



THE CITY OF WINNIPEG

TENDER

TENDER NO. NO. 415-2025

CHLORINE VENTILATION UPGRADES AT REGIONAL PUMPING STATIONS

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	2
B5. Confidentiality	2
B6. Addenda	3
B7. Substitutes	3
B8. Bid Components	4
B9. Bid	4
B10. Prices	5
B11. Disclosure	5
B12. Conflict of Interest and Good Faith	6
B13. Qualification	7
B14. Bid Security	8
B15. Opening of Bids and Release of Information	8
B16. Irrevocable Bid	9
B17. Withdrawal of Bids	9
B18. Evaluation of Bids	9
B19. Award of Contract	10

PART C - GENERAL CONDITIONS

C0. General Conditions	1
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PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Form of Contract Documents	1
D3. Scope of Work	1
D4. Site Investigation Due Diligence and Risk	4
D5. Definitions	4
D6. Contract Administrator	6
D7. Contractor's Supervisor	6
D8. Accessible Customer Service Requirements	6
D9. Supplier Code of Conduct	7
D10. Unfair Labour Practices	7
D11. Furnishing of Documents	8

Submissions

D12. Authority to Carry on Business	8
D13. Safe Work Plan	8
D14. Insurance	8
D15. Contract Security	9
D16. Subcontractor List	10
D17. Equipment List	10
D18. Detailed Work Schedule	10
D19. Requirement for Site Accessibility Plan	11

Schedule of Work

D20. Commencement	12
D21. Work By Others	13
D22. Working Days	13

D23. Critical Stages	13
D24. Substantial Performance	14
D25. Total Performance	14
D26. Liquidated Damages	14
D27. Supply Chain Disruption Schedule Delays	14
D28. Scheduled Maintenance	15
Control of Work	
D29. Job Meetings	15
D30. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	16
D31. The Workplace Safety and Health Act (Manitoba) – Qualifications	16
Invoices & Measurement and Payment	
D32. Measurement and Payment	16
Final Payment	
Invoices	
D33. Payment	18
Warranty	
D34. Warranty	18
Dispute Resolution	
D35. Dispute Resolution	18
Indemnity	
D36. Indemnity	19
Third Party Agreements	
D37. Funding and/or Contribution Agreement Obligations	20
Form J: Subcontractor List	23
Form K: Equipment	24
PART E - SPECIFICATIONS	
General	
E1. Applicable Specifications and Drawings	26
E2. Soils Investigation Report	32
General Requirements	
E3. Office Facilities	33
E4. Hazardous Materials	33
E5. Mobilization and Demobilization Payment	33
E6. Cash Allowance for Additional Work	33
E7. Specific Requirements	34
E8. Equipment and Materials	35
E9. Site Access and Security	35
E10. Material Disposal	36
E11. Dangerous work conditions	36
E12. Temporary use of City Equipment	37
E13. Pumping Station Operation During Construction	37
E14. Construction Work Plan	39
E15. Operating Constraints for Work in close proximity to critical water infrastructure	39
E16. Site Environmental Requirements	44
E17. Traffic Control	47
PART F - SECURITY CLEARANCE	
F1. Security Clearance	1

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 CHLORINE VENTILATION UPGRADES AT REGIONAL PUMPING STATIONS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, June 25th, 2025.

B2.2 The Contract Administrator or the Manager of Purchasing 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 to provide Bidders access to the Site on Thursday June 5th, 2025 at the following times and locations:

- (a) from 9:00am to 11:00am. at the McPhillips Regional Pumping Station - 360 McPhillips Street, Winnipeg, MB;
- (b) from 1:00pm to 2:00pm. at the MacLean Regional Pumping Station – 875 Lagimodiere Blvd, Winnipeg, MB; and
- (c) from 2:45pm to 3:45pm. at the Hurst Regional Pumping Station – 60 Hurst Way, Winnipeg, MB.

B3.1.1 Bidders must provide their own transportation between the facilities.

Note: Hillock Avenue adjacent to the McPhillips RPS is a no parking zone.

B3.2 The Bidder is advised that Site access into facilities is restricted and site viewing is limited. The City will provide access into facilities where the Work will be done.

B3.3 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.

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

B3.5 Although attendance at the Site investigation is not mandatory, the City strongly suggests that the Bidder attend.

B3.6 Access to view the Sites can only be made under the supervision of an authorized City representative.

B3.7 The Bidder is required to register for the Site investigation by 3:00pm Winnipeg time, June 2nd, 2025 by contacting the Contract Administrator identified D6.1.

B3.8 Bidders registered for the Site investigation must provide the Contract Administrator identified in D6.1 with a Public Safety Verification Check obtained not earlier than one (1) year prior to the Site investigation.

- (a) The Public Safety Verification check can be obtained from Sterling BackCheck. Bidders will need to setup a Sterling BackCheck 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 a minimum of 48 hours to complete. Refer to PART F - Security Clearance for further information

- (b) The results of the Public Safety Verification Check must be received by the City directly through Sterling Talent Solutions. Bidders must set up an account with Sterling Talent Solutions under their company name and grant Sterling Talent Solutions permission to share the results of the Public Safety Verification Check with the City of Winnipeg

- B3.9 Bidders will not be allowed to take pictures at the Site investigation. The Bidder may request pictures of specific areas from the Contract Administrator. The pictures will be then issued to all the Bidders registered for the Site investigation.
- B3.10 CSA approved safety footwear, hard hats, hi-vis vest are required for all personnel attending the Site investigation. In the event the Site is under construction and in the control of others additional safety equipment may be required as directed by the Site specific safety plan.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D6.1.
- 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 they have received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The 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 D6.

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 their 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 they wish 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 their 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 their own name, their 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 their 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 their 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 their duly authorized officer or officers;
 - (d) if the Bidder is carrying on business under a name other than their own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

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 Notwithstanding C12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

B10.1.2 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 D37. Any such costs shall be determined in accordance with D37.

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) Trek Geotechnical Inc.
 - (i) Provided geotechnical investigation at MacLean, McPhillips, and Hurst Regional Pumping Station.

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 their 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 their 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 their sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in their sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in their sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- 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 their sole discretion:
- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of their 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 their 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 their 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 their 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, Purchasing Division website <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) ensure that all personnel working at the Site have security clearances as described in PART F - Security Clearances and have been reviewed and accepted by the City. ;
- (f) have Electrical Contractor and a M-Prime Licensed Mechanical Contractor as defined in D5.

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, Purchasing Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>.

- B13.5 Further to B13.3(d), the Bidder acknowledges that they and all Subcontractors have obtained training required by the Accessibility for Manitobans Act (AMA) available at <https://accessibilitymb.ca/resources-events-and-training/online-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 their 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 at: <https://www.winnipeg.ca/media/4929/>
- 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(b).
- 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 their 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 their Bid or in other information required to be submitted, that they are 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 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.
- B18.4.2 Bidders are advised that the calculation indicated in B18.4 will prevail over the Total Bid Price entered in MERX.

- B18.4.3 The total bid price shall be 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; 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 Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by removing items 15,16,17,18,19, 20, and 21 on Form B: Prices to achieve a Total Bid Price within the budgetary provision.

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 their 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 D37 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 their 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, Purchasing 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 HVAC and associated electrical and automation upgrades at the Chlorine Buildings at the Hurst Regional Pumping Station, the MacLean Regional Pumping Station, and the McPhillips Regional Pumping Station.

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

D3.2.1 MacLean Regional Pumping Station:

- (a) The supply and installation of new HVAC equipment in the chlorine building:
 - (i) New chlorine scrubber located outside;
 - (ii) New make up air unit for the tonner room. Located in the pumphouse mezzanine;
 - (iii) New exhaust fans for the tonner room;
 - (iv) New supply and exhaust fans for the chlorinator equipment room;
 - (v) New electric duct heater for the chlorinator equipment room;
- (b) removal of door between the chlorinator equipment room and the tonner room and sealing of opening;
- (c) the supply and installation of emergency safety showers at the tonner room entrances. Structural upgrades to the west and south entrances of the tonner room to accommodate safety showers;
- (d) the supply and installation of normal lighting and emergency lighting in the chlorinator equipment room and tonner rooms. Demo existing lighting;
- (e) replace all existing receptacles and switches in the chlorine building to comply Class 2 (NEMA 4X) hazardous classification;
- (f) paint all existing conduit and junction boxes, pull boxes that do not comply with Class 2 (NEMA 4X) hazardous classification;
- (g) the supply and installation of new chlorine gas detection system;
- (h) the supply and installation of an HVAC PLC panel and commissioning;
- (i) Provide and program new HVAC PLC local HMI screen as per City of Winnipeg requirements.
- (j) upgrades of the HVAC and related control systems (including PLC programming);
- (k) the supply and installation of MCC buckets with all required controls for new 600V equipment;
- (l) the supply and installation of feeder breakers for new 600V and 120/208V equipment;
- (m) the supply and installation of HVAC control and starter panels;
- (n) supply and installation of instrumentation equipment;

- (o) field calibrate and commission all new instrumentation equipment;
- (p) the supply and installation of new overhead door in the Tonner Room.
- (q) the supply and installation of new tonner storage trunnions.
- (r) provision of concrete pads, bollards, and fencing;
- (s) provision of asbestos abatement to accommodate the Work;
- (t) completion of minor structural repairs to accommodate the Work as required; and
- (u) demolition and removal of existing equipment to be replaced;
- (v) Refer to the drawing set and complete specification for additional details.

D3.2.2 McPhillips Regional Pumping Station:

- (a) The supply and installation of new HVAC equipment in the chlorine building:
 - (i) New chlorine scrubber located outside;
 - (ii) Two new rooftop make up air unit for the tonner room;
 - (iii) New exhaust fans for the tonner room;
 - (iv) New supply and exhaust fans for the chlorinator equipment room;
 - (v) New electric duct heater for the chlorinator equipment room;
- (b) removal of door between the chlorinator equipment room and the tonner room and sealing of opening;
- (c) new entry vestibule for the tonner room;
- (d) provide heat tracing for drain underneath new vestibule;
- (e) the supply and installation of emergency safety shower at the tonner room entrance;
- (f) reconfigure lighting control to separate switching in chlorinator equipment and tonner room;
- (g) replace all existing receptacles and switches in the chlorine building to comply with Class 2 (NEMA 4X) hazardous classification;
- (h) paint all existing conduit and junction boxes, pull boxes that do not comply with Class 2 (NEMA 4X) hazardous classification;
- (i) the supply and installation of new chlorine gas detection system;
- (j) the supply and installation new remote I/O panel and commissioning;
- (k) provide and program additional HMI screens to existing HVAC PLC panel local HMI as per City of Winnipeg requirements.
- (l) upgrades of the HVAC and related control systems (including PLC programming);
- (m) the supply and installation of MCC buckets with all required controls for new 600V equipment;
- (n) the supply and installation of feeder breakers for new 600V and 120/208V equipment;
- (o) the supply and installation of HVAC control and starter panels;
- (p) supply and installation of instrumentation equipment;
- (q) field calibrate and commission all new instrumentation equipment;
- (r) the supply and installation of new overhead door in the Tonner Room. Modification of existing monorail system to accommodate new door.;
- (s) the supply and installation of new tonner storage trunnions;
- (t) provision of concrete pads, bollards;
- (u) expansion of existing parking lot to add more stalls and all landscaping and sodding and or seeding associated with parking lot upgrades;
- (v) provide guard rails on the roof as shown on drawings ;
- (w) provision of asbestos abatement to accommodate the Work;

- (x) completion of minor structural repairs to accommodate the Work as required; and
- (y) demolition and removal of existing equipment to be replaced;
- (z) refer to the drawing set and complete specification for additional details.

D3.2.3 Hurst Regional Pumping Station

- (a) The supply and installation a new HVAC equipment in the chlorine building:
 - (i) New chlorine scrubber located outside;
 - (ii) New rooftop make up air unit for the tonner room;
 - (iii) New exhaust fans for the tonner room;
 - (iv) New supply and exhaust fans for the chlorinator equipment room;
 - (v) New electric duct heater for the chlorinator equipment room;
- (b) removal of door between the chlorinator equipment room and the tonner room and sealing of opening;
- (c) two new entry vestibules for the tonner room;
- (d) Provide heat tracing for drain underneath new vestibules.
- (e) the supply and installation of emergency safety shower at each tonner room entrance;
- (f) the supply and installation of normal lighting and emergency lighting in the chlorinator equipment room and tonner rooms. Demo existing lighting;
- (g) replace all existing receptacles and switches in the chlorine building to comply Class 2 (NEMA 4X) hazardous classification;
- (h) paint all existing conduit and junction boxes, pull boxes that do not comply with Class 2 (NEMA 4X) hazardous classification;
- (i) the supply and installation of new chlorine detection system;
- (j) the supply and installation new remote I/O panel and commissioning;
- (k) provide and program additional HMI screens to existing HVAC PLC panel local HMI as per City of Winnipeg requirements
- (l) upgrades of the HVAC and related control systems (including PLC programming);
- (m) the supply and installation of feeder breakers for new 600V and 120/208V equipment;
- (n) the supply and installation of HVAC control and starter panels;
- (o) supply and installation of instrumentation equipment;
- (p) field calibrate and commission all new instrumentation equipment;
- (q) supply and installation of a new fire alarm system. Demolish existing fire alarm system;
- (r) the supply and installation of new overhead door in the Tonner Room and Main Pumphouse;
- (s) the supply and installation of new tonner storage trunnions;
- (t) provision of concrete pads, bollards, and fencing;
- (u) provision for new walkway south of the station from parking lot to new concrete scrubber pad;
- (v) provision of asbestos abatement to accommodate the Work;
- (w) completion of minor structural repairs to accommodate the Work as required; and
- (x) demolition and removal of existing equipment to be replaced.
- (y) refer to the drawing set and complete specification for additional detail.

D3.3 The following shall apply to the Services:

- (a) City of Winnipeg Green Building Policy: New City-Owned Buildings and major additions;
<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeld=2&DocId=5989>

- (b) Universal Design Policy

<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeld=2&DocId=3604>

- (c) City of Winnipeg Water and Waste Department WWD CAD/GIS Standards;
<https://winnipeg.ca/waterandwaste/pdfs/dept/CAD-GIS-Specifications.pdf>
- (d) City of Winnipeg Water & Waste Department Identification Standard; and
- (e) City of Winnipeg Water & Waste Department Electrical Design Guide.

D3.4 The funds available for Contract are: \$4,850,000 (including MRST).

D4. SITE INVESTIGATION DUE DILIGENCE AND RISK

D4.1 Notwithstanding C3.1, the Contractor acknowledges that the site investigation reports and other site information included in this Tender have been provided to it and may be relied upon by the Contractor to the extent that the Contractor uses Good Industry Practice in interpreting such report(s) and site information and carries out the Work in accordance with Good Industry Practice based upon such report(s) and the information contained in them and such other site information. In the event that a site condition related to:

- (a) the location of any utility which can be determined from the records or other information available at the offices of any public authority or person, including a municipal corporation and any board or commission thereof, having jurisdiction or control over the utility;
- (b) the Site conditions, including but not limited to subsurface hazardous materials or other concealed physical conditions;
- (c) the location, nature, quality or quantity of the materials to be removed or to be employed in the performance of the Work;
- (d) the nature, quality or quantity of the Plant needed to perform the Work;
- (e) all matters concerning access to the Site, power supplies, location of existing services, utilities or materials necessary for the completion of the Work; and
- (f) all other matters which could in any way affect the performance of the Work;

that could not have been “properly inferable”, “readily apparent” and readily discoverable” using Good Industry Practice by the Contractor, results in additional Work which is a direct result of this newly discovered site condition, such additional Work will be considered by the City under Changes in Work.

D5. DEFINITIONS

D5.1 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) “**ACIC**” means Armored Control and Instrumentation Cable (run in cable tray);
- (c) “**ACM**” means Asbestos Containing Materials;
- (d) “**Authority Having Jurisdiction**” means an organization, office or individual responsible for enforcing the requirements of a code, standard or by-law, or for approving equipment, materials, and installation or a procedure, which is typically in reference to the local inspection authority;
- (e) “**AHJ**” means Authority Having Jurisdiction;
- (f) “**As-Built**” means an accurate and complete record of the construction Work undertaken by the Contractor, resulting in adjustments and markups made to the Construction set of documents;
- (g) “**CEC**” means the Canadian Electrical Code (CSA C22.1) plus all City of Winnipeg amendments to the code, as contained in The Winnipeg Electrical By-Law 86/2018;

- (h) “**Certificate of Final Inspection**” means the certificate of final inspections, obtained from the City of Winnipeg inspections department;
- (i) “**CIC**” means Control and Instrumentation Cable (run in conduit);
- (j) “**Code**” or “**code**” means the latest local code applicable at the project location. Including but not limited to The Winnipeg Electrical By-Law;
- (k) “**C.P.M**” means critical path method;
- (l) “**Critical Infrastructure**” means components of the system that cannot typically be taken out of service for extended periods to facilitate construction and inadvertent damage caused to the component would likely have catastrophic consequences
- (m) “**CT**” means Current Transformer;
- (n) “**EMT**” mean Electric Metallic Tubing;
- (o) “**FAT**” means Factory Acceptance Testing. All FAT type testing to be performed at the equipment vendor facilities, utilizing the equipment vendor’s labor, materials and test equipment;
- (p) “**Genset**” means generator set;
- (q) “**HVAC**” means Heating, Ventilation and Air Conditioning;
- (r) “**HMI**” means Human-Machine Interface or the user interface that connects an operator to the controller for an industrial system;
- (s) “**ILD**” means Instrument Loop Diagram;
- (t) “**Instructions**” or “**As Instructed**” or “**Where Instructed**” etc. shall be understood to mean as instructed in writing by the Contract Administrator;
- (u) “**I/O**” means input / output;
- (v) “**LED**” means Light-Emitting Diode;
- (w) “**Licenced Electrical Contractor**” means an individual meeting the requirements of the Manitoba Electricians’ Licence Act (C.C.S.M. c. E50) and the Manitoba Electricians Licensing Regulation (186/87 R);
- (x) “**Licenced Mechanical Contractor**” means a M-Prime contractor licensed by the City. M-Prime Contractors may obtain permits for any work on HVAC systems, hazardous process systems, or fire protection systems where the work is to be performed by a M1 licenced contractor and/or a M2 licenced contractor;
- (y) “**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;
- (z) “**MCC**” means Motor Control Centre;
- (aa) “**MSDS**” or alternatively “**SDS**” means Material Safety Data Sheets or alternatively Safety Data Sheets acceptable to Labour Canada;
- (bb) “**Payment Certification**” means the Contract Administrator’s statement of the sums certified to be paid by the City to the Contractor with reference to its interim and final progress estimates and/or the Contractor’s Proper Invoice;
- (cc) “**PEP**” means Politically Exposed Persons;
- (dd) “**PID**” means Process and Instrumentation Diagram;
- (ee) “**PLC**” means Programmable Logic Controller;
- (ff) “**PPE**” means Personal Protective Equipment;
- (gg) “**Proper Invoice**” means the definition within *The Builders’ Liens Act*, R.S.M. 1987, c. B91 and any subsequent amendments thereto, and also includes the criteria to be included in an invoice, as set out in the Measurement and Payment provisions of the Contract
- (hh) “**provide**” means to supply, install, and leave in working order all materials and necessary equipment, wiring, supports, access panels, etc., as necessary for item or system indicated;

- (ii) **“PVC”** means Polyvinyl Chloride;
- (jj) **“Record Drawing”** means an accurate and complete record of the construction Work undertaken by the Contractor, and prepared by the reviewing professional after verifying in detail the actual conditions of the completed project as a result of adjustments and markups made to the Construction set of documents. The drawings shall bear the seal of the responsible professional;
- (kk) **“SCADA”** means Supervisory Control and Data Acquisition;
- (ll) **“SPDT”** means Single Pole, Double Throw;
- (mm) **“Standard”** or **“standard”** means the latest standard that is in effect at the project location;
- (nn) **“Supply Chain Disruption”** means an inability by the Contractor to obtain goods or services from third parties necessary to perform the Work of the Contract within the schedule specified therein, despite the Contractor making all reasonable commercial efforts to procure same. Contractors are advised that increased costs do not, in and of themselves, amount to a Supply Chain Disruption
- (oo) **“TAB”** means Testing, Adjusting, and Balancing;
- (pp) **“The Builders’ Liens Act”** or **“the BLA”** means *The Builders’ Liens Act*, R.S.M. 1987, c. B91 and any subsequent amendments thereto
- (qq) **“Tonner Room”** means room contain the chlorine gas tanks for storage and the chlorine scales;
- (rr) **“WHMIS”** means Workplace Hazardous Materials Information System.

D6. CONTRACT ADMINISTRATOR

D6.1 The Contract Administrator is AtkinsRéalis Canada Inc., represented by:

Vivek Elimban, P. Eng
Electrical Engineer

Telephone No. 204-786-8080 ex 17255

Email Address vivek.elimban@atkinsrealis.com

D6.2 At the pre-construction meeting, Mr. Elimban will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D7. CONTRACTOR'S SUPERVISOR

D7.1 At the pre-construction meeting, the Contractor shall identify their designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

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. SUPPLIER CODE OF CONDUCT

- D9.1 The Contractor has reviewed and understands the City's Supplier Code of Conduct. This document is located at: <https://www.winnipeg.ca/media/4891>
- D9.2 The Contractor agrees to comply with the Supplier Code of Conduct as it may be amended or replaced from time to time. The Contractor is responsible for periodically checking the above link for updates to the Supplier Code of Conduct. Contract signature on Form A: Bid/Proposal from the Contractor signifies agreement to the Supplier Code of Conduct which comes into effect once the Contract starts.
- D9.3 If there is a conflict between the Contract and the Supplier Code of Conduct – the Contract will prevail.

D10. UNFAIR LABOUR PRACTICES

- D10.1 Further to C3.2, the Contractor declares that in bidding for the Work and in entering into this Contract, the Contractor and any proposed Subcontractor(s) conduct their respective business in accordance with established international codes embodied in United Nations Universal Declaration of Human Rights (UDHR) <https://www.un.org/en/about-us/universal-declaration-of-human-rights> International Labour Organization (ILO) [https://www.ilo.org/global/lang--en/index.htm](https://www.ilo.org/global/lang-en/index.htm) conventions as ratified by Canada.
- D10.2 The City of Winnipeg is committed and requires its Contractors and their Subcontractors, to be committed to upholding and promoting international human and labour rights, including fundamental principles and rights at work covered by ILO eight (8) fundamental conventions and the United Nations Universal Declaration of Human Rights which includes child and forced labour.
- D10.3 Upon request from the Contract Administrator, the Contractor shall provide disclosure of the sources (by company and country) of the raw materials used in the Work and a description of the manufacturing environment or processes (labour unions, minimum wages, safety, etc.).
- D10.4 Failure to provide the evidence required under D10.3, may be determined to be an event of default in accordance with C18.
- D10.5 In the event that the City, in its sole discretion, determines the Contractor to have violated the requirements of this section, it will be considered a fundamental breach of the Contract and the Contractor shall pay to the City a sum specified by the Contract Administrator in writing ("Unfair Labour Practice Penalty"). Such a violation shall also be considered an Event of Default, and shall entitle the City to pursue all other remedies it is entitled to in connection with same pursuant to the Contract.
- D10.5.1 The Unfair Labour Practice Penalty shall be such a sum as determined appropriate by the City, having due regard to the gravity of the Contractor's violation of the above requirements, any cost of obtaining replacement goods/ services or rectification of the breach, and the impact upon the City's reputation in the eyes of the public as a result of same.
- D10.5.2 The Contractor shall pay the Unfair Labour Practice Penalty to the City within thirty (30) Calendar Days of receiving a demand for same in accordance with D10.5. The City may

also hold back the amount of the Unfair Labour Practice Penalty from payment for any amount it owes the Contractor.

- D10.5.3 The obligations and rights conveyed by this clause survive the expiry or termination of this Contract, and may be exercised by the City following the performance of the Work, should the City determine, that a violation by the Contractor of the above clauses has occurred following same. In no instance shall the Unfair Labour Practice Penalty exceed the total of twice the Contract value.

D11. FURNISHING OF DOCUMENTS

- D11.1 Upon award of the Contract, the Contractor will be provided with 'issued for construction' Contract Documents electronically, including Drawings in PDF format only.

SUBMISSIONS

D12. AUTHORITY TO CARRY ON BUSINESS

- D12.1 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.

D13. SAFE WORK PLAN

- D13.1 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.
- D13.2 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, Purchasing Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>
- D13.3 Notwithstanding B13.4 at any time during the term of the Contract, the City may, at their 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.

D14. INSURANCE

- D14.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$5,000,000.00) 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 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) all risks course of construction insurance in the amount of one hundred percent (100%) of the total Contract Price, written in the name of the Contractor and The City of Winnipeg, at all times during the performance of the Work and until the date of Total Performance.

- (d) All risks property insurance for all Contractors equipment and tools to be used in the connection of the works.
- D14.2 Deductibles shall be borne by the Contractor.
- D14.3 If Require, the Contractor and/or sub-contractor involved in the use of the City crane to provide evidence of D14.1(a) with certificate of insurance to state that riggers liability is included.
- D14.4 All subcontractors performing work on the project shall provide the Contractor with evidence of comparable insurances as outlined in D14.1(a) and D14.1(b)above and be in good standing with Workers Compensation Board of Manitoba and maintain insurance and workers compensation coverage throughout the performance of the Work. The Contractor shall provide the contract administrator with evidence of same prior to the commencement of the any Work
- D14.5 The Contractor shall ensure that the subcontractor involved in the asbestos abatement provide evidence of D14.1(b) and the following
- (a) Commercial general liability insurance in the amount of at least \$2,000,000 with the City to be added as an additional insured. Certificate of insurance to include evidence of their operations to include "asbestos abatement", cross liability clause, contractual liability, products and completed operations endorsement and non-owned automobile liability;
- (b) Contractors pollution liability in the amount of at least \$2,000,000 per occurrence;
- D14.6 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.
- D14.7 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.

D15. CONTRACT SECURITY

- D15.1 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 amount of fifty percent (50%) of the Contract Price; and
- (b) labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in an amount equal to fifty percent (50%) of the Contract Price.
- D15.1.1 Bonds are available at:
- (a) Performance Bond <https://www.winnipeg.ca/media/4928/>
- (i) Performance Bond – Schedule A - Form of Notice
<https://www.winnipeg.ca/media/4831/>
- (ii) Performance Bond – Schedule B – Surety's Acknowledgement
<https://www.winnipeg.ca/media/4832/>
- (iii) Performance Bond – Schedule C – Surety's Position
<https://www.winnipeg.ca/media/4833/>
- (b) Labour & Material Payment Bond <https://www.winnipeg.ca/media/4930/>
- (i) L&M Bond – Schedule A – Notice of Claim
<https://www.winnipeg.ca/media/4834/>
- (ii) L&M Bond – Schedule B – Acknowledgement of a Notice
<https://www.winnipeg.ca/media/4835/>
- (iii) L&M Bond – Schedule C – Surety's Position
<https://www.winnipeg.ca/media/4836/>

- D15.1.2 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 D15.1(b).
- D15.1.3 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 their discretion, exercised reasonably, allows.
- D15.1.4 Digital bonds passing the verification process will be treated as original and authentic.
- D15.2 The Contractor shall provide the Contract Administrator identified in D6 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.
- D15.3 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 D15.1(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.
- D16. SUBCONTRACTOR LIST**
- D16.1 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 C4.1 for the return of the executed Contract Documents, if applicable.
- D17. EQUIPMENT LIST**
- D17.1 The Contractor shall provide the Contract Administrator with a complete list of the equipment which the Contractor proposes to utilize (Form K: Equipment 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 C4.1 for the return of the executed Contract Documents, if applicable.
- D18. DETAILED WORK SCHEDULE**
- D18.1 The Contractor shall provide the Contract Administrator with a detailed work schedule 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 C4.1 for the return of the executed Contract Documents if applicable.
- D18.2 The detailed work schedule shall consist of the following:

- (a) a critical path method (C.P.M.) schedule for the Work;
- (b) a Gantt chart for the Work based on the C.P.M. schedule;
- (c) a daily manpower schedule for the Work;

all shall be reviewed by, and shall be acceptable to the Contract Administrator. The Contractor shall make all requested changes to the documents as required by the Contract Administrator, and re-submit as needed prior to executing the Work.

D18.3 Further to D18.2(a), the C.P.M. 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) MacLean Regional Pumping Station (875 Lagimodiere Blvd)
 - (i) Commencement Date;
 - (ii) Satisfactory Installation (see Section – 01 43 33 Contractor's Field Requirements);
 - (iii) Satisfactory System Performance (see Section – 01 43 33 Contractor's Field Requirements).
- (b) McPhillips Regional Pumping Station (360 McPhillips Street)
 - (i) Commencement Date;
 - (ii) Satisfactory Installation (see Section – 01 43 33 Contractor's Field Requirements);
 - (iii) Satisfactory System Performance (see Section – 01 43 33 Contractor's Field Requirements).
- (c) Hurst Station (60 Hurst Way)
 - (i) Commencement Date;
 - (ii) Satisfactory Installation (see Section – 01 43 33 Contractor's Field Requirements);
 - (iii) Satisfactory System Performance (see Section – 01 43 33 Contractor's Field Requirements).

D18.4 Further to D18.2(b), 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.

D18.5 Further to D18.2(c), the daily manpower schedule shall list the daily number of individuals on the Site for each trade.

D19. REQUIREMENT FOR SITE ACCESSIBILITY PLAN

D19.1 The Contractor shall provide the Contract Administrator with an Accessibility 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.

D19.2 The Accessibility Plan shall demonstrate how the Contractor will accommodate the safe passage of pedestrians and cyclists in accordance with the Manual of Temporary Traffic Control, the Contract Drawings, Staging Plans, and Streets By-Law No. 1481/77 at all times for the duration of the Construction. Unless noted in the Contract, the Accessibility Plan must include a written plan for the following:

- (a) How the Contractor will maintain at least one crossing in each direction for each intersection (one north/south crosswalk and one east/west crosswalk).
- (b) How the Contractor will maintain access to bus stops within the site.
- (c) How the Contractor will maintain access to pedestrian corridors and half signals.
- (d) How the Contractor will maintain cycling facilities.
- (e) How the Contractor will maintain access to residents and businesses unless otherwise noted in the Contract.
- (f) Any required detour signage at adjacent crossings to facilitate sidewalk or active transportation pathway closures.

- D19.3 The Accessibility Plan may also include figures, sketches, or drawings to demonstrate the proposed plan.
- D19.4 The Accessibility Plan shall include written details on how the Contractor intends to review, maintain, and document all items related to the Accessibility Plan on-site during Construction, including, but not limited to:
- (a) Signage
 - (b) Temporary Ramping
 - (c) Transit Stops
 - (d) Detour Signage
- D19.5 At minimum, the Contractor shall review the site conditions on a daily basis to ensure that all features related to the Accessibility Plan are in place. The site review is intended to correct deficiencies as a result of unforeseen events such as wind, traffic, or the general public. Deficiencies that are direct result of the Contractors actions must be corrected immediately.
- D19.6 Any changes to the Accessibility Plan must be approved by the Contract Administrator.
- D19.7 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the site has been maintained.
- D19.8 Deficiencies as a direct result of actions by the Contractor that are not immediately corrected and/or failure to produce records that demonstrate that the site was maintained in compliance with the Accessibility Plan may result in a pay adjustment via the monthly Progress Payment. The rate of pay adjustment will be as per the following schedule:
- (a) First Offence – A warning will be issued and documented in the weekly or bi-weekly site meeting.
 - (b) Second Offence - A field instruction to immediately correct the site will be issued by the Contract Administrator.
 - (c) Third and subsequent Offences – A pay reduction will be issued in the amount of \$250.00 per instance and per day.

SCHEDULE OF WORK

D20. COMMENCEMENT

- D20.1 The Contractor shall not commence any Work until they are in receipt of an award letter from the Award Authority authorizing the commencement of the Work.
- D20.2 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 D12;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D13;
 - (iv) evidence of the insurance specified in D14;
 - (v) the contract security specified in D15;
 - (vi) all completed Police Information Checks and a Public Safety Verifications as specified in Part F Security Clearances
 - (vii) the Subcontractor list specified in D16;
 - (viii) the equipment list specified in D17;
 - (ix) the detailed work schedule specified in D18;
 - (x) the Requirement for Site Accessibility Plan in D19; and
 - (xi) the direct deposit application form specified in D33.

- (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.

D20.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the award letter.

D20.4 The City intends to award this Contract by July 28th, 2025. ^

D20.4.1 If the actual date of award is later than the intended date, the dates specified for Commencement, Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D21. WORK BY OTHERS

D21.1 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.

D21.2 Work by others on or near the Site will include but not necessarily be limited to:

- (a) City Operation and Maintenance Staff;
- (b) Chlorine Tonner Supplier;
- (c) Discharge Meter Upgrade at the Regional Pumping Stations;
- (d) RDS SCADA System Upgrade, PLC Replacement, Power Reliability Upgrades (805-2019).

D21.3 Further to D21.1 the Contractor shall cooperate and coordinate all activities with all parties performing required Work by Others identified in D21.1 and accommodate the necessary area on Site required for the Work by Others to complete the Work

D22. WORKING DAYS

D22.1 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.

D22.2 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.

D22.3 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.

D22.4 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.

D23. CRITICAL STAGES

D23.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) Shop drawing review of all equipment: Prior to September 19th, 2025.

D24. SUBSTANTIAL PERFORMANCE

- D24.1 The Contractor shall achieve Substantial Performance by May 21st, 2027.
- D24.2 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.
- D24.3 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.

D25. TOTAL PERFORMANCE

- D25.1 The Contractor shall achieve Total Performance by June 25th, 2027.
- D25.2 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.
- D25.3 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.

D26. LIQUIDATED DAMAGES

- D26.1 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) Shop Drawing review of all equipment – two hundred fifty dollars (\$250);
 - (b) Substantial Performance – one thousand dollars (\$1,000);
 - (c) Total Performance – one thousand dollars (\$1,000);
 - (d) Substantial Performance and Total Performance - one thousand dollars (\$1,000).
- D26.2 The amounts specified for liquidated damages in D26.1 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.
- D26.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D27. SUPPLY CHAIN DISRUPTION SCHEDULE DELAYS

- D27.1 The City acknowledges that the schedule for this Contract may be impacted by Supply Chain Disruption. Commencement and progress of the Work shall be performed by the Contractor with due consideration to the delivery requirements and schedule identified in the Contract, in close consultation with the Contract Administrator.
- D27.2 If the Contractor is delayed in the performance of the Work by reason of Supply Chain Disruption, 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.

- D27.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether a Supply Chain Disruption will affect the start date. The Contractor shall provide sufficient evidence that the delay is directly related to a Supply Chain Disruption, including but not limited to evidence related to availability ordering of Material or Goods, production and/or manufacturing schedules or availability of staff as appropriate.
- D27.4 For any delay related to supply chain disruption 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 D27.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D27.5 The Work schedule, including the durations identified in D23 to D25 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.
- D27.6 Where Work not previously identified is being carried over solely as a result of delays related to Supply Chain Disruption, 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 Supply Chain Disruption, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.
- D27.7 Any time or cost implications as a result of Supply Chain Disruption and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

D28. SCHEDULED MAINTENANCE

- D28.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Perform maintenance of the Scrubbers MacLean, McPhillips, and MacLean Regional Pumping Stations prior to Total Performance;
 - (b) Perform maintenance of the Chlorine Room Air Handling Units installed as part of this projects at MacLean, McPhillips, and MacLean Regional Pumping Stations prior to Total Performance;
- D28.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D29. JOB MEETINGS

- D29.1 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.
- D29.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever they deem it necessary.
- D29.3 The Contract Administrator will record meetings, and distribute to team members.

D30. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D30.1 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).

D31. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D31.1 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 their sole discretion and acting reasonably, require updated proof of compliance, as set out in B13.4.

INVOICES & MEASUREMENT AND PAYMENT

D32. MEASUREMENT AND PAYMENT

D32.1 C12.2 is deleted and replaced with the following:

C12.2 The amounts to be paid by the City to the Contractor shall be as set out in the Payment Certification. In the event the Payment Certification does not align with the Contractor's Proper Invoice and payment by the City to the Contractor is not made, or not going to be made, for the invoiced amount within 28 Calendar Days of receipt of the Proper Invoice, the City will issue a notice of non-payment to the Contractor in accordance with the BLA.

C12.2.1 For unit price Contracts, such sums shall be determined by the Contract Administrator upon the basis of the unit prices for the various classes of the Work stated on Form B: Prices. The total amount to be paid to the Contractor for the Work will be the amount arrived at by measuring the amount of each class of the Work listed on Form B: Prices and performed in accordance with the Contract, and pricing the same, in accordance with the unit prices stated thereon.

C12.2.2 For lump sum Contracts, such sums shall be determined by the Contract Administrator upon the basis of the lump sum price stated on Form B: Prices, if applicable, but in any event the lump sum price broken down into the percentage completed for each portion of the Work, commonly referred to as detailed prices.

D32.2 C12.7 to C12.15 are deleted and replaced with the following:

C12.7 By the seventh (7) Calendar Day after the end of each month, the Contract Administrator shall issue to the Contractor a progress estimate indicating its opinion of the quantity and value of Work performed during the previous month. The Contractor may use the progress estimate to form part of its Proper Invoice as support of the type and quantity of Work performed. In the event the Contractor chooses to produce its own documentation of the type and quantity of Work performed to form part of its Proper Invoice, the content shall be in accordance with C12.2 and the format of such documentation should follow that of a typical progress estimate, including all evidence and records of measurement that the Contract Administrator would require to certify payment. In either event the Contractor shall include such supporting documentation as part of its invoice.

C12.8 If the Contractor agrees with the progress estimate provided by the Contract Administrator it should indicate that on its Proper Invoice. If the Contractor does not agree with the progress estimate provided by the Contract Administrator it should attempt to reconcile the discrepancy, which could result in a revised progress estimate to be provided by the Contract Administrator or a revised invoice by the Contractor, so that the progress estimate and the Proper Invoice align. In the event that the discrepancy is not reconciled then the Contractor should detail the items within the

progress estimate that it disagrees with in order that the value on the Proper Invoice aligns with and is supported by the progress estimate with noted discrepancies.

- C12.7 After the end of each month, the Contractor shall submit a Proper Invoice including documentation that details the type, quantity and value of Work performed during the previous month, in accordance with C12.2.
- C12.8 The Contract Administrator will review the Proper Invoice and produce its Payment Certification accordingly.
- C12.9 Any payment made by the City to the Contractor on account of a Proper Invoice shall be less any holdback required to be made by The Builders' Liens Act, and such holdbacks or other amounts which the City is entitled to withhold pursuant to the Contract.
- C12.10 If in the Contractor's opinion the Work performed during the previous month is minimal or does not warrant an invoice, the Contractor is permitted to not submit an invoice on the condition that the Contractor advises the Contractor Administrator in writing.
- C12.11 Unless agreed to by the Contract Administrator, in writing, on an exception basis, the Contractor shall not submit invoices more frequently than monthly.
- C12.12 Any reference to payment submittals or payment processes in the NMS Sections of the Contract are deleted and replaced with the payment submittals and payment processes within Section C12 of the General Conditions, as amended by the Supplemental Conditions.

FINAL PAYMENT

- C12.13 The Contractor shall indicate on its invoice if it is the final invoice for Work performed under the Contract. Payment Certification, in response to receipt of the final Proper Invoice by the Contractor, shall be subject to the following conditions:
- (a) issuance by the Contract Administrator of a certificate of Total Performance;
 - (b) receipt by the City of a certificate from the Workers Compensation Board stating that full payment has been made to the Board with respect to all assessments owing.
- C12.14 Payment on account of the holdback made by the City pursuant to The Builders' Liens Act, shall be paid to the Contractor when the time for filing liens or trust claims has elapsed, unless the City is in receipt of a lien or trust claim.
- C12.15 Neither the issuance of a certificate of Total Performance nor the payment of the final Proper Invoice shall relieve the Contractor from their responsibilities either under C13 or as a result of any breach of the Contract by the Contractor including, but not limited to, defective or deficient Work appearing after Total Performance, nor shall it conclude or prejudice any of the powers of the Contract Administrator or the Chief Administrative Officer hereunder.
- C12.16 Subject to C12.17, acceptance by the Contractor of payment on account of the final Proper Invoice shall constitute a waiver and release by them of all claims against the City whether for payment for Work done, damages or otherwise arising out of the Contract.
- C12.17 If the Contractor disputes a Payment Certification related to a notice of non-payment by the City to the Contractor in accordance with the BLA, the Contractor may appeal the determination of the Contract Administrator to the Chief Administrative Officer as provided for in C21. If prior to the appeal being concluded, the Contractor gives a notice of adjudication to the City pursuant to the BLA, the appeal process will be discontinued.

INVOICES

D32.3 Further to C12, the Contractor:

- (a) shall submit invoices for Work performed during the previous calendar month in accordance with the instruction on the City's website at:
<https://www.winnipeg.ca/finance/corporate-accounts-payable.stm>; and
- (b) should copy the Contract Administrator on submission of its invoice.

D33. PAYMENT

D33.1 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.

D33.2 Further to **E6**, no payment will be made for Cash Allowances other than as set out in **E6.4**.

WARRANTY

D34. WARRANTY

D34.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D34.1.1 For the LED lighting, the warranty period shall be five (5) years.

DISPUTE RESOLUTION

D35. DISPUTE RESOLUTION

D35.1 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 D35.

D35.2 The entire text of C21.4 is deleted, and amended to read: "Intentionally Deleted"

D35.3 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 their written Appeal Form, in the manner and format set out on the City's Purchasing 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 their Appeal Form.

D35.4 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.

- D35.5 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.
- D35.6 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.
- D35.7 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.
- D35.8 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 D35.7, 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.

INDEMNITY

D36. INDEMNITY

- D36.1 Indemnity shall be as stated in C17.
- D36.2 Notwithstanding C17.1, the Contractor shall save harmless and indemnify the City in the amount of twice the Contract Price or five million dollars (\$5,000,000), whichever is greater, against all costs, damages or expenses arising from actions, claims, demands and proceedings, by whomsoever brought, made or taken as a result of negligent acts or negligent omissions of the Contractor, their Subcontractors, employees or agents in the performance or purported performance of the Work, and more particularly from:
- (a) accidental injury to or death of any person whether retained by or in the employ of the contractor or not, arising directly or indirectly by reason of the performance of the Work, or by reason of any trespass on or damage to property;
 - (b) damage to any property owned in whole or in part by the City, or which the City by duty or custom is obliged, directly or indirectly, in any way or to any degree, to construct, repair or maintain;
 - (c) damage to, or trespass or encroachment upon, property owned by persons other than the City;
 - (d) any claim for lien or trust claim served upon the City pursuant to The Builders' Liens Act;
 - (e) failure to pay a Workers Compensation assessment, or Federal or Provincial taxes;
 - (f) unauthorized use of any design, device, material or process covered by letters patent, copyright, trademark or trade name in connection with the Work;
 - (g) inaccuracies in any information provided to the City by the Contractor.
- D36.3 Further to C17, The City shall save harmless and indemnify the Contractor in the amount of twice the Contract Price or five million dollars (\$5,000,000), whichever is greater, against all costs, damages or expenses arising from actions, claims, demands and proceedings, by whomsoever brought, made or taken as a result of negligent acts or negligent omissions of the City, their employees or agents in the performance of its obligation under the Contract.

THIRD PARTY AGREEMENTS

D37. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D37.1 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.
- D37.2 Further to D37.1, in the event that the obligations in D37 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.
- D37.3 For the purposes of D37:
- (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.
- D37.4 Modified Insurance Requirements
- D37.4.1 If not already required under the insurance requirements identified in D14, 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 their Ministers, officers, employees, and agents shall be added as additional insureds.
- D37.4.2 If not already required under the insurance requirements identified in D14, 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.
- D37.4.3 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.
- D37.4.4 Further to D14.3, 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.
- D37.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D37.5 Indemnification By Contractor
- D37.5.1 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.

- D37.5.2 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.
- D37.6 Records Retention and Audits
- D37.6.1 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.
- D37.6.2 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 D37.6.1 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.
- D37.7 Other Obligations
- D37.7.1 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.
- D37.7.2 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.
- D37.7.3 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.
- D37.7.4 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.
- D37.7.5 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.

D37.7.6 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 K: EQUIPMENT
(See D18)

CHLORINE VENTILATION UPGRADES AT REGIONAL PUMPING STATIONS

1. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
2. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
3. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	

FORM K: EQUIPMENT
(See D18)

CHLORINE VENTILATION UPGRADES AT REGIONAL PUMPING STATIONS

4. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
5. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
6. Category/type:	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	
Make/Model/Year: _____	Serial No.: _____
Registered owner: _____	

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 their 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, Purchasing 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 B8. 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 B8.
- E1.4 The following are applicable to the Work:

NMS SPECIFICATIONS

DIVISION 01 – GENERAL REQUIREMENTS

- 01 33 00 SUBMITTAL PROCEDURES
- 01 35 43 ENVIRONMENTAL PROCEDURES
- 01 43 33 CONTRACTOR'S FIELD REQUIREMENTS
- 01 45 00 QUALITY CONTROL
- 01 51 00 TEMPORARY UTILITIES
- 01 52 00 CONSTRUCTION FACILITIES
- 01 56 00 TEMPORARY BARRIERS AND ENCLOSURES
- 01 61 00 COMMON PRODUCT REQUIREMENTS
- 01 73 03 EXECUTION REQUIREMENTS
- 01 74 11 CLEANING
- 01 78 00 CLOSEOUT SUBMITTALS

DIVISION 02 – EXISTING CONDITIONS

- 02 22 10.01 SITE CONDITIONS
- 02 41 00.08 DEMOLITION – MINOR WORKS
- 02 82 00 ASBESTOS ABATEMENT – INTERMEDIATE PRECAUTIONS

DIVISION 03 – CONCRETE

- 03 05 10 CAST-IN-PLACE CONCRETE
- 03 20 00 CONCRETE REINFORCING

DIVISION 04 – MASONRY

- 04 05 00 MASONRY

DIVISION 05 – METALS

- 05 50 00 METAL FABRICATIONS

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07 21 13		BOARD INSULATION
07 26 00		VAPOUR RETARDERS
07 46 13		PREFORMED METAL SIDING
07 61 00		SHEET METAL ROOFING
07 62 00		SHEET METAL FLASHING AND TRIM
07 84 00		FIRE STOPPING
07 92 10		JOINT SEALANTS
DIVISION 08	-	OPENINGS
08 11 14		METAL DOORS AND FRAMES
DIVISION 09	-	FINISHES
09 91 23		PAINTING
DIVISION 22	-	PLUMBING
22 05 00		COMMON WORK RESULTS - PLUMBING
22 05 05		SELECTIVE DEMOLITION FOR PLUMBING
22 05 15		PLUMBING SPECIALTIES AND ACCESSORIES
22 11 18		DOMESTIC WATER PIPING
22 13 16.16		SANITARY WASTE AND VENT PIPING - PLASTIC
22 33 13		INSTANTANEOUS ELECTRICAL DOMESTIC WATER HEATERS
22 45 33.02		COMBINATION EMERGENCY FIXTURES
DIVISION 23	-	HEATING, VENTILATING AND AIR CONDITIONING (HVAC)
23 05 00		COMMON WORK RESULTS - HVAC
23 05 29		HANGER AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT
23 05 54		MECHANICAL IDENTIFICATION
23 05 93		TESTING, ADJUSTING, AND BALANCING FOR HVAC
23 07 13		DUCT INSULATION
23 09 33		ELECTRIC AND ELECTRONIC CONTROL SYSTEM FOR HVAC
23 31 13		METAL DUCTS – LOW PRESSURE TO 500PA
23 33 00		AIR DUCT ACCESSORIES
23 33 14		BALANCING DAMPER SPECIFICATION
23 33 15.01		CONTROL DAMPER SPECIFICATION
23 34 00.01		HVAC FANS (EXHAUST FANS SPECIFICATION)
23 34 00.02		HVAC FANS (SUPPLY FANS SPECIFICATION)
23 34 00.03		HVAC FANS (UNOCCUPIED EXHAUST FANS SPECIFICATION)
23 38 18		FRP DUCTS – LOW PRESSURE TO 500PA
23 41 00		PARTICULATE AIR FILTRATION
23 55 13.20		ELECTRIC DUCT HEATERS
23 73 00.16		PACKAGED AIR HANDLING UNIT SPECIFICATION
		PACKAGED OUTDOOR HVAC EQUIPMENT
23 74 00		(TOXIC CHEMICAL SCRUBBER SPECIFICATION)
23 82 39		UNIT HEATERS – FORCED FLOW
DIVISION 26	-	ELECTRICAL
26 05 01		COMMON WORK RESULTS - ELECTRICAL
26 05 21		WIRES AND CABLES (0-1000 V)
26 05 28		GROUNDING - SECONDARY
26 05 29		HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
26 05 31		SPLITTERS, JUNCTION, PULL BOXES AND CABINETS
26 05 32		OUTLET BOXES, CONDUIT BOXES AND FITTING
26 05 34		CONDUITS, CONDUIT FASTENINGS AND FITTINGS
26 08 05		ACCEPTANCE TESTING
26 12 17		DRY TYPE TRANSFORMERS UP TO 600 V PRIMARY
26 27 26		WIRING DEVICES
26 28 21		MOULDED CASE CIRCUIT BREAKERS
26 28 23		DISCONNECT SWITCHES - FUSED AND NON-FUSED
26 29 10		MOTOR STARTERS TO 600 V
26 29 23		VARIABLE FREQUENCY DRIVES
26 50 00		LIGHTING

26 52 01		UNIT EQUIPMENT FOR EMERGENCY LIGHTING
DIVISION 28	–	ELECTRONIC SAFETY AND SECURITY
28 31 02		MULTIPLEX FIRE ALARM SYSTEM
DIVISION 31	–	EARTHWORK
31 23 10		EXCAVATING, TRENCHING AND BACKFILLING
DIVISION 40	–	PROGRESS INTEGRATION
40 05 01		COMMON WORK RESULTS - AUTOMATION
40 41 13		PIPE HEAT TRACING
40 42 13		PIPING INSULATION
40 80 08		FACTORY ACCEPTANCE TEST
40 80 11		AUTOMATION COMMISSIONING
40 91 00		AUTOMATION – PROCESS MEASUREMENT DEVICES
40 92 00		AUTOMATION - PRIMARY CONTROL DEVICES
40 95 13		CONTROL PANELS
40 99 01		TRAINING
40 99 90		MAINTENANCE AND SUPPORT
APPENDIX A		IO LISTS
APPENDIX B		EQUIPMENT LISTS
APPENDIX C		PROCESS CONTROL NARRATIVES
APPENDIX D		TEST FORMS
APPENDIX E		STATION GEOTECHNICAL REPORTS
APPENDIX F		CONFIRMED AND PRESUMED ASBESTOS REPORTS

Drawing No. Sheet Drawing Name/Title

MacLean Station

Cover Page

Drawing Number	Sheet	Drawing Name and Title
1-0630A-D0006	001	DRAWING INDEX – MACLEAN PUMPING STATION

Structural

Drawing Number	Sheet	Drawing Name and Title
1-0630M-S0010	001	STRUCTURAL, NOTES
1-0630M-S0010	002	STRUCTURAL, NOTES
1-0630M-S0011	001	STRUCTURAL, DEMOLITION & REMOVALS, PLAN, ELEVATION & SECTIONS
1-0630M-S0012	001	STRUCTURAL, CONCRETE PADS, STRUCTURES & ROLL-UP DOOR, PLAN, SECTIONS & DETAIL
1-0630M-S0013	001	STRUCTURAL, VESTIBULES CONCRETE PAD, PLAN AND SECTIONS
1-0630M-S0014	001	STRUCTURAL, VESTIBULE STRUCTURE, PLAN, SECTIONS & DETAILS
1-0630M-S0015	001	STRUCTURAL, SCRUBBER PAD ARRANGEMENT, PLAN, SECTIONS AND NOTES
1-0630M-S0016	001	STRUCTURAL, SCRUBBER DUCT SUPPORT FRAME, PLANS, ELEVATION AND DETAILS
1-0630M-S0017	001	STRUCTURAL, EQUIPMENT PAD AND FLOOR OPENING, PLAN, SECTIONS, DETAILS AND NOTES
1-0630M-S0018	001	SERVICE AREA 1 - ADDITIONAL ROOM ENCLOSURE, REMOVALS AND NEW WORK, PLAN AND ELEVATIONS

Electrical

Drawing Number	Sheet	Drawing Name and Title
1-0630M-E0023	001	ELECTRICAL SINGLE LINE DIAGRAM, MCC-M710
1-0630M-E0024	001	ELECTRICAL SINGLE LINE DIAGRAM, DP-M720
1-0630M-E0025	001	ELECTRICAL SINGLE LINE DIAGRAM, MCC-M730E
1-0630M-E0026	001	MCC ELEVATION AND DETAILS, MCC-M710
1-0630M-E0027	001	MCC ELEVATION AND DETAILS, MCC-M730E
1-0630M-E0028	001	MCC SCHEDULES, MCC-M710 AND MCC-M730E
1-0630M-E0029	001	MCC SCHEDULE AND DETAILS, DP-M720
1-0630M-E0042	001	PANELBOARD SCHEDULES
1-0630M-E0071	001	ELECTRICAL EQUIPMENT PLAN, CHLORINE BUILDING, MAIN FLOOR SITE PLAN
1-0630M-E0072	001	ELECTRICAL EQUIPMENT PLAN, DEMOLITION
1-0630M-E0073	001	ELECTRICAL EQUIPMENT PLAN, CHLORINE BUILDING, MAIN FLOOR
1-0630M-E0074	001	ELECTRICAL EQUIPMENT PLAN, CHLORINE BUILDING, MEZZANINE LEVEL
1-0630M-E0075	001	ELECTRICAL EQUIPMENT PLAN, CHLORINE BUILDING, ROOF
1-0630M-E0076	001	LIGHTING LAYOUT, CHLORINE BUILDING
1-0630M-E0077	001	CONNECTION DIAGRAM, MAKE-UP AIR UNIT AHU-C601

1-0630M-E0078	001	STARTER SCHEMATIC/FIELD WIRING DIAGRAM, HEATER HCE-C620
1-0630M-E0079	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C640
1-0630M-E0080	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C641
1-0630M-E0081	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, SUPPLY FAN SF-C630
1-0630M-E0082	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C642
1-0630M-E0083	001	CONNECTION DIAGRAM, CHLORINE GAS SCRUBBER SCBR-C670

Mechanical

1-0630M-M0029	001	REMOVALS
1-0630M-M0030	001	NEW WORK, MEZZANINE AND MAIN FLOOR PLANS
1-0630M-M0031	001	NEW WORK, ROOF PLAN, ELEVATIONS AND DETAILS
1-0630M-M0032	001	NEW WORK, SECTIONS AND DETAILS
1-0630M-M0033	001	NEW WORK, DETAILS
1-0630M-M0034	001	NEW WORK, SCHEDULES

Process

Drawing Number	Sheet	Drawing Name and Title
1-0630C-P0001	001	PROCESS & INSTRUMENTAION DIAGRAM, CHLORINE CYLINDER SHUTOFF VALVES
1-0630M-P0018	001	HVAC SYSTEM, PROCESS & INSTRUMENTATION DIAGRAM

Automation

Drawing Number	Sheet	Drawing Name and Title
1-0630M-A0026	001	INSTRUMENT LOOP DIAGRAM, LC-809-XSC MANUAL/AUTOMATIC SHUTDOWN
1-0630M-A0053	001	PANEL LAYOUT, HVAC CONTROL PANEL CP-M826
1-0630M-A0053	002	PANEL LAYOUT, HVAC CONTROL PANEL CP-M826
1-0630M-A0054	001	POWER DISTRIBUTION, HVAC CONTROL PANEL CP-M826
1-0630M-A0055	001	HVAC CONTROL PANEL CP-M826, DISCRETE INPUTS RACK 0, MODULE 2
1-0630M-A0056	001	HVAC CONTROL PANEL CP-M826, DISCRETE INPUTS RACK 0, MODULE 3
1-0630M-A0057	001	HVAC CONTROL PANEL CP-M826, DISCRETE OUTPUTS RACK 0, MODULE 4
1-0630M-A0058	001	HVAC CONTROL PANEL CP-M826, ANALOG INPUTS RACK 0, MODULE 5
1-0630M-A0059	001	HVAC CONTROL PANEL CP-M826, ANALOG INPUTS RACK 0, MODULE 6
1-0630M-A0060	001	HVAC CONTROL PANEL CP-M826, ANALOG OUTPUTS RACK 0, MODULE 7
1-0630M-A0061	001	LOOP DIAGRAM, FSL-C5301, FSL-C5311, EMERGENCY SHOWER FLOW SWITCHES
1-0630M-A0062	001	LOOP DIAGRAM, HS-C6001 AND HS-C6002, TONNER STORAGE ROOM OCCUPANCY SWITCHES
1-0630M-A0063	001	LOOP DIAGRAM, TSL-C6044, TSL-C6045, TONNER ROOM VESTIBULES TEMPERATURE SWITCHES
1-0630M-A0064	001	LOOP DIAGRAM, CP-M826.UPS01, POWER SUPPLY ALARM
1-0630M-A0065	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-1
1-0630M-A0066	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-2
1-0630M-A0067	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-3
1-0630M-A0068	001	LOOP DIAGRAM, TT-C6041, TT-C6042, AND TT-C6043, TEMPERATURE TRANSMITTERS
1-0630M-A0069	001	LOOP DIAGRAM, PDT-C6012, TONNER ROOM PRESSURE DIFFERENTIAL
1-0630M-A0070	001	CHLORINE SYSTEM UPGRADES, JUNCTION BOX LAYOUT, JBA-C6903
1-0630M-A0071	001	PANEL LAYOUT, VENTILATION CONTROL PANEL, CP-C601
1-0630M-A0072	001	PANEL LAYOUT, DAMPER-ACTUATOR, JUNCTION BOXES
1-0630M-A0073	001	TONNER SCALE ROOM BYPASS SWITCH, HZ-809-HS-1, LAYOUT
1-0630M-A0074	001	AUTOMATION, CONTROL SYSTEM ARCHITECTURE
1-0630M-A0075	001	LOOP DIAGRAM, XV-C6111, TONNER ROOM EMERGENCY AIR OUTDOOR INTAKE DAMPER
1-0630M-A0076	001	JUNCTION BOX LAYOUT, JBA-C6111

McPhillips Station

Cover page

Drawing Number	Sheet	Drawing Name and Title
1-0640A-D0002	001	DRAWING INDEX – MCPHILLIPS PUMPING STATION

Structural

Drawing Number	Sheet	Drawing Name and Title
1-0640C-C0001	001	CIVIL, DEMOLITION DRAWING – EARTHWORKS, PLANS
1-0640C-C0002	001	CIVIL, PARKING LOT EXPANSION, PLAN
1-0640C-S0001	001	STRUCTURAL, GENERAL NOTES
1-0640C-S0001	002	STRUCTURAL, GENERAL NOTES
1-0640C-S0002	001	STRUCTURAL, CHLORINE BUILDING DEMOLITION, PLANS, ELEVATIONS & DETAILS
1-0640C-S0003	001	STRUCTURAL, CHLORINE BUILDING MODIFICATION LAYOUT, PLANS, SECTIONS & ELEVATIONS

1-0640C-S0004	001	STRUCTURAL, CHLORINE SCRUBBER PAD, PLAN, SECTIONS & DETAILS
1-0640C-S0005	001	STRUCTURAL, DOOR MODIFICATIONS, PLANS, SECTIONS & DETAIL
1-0640C-S0006	001	STRUCTURAL, VESTIBULE PAD & WALKWAY, PLANS, ELEVATIONS & DETAILS
1-0640C-S0007	001	STRUCTURAL, VESTIBULE STRUCTURE, PLAN, ELEVATIONS & DETAILS
1-0640C-S0008	001	STRUCTURAL, NEW WORK ASSEMBLIES, PLAN, ELEVATIONS & DETAILS
1-0640C-S0008	002	STRUCTURAL, NEW WORK ASSEMBLIES, PLAN, ELEVATIONS & DETAILS

Electrical

Drawing Number	Sheet	Drawing Name and Title
1-0640C-E0003	001	ELECTRICAL SINGLE LINE DIAGRAM, CHLORINE BUILDING, MCC-C710/MCC-C720E
1-0640C-E0004	001	ELECTRICAL PANEL LAYOUT, CHLORINE BUILDING, MCC-C710/MCC-C720E LAYOUT AND SCHEDULE
1-0640C-E0005	001	ELECTRICAL PANEL LAYOUT, CHLORINE BUILDING, MCC-C710/MCC-C720E LOCATION PLAN – GALLERY LEVEL
1-0640C-E0006	001	PANELBOARD SCHEDULES, CHLORINE BUILDING, PNL-C711 AND PNL-C731E
1-0640C-E0008	001	ELECTRICAL LIGHTING PLAN, CHLORINE BUILDING, GROUND LEVEL AND SERVICE TUNNELS
1-0640C-E0013	001	ELECTRICAL EQUIPMENT PLAN, PUMP HOUSE AND CHLORINE BUILDING, GROUND LEVEL AND SERVICE TUNNELS
1-0640C-E0014	001	ELECTRICAL EQUIPMENT PLAN, DEMOLITION, CHLORINE BUILDING
1-0640C-E0015	001	ELECTRICAL EQUIPMENT AND INSTRUMENTATION PLAN, CHLORINE BUILDING
1-0640C-E0016	001	PARKING LOT UPGRADES, CHLORINE BUILDING
1-0640C-E0017	001	ELECTRICAL WIRING DIAGRAM, CHLORINE BUILDING, DRAIN PIPING HEAT TRACE, TEMP. CONTROLLER TC-C5032
1-0640C-E0018	001	CONNECTION DIAGRAM, MAKE-UP AIR UNIT AHU-C601
1-0640C-E0019	001	CONNECTION DIAGRAM, MAKE-UP AIR UNIT AHU-C602
1-0640C-E0020	001	STARTER SCHEMATIC/FIELD WIRING DIAGRAM, HEATER HCE-C620
1-0640C-E0021	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C640
1-0640C-E0022	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C641
1-0640C-E0023	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN SF-C630
1-0640C-E0024	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C642
1-0640C-E0025	001	CONNECTION DIAGRAM, CHLORINE GAS SCRUBBER SCBR-C670
1-0640C-E0042	002	PANELBOARD AND LUMINARE SCHEDULE

Mechanical

Drawing Number	Sheet	Drawing Name and Title
1-0640C-M0001	001	REMOVALS
1-0640C-M0002	001	NEW WORK, MAIN FLOOR AND ROOF PLAN
1-0640C-M0003	001	NEW WORK, ELEVATIONS AND SECTION
1-0640C-M0004	001	NEW WORK, PLAN, ELEVATION AND DETAILS
1-0640C-M0005	001	NEW WORK, PLAN, ELEVATION AND DETAILS
1-0640C-M0006	001	NEW WORK, SCHEDULES

Process

Drawing Number	Sheet	Drawing Name and Title
1-0640C-P0002	001	PROCESS & INSTRUMENTAION DIAGRAM, CHLORINE CYLINDER SHUTOFF VALVES
1-0640C-P0003	001	HVAC SYSTEM, PROCESS & INSTRUMENTATION DIAGRAM

Automation

Drawing Number	Sheet	Drawing Name and Title
1-0640C-A0003	001	REMOTE I/O PANEL LAYOUT, CONTROL PANEL CP-C827
1-0640C-A0004	001	POWER DISTRIBUTION, REMOTE I/O PANEL, CONTROL PANEL CP-C827
1-0640C-A0005	001	REMOTE I/O CONTROL PANEL CP-C827, DISCRETE INPUTS RACK 0, MODULE 2
1-0640C-A0006	001	REMOTE I/O CONTROL PANEL CP-C827, DISCRETE INPUTS RACK 0, MODULE 3
1-0640C-A0007	001	REMOTE I/O CONTROL PANEL CP-C827, DISCRETE OUTPUTS RACK 0, MODULE 4
1-0640C-A0008	001	REMOTE I/O CONTROL PANEL CP-C827, ANALOG INPUTS RACK 0, MODULE 5
1-0640C-A0009	001	REMOTE I/O CONTROL PANEL CP-C827, ANALOG INPUTS RACK 0, MODULE 6
1-0640C-A0010	001	REMOTE I/O CONTROL PANEL CP-C827, ANALOG OUTPUTS RACK 0, MODULE 7
1-0640C-A0011	001	LOOP DIAGRAM, U-C5301, EMERGENCY SHOWER FLOW SWITCH
1-0640C-A0012	001	LOOP DIAGRAM, HS-C6001, TONNER STORAGE ROOM OCCUPANCY SWITCH
1-0640C-A0013	001	LOOP DIAGRAM, TSL-C6044, TONNER ROOM VESTIBULES TEMPERATURE SWITCHES
1-0640C-A0014	001	LOOP DIAGRAM, CP-C827.UPS01, POWER SUPPLY ALARM
1-0640C-A0015	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-1
1-0640C-A0016	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-2
1-0640C-A0017	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-3
1-0640C-A0018	001	LOOP DIAGRAM, TT-C6041 AND TT-C6042, TEMPERATURE TRANSMITTERS

1-0640C-A0019	001	LOOP DIAGRAM, PDT-C6012, TONNER STORAGE ROOM PRESSURE DIFFERENTIAL
1-0640C-A0020	001	LOOP DIAGRAM, ZSC-C9001, DOOR SWITCH
1-0640C-A0021	001	LOOP DIAGRAM, FV-C6111, DAMPER POSITION CONTROL
1-0640C-A0022	001	PANEL LAYOUT, VENTILATION CONTROL PANEL CP-C601
1-0640C-A0023	001	JUNCTION BOX LAYOUT, JBA-C6903
1-0640C-A0024	001	PANEL LAYOUT, DAMPER ACTUATOR, JUNCTION BOXES
1-0640C-A0025	001	TONNER SCALE ROOM BYPASS SWITCH, LAYOUT
1-0640C-A0026	001	LOOP DIAGRAM, CHLORINE EMERGENCY ISOLATION SYSTEM, LC-809-XSC MANUAL/AUTOMATIC SHUTDOWN
1-0640M-A0051	002	PANEL LAYOUT, HVAC CONTROL PANEL CP-M826
1-0640M-A0058	001	AUTOMATION, CONTROL SYSTEM ARCHITECTURE

**Hurst Station
Cover Page**

Drawing Number	Sheet	Drawing Name and Title
1-0650A-D0003	001	DRAWING INDEX – MCPHILLIPS PUMPING STATION

Structural

Drawing Number	Sheet	Drawing Name and Title
1-0650M-C0001	001	CIVIL, EXISTING INFRASTRUCTURE, PLAN
1-0650M-S0023	001	STRUCTURAL, GENERAL NOTES
1-0650M-S0023	002	STRUCTURAL, GENERAL NOTES
1-0650M-S0024	001	STRUCTURAL, DEMOLITION & REMOVALS, PLAN & DETAILS
1-0650M-S0024	001	STRUCTURAL, DEMOLITION & REMOVALS, PLAN & DETAILS
1-0650M-S0025	001	STRUCTURAL, NEW WORKS – WALL OPENINGS, PLAN & DETAILS
1-0650M-S0026	001	STRUCTURAL, NEW WORKS – MISCELLANEOUS, PLAN, SECTIONS & DETAILS
1-0650M-S0027	001	STRUCTURAL, NEW WORKS - CONCRETE PADS, PLAN, SECTIONS & DETAILS
1-0650M-S0028	001	STRUCTURAL, NEW WORKS – FENCING, PLAN, SECTIONS & DETAILS
1-0650M-S0029	001	STRUCTURAL, NEW WORKS – SCRUBBER DUCT SUPPORT
1-0650M-S0030	001	STRUCTURAL, NEW WORKS – EXTERIOR WALL MODIFICATIONS, PLAN, SECTIONS & DETAILS
1-0650M-S0031	001	STRUCTURAL, NEW WORKS – VESTIBULE STRUCTURE, ELEVATION & DETAILS
1-0650M-S0032	001	STRUCTURAL, NEW WORKS – ROLLING DOORS, PLAN, SECTIONS & ELEVATIONS
1-0650M-S0033	001	STRUCTURAL, NEW WORKS – AHU SUPPORT FRAME, PLAN, ELEVATIONS & DETAILS

Electrical

Drawing Number	Sheet	Drawing Name and Title
1-0650M-E0015	001	ELECTRICAL SINGLE LINE DIAGRAM, PNL-AA AND CHILLER
1-0650M-E0016	001	ELECTRICAL SINGLE LINE DIAGRAM, PNL-BB
1-0650M-E0017	001	ELECTRICAL SINGLE LINE DIAGRAM, PNL-CC
1-0650M-E0041	001	ELECTRICAL SCHEDULES, 120V PANELBOARDS
1-0650M-E0041	002	ELECTRICAL SCHEDULES, 120V PANELBOARDS
1-0650M-E0042	001	ELECTRICAL SCHEDULES, 600V PANELBOARDS
1-0650M-E0043	001	CHLORINE BUILDING SITE PLAN, MAIN FLOOR
1-0650M-E0044	001	ELECTRICAL EQUIPMENT LAYOUT, MAIN FLOOR DEMOLITION
1-0650M-E0045	001	ELECTRICAL EQUIPMENT AND INSTRUMENTATION LAYOUT, MAIN FLOOR
1-0650M-E0046	001	WIRING DIAGRAM, CHLORINE BUILDING, DRAIN PIPING HEAT TRACE, TEMP CONTROLLER TC-C5302
1-0650M-E0047	001	WIRING DIAGRAM, CHLORINE BUILDING, DRAIN PIPING HEAT TRACE, TEMP CONTROLLER TC-C5303
1-0650M-E0048	001	CONNECTION DIAGRAM, MAKE-UP AIR UNIT AHU-C601
1-0650M-E0049	001	CONNECTION DIAGRAM, MAKE-UP AIR UNIT AHU-C602
1-0650M-E0050	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C640
1-0650M-E0051	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C641
1-0650M-E0052	001	STARTER SCHEMATIC/FIELD WIRING DIAGRAM, HEATER HCE-C620
1-0650M-E0053	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, SUPPLY FAN SF-C630
1-0650M-E0054	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C642
1-0650M-E0055	001	MOTOR STARTER SCHEMATIC/FIELD WIRING DIAGRAM, EXHAUST FAN EF-C644
1-0650M-E0056	001	CONNECTION DIAGRAM, CHLORINE GAS DETECTION SCRUBBER SCBR-C670
1-0650M-E0057	001	LIGHTING LAYOUT, CHLORINE BUILDING
1-0650M-E0058	001	ELECTRICAL FIRE ALARM, LEGEND AND DETAILS
1-0650M-E0059	001	ELECTRICAL FIRE ALARM PLAN, MAIN FLOOR, DEMOLITION
1-0650M-E0060	001	ELECTRICAL FIRE ALARM PLAN, PUMP FLOOR
1-0650M-E0061	001	ELECTRICAL FIRE ALARM PLAN, MAIN FLOOR
1-0650M-E0062	001	ELECTRICAL FIRE ALARM, RISER DIAGRAM, DETECTION CIRCUITS

1-0650M-E0063 001 ELECTRICAL FIRE ALARM, RISER DIAGRAM, NOTIFICATION APPLIANCE CIRCUITS

Mechanical

Drawing Number	Sheet	Drawing Name and Title
1-0650M-M0011	001	REMOVALS
1-0650M-M0012	001	NEW WORK, PLANS AND SECTION
1-0650M-M0013	001	NEW WORK, SECTIONS
1-0650M-M0014	001	NEW WORK, ELEVATIONS AND SECTION
1-0650M-M0015	001	NEW WORK, DETAILS
1-0650M-M0016	001	NEW WORK, PLANS & DETAILS
1-0650M-M0017	001	NEW WORK, SCHEDULES

Process

Drawing Number	Sheet	Drawing Name and Title
1-0650M-P0022	001	HVAC SYSTEM, PROCESS & INSTRUMENTATION DIAGRAM
1-0650M-P0024	001	PROCESS & INSTRUMENTAION DIAGRAM, CHLORINE CYLINDER SHUTOFF VALVES

Automation

Drawing Number	Sheet	Drawing Name and Title
1-0650M-A0026	001	INSTRUMENT LOOP DIAGRAM, HC-809-XSC MANUAL/AUTOMATIC SHUTDOWN
1-0650M-A0031	005	LOOP DIAGRAM, METHANE AND CO DETECTION
1-0650M-A0032	001	SCHEMATIC, METHANE AND CO DETECTION
1-0650M-A0040	001	HVAC CONTROL PANEL CP-M806, PANEL LAYOUT
1-0650M-A0042	001	AUTOMATION, CONTROL SYSTEM ARCHITECTURE
1-0650M-A0044	001	AUTOMATION – WIRING DIAGRAM, HVAC CONTROL PANEL CP-M806, DISCRETE INPUTS RACK 0, SLOT 4
1-0650M-A0060	001	REMOTE I/O PANEL LAYOUT, CONTROL PANEL CP-C827
1-0650M-A0061	001	POWER DISTRIBUTION, REMOTE I/O PANEL, CONTROL PANEL CP-C827
1-0650M-A0062	001	CONTROL PANEL CP-C827, DISCRETE INPUTS RACK 0, MODULE 2
1-0650M-A0063	001	CONTROL PANEL CP-C827, DISCRETE INPUTS RACK 0, MODULE 3
1-0650M-A0064	001	CONTROL PANEL CP-C827, DISCRETE OUTPUTS RACK 0, MODULE 4
1-0650M-A0065	001	CONTROL PANEL CP-C827, ANALOG INPUTS RACK 0, MODULE 5
1-0650M-A0066	001	CONTROL PANEL CP-C827, ANALOG INPUTS RACK 0, MODULE 6
1-0650M-A0067	001	CONTROL PANEL CP-C827, ANALOG OUTPUTS RACK 0, MODULE 7
1-0650M-A0068	001	LOOP DIAGRAM, FSL-C5301, FSL-C5311, AND FSL-C5321, EMERGENCY SHOWER FLOW SWITCHES
1-0650M-A0069	001	LOOP DIAGRAM, HS-C6001 & HS-C6002, TONNER STORAGE ROOM OCCUPANCY SWTICH
1-0650M-A0070	001	LOOP DIAGRAM, TSL-C6044, TSL-C6045, TONNER ROOM VESTIBULES TEMPERATURE SWITCHES
1-0650M-A0071	001	LOOP DIAGRAM, CP-M826.UPS01, POWER SUPPLY ALARM
1-0650M-A0072	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-1
1-0650M-A0073	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-2
1-0650M-A0074	001	LOOP DIAGRAM, CHLORINE DETECTION, AIT-C6903-3
1-0650M-A0075	001	LOOP DIAGRAM, TT-C6041 AND TT-C6042, TEMPERATURE TRANSMITTERS
1-0650M-A0076	001	LOOP DIAGRAM, PDT-C6012, TONNER ROOM PRESSURE DIFFERENTIAL
1-0650M-A0077	001	LOOP DIAGRAM, ZSC-9001 AND ZSC-9002, TONNER ROOM VESTIBULE DOOR SWITCH
1-0650M-A0078	001	PANEL LAYOUT, VENTILATION CONTROL PANEL CP-C601
1-0650M-A0079	001	JUNCTION BOX LAYOUT, JBA-C6903
1-0650M-A0080	001	PANEL LAYOUT, DAMPER ACTUATORS, JUNCTION BOXES
1-0650M-A0081	001	TONNER SCALE ROOM CHLORINE BYPASS SWITCH LAYOUT
1-0650M-A0082	001	PANEL LAYOUT, HCE-C620 CONTROL PANEL
1-0650M-A0083	001	LOOP DIAGRAM, FIRE ALARM CONTROL PANEL FACP-M922

E2. SOILS INVESTIGATION REPORT

E2.1 The following geotechnical soils reports are provided in Appendix E:

- (a) Maclean Regional Pumping Station – Chlorine Systems Upgrades Geotechnical Report.
- (b) McPhillips Regional Pumping Station – Chlorine Systems Upgrades Geotechnical Report.
- (c) Hurst Regional Pumping Station – Chlorine Systems Upgrades Geotechnical Report.

E2.2 The geotechnical soils report is provided for information only. Proponents are not to rely on the information given in the geotechnical soils report for the purposes of preparation of their Bid.

GENERAL REQUIREMENTS

E3. OFFICE FACILITIES

- E3.1 The Contractor shall supply office facilities meeting the following requirements;
- (a) Provide office heated to 20 degrees C, lighted, and ventilated, of sufficient size to accommodate Site meeting and furnished with drawing laydown table;
 - (b) Provide marked and fully stocked first aid case in a readily available location;
 - (c) Subcontractors to provide their own office as necessary. Direct locations of these offices;
 - (d) Refer to Specification 01 52 00, Section 1.8 for additional information.

E4. HAZARDOUS MATERIALS

- E4.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.
- E4.2 Asbestos (both known and presumed) will be distributed by the Work. Refer to Section 02 82 00 – Asbestos Abatement for details.
- E4.3 The City utilizes chlorine gas on Site as part of the water pumping process at all three pumping station as part of the scope of work (McPhillips, Maclean, Hurst Regional Pumping Stations). A chlorine gas detector is installed with alarming to notify personnel of any potential toxic chlorine gas levels. The existing chlorine gas detectors shall remain operation during the installation of the new gas detectors. The Contractor is expected to follow City policies regarding chlorine gas safety.

E5. MOBILIZATION AND DEMOBILIZATION PAYMENT

- E5.1 Description
- (a) This Specification shall govern mobilization and demobilization from site.
- E5.2 Measurement and Payment
- E5.2.1 Mobilization and Demobilization
- (a) Mobilization and demobilization will be measured on a lump sum basis and paid for at the Contract Lump Sum Price for “Mobilization and Demobilization”. Payment for Mobilization and demobilization shall include all costs associated with mobilization and demobilization, site set up, and cleanup. Payment will be made on the following schedule:
 - (b) 25% payment of the Mobilization and Demobilization lump sum price will be paid once sewer cleaning and preparation crews arrive on site and commence with cleaning and sewer preparation works.
 - (c) 50% payment of the Mobilization and Demobilization lump sum price will be paid once lining crews arrive on site and commence CIPP liner installations.
 - (d) 100% of the Mobilization and Demobilization lump sum price will be paid subsequent to completion of the liner installation, liner repairs (if necessary), and site cleanup.

E6. CASH ALLOWANCE FOR ADDITIONAL WORK

- E6.1 Additional Work may be necessitated due to unforeseen circumstances that may arise during the course of the project due to:
- (a) Additions to the scope of Work by the Contract Administrator, beyond that defined herein.
- E6.2 A cash allowance has been included on Form B: Prices.

- E6.3 The City reserves the right to delete any or all of the Cash Allowance from the Contract if the Work intended to be covered by the Cash Allowance is not required, or if the Works intended are found to be more extensive than the provisional Cash Allowance.
- E6.4 Cost of additional work shall be evaluated by the methods outlined in C7.4, and a Change Order prepared by the Contract Administrator. Cost of the Change Order will be paid on the Progress Estimate and deducted from the Cash Allowance. If the valuation of the authorized work exceeds the Value of the Cash Allowance, the Contract Value will be adjusted by the shortfall.
- E6.5 Additional services and/or Work will not be initiated for:
- (a) Reasons of lack of performance or errors in execution.
 - (b) Scheduling changes initiated by the City, where at least 24 hours' notice is given prior to the Contractors schedule time to be on Site.
- E6.6 Should it be determined that additional material or services are required, the Contract Administrator shall approve the Work, prior to commencement of the additional Work.
- E6.7 Material Mark-Up Factors in accordance with C7:
- (a) The base cost is to be the wholesale cost of the material, regardless of the Contractor or Subcontractor supplying the material.
 - (b) In general, the party (Contractor or Subcontractor) supplying the material is the party that purchases the material from a supplier who does not perform any work on Site, unless otherwise determined by the Contract Administrator.
 - (c) Where the Contractor is supplying the material, the mark-up on the material is limited to fifteen percent (15%).
 - (d) Where the Contractor's immediate Subcontractor is supplying the material the total mark-up on the material including all Subcontractors and the Contractor is limited to twenty-five percent (25%)
 - (i) The Subcontractor's mark-up on the material is limited to fifteen percent (15%);
 - (ii) The Contractor's mark-up on the material is limited to ten percent (10%).
 - (e) A Third-Level Subcontractor is a Subcontractor of a Subcontractor of the Contractor.
 - (i) No Third-Level Subcontractors on this project are approved for additional mark-up.
 - (f) In the event that a Third-Level Subcontractor is utilized, that is not approved for additional mark-up, the Contractor is responsible for coordinating the split of the maximum approved mark-up between the Contractor and Subcontractors.
- E6.8 Measurement and Payment
- (a) Additional labour will be reimbursed at the rate specified on Form B: prices. The rate will not be adjusted for Subcontractors or individual with specialized skills, without specific approval of the Contract Administrator.
 - (b) All additional labour will be reimbursed at the rate specified on Form B: Prices Labour – Base except in the following circumstances:
 - (i) Work after 9:00pm and prior to 6:00am that is approved as night-time shutdown work, which will be at Labour – Night-time rate.
 - (c) Additional material will be reimbursed by the actual base cost of the material, multiplied by the approved mark-up factors indicated in E6.7.

E7. SPECIFIC REQUIRMENTS

- E7.1 Advance notice, and written approval by the Contract Administrator, will be required if access in/out of any of the sites is restricted due to construction efforts. The City has vehicles which enter and exit all sites to accommodate on-going operations. Operations at each station will be on-going by the City during the Construction period.

E7.2 The Contractor shall abide by the Arc Flash PPE requirements of CSA-Z462, Workplace Electrical Safety, and the arc flash labels on existing facility equipment (as well as new arc flash levels).

E8. EQUIPMENT AND MATERIALS

E8.1 The Contractor shall supply all equipment and materials necessary to execute the work.

E8.2 Existing equipment and materials may be re-used only as specifically indicated in these Specifications, as shown on the Drawings or as approved by the Contract Administrator.

E9. SITE ACCESS AND SECURITY

E9.1 This section describes the security requirements and access restrictions at Site during construction. Site applies to all three pumping stations (McPhillips, MacLean, and Hurst Pumping Stations)

E9.2 General Considerations for Work at the McPhillips, MacLean, and Hurst Pumping Stations.

E9.2.1 Each station contains numerous water conduits that are critical components of the City's water supply. Work around any of these pipelines shall be well planned and executed to ensure that the pipelines are not subjected to excessive construction related loads, including excessive vibrations and concentrated or asymmetrical lateral loads during the Work. Advance notice shall be provided to the Contract Administrator and the City when there is any work around the pipelines including scope of the Work and what equipment is being used to perform the Work. See E15 for more detail.

E9.2.2 Advance notice and written approval by the Contract Administrator will be required if access in/out of any of the Site is restricted due to construction efforts.

E9.2.3 Under no circumstances will traffic or equipment be permitted beyond designated areas unless stated otherwise in the Specifications.

E9.2.4 Employees of the Contractor or any Subcontractor that fail to comply with the conditions for working at the Site shall be promptly removed from the Site.

E9.2.5 The Contractor's Site supervisor is required to carry, at all times, a cellular telephone, with voice mail.

E9.3 The Contractor will be issued keys for access to site

E9.3.1 The Contractor shall provide the name and contact information for the person in charge and responsible for the Site.

E9.3.2 The first progress payment after issuing the keys will be deducted ten thousand dollars (\$10,000.00) as a deposit for any and all keys.

E9.3.3 The Contractor is to return all keys prior to Total Performance. On return of all keys including damaged keys, the ten-thousand-dollar (\$10,000) deposit will be released.

E9.3.4 If any key is not returned (functioning or otherwise), the Contractor's deposit will not be released, and the money may be used by the City to cover the cost of rekeying the affected locks.

E9.3.5 The Contractor is to immediately report any lost keys and return any damaged or non-functioning keys for replacement.

E9.4 Site Security

E9.4.1 The Contractor is required to take measures necessary to secure the Work areas when the Work areas are vacated. When personnel are not within visual range of the access gates, the gates shall be closed and locked.

E9.4.2 The Contractor is responsible for all Plant and Material stored on the Site.

- E9.4.3 All entry doors into the pumping stations and chlorine buildings are to remain locked at all times.
- (a) Overhead door entries to be securely enclosed during the Work. The contractor to provide a secure means to enclose/seal the overhead door entries during overhead door replacement when door is temporarily removed. Contractor to provide method of securing overhead door entries during this Work to the Contract Administrator for approval prior to proceeding.
- E9.4.4 Follow City procedures regarding entrance and exit.
- E9.4.5 On a daily basis during the course of Work, the Contractor shall communicate with the **City of Winnipeg Deacon Control Centre at 204-986-5000** at the beginning of working hours and at the end of working hours, as to the status of the Site security and, in particular, when the Contractor staff leaves the Site.

E10. MATERIAL DISPOSAL

- E10.1 All demolished Material shall be appropriately disposed at an appropriate facility off site and in accordance with all applicable regulations and by-laws with the exception of the items noted below.
- (a) Any and all MCC sections and distribution panel breakers. These Materials can be left in place and marked as spare if the space is not required for new Material or turned over to the City if the space is required for new Material.
- (b) All salvaged equipment and materials as determined by the Contract Administrator. Set aside all demolished equipment and material determined to be salvaged at an agreed upon location between.
- E10.2 Removal and delivery of salvageable and non-salvageable equipment and material shall be considered incidental to the Contract Work and no additional payment will be made for such Work.

E11. DANGEROUS WORK CONDITIONS

- E11.1 Further to clause E4, the Contractor shall be aware that the following locations are considered confined spaces:
- (a) sump pump chamber at the McPhillips Regional Pumping Station;
- (b) suction header area at the McPhillips Regional Pumping Station;
- (c) outside air and supply air plenum at the McPhillips Regional Pumping Station;
- (d) crawlspace in the Collections Building;
- (e) crawlspace below the Tonner Room at the Hurst RPS;
- (f) suction header and valve area below the Pump Floor at the Hurst RPS.
- (g) sump pump chamber at the MacLean Regional Pumping Station;
- (h) suction header area at the MacLean Regional Pumping Station;
- (i) air plenum at the MacLean Regional Pumping Station;
- (j) inside of vessels and tanks;
- (k) any other areas labelled as "confined space" at Site.
- E11.2 The Contractor shall follow the "Guidelines for Confined Entry Work" as published by the Manitoba Workplace Safety and Health Division for all work involving a confined space.
- E11.3 The Contractor shall be aware of the potential hazards that can be encountered in confined spaces such as toxic gases and oxygen deficiency. The Contractor's Safe Work Plan should address these issues.

- E11.4 The air in a confined space must be tested before entry and continuously during the time that personnel are inside the space. Equipment for continuous monitoring of gases must be explosion-proof and equipped with a visible and audible alarm. The principal tests are for oxygen deficiency and toxic gases. Testing equipment must be calibrated in accordance with manufacturer's specifications.
- (a) The Contractor is responsible for all testing requirements.
 - (b) Contractor shall be responsible for all equipment, support, and documentation required to safely perform a confined space entry. Confined space entry permit must be posted/available at the confined space.
- E11.5 The Contractor shall ventilate all confined spaces including underground chambers, tunnels, and shafts as required and approved by the Manitoba Workplace Safety and Health Act (the "Act"). If no ventilation is supplied, a worker must wear a respirator or supplied air to enter the confined space.
- E11.6 The Contract Administrator may issue a stop work order to the Contractor if the above guidelines are not being followed. The Contractor shall not resume operations until the Contract Administrator is satisfied the Contractor is following the appropriate procedures. The Contractor shall have no claim for extra time or costs due to the stop work order for not following these safety guidelines.

E12. TEMPORARY USE OF CITY EQUIPMENT

- E12.1 City facilities, systems and equipment shall not be used during construction without the Contract Administrator's written permission. The Contract Administrator reserves the right to withdraw said permission if, in his opinion, proper care and maintenance are not provided.
- E12.2 The Contractor may use the existing overhead crane at the McPhillips, Maclean, Hurst Pumping Stations under this Contract, subject to review of a Safe Work Plan applicable to the Work.
- E12.2.1 The Contractor shall provide a qualified crane operator. Contractor to provide appropriate certification of personnel for crane use. Personnel using crane shall also complete a City safety course prior to crane use.
- E12.2.2 Any lifts performed by the Contractor will need to be within the operating limit of the crane.
- E12.2.3 As per C10.2, the Contractor shall be responsible for any losses or damages to the crane during the operation.
- E12.2.4 Crane Capacity
- (a) MacLean Regional Pumping Stations:
 - (i) Main Pumphouse: 10 tonnes.
 - (ii) Chlorine Room: 2.5 tonnes.
 - (b) McPhillips Regional Pumping Station:
 - (i) Main Pumphouse: 10 tonnes
 - (ii) Chlorine Room: 2.5 tonnes.
 - (c) Hurst Regional Pumping Station.
 - (i) Main Pumphouse: 7.5 tonnes.
 - (ii) Chlorine Room: 2.5 tonnes.

E13. PUMPING STATION OPERATION DURING CONSTRUCTION

- E13.1 The facilities related to the Work are critical to the distribution of potable water for the City of Winnipeg and for fire fighting services for the City. Under no condition shall the station services be shut down without prior permission of the Contract Administrator, in review with the City.
- E13.2 The Contractor is advised that the McPhillips Regional Pumping Station, MacLean Regional Pumping Station, and Hurst Regional Pumping Station will be allowed to be taken out of

operation only after the Contractor's schedule of activities to complete the Work is approved by the Contract Administrator. The Contractor shall plan his construction activities to allow for the minimum amount of disruption time to normal operating status of the stations. Under no circumstances can multiple stations be taken out of operation at one time.

- E13.3 The Contractor shall cooperate with and provide full access at all times for City personnel to carry out maintenance and operational duties.
- E13.4 No additional payments will be made for providing access to City forces on the site or any potential effect City crews might have on the Contractor's work.
- E13.5 Prepare and submit shutdown plans a minimum of fourteen (14) Business Days prior to the proposed shutdown.
- E13.6 All operation and control relating to the water process will be by the City.
- E13.7 Shutdowns
- E13.7.1 Temporary shutdowns for the McPhillips Regional Pumping Station (including the Chlorine Building) are only permitted between the hours of 11:30 p.m. and 5:00 a.m. (maximum 5.5 hours in duration per outage or less where otherwise indicated for select systems). Under no circumstance will the pumping station be permitted to shut down during the day.
- E13.7.2 Temporary shutdowns for the MacLean Regional Pumping Station (including the Chlorine Building) are only permitted between the hours of 11:30 p.m. and 5:00 a.m. (maximum 5.5 hours in duration per outage or less where otherwise indicated for select systems). Under no circumstance will the pumping station be permitted to shut down during the day.
- E13.7.3 Temporary shutdowns for the Hurst Regional Pumping Station (including the Chlorine Building) are only permitted between the hours of 11:30 p.m. and 5:00 a.m. (maximum 5.5 hours in duration per outage or less where otherwise indicated for select systems). Under no circumstance will the pumping station be permitted to shut down during the day
- E13.7.4 In the event that the Contractor causes an unplanned partial or complete shutdown, and, in the opinion of the Contract Administrator, is deemed to be at fault, the Contractor may be charged a fee between \$2,000 and \$10,000 to cover the City's costs associated with the shutdown. This does not waive or eliminate any associated insurance or other requirements.
- E13.7.5 In the event that the Contractor causes an unplanned partial or complete shutdown, the Contractor is responsible for providing all required services to remediate the issues on an emergency basis. No payment will be made to the Contractor for repair of any item related to the Contractor's work.
- E13.7.6 Schedule several work activities to be completed in the same shutdown where possible to minimize the number of station shutdowns required.
- E13.7.7 There will be no charge to temporarily shut down the water pumping station for the work activity listed.
- E13.7.8 If an unreasonable number of station shutdowns are required to complete the same work activity due to the Contractor's method of operation, a fee of \$500.00 per hour may be charged to the Contractor and deducted from future Progress Payments
- E13.7.9 The Contract Administrator reserves the right to cancel a planned station shutdown if in their opinion any conditions would not allow for a shutdown of sufficient duration to complete the work activity. The Contractor shall reschedule the work activity to a more suitable time.
- E13.7.10 The Contract Administrator reserves the right to cancel a planned station shutdown during inclement weather, or due to operational issues, including issues within other City facilities.

E14. CONSTRUCTION WORK PLAN

- E14.1 Submit a Detailed Work Plan document for review and approval by the Contract Administrator on each Thursday, indicating the following:
- (a) Detailed description of all work planned for the next week. Where required or requested by the Contract Administrator, provide:
 - (i) The proposed construction sequence to be followed including all methods to be employed to ensure that no damage or unintended service outages occur.
 - (ii) A description of all proposed methods of construction to be implemented.
 - (iii) Specialized equipment that may be used.
 - (iv) A detailed description, methods and procedures for all testing (both factory-based testing and field testing).
 - (b) Planned shutdowns within the next 2-4 weeks.
 - (c) Any design revision proposed to accommodate the Contractor's proposed method of construction.
 - (d) The Contractor shall respond to any concerns that may be raised by the Contract Administrator's review of the Contractor's construction methods submission.
- E14.2 All shutdowns require detailed planning and approval by the City. The Contractor must submit information required to support the creation of a detailed Shutdown Procedure and Work Plan. The Contract Administrator will assist with the creation of these documents and coordinating with the City.
- E14.3 The Contractor must keep life safety systems, such as fire alarm systems, emergency lighting, gas detection systems operational at all times except for planned and approved outages. Include costs and provide a 24 hours per day / 7 day per week watch person where systems are made inoperable during the approved outage periods.
- E14.3.1 No Work shall proceed without the inclusion of the Work on a Detailed Work Plan and corresponding approval of the Work by the Contract Administrator.

E15. OPERATING CONSTRAINTS FOR WORK IN CLOSE PROXIMITY TO CRITICAL WATER INFRASTRUCTURE

E15.1 Description

- E15.1.1 This section details operating constraints for all Work to be carried out in close proximity to the City suction inlet and discharge piping and other critical water infrastructure. Close proximity shall be deemed to be any construction activity within a 5 m horizontal offset from the centreline of suction inlet and discharge piping, within a 5 m horizontal offset from a feeder main/water main, within 5 m of valve chambers and other appurtenances, and any other infrastructure identified below. Construction activity includes the placement for any large cranes for lifting equipment.
- E15.2 The following shall be considered critical pipelines and water infrastructure for this project
- E15.2.1 McPhillips Regional Pumping Station:
- (a) The suction inlet and discharge piping are located on the east side of the McPhillips Chlorine Building as shown on the Drawings.
 - (b) The suction inlet piping is a 1650 mm pre-stressed concrete pressure pipe.
 - (c) The discharge piping is a 1350 mm pre-stressed concrete pressure pipe.
 - (d) The Valve Chamber is located outside the fenced area south west of the pumping station on Logan Avenue.
- E15.2.2 MacLean Regional Pumping Station:
- (a) The 1350 mm Aqueduct Interconnector is constructed of PSC pipe runs and below the west slope of the MacLean Reservoir.

- (b) One 1500mm PSC suction pipe running from the south face of the MacLean RPS to the MacLean Reservoir Valve House.
- (c) One 1500mm PSC suction pipe running from the north east corner of the RPS and parallel to the east face of the RPS to the MacLean Reservoir Valve House
- (d) One 1500mm PSC suction pipe running parallel to the north face of the RPS from the east at 1500mm suction pipe into the north east corner of the RPS.
- (e) One 1200mm PSC suction bypass pipe running from the intersection of the two 1500mm suction pipes at the north east corner of the pump station to B-Valve Chamber at the 1350mm Aqueduct Interconnect.
- (f) Two 1200mm PSC discharge pipes which connect into the 1050mm Speer Road PSC feedermain located under Lagimodiere Blvd. The discharge pipe exits one at the north face of the building and one at the south face of the building.

E15.2.3 Hurst Regional Pumping Station:

- (a) Charleswood feedermain, 750mm reinforced concrete water pipe – steel cylinder type, not pre-stressed, installed on the boulevard/sidewalk between the property line and back of the curb, and crossing the entrance driveway.
- (b) Wilkes Avenue feedermain, 900mm pre-stressed concrete pressure pipe installed on the boulevard and crossing the entrance driveway.
- (c) Wilkes Avenue Reservoir Drainage Building Outlet Pipe, 600mm asbestos cement class II sewer pipe installed on the west of Hurst RPS connecting the Drainage Lift Station to the City 1350mm concrete land drainage sewer.
- (d) Wilkes Avenue Reservoir By-pass Piping, 1350 mm pre-stressed concrete pressure suction pipe installed on the south side of the Hurst RPS crossing the driveway under the entrance gate.
- (e) 900mm pre-stressed concrete pressure suction pipe on the south side of the Hurst RPS supplying water from Wilkes Avenue Reservoir North Cell (Wilkes Avenue Reservoir No.2) to the Hurst RPS crossing the gravel road.
- (f) 900m prestressed concrete pressure suction pipe running diagonally on the south side of the Hurst RPS.
- (g) Two 1350mm steel pipe in concrete suction lines on the southwest and southeast of Hurst RPS.
- (h) Two 1200mm steel pipe in concrete discharge line on the northwest and northeast of Hurst RPS.

E15.3 General Considerations for Work in Close Proximity to Critical Water Infrastructure:

E15.3.1 Feedermain, suction inlet, and discharge piping are critical components of the City of Winnipeg regional water supply system and work in close proximity to suction inlet and discharge piping shall be undertaken with an abundance of caution. Feedermain, suction inlet, and discharge piping 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.

E15.3.2 Work around critical water infrastructure 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.

E15.3.3 Any 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.

E15.4 Submittals

- E15.4.1 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 width or wheel configurations; and,
 - (c) load distributions on the intended operating configuration.
- E15.4.2 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) a detailed craning plan including the location of setup, the rigging configuration and lifting devices, and probable ground pressures resulting below the crane wheels and all outriggers.
 - (b) crane mat Shop Drawings sealed, signed, date by a Professional Engineer licensed to practice in the Province of Manitoba for all crane mats necessary to complete the Works.
 - (c) proposed construction plan including excavation locations, haul routes, excavation equipment locations, and loading positions;
 - (d) excavation plans, including shoring designs, for excavations occurring in close proximity to suction inlet or discharge piping (within 5 m horizontal of the pipe's center line) where the excavation is to be extended below the top of the suction inlet or discharge piping embedment zone (150mm above the pipe);
 - (e) Any other pertinent information required to accurately describe the construction activities in close proximity to the suction inlet or discharge piping and permit the Contract Administrator to review the proposed construction plans.
- E15.4.3 Incomplete or partial submissions will not be reviewed and will be returned to the Contractor for re-submission.
- E15.4.4 Allow five (5) Business Days for review by the Contract Administrator.
- E15.5 Pre-work, Planning and General Execution
- E15.5.1 No work shall commence in close proximity to suction inlet or discharge piping and critical infrastructure until the equipment specifications and construction method statement have been submitted and accepted, and suction inlet or discharge piping locations have been clearly delineated in the field. Work over suction inlet or discharge piping shall only be carried out with equipment that has been reviewed and quantified in terms of its loading implications on the pipe.
- E15.5.2 Contact the City of Winnipeg Water and Waste Department, Construction Services Coordinator prior to construction.
- E15.5.3 Locate critical infrastructure and confirm their position horizontally and vertically prior to undertaking work in close proximity to the identified suction inlet or discharge piping. Note, exact locations to be identified in the field. Contractor to confirm depth and location via soft dig/hydro vac excavation. Deviations from the elevations noted on the Drawings shall be reported to Contract Administrator for review prior to proceeding with work:
- E15.5.4 Visually delineate all critical infrastructure identified herein on Site by use of paint, staking/flagging, construction fencing, snow fencing, or other suitable methods.
- E15.5.5 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 critical infrastructure identified herein.
- E15.5.6 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.
- E15.5.7 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).
- E15.5.8 Granular material, construction material, soil, and/or other material shall not be stockpiled on the pipelines or within 5 m of any suction inlet or discharge piping or other critical infrastructure identified herein.
- E15.5.9 The Contractor shall ensure that all crew members understand and observe the requirements of working near suction inlet or discharge piping and critical infrastructure. At each site, prior to commencement of on-Site work, the Contractor shall jointly conduct an orientation meeting with the Contract Administer, 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 suction inlet or discharge piping. 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.
- E15.6 Demolition, Excavation, and Shoring
- E15.6.1 Use of pneumatic concrete breakers within 3 m of a suction inlet or discharge piping or critical pipeline is prohibited. Pavement shall be full depth sawcut and carefully removed. Use of hand held jackhammers for pavement removal will be allowed
- E15.6.2 Offset excavation equipment a minimum of 3 m from the center line of suction inlet or discharge piping or critical pipelines when undertaking excavations where there is less than 2.4 m of earth cover over the pipeline.
- E15.7 Excavation
- E15.7.1 Utilize only smooth edged excavation buckets, soft excavation, or hand excavation techniques where there is less than 1.5 m of earth cover over the pipeline.
- E15.7.2 Where there is less than 1.0 m of soil cover above the pipeline, provide full time supervision and complete the excavation utilizing hand excavation, soft excavation methods, or machine excavation. Where machine excavation is to be used, the crown of the pipeline must be exposed (or suitable located) using hand or soft excavation methods a minimum of every 1.8 m.
- E15.7.3 Where there is less than 0.5 m of soil cover above the pipeline, provide full time supervision and complete the excavation utilizing hand excavation or soft excavation methods only.
- E15.7.4 Equipment should not be allowed to operate while positioned directly over suction inlet or discharge piping except were permitted herein, outlined in the reviewed and accepted construction method statement.
- E15.7.5 Excavations within 3 m of the outside edge of suction inlet or discharge piping (hydrovac holes for confirming trenchless installations excluded) and which extend below obvert of the suction inlet or discharge piping shall utilize shoring methods that precludes the movement of native in-situ soils (i.e. a tight shoring system).
- E15.7.6 Excavation and base placement for sidewalks and approaches shall be completed remotely with limitations as specified herein.
- E15.8 Subgrade Construction
- E15.8.1 Subgrade and backfill compaction within 3 metres (horizontal) of suction inlet or discharge piping shall be limited to non-vibratory methods only. Small walk behind vibratory packers will be permitted.

- E15.8.2 Subgrade, sub-base and base course construction shall be kept in a rut free condition at all times. Construction equipment is prohibited from crossing pipelines if the grade is insufficient to support the equipment without rutting.
- E15.8.3 Subgrade conditions should be inspected by personnel with competent geotechnical experience (e.g. ability to adequately visually classify soils and competency of subgrade, subbase, and base course materials). In the event of encountering unsuitable subgrade materials above the suction inlet or discharge piping, proposed design revisions shall be submitted to the Contract Administrator for review to obtain approval from the Water and Waste Department relative to any change in conditions.
- E15.8.4 Fill material shall not be dumped directly on pipelines but shall be stockpiled outside the limits noted in these recommendations and shall be carefully bladed in-place.
- E15.8.5 Only use compaction equipment approved by the Contract Administrator to compact fill materials above suction inlet or discharge piping or critical pipelines. Compaction of fill materials shall be completed using static methods only, no vibratory compaction will be allowed within the limits noted in these recommendations.
- E15.8.6 Construction operations shall be staged to minimize the time period between excavation to subgrade and placement of granular subbase materials. Should bare subgrade be left overnight, measures shall be implemented to protect the subgrade against inadvertent travel over it and to minimize the impact of wet weather.
- E15.9 Subbase and Base Course Construction
- E15.9.1 Subbase or base course materials shall not be dumped directly on pipelines but shall be stockpiled outside limits noted in these recommendations and shall be carefully bladed in place.
- E15.9.2 Subbase compaction within 3 m horizontal of the centreline of suction inlet or discharge piping or a critical pipeline shall be either carried out by static methods (without vibration) or with smaller approved equipment such as hand held plate packers or smaller roller equipment.
- E15.10 Paving
- E15.10.1 When constructing asphalt pavements only non-vibratory compaction should be used within 3 m (horizontal) of the center of suction inlet or discharge piping or critical pipelines.
- E15.11 Crane Mats
- E15.11.1 The Contractor shall furnish of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all things necessary for and incidental to the satisfactory performance and completion of all works associated with the crane mats.
- E15.11.2 The Work associated with the crane mats shall include, but is not limited to:
- (a) Design, supply, and installation of all crane mats necessary to complete the Works.
 - (b) Removal of crane mats off-Site upon the completion of all crane Works.
- E15.11.3 Reference
- (a) All related Specifications and reference standards are in accordance with the most current issue of latest revision.
 - (i) City of Winnipeg Specifications CW-3130 (latest edition) – Supply And Installation of Geotextile Fabrics.
- E15.11.4 Equipment
- (a) The Contractor's requirements of the Works and all notes shown on the Drawings.
- E15.11.5 Measurement and Payment.
- (a) Crane mats will be considered to Item No.1 on Form B: prices and no additional measurements or payments will be made.

E16. SITE ENVIRONMENTAL REQUIREMENTS

- E16.1 The Contractor shall be aware that the three pumping stations are for potable water supply and no contamination by fuel, chemicals, etc. shall be permitted at any time. Fuels, chemicals, or any other hazardous substances which may compromise the safety of the potable water supply shall not be stored outside of the area designated by the Contract Administrator.
- E16.2 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.
- E16.3 Submittals
- E16.3.1 Submit an Environmental Protection Plan two (2) weeks prior to start of Work in accordance with Section 01 33 00 – Submittals
- E16.3.2 Environmental Protection Plan to include
- (a) Names of persons responsible for ensuring adherence to Environmental Protection Plan.
 - (b) Names and qualifications of persons responsible for hazardous waste removal from Site.
 - (c) Names and qualifications of person responsible for training Site personnel.
 - (d) Description of environmental protection personnel training program.
 - (e) Fuel Handling and Storage Plan describing the Contractor's proposed procedure for refuelling of equipment. The plan shall include the location of the designated refuelling area, the provision of containment membrane underneath all equipment being refuelled, the provision of containment membranes underneath all stationary working equipment (e.g., membranes underneath all cranes to contain any leaks), the proposed procedures for refueling large stationary equipment away from the designated refuelling area (e.g., refuelling of set-up cranes) proposed locations, types, and volumes of stored fuel, and any other details pertinent to refuelling on Site.
 - (f) Storm Water Pollution Prevention Plan, if applicable, describing water quality protection measures including erosion and sediment controls, inspections, monitoring, and staff training. The plan shall also provide a schematic drawing indicating locations and type of sediment protection measures.
 - (g) Drawings showing locations of proposed temporary excavations or embankments for haul roads, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on-Site.
 - (h) Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plans include measures to minimize amount of mud transported onto paved public roads by vehicles or runoff.
 - (i) Work area plan showing proposed activity in each portion of area and identifying areas of limited use or non-use. Plan to include measures for marking limits of use areas including methods for protection of features to be preserved within authorized work areas.
 - (j) Spill Control Plan including procedures, instructions, and reports to be used in event of unforeseen spill of regulated substance.
 - (k) Construction Waste Management Plan describing on-site waste management, disposal, reuse of materials, recycling, and staff training.
 - (l) Hazardous Material Spill Management Plan describing management, reporting, emergency response and contact numbers, as well as staff training.
- E16.4 The Contractor is advised that at least the following Acts, Regulations, and By-laws apply to the Work:
- (a) Workplace Hazardous Material Information System (Hazardous Product Act and Canada Labour Code);

- (b) Canadian Environmental Protection;
- (c) Canadian Environmental Assessment Act;
- (d) Transportation of Dangerous Goods Act;
- (e) Manitoba Environmental Act;
- (f) The Manitoba Nuisance Act N120;
- (g) The Public Health Act c.P210;
- (h) Manitoba Dangerous Goods, Handling, and Transportation Act;
- (i) The Workplace Safety and Health Act W210; and
- (j) Current applicable associated regulations

E16.5 Fuel Handling

- E16.5.1 The Contractor shall abide by the regulations of Manitoba Environment for handling and storage of fuel products.
- E16.5.2 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.
- E16.5.3 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.
- E16.5.4 The Contractor shall ensure that all fuel storage containers are inspected daily for leaks and spillage.
- E16.5.5 Products transferred from fuel storage area(s) to specific work sites shall not exceed the daily usage requirement.
- E16.5.6 When servicing requires the drainage or pumping of fuels, lubricating oils, or other fluids from equipment, a groundsheet of suitable material (such as high density polyethylene) and size shall be spread on the ground to catch the fluid in the event of a leak or spill.
- E16.5.7 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.
- E16.5.8 A sufficient supply of materials such as absorbent material and plastic oil brooms, to clean-up minor spills shall be stored nearby on-Site. The Contractor shall ensure that additional material can be made available on short notice.
- E16.5.9 Fuelling of stationary equipment shall be completed with portable tanks containing only enough fuel to fill equipment.

E16.6 Waste Handling and Disposal

- E16.6.1 The construction area shall be kept clean and orderly at all times during and at completion of construction.
- E16.6.2 At no time during construction shall personal or construction waste be permitted to accumulate for more than one (1) day at any location on the Site, other than at a dedicated storage area as may be approved by the Contract Administrator.
- E16.6.3 Indiscriminate dumping, littering, or abandonment shall not take place.
- E16.6.4 Equipment shall not be cleaned on Site unless at areas designated by the Contract Administrator.

E16.7 Dangerous Goods/Hazardous Waste Handling and Disposal

- E16.7.1 The construction area shall be kept clean and orderly at all times during and at completion of construction.

- E16.7.2 At no time during construction shall personal or construction waste be permitted to accumulate for more than one (1) day at any location on the Site, other than at a dedicated storage area as may be approved by the Contract Administrator.
- E16.7.3 Indiscriminate dumping, littering, or abandonment shall not take place.
- E16.7.4 Equipment shall not be cleaned on Site unless at areas designated by the Contract Administrator.
- E16.8 Fires, Smoking, Vaping
- E16.8.1 Fires and burning of rubbish on-Site shall not be permitted.
- E16.8.2 Smoking and vaping shall only be allowed in area(s) designated by the Contract Administrator.
- E16.8.3 Smoking or vaping in non-designated areas may result in the removal the individual of the Contractor's personnel from Site.
- E16.9 Emergency Spill Response
- E16.9.1 The Contractor shall ensure that due care and caution is taken to prevent spills.
- E16.9.2 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, including contamination of potable water, to the Contract Administrator and Manitoba Environment, immediately after occurrence of the environmental accident, by calling the twenty-four (24)-hour emergency telephone number 204-945-4888.
- E16.9.3 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.
- E16.9.4 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.
- (a) Notify emergency-response coordinator, the Contract Administrator, the City Project Manager, and the Deacon Water Treatment Plant Control Room (204-986-5000) of the accident:
 - (i) identify exact location and time of accident.
 - (ii) indicate injuries if any;
 - (iii) request assistance as required by magnitude of accident (Manitoba Environment twenty-four (24)-hour Spill Response Line 204-945-4888, Winnipeg Police Service, Winnipeg Fire Paramedic Service).
 - (b) Assess situation and gather information on the status of the situation noting:
 - (i) personnel on-Site;
 - (ii) cause and effect of spill;
 - (iii) estimated extent of damage. Contractor to estimate the volume of spilled material;
 - (iv) amount and type of material involved; and
 - (v) proximity to critical Reservoir infrastructure and other waterlines.
 - (c) If safe to do so, try to stop the dispersion or flow of spill materials:
 - (i) approach from upwind,
 - (ii) stop or reduce leak if safe to do so;
 - (iii) dike spill material with dry, inert absorbent material or dry clay soil or sand;
 - (iv) prevent spill material from entering Site infrastructure and utilities by diking; and
 - (v) prevent spill material from entering drainage manholes and other openings by covering with rubber spill mats or diking.

- (d) Resume any effective action to contain, clean-up, or stop the flow of the spilled product.

E16.9.5 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 and Transportation Act Environmental Accident Report Regulation 439/87.

E16.10 Controlled Products

E16.10.1 Materials classified as "Controlled Products" under Regulation 52/88, "Workplace Hazardous Materials Information System", including amendments, are prohibited inside the Site, unless the material will be directly employed in the Work.

E17. TRAFFIC CONTROL

E17.1 In accordance with the Manual of Temporary Traffic Control on City Streets (MTTC), the Contract Administrator shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place, maintain, and remove all regulatory signs and traffic control devices authorized and/or required by the Traffic Management Branch in the following situations:

- (a) Parking restrictions,
- (b) Stopping restrictions,
- (c) Turn restrictions,
- (d) Diamond lane removal,
- (e) Full or directional closures on a Regional Street,
- (f) Traffic routed across a median,
- (g) Full or directional closure of a non-regional street where there is a requirement for regulatory signs (turn restrictions, bus stop relocations, etc.) to implement the closure.
- (h) Approved Designated Construction Zones with a temporary posted speed limit reduction. Traffic Services will be responsible for placing all of the advance signs and 'Construction Ends' (TC-4) signs. The Contractor is still responsible for all other temporary traffic control including but not limited to barricades, barrels and tall cones.

E17.2 Further to (c), the Contractor shall make arrangement with the Traffic Services Branch of the City of Winnipeg to supply regulatory signs as required.

E17.3 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the Site has been maintained.

E17.4 Further to E17.1(c) and E17.1(d) the Contractor shall make arrangements with the Traffic Services Branch of the City of Winnipeg to reinstall the permanent regulatory signs after the Contract Work is complete. At this time the Contractor shall make arrangements to drop off the stockpiled materials to Traffic Services at 495 Archibald Street.

E17.5 Any changes to the approved traffic management plan must be submitted to the Contract Administrator a minimum of (five) 5 Working Days prior to the required change for approval.

E17.6 If the Contract Administrator determines that the Contractor is not performing Traffic Control in accordance with this specification, Traffic Services Branch may be engaged to perform the Traffic Control. In this event the Contractor shall bear the costs associated charged to the project by the Traffic Services Branch of the City of Winnipeg in connection with the required Works undertaken by the Contractor.

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:

JulieAnne Narra
Client Success Partner – Canada
1-212-736-5100 ext 63412
1-866-455-7293 ext 3001 (Toll Free)
julianne.narra@fadv.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 their 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 Bidder/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 their 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.