush mount on concrete wall, open top frame.
 - (ii) Frame and Gate components shall be manufactured from ASTM A-240 Type 304 L stainless steel.
 - (iii) Design head 4 metres.
 - (iv) Maximum Leakage – Seating Head - 0.6 litres/minute/metre of perimeter.
 - (v) Maximum Leakage – Unseating Head – As per AWWA C561.

- (vi) Stainless steel chemical anchors, Hilti HVU or Approved Equal.
- (vii) EDPM wall gasket.

Part	Material
Frame	Stainless Steel ASTM A-240 Type 316L
Slide	Stainless steel ASTM A-240 Type 304L
Guides	Ultra High molecular Weight (UHMW) Polyethylene
Top and Side Seals	Self adjusting UHMWPE ASTM D-4020
Bottom Seal	Neoprene ASTM D2000 Grade 2 BC-510 or Equal
Stem Guides	Stainless steel ASTM A-240 Type 304L
Threaded stem	Stainless steel ASTM A-276, Type 316
Seats	UHMWPE, ASTM D-4020-96
Stem Guide Bushings	Stainless Steel ASTM A276 Type304L
Anchor Bolts and Fasteners	Stainless Steel ASTM F593 or F594 GR2 316
Operator and lift	Bevel gearbox and crank operator. Maximum operating effort at crank (all heads) 178 N. 50 millimetre operating nut gear lift with pedestal suitable for operating with an electric portable drill and manual opening.
Pedestal and Gear Housing	Cast Iron ASTM A126, Class B, ASTM A48 Class 30, with High solids Epoxy Paint
Stem Couplings	Stainless steel ASTM A-276 316
Stem cover	Galvanized steel pipe with acrylic window with graduations
Pedestal	Cast iron - ASTM A48 Class 30; or ASTM A126, Class B; or Steel – ASTM A36
Gears	Steel AISI 8620, 4140, or 1117
Gear Housing	Stainless Steel ASTM A276 316, or ASTM A312, or ASTM A376

(viii) Acceptable Manufacturers:

- ◆ Fontaine Aquanox Series 20,
- ◆ Hydrogate HG561S
- ◆ Or Approved Equal in accordance with B7.

- (b) Paint pedestal and gear housing exposed metal surfaces with two (2) or more layers (5 mils minimum each coat) of Polyamide Epoxy, Amerlock 400, Tnemec Series 140F Pota-Pox Plus or approved equal in accordance with B7. Application as per manufacturer's recommendations.

E9.3 Shop Drawings

(a) Fabricated Sluice Gate (Contractor Supplied)

- (i) Submit Shop Drawings as per E5. Shop drawing shall include detailed list of materials and specifications, fabrication details and erection drawings.
- (ii) Provide Affidavit of Compliance, certifying that the gate conforms to the requirements of AWWA C561 and this Specification.

E9.4 Delivery and Shipping

(a) Fabricated Sluice Gate

- (i) The Contractor shall be responsible for the safe storage, transportation and installation of the gate, in accordance to AWWA C561.

E9.5 Construction Methods

(a) Installation

- (i) Install fabricated sluice gates, wall thimbles, mechanical lift operator, stems, wall brackets and accessories as shown on the drawings and in accordance with the manufacturer's recommendations.

- (ii) Make arrangements to have a qualified field representative of the sluice gate supplier/manufacturer inspect the installation during and after completion and provide a Certificate of Satisfactory Installation to the Contract Administrator.
- (b) Shop Testing
 - (i) The fully assembled gate shall be shop inspected, adjusted and tested for operation and leakage at the design head before shipping.
 - (ii) The Contractor shall provide shop testing data of all Contractor supplied gates.

E9.6 Field Testing

- (a) Perform leakage tests in the Contract Administrator's presence once sluice gates have been installed to ensure compliance with the allowable leakage rate indicated in AWWA C561.
- (b) Arrange for a qualified field representative of the sluice gate supplier/manufacturer to be present during field testing.
- (c) Generally, the test for unseating head will be performed by closing the gates and flooding the pipe downstream to Manhole 2 of the sluice chamber to its maximum design head. Provide suitable inflatable plug(s) as required.
- (d) The Contractor will be responsible to fill downstream pipe for testing purposes. If a gate fails the field leakage test, the Contractor shall undertake adjustments replacements or other modifications recommended by the sluice gate supplier/ manufacturer's field representative and repeat the test. The sequence shall be repeated until the gate passes the allowable leakage rate.

E10. EXCAVATION, SHORING, AND BACKFILL

E10.1 Description

- (a) This Specification covers the requirements for excavations and backfilling of trenches, pipelines, and structures.

E10.2 Submittals

- (a) Shop Drawings for all excavation shoring (where required) shall be prepared and submitted a minimum of five (5) Business Days prior to undertaking the excavation and shoring installation. Where required by Workplace Safety and Health Regulation, shoring Shop Drawings shall be sealed by a Professional Engineer, registered in the Province of Manitoba, experienced in the design of excavation shoring systems.

E10.3 Shoring Design

- (a) Shoring shall be provided for excavations, where required, in accordance with CW 2030.
- (b) Excavation shoring shall be designed to accommodate the installation of all pipe and fittings.
- (c) Provide stamped Shop Drawings in accordance with E10.2.
- (d) All shoring systems shall comply with Manitoba Workplace Safety and Health requirements.

E10.4 Excavation

- (a) Materials shall not be stockpiled over pipelines or within 5 metres of pipelines.
- (b) Excess excavation material from excavations can be disposed of on site at locations west of the WTP fence as identified by the Contract Administrator. Fill disposed of on site shall be free of debris, sloped and leveled to acceptance of the Contract Administrator.
- (c) Granular bedding in the vicinity of existing pipelines shall be dewatered and stabilized prior to undermining pipes to prevent loss of granular pipe foundation.
- (d) Carefully excavate to expose existing pipelines. Excavation within 1.0 m of the pipe shall be done using soft dig or hand excavation methods to prevent damage to the pipe.

- (e) The Contractor shall undertake all efforts to prevent freezing of soils underlying existing pipelines, bedding and backfilling will not be permitted overtop of frozen soils. Excavations left open when nighttime atmospheric temperatures are expected to drop below 0°C shall be horded and heated as required to keep soils and pipelines from freezing.
- (f) See E7 for additional restrictions when working in close proximity to Aqueducts, feeder mains and critical infrastructure.
- (g) Provide heating and hoarding around the lower portion of the excavation and pipe during freezing conditions.

E10.5 Backfill

- (a) Trench and excavation backfill in landscaped areas shall be completed to CW 2030 Class 4 Standards.
- (b) Trench and excavation backfill under pavements shall be completed to CW 2030, Class 2 standards.
- (c) The top 600 millimetres of the backfill adjacent to concrete structures shall be insitu clay material completed to CW 2030, Class 4 standards.
- (d) The Contractor shall undertake all efforts to prevent excavated material intended for backfilling from freezing. Backfilling with frozen materials will not be permitted.

E10.6 Measurement and Payment

- (a) Excavation, shoring, and backfilling for excavations will be considered incidental to the Works and will not be measured for payment. No separate payment will be made.

E11. CHAMBER PIPING AND APPURTENANCES

E11.1 Description

- (a) This Specification shall cover the modification of valve chambers and sump pits.

E11.2 Submittals

- (a) Submit shop drawings in accordance with E5 for all products and materials specified in sections E11.3.3 through to E11.3.6

E11.3 Materials

E11.3.1 Fasteners

- (a) Bolts for all assembly shall be ASTM F593, type 316 stainless steel.
- (b) Nuts for all assembly shall be ASTM F594, type 316 stainless steel.
- (c) Anti-seize compound shall be used on all bolts.

E11.3.2 Flange Gaskets

- (a) 3mm, full-faced, SBR rubber gaskets or neoprene in accordance with AWWA C207.
- (b) Gaskets shall be one piece construction where possible.
- (c) Segmented gaskets shall be constructed of a minimum number of segments and joints shall be of dovetailed construction, or other jointing methods approved by the Contract Administrator.

E11.3.3 DBPS Sump Pit Pipe, Couplings, Flanges and Adaptors.

- (a) Pipe, fittings and adaptors shall be PVC conforming to ASTM D1785.
- (b) Approved Products IPEX Xirtec PVC or approved Equal in accordance with B7.

E11.3.4 DBPS Sump Pit Butterfly Valves

- (a) Polypropylene or PVC body wafer design, corrosion proof construction.
- (b) Maximum operating head 140 KPa.

- (c) On-off service.
- (d) Provide 316 stainless steel extension stems between valve and actuator.
- (e) Provide 316 stainless steel actuator mounting brackets.
- (f) Approved Product IPEX FE Series or approved equal in accordance with B7.
- (g) Electrically actuated. Actuator to be IP68 Zone 2 rated.
- (h) Provide actuator remote circuitry to allow local valve operation (open/close) from plant floor level.
- (i) Estimated valve operational torque (to be confirmed with valve manufacturer);
 - (i) 100 mm - 45 N -m (400 in-lbs)
 - (ii) 150 mm - 90 N - m (800 in-lbs)
- (j) Approved Product Rotork ROM series, Limitorque LTQ or approved equal in accordance with B7.

E11.3.5 WTP Sump Pit Materials

- (a) Pipe and fittings to AWWA C906 HDPE IPS DR17.
- (b) Valves shall be of thermoplastic construction capable suitable for operating pressures.
- (c) Air/vacuum valve shall be able to exhaust air at pump start up and admit air to allow the pipeline to drain at pump shutdown.
- (d) Provide 316 stainless steel mounting supports as recommended by the manufacturer.
- (e) Provide couplings designed to accommodate thrust during pump operation and dead head pump pressure
- (f) Approved Products:
 - (i) Check Valve: IPEX SXE Series or approved equal in accordance with B7.
 - (ii) Ball Valve: IPEX MP Series or approved equal in accordance with B7.
 - (iii) Air/vacuum valve: Vent-O-Mat Series RPS or approved equal in accordance with B7.

E11.3.6 Duckbill valves

- (a) Duckbill valves shall be slip on style.
- (b) Approved Products Tideflex, Cla-Val or approved equal in accordance with B7.

E11.4 Methods

E11.4.1 DBPS Sump Pit Piping

- (a) Modify existing piping to accommodate valves and actuators.
- (b) Use bushings, sealant and mechanical fasteners as required to fix to existing pipes. Cut existing pipe stubs as required to facilitate connections.
- (c) Install flange adaptors on metallic pipes.
- (d) Install solvent weld PVC flanges on PVC pipe.
- (e) Mount actuators above valve close float elevation 224.7 m. Supply 316 stainless steel mounting brackets and fasteners.

E11.4.2 WTP Sump Pump Piping Installation

- (a) Install pipe external to manhole trenchlessly where possible.
- (b) Provide minimum of one disassemble-able joint within the manhole structure.
- (c) Support pipe within manhole as per manufacturer recommendations.
- (d) Supply and install pumps as per E12.

E12. SUBMERSIBLE PUMPS

E12.1 Description

- (a) Supply, installation, testing, and commissioning of two (2) submersible pumps including mounting elbows, guide rails, motors, motor protection and power and signal cables.

E12.2 Submittals

- (a) Submittals shall be in accordance with Section E5, allowing for a minimum of ten (10) business days for review.
- (b) Submit proof of CSA approval for the pump assembly as one unit, as per CSA standard C22.2-108-14.
- (c) The pump assembly shop drawings shall include the following specific details:
 - (i) Dimensional drawings, cross sections and details of the pumps.
 - (ii) Drawings of the mounting elbow and guide bars, including the diameter, wall thickness, material coating, guide rail supports, pump mounting to elbow detail, and detail of mounting elbow to the floor of the sump.
 - (iii) The mounting detail and guide bars as per manufacturer recommendations.
 - (iv) Performance curve for the pumping unit(s) superimposed on the system curves for the duty operating condition, including the efficiency isopleth and NPSHr variation with flow. The performance curve shall demonstrate the pump(s) meet the specified requirements for head, capacity, horsepower, speed, efficiency and NPSHr for the range of operating conditions.
 - (v) Motor operating data, including motor and insulation ratings, start-up and operating current ratings, operating voltage and amperage tolerances, description of construction complete with illustrative drawings, and any other pertinent information.
 - (vi) List of materials of construction, detailing the component parts of the pump(s), their materials of construction, and reference specifications for those materials.
 - (vii) Required ancillary services including, but not limited to electrical, seal water, and drains. The sizes, ratings, and any other pertinent information related to these services.
 - (viii) Installation instructions indicating assembly and mounting requirements, alignment and assembly tolerances, and points of connection for ancillary services (electrical, seal water, drains, etc.).
 - (ix) Start-up instructions including lubricant requirements, electrical requirements, etc.
- (d) Operating and Maintenance Data: Provide for incorporation in operation and maintenance. Include the following:
 - (i) Complete description of operation.
 - (ii) General arrangement and detailed drawings.
 - (iii) Wiring diagrams for power and control schematics
 - (iv) Parts catalogues with complete list of repair, replacement and spare parts with section drawings, illustrating the connection and the parts manufacturer's identifying numbers.
 - (v) Detailed maintenance and lubrication schedule, including daily, weekly, monthly, semi-annual and annual checks.
 - (vi) Detailed instructions on adjustment due to wear and replacement of parts.

E12.3 Design

- (a) Pump design capacity within 10% of best efficiency point of 5 l/s. Contractor to submit pump and system curve of design for range of operation:
 - (i) FOR: Pump On: 229.5 (lowest static lift), Pump Off 228.9 (highest static lift), discharge elevation: 235.00 m.
 - (ii) RWPS: Pump On: 229.6 (lowest static lift), Pump Off 229.0 (highest static lift), discharge elevation: 235.00 m.

- (b) Provide calculations support development of system curve, including:
 - (i) Pipe internal diameter and length.
 - (ii) Friction coefficient.
 - (iii) Minor losses.
- (c) 50mm discharge.

E12.4 Materials

- (a) Description
 - (i) Provide two (2) submersible, close coupled, single-stage centrifugal pumps for dewatering of WTP underdrain system including:
 - ◆ FOR Dewatering Manhole
 - ◆ RWPS Dewatering Manhole
 - (ii) Each pump shall include a mounting elbow and a double guide rail system, such that the pump shall automatically connect to the discharge elbow when lowered into place.
 - (iii) The mounting elbow shall be fastened to the bottom of the sump in the manholes.
 - (iv) The pump shall be mounted to the mounting elbow.
 - (v) The mounting and guide rail system shall allow for removal of the pump to ground surface such that man entry to the bottom of the manhole is not required for maintenance operations.
 - (vi) Include a spring-loaded hooking device with a working load fifty percent greater than the weight of the pump-motor unit.
 - (vii) Include monitoring and protection for each pump for moisture/leak detection and stator temperature.
- (b) Pump Characteristics
 - (i) Drive: Constant Speed.
 - (ii) Number of Pumps: 2.
 - (iii) Rated capacity per pump: 5 l/s.
- (c) Duty Point
 - (i) FOR: Pump On: 229.5 ((lowest static lift), Pump Off 228.5 (highest static lift), discharge elevation: 235 m.
 - (ii) RWPS: : Pump On: 229.6 ((lowest static lift), Pump Off 229.0 (highest static lift), discharge elevation: 235 m.
- (d) Approved Product
 - (i) Zoeller 6290 Series,
 - (ii) Xylem Flygt NP 3069 SH3,
 - (iii) Or approved equal in accordance with B7.
- (e) Impeller
 - (i) Provide a cast iron, dynamically balanced, single-vane non-clogging impeller.
 - (ii) Provide an impeller capable of passing solids to a minimum of 75 mm.
 - (iii) Firmly affix the impeller directly to the motor shaft through a keyed and bolted connection. Design the connection to minimize solids capture.
- (f) Pump Volute
 - (i) Cast iron, Class 30, to ASTM A48.
 - (ii) Single piece, non-concentric design.
- (g) Motor
 - (i) Rated for heavy-duty service.
 - (ii) Squirrel cage induction type with non-hygroscopic windings. Insulation temperature rise not to exceed Class F. Insulation to be moisture resistant.

- (iii) For starting and torque characteristics, conform to NEMA Design B.
- (iv) Provide motors nameplate rated for 208 V, 60 Hz, 3-phase service.
- (v) Design motors for full voltage starting and capable of running successfully when terminal voltage is from +10% to -10% of nameplate voltage. Motors shall have a service factor of 1.15 and shall operate at not more than 100% of nameplate current rating.
- (vi) Provide motors capable of 10 starts per hour on a continuous basis without temperature rises which would harm insulation and windings.
- (vii) Design motors for semi-continuous immersion in liquid with an ambient temperature of 40°C unless higher temperatures are specified. Design casing for adequate heat rejection. Internal circulation of the pumped liquid for cooling is not permitted.
- (viii) Provide thermal protection. Incorporate two bimetallic sensors that sense when the motor temperature rises above 140°C. The motor shall automatically restart after cool-down. For TEXP motors, calibrate the two bimetallic sensors to shut down the motor at 120°C. Include three additional thermistors which shut down the motor at 140°C. On sensing this condition, the motor will be shut down and held until reset. Use the thermal switches in conjunction with, and supplemental to, external thermal motor overload protection.
- (ix) Attach an oil-filled reservoir to the bottom of the motor. Prevent the entry of moisture with inner and outer single mechanical seals.
- (x) Provide a float type moisture sensing device in the stator housing connected to the monitoring system.
- (xi) Provide Type 431 stainless steel motor shafts.
- (xii) Provide Type 316 stainless steel hardware.
- (xiii) Mounting
 - (i) All motors are to be supplied integrally with the related equipment.
 - (ii) Factory align and balance motors with the related equipment to minimize vibration and undue stresses.
- (xiv) Pump motors shall be explosion proof and rated for Class 1 Zone 1 environment.
- (h) Cables
 - (i) Provide approved SOW type cables, with a 90°C rating and neoprene jackets.
 - (ii) Supply submersible motors with factory installed cables, of a minimum length to reach the pump's control panel and starter. The motor and cable to be capable of continuous submergence under water without loss of watertight integrity to a depth of 20 m.
 - (iii) Seal the junction chamber, containing the junction board, from the motor with an O-ring seal.
 - (iv) Connect the cable conductors and stator leads with threaded binding posts permanently mounted into the terminal insulation the board, and thus permanently leak-proof.
 - (v) Provide the cable entry body with a strain relief function (separate from the cable sealing function) which strain relief is to be applied from the outer side of the cable entry assembly.
- (i) Junction Box
 - (i) Design the junction box with two separate terminal boards, one for connecting the signal wires and signal cable, and one for connecting the stator leads and power cables.
 - (ii) Seal the lower terminal board from the motor by an elastomer compression seal (O-ring) so that it is leakproof.
 - (iii) The Manufacturer shall demonstrate to the Contract Administrator a methodology for prevention or managing moisture within the junction box. Should the methodology involve collection of moisture within a cavity, a float type moisture sensor shall be

provided in the cavity to provide an alarm in the event of water intrusion into the cable junction box. The sensor shall be connected to the monitoring system.

- (j) Controls
 - (i) Provide a pump control and status monitoring system for each pump. The motor starters, disconnect switches, control panel, and other power ancillaries are specified in Division 26.
 - (ii) Design the pump control and monitoring system for monitoring motor stator high temperature and moisture sensing/water intrusion in the stator housing and the junction box.
 - (iii) For each pump control/monitoring system provide control wiring and a junction box to connect between the pump and the control enclosure.
- (k) Cooling System
 - (i) The pump motor shall be cooled by the passage of the pumped fluid over the stator housing.
- (l) Mechanical Seals
 - (i) Provide tandem mechanical rotating shaft seal system between the impeller and the motor.
 - (ii) Design seals to run in an oil reservoir.
 - (iii) Design lapped seal faces to be hydrodynamically lubricated at a constant rate.
 - (iv) Provide tungsten carbide seals.
 - (v) Design each interface to be held in contact by its own spring system.
 - (vi) Provide each pump with an oil chamber for the shaft sealing system. Design the oil chamber for oil pressure compensation.
- (m) Bearings
 - (i) Design the motor shaft to rotate on two permanently lubricated bearings.
 - (ii) Provide information as to the proposed arrangement for both the upper support bearing and the lower main bearing configuration.
 - (iii) Provide bearings with a minimum ABMA 9 and ABMA 11 L10 bearing life of 50,000 hours minimum.
- (n) Mounting and Guide Rail
 - (i) The pump shall seal to the discharge elbow by a simple linear downward motion of the pump. Provide a sliding guide bracket attached to the pump.
 - (ii) Guide the entire weight of the pump by a double guide bar and press the pump tightly against the discharge elbow with metal-to-metal contact.
 - (iii) The discharge elbow shall connect to the 50 mm discharge line.
- (o) Accessories
 - (i) Stainless steel lifting chain, shackle and hook.
 - (ii) Power cable.
 - (iii) Stainless steel double guide bar with upper guide bar holder.
- (p) Finishes
 - (i) Factory prime and paint submersible pumps.
- (q) Spare Parts
 - (i) Provide the following spare parts for each pump:
 - (ii) Casing gaskets and O-rings for motor/pump and for cable duct.
 - (iii) Mechanical seal assembly.
 - (iv) Impeller.
 - (v) Casing wear ring (2).
 - (vi) Bearing, motor side.
 - (vii) Bearing, pump side.

- (r) **Factory Tests**
 - (i) Perform the following inspections and tests on each pump before shipment from the factory. Include the test results in the Operations and Maintenance Manuals.
 - (ii) Check the propeller, motor rating, and electrical connections for compliance to the specifications and the pump data plates.
 - (iii) Test motor and cable insulation for defects.
 - (iv) Prior to submergence, dry run the pump to establish correct rotation and mechanical integrity.
 - (v) Submerge the pump and run for 30 minutes.
 - (vi) Re-test motor and cable insulation for defects after the operational test.
 - (vii) Conduct factory performance testing of all supplied pumps in compliance with ANSI/HI Standards 14.6 to an acceptance grade of 2B.
 - (viii) Certify test results and summarize findings in a short report. Submit report within three weeks of completing factory tests, including calculations showing losses not included in shop tests, field performance curves, and computation and curves showing power consumption by motor and bhp load on motor.
 - (ix) Where the pump does not satisfy the specified performance requirements within the tolerances specified by the Hydraulics Institute, redesign, modify, and retest the pump at no additional cost.
 - (x) Do not ship the pump until the test results report has been submitted to the Contract Administrator.

E12.5 Execution

- (a) **Manufacturer's Representative**
 - (i) Manufacturer's representative is to attend the site to train installation personnel; to train operating personnel; and to witness installation and testing to ensure the equipment is installed and operated as intended.
- (b) **Testing**
 - (i) Ensure that each pump, including all component parts, operates as intended.
 - (ii) Cooperate with the Contract Administrator to fulfill the requirements for successful testing of the equipment.
 - (iii) Field test all pumps to verify performance.
 - (iv) Provide temporary connections, ammeters, and temporary tankage required for the performance of the tests.
 - (v) **Flow Metering**
 - (i) Where possible, use fill and draw techniques to determine the amount of flow conveyed during the test period. Ensure that the volumes are sufficient for at least 10 minutes of pump operation at the flows that are to be tested, other than run-out.
 - (vi) **Field Test Report**
 - (i) Compile field test results into a report for submittal to the Contract Administrator.
 - (ii) Describe test set-up and measurement devices used to conduct the tests.
 - (iii) For each pump, list the specified performance requirements and field test results. Show field test results (flow, pressure, power draw) superimposed on the performance curve provided with the submission.
 - (vii) Where field tests do not verify compliance with specified performance requirements, investigate cause for noncompliance, undertake remedial work as required to bring pump into compliance, or replace the pump and all necessary ancillaries, and retest to prove compliance. All work required to bring
 - (viii) Cooperate with the installer to fulfill the requirements for successful testing of the equipment as outlined in Section 01 91 13 - General Commissioning Requirements.

E12.6 Training

- (a) Allow for a minimum of 4 hours of operation and maintenance training.

E12.7 Installation

- (a) Before commencing the installation of the Work, inspect and take field measurements and ensure that Work conducted previously in the area is not prejudicial to the proper installation of the works.
- (b) Manhole Dewatering
 - (i) Provide initial dewatering of weeping tile system to facilitate construction. From pumping tests conducted during design, the following data was collected:

Pumping Scenario	FOR MH	RWPS MH
Initial Dewatering	50 l/s for 75 minutes	50 l/s for 15 minutes
Initial Rebound	Instantaneous rebound to 229.6 m then 1 l/s for 20 minutes	5 l/s reducing to 0 l/s
Continuous Drawdown test (estimated continuous flow)	2.5 l/s for 2 days	2.5 l/s for 2 days

- (ii) Temporary underdrain plugs may be utilized to arrest flows during pump installation work, Water build up in the underdrain system should be relieved daily to prevent excess accumulation of water in the upstream system;
- (c) Install the pump assemblies as shown on the Drawings.
- (d) Supply and install all necessary shims, gaskets etc., required to complete the installation.
- (e) Dimensions shown on the Drawings for equipment base, piping connection and length, column supports etc. are approximate and must be corrected by the Contractor to suit the exact dimensions of the equipment provided for each application. Arrange any necessary modifications to piping connections, pipework, or other ancillaries at no cost and after acceptance by the Contract Administrator.
- (f) Provide for the use of all necessary lifting and loading equipment and all tools required to complete the installation.
- (g) Demonstrate to the Owner, Contract Administrator, and Manufacturer's Representative the final alignment.
- (h) Extend any inaccessible lubrication points and lubricant drains to convenient locations.

E12.8 Commissioning

- (a) Attend during commissioning of the process system which includes the pump specified in this section to ensure that the pump functions as intended in the process system.

E13. CAST-IN-PLACE CONCRETE

E13.1 Description

- (a) This Specification shall cover the construction of cast-in-place concrete for the cast-in-place Manhole 1 extension and Manhole 2 curb, which the Contractor shall carry out in accordance with Specification CW 2160 and CSA A23.1, except as amended or supplemented herein.
- (b) Provide heating and hoarding if required in order to install the materials.

E13.2 Submittals

- (a) Shop Drawings
 - (i) Provide Shop Drawings in accordance with E5.
 - (ii) Shop Drawings for the Mix Design are to bear the seal of a Professional Engineer, registered in the Province of Manitoba.
- (b) Submit and implement a Quality Control Plan a minimum of four (4) weeks prior to first scheduled concrete casting; the Quality Control Plan shall include:
 - (i) Identify the Quality Control Manager.
 - (ii) Qualifications of construction supervisory personnel.
 - (iii) Quality Control testing plan for concrete.
 - (iv) Third party testing data from trial batching of each Mix Type.
 - (v) Pre-placement procedures and checklists for concrete.
 - (vi) Post-placement procedures and checklists for concrete.
- (c) Submit mix design statements for each type of concrete:
 - (i) Submit documentation a minimum of four (4) weeks prior to the first scheduled concrete casting demonstrating that the proposed mix designs and materials will achieve the required strength, durability, and performance requirements.

E13.3 Materials

- (a) Concrete Mix Types:
 - (i) Provide concrete mixed in accordance with requirements of CAN/CSA-A23.2.
 - (ii) Structural concrete design shall be in accordance with the Drawings.
 - (iii) Self-consolidating concrete mixes will not be permitted for use on this project.

E13.4 Cast-in-Place Concrete Construction

- (a) A minimum of forty-eight (48) hours notice shall be given to the Contract Administrator prior to the casting of any concrete to allow for inspection of reinforcing steel.

E13.4.1 Finishing Slab Surfaces

- (a) Light broom finish exterior slab top surfaces to achieve nonslip surface conforming to CSA A23.1.

E13.5 Curing and Protection

- (a) Formwork shall not be removed until 75% design strength.
- (b) Concrete shall receive moist curing for a period of at least seven (7) Calendar Days. One of the following methods shall be used as soon as the concrete has hardened sufficiently to prevent marring:
 - (i) Surfaces of concrete that are protected by formwork that is left in place for seven (7) Calendar Days, shall not require any additional curing (except as specified for hot weather).
- (c) No concreting will be allowed until all materials required for the curing phase are on-site and ready for use.
- (d) At the end of the curing and protection period, the temperature of the concrete shall be reduced gradually at a rate meeting both the requirements of CSA A23.1 Table 21 for allowable differential temperature in the concrete and ACI 306R Table 5.1 for the allowable rate of temperature change of the edges of the concrete until the outside air temperature has been reached.

E14. CONCRETE ACCESSORIES

E14.1 Description

- (a) This Specification shall cover all concrete accessories work, in accordance with Specification CW 2160, except as amended or supplemented herein.
- (b) Provide heating and hoarding for the installation of the materials.

E14.2 Submittals

- (a) Submit the following Shop Drawings; in accordance with E5.
 - (i) Bonding Agent,
 - (ii) Waterstop,
 - (iii) Davit Mount Sleeve and Cap.
- (b) Submit Shop Drawings in accordance with E5.

E14.3 Materials

- (a) Dowel Grout
 - (i) Hilti Hy-200-A or approved equal in accordance with B7.
- (b) Waterstop.
 - (i) Sika SwellStop or approved equal in accordance with B7.
- (c) Davit Mount Sleeve and Cap
 - (i) Davit mount sleeve shall be DBI Sala Advanced Flush Floor Mount Sleeve, Model # 8512828, stainless steel construction or approved equal in accordance with B7.
 - (ii) Cap shall be DBI Sala Advanced Heavy Duty Sleeve Cap, Model #8510827, stainless steel construction or approved equal in accordance with B7.
- (d) Floor Benching Grout Repair
 - (i) Grout, if required, shall be SikaTop 123 Plus by Sika Canada Inc. or approved equal in accordance with B7.

E14.4 Construction Methods

- (a) Install materials in accordance with the Manufacturer's written instructions.

E15. REINFORCING STEEL

E15.1 Description

- (a) This Specification shall cover all reinforcing steel work, in accordance with Specification CW 2160, except as amended or supplemented herein.

E15.2 Shop Drawings

- (a) The Contractor shall submit Shop Drawings in accordance with E5 for the Contract Administrator's approval two (2) weeks prior to the fabrication of any reinforcing steel.

E15.3 Materials

E15.3.1 Reinforcing Steel

- (a) Further to CW 2160 Sentence 2.6 Materials: Reinforcing Steel, all reinforcing steel shall conform to the requirements of CSA G30.18, Grade 400.

E15.3.2 Bar Accessories

- (a) Bar accessories shall be of type approved by the Contract Administrator. They shall be made from a non-corroding material, and they shall not stain, blemish, or spall the concrete surface for the life of the concrete. Bar chairs are to be PVC; galvanized bar chairs are not acceptable.

E15.4 Construction Methods

E15.4.1 Placing of Reinforcing Steel

- (a) Reinforcing steel shall be placed accurately in the positions shown on the Contract Drawings. Carefully adjust the location of reinforcing steel adjacent to openings to frame those openings in accordance with good practice, and maintain the bar spacing intent.
- (b) Splices in reinforcing steel shall be made only where indicated on the Contract Drawings. Prior approval of the Contract Administrator shall be obtained where, in the opinion of the Contractor, other splices must be made. All splices shall have Class 'B' top lap splices in accordance with Reinforcing Steel Manual of Standard Practice. Welded splices shall not be used.
- (c) Adjust the location of the reinforcing steel adjacent to openings and in location of the lifting hook in accordance with good practice, and maintain the bar spacing intent.
- (d) Do not use welded splices for reinforcing steel.

E15.5 Construction Methods

- (a) Install materials in accordance with the Manufacturer's written instructions.

E16. ACCESS HATCHES

E16.1 Submittals

- (a) Submit Shop Drawings in accordance with E5

E16.2 Materials

- (a) Floor Hatch: Type J-AL 300 PSF as manufactured by The Bilco Company, or approved equal in accordance to B7, with all standard features and additional features as per Drawings and the below:
 - (i) Cover shall be reinforced to support a minimum live load of 14.4 kPa (300 psf).
 - (ii) Custom flashing over concrete curb with minimum 30 mm vertical cap portion over concrete curb vertical face and minimum 12 mm drip edges.
 - (iii) Custom bent stainless steel anchorage devices to interior concrete curb's vertical face complete with stainless steel anchors.
 - (iv) Frame opening size as shown on the Drawings.
 - (v) Hold open device with grip handle.
 - (vi) Aluminum composite spring tube and steel compression springs in grease.
 - (vii) Type 316 stainless steel slam lock with fixed interior handle and removable exterior turn/lift handle. Latch release is protected by a flush, gasketed, removable screw plug. Supply two (2) additional turn/lift handles and two (2) removable screw plugs as spare parts.
 - (viii) All exposed welds are to be ground flush.
 - (ix) All components are to be shop fabricated.

E16.3 Construction Methods

- (a) Install materials in accordance with the Manufacturer's written instructions.
- (b) Field measure site conditions prior to fabricating Work.
- (c) Fabricate all components in the factory, ready for field installation.

E17. ALUMINUM FABRICATIONS

E17.1 Description

- (a) This Specification shall cover design, fabrication and installation of aluminum items as shown on the Drawings.

E17.2 General

- (a) Design Code and Quality Assurance
 - (i) National Building Code of Canada, 2010.
 - (ii) CAN/CSA-S157, Strength Design in Aluminum.
 - (iii) CSA W59.2, Welded Aluminum Construction.
 - (iv) CSA W47.2, Certification of Companies for Fusion Welding of Aluminum.
 - (v) ASTM F 593, Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.
 - (vi) ASTM F 594, Specification for Stainless Steel Nuts.
 - (vii) Aluminum Association Standard SSA-46.
- (b) Design Requirements
 - (i) Use Loads, load combinations and stress levels shown on Drawings and in accordance with the NBC 2010 and the Manitoba Amendments.
 - (ii) Connections are to be designed by a Professional Engineer registered in the Province of Manitoba. Design connections for loads indicated on the Drawings as a minimum.
- (c) Qualifications
 - (i) All work is to be performed by a firm certified by the Canadian Welding Bureau to the requirements of CSA W47.2 in Division 2.
- (d) Inspection and Testing
 - (i) Welds will be considered defective if they fail to meet quality requirements of CSA W59.2.
- (e) Submittals
 - (i) Shop Drawings and design briefs are to bear the seal of a Professional Engineer, registered in the Province in Manitoba.
 - (ii) Submit Shop Drawings for review in accordance with E5.
 - (iii) Clearly indicate profiles, sizes, spacing and locations of structural members, connections, attachments, reinforcing, anchorage, framed openings, size and type of fasteners, cambers and loads, accessories, column anchor bolt locations, setting details.

E17.3 Products

- (a) Materials
 - (i) All materials shall be new.
 - (ii) Aluminum to requirements of CAN/CSA-S157, 6061-T6 or 6063-T6 aluminum alloy. All aluminum shapes based on Alcan structural shapes.
 - (iii) Fastening devices connecting aluminum parts to aluminum, concrete, or other materials: stainless steel bolts to ASTM F 593, stainless steel nuts to ASTM F 594, with appropriate isolation devices.
 - (iv) Welding materials: conforming to CSA W59.2.
 - (v) Bituminous paint: to MPI (Master Paint Institute) EXT 5.5D, without thinner.
 - (vi) Concrete anchors: stainless steel Hilti HY-200 Adhesive Anchors, manufactured by Hilti (Canada) Ltd. where indicated, or approved equal in accordance with B7.
- (b) Fabrication
 - (i) Fabricate aluminum members in accordance with CAN/CSA-S157 using Alcan structural shapes.
 - (ii) Conform to requirements of CSA W59.2 for recommended filler alloy and welding.
 - (iii) Verify all Drawing dimensions prior to commencing fabrication.
 - (iv) Provide connections for loads indicated on the Drawings as a minimum.
 - (v) Provide bolted connections wherever possible. Bolted connections shall be bearing-type connections with the thread excluded from the planes of shear. Welded

connections will not be permitted unless acceptable to the Engineer. Inform Engineer if required welding procedures will negatively influence the original yield strength of the members at the compression or tension flange. Adjust welding procedures as required by the Engineer at no additional cost.

- (vi) Provide perimeter banding for grating; banding to be the same size as bearing bars.
 - (vii) Provide banding of same size as bearing bars for all required openings through grating as required unless noted. Contractor to coordinate location of openings prior to Shop Drawing submission.
 - (viii) Match position of bearing bars and cross bars in adjacent panels to preserve a continuous appearance.
 - (ix) Provide removable hold down clip style Type D complete with appurtenances for all grating. At locations where Type D clip is impractical, provide Type C clip.
 - (x) Provide minimum four (4) hold-down clips at each end of the panels if not detailed on the Drawings.
 - (xi) Clip adjacent grating panels edges together at maximum 1500 mm spacing to prevent differential vertical movement.
 - (xii) Install one Ladder Up Safety Post LU-3 as manufactured by The Bilco Company on each ladder assembly or approved equal in accordance with B7.
- (c) Construction Method
- (i) Erect aluminum in accordance with CAN/CSA-S157 and Drawings.
 - (ii) Obtain permission of Engineer prior to site cutting or making adjustments that are not part of the scheduled Work.
 - (iii) Install items plumb, square, and level; fit accurately and maintain free from distortion or defects detrimental to appearance and performance.
 - (iv) Paint aluminum surfaces in contact with concrete with two (2) coats of alkali-resistant bituminous paint. After erection touch up abrasions and damage to bituminous coatings.
 - (v) Prevent electrolysis between aluminum and dissimilar metals in contact with appropriate isolation devices.

PART F - SECURITY CLEARANCE

F1. SECURITY CLEARANCE

F1.1 Each individual proposed to perform Work under this Contract within facilities associated with the water supply, treatment and distribution system including the Shoal Lake Intake Facility, Shoal Lake Aqueduct, Deacon Reservoir, Water Treatment Plant, Regional Pumping Stations, and Booster Pumping Stations shall be required to obtain a Global Sanctions & PEP Check **and** a Police Information Check as detailed below.

- F1.1.1 The Global Sanctions & PEP Check must be obtained through Sterling BackCheck.
- (a) A Sterling BackCheck account must be setup 72 hours prior to individual security clearances to allow sufficient time for activation of the contracting company's account. If the contracting company has an existing City of Winnipeg Sterling Backcheck vendor account, they may skip to (d) below.
 - (b) An authorized individual of the contracting company must complete the Sterling Backcheck Setup Form. There is no cost to the organization to set up the account. Click on the link below, complete the form, and hit submit. ******(This form is to be completed by the company, not by the employee requiring the security clearances).
<https://forms.sterlingbackcheck.com/partners/platform2-en.php?&partner=winnipegcity>
 - (c) Within 48 hours of completing the Sterling Backcheck Setup Form, the authorized individual of the contracting company will receive a Username and Password for Sterling Backcheck. It will appear in their inbox as a "Welcome to Sterling Backcheck" email. Upon receipt, the authorized individual of the contracting company will be asked to login to the Sterling Backcheck website to set their security questions and password. Once completed, individual security clearance requests can be submitted.
 - (d) In order to run a Global Sanctions & PEP Check and/or a Police Information Check, follow the steps below:
 - (i) Click on the sub-tab labelled "Order eConsent".
 - (ii) Fill out the required information about the employee proposed to perform Work under this Contract within City facilities (the person that requires the security clearances).
 - (iii) Select your location under the "Order Information" section and enter the organization's phone number, if required.
 - (iv) Select the required individual service(s) in the dropdown menu under the "Select Services" section. If both the Global Sanctions & PEP Check and the Police Information Check are required, select the Sterling Backcheck Package One (with electronic identity verification). Once selected, both the Global Sanctions & PEP Check and the Police Information Check should have a grey check mark beside them.
 - (v) Scroll down to the bottom and click the blue "Submit" button. The employee proposed to perform Work under this Contract within City facilities will be invited to complete their security clearance.
 - (vi) The employee will receive the invitation and must click on the link and complete their Global Sanctions & PEP Check and/or Police Information Check.
 - (vii) The results of the Global Sanctions & PEP Check and/or Police Information Check will go directly to the City of Winnipeg and to the authorized individual of the contracting company within 24 hours.
 - (e) Any questions related to the Sterling BackCheck process can be directed to Linda Ferens at 204-999-0912 or by email at: linda.ferens@sterlingcheck.com OR managedsupport@sterlingcheck.com

- F1.1.2 The Police Information Check must be obtained from one of the following:
- (a) Sterling BackCheck;
 - (i) See F1.1.1(a) thru (e) for instructions on how to set up an account and submit individuals for security checks; or
 - (b) A police service having jurisdiction at his/her place of residence;
 - (i) The original Police Information Check (Form P-612) will be provided by the Winnipeg Police Service to the individual applicant. The original has a validation sticker from the Winnipeg Police Service in the top right hand corner.
 - (ii) The applicant shall provide the original Police Information Check (Form P-612) to the Contract Administrator; or
 - (c) Commissionaires (Manitoba Division);
 - (i) Forms to be completed can be found on the website at: <https://www.commissionaires.ca/en/manitoba/home>
 - (ii) The applicant shall provide the original Police Information Check to the Contract Administrator; or
 - (d) FASTCHECK Criminal Record & Fingerprint Specialists;
 - (i) Forms to be completed can be found on the website at: <https://myfastcheck.com>
 - (ii) The applicant shall provide the original Police Information Check to the Contract Administrator.
- F1.2 Any individual for whom a Global Sanctions & PEP Check and/or a Police Information Check is not provided will not be permitted to perform any Work.
- F1.3 Individuals for whom a Global Sanctions & PEP Check indicates "CLEAR" and a Police Information Check demonstrates no previous convictions or pending charges will be permitted to perform Work as specified in F1.1.
- F1.4 Individuals for whom a Global Sanctions & PEP Check does not indicate "CLEAR" and/or a Police Information Check demonstrates previous convictions or pending charges may not be permitted to perform any Work as specified in F1.1.
- (a) Previous convictions or pending charges may be investigated and a determination will be made by the City as to whether the individual will be permitted to perform any Work.
 - (b) Convictions or pending charges that may preclude an individual from performing any Work include but are not limited to:
 - (i) convictions or pending charges related to property offences; and/or
 - (ii) convictions or pending charges related to crimes against another person.
 - (c) Where additional investigation related to a Global Sanctions & PEP Check or a Police Information Check is required by the City, no extension to critical stages, Substantial Performance, or Total Performance, as applicable, will be provided.
 - (d) Additional investigation by the City may take upwards of six weeks.
- F1.5 Prior to the award of Contract, and during the term of the Contract, if additional or replacement individuals are proposed to perform Work within City facilities, the Contractor shall supply the Contract Administrator with a Global Sanctions & PEP Check and a Police Information Check satisfactory to the City obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform the Work.
- F1.6 Any Global Sanctions & PEP Check and Police Information Check determined to be satisfactory to the City will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- F1.7 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated Global Sanctions & PEP Check

and/or a Police Information Check. Any individual F1.1 who fails to provide a Global Sanctions & PEP Check and/or a Police Information Check satisfactory to the City as a result of a repeated records search will not be permitted to continue to perform any Work as specified in F1.1.