

THE CITY OF WINNIPEG

TENDER

TENDER NO. 976-2024

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 FLOOD STATION TRANSFORMER REMEDIATION AND UPGRADES 2025

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, January 30, 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 at the following sites to provide Bidders access to the Site. Attendance of at least one of these events is mandatory, and the Bid of any Bidder not having attended will be rejected on the basis that it is non-responsive
 - (a) Mission Flood Pumping Station 91 Archibald Street <u>8:30 AM 9:00 AM on January</u> <u>16, 2025.</u>
 - (b) Galt Flood Pumping Station 401 Waterfront Drive, <u>9:30AM 10:00 AM on January 16,</u> 2025.
 - (c) Colony Flood Pumping Station 32 Mostyn Place -<u>1:00 PM 1:30 PM on January 20,</u> 2025.
 - (d) Cornish Flood Pumping Station 110 Cornish Avenue <u>2:00 PM 2:30 PM on January</u> <u>20, 2025.</u>
- B3.2 Bidders are required to register for the Site Investigation by contacting the Contract Administrator with the preferred site visit date they plan to attend.
- B3.3 The Bidder is advised that they are responsible for providing their own Personal Protective Equipment (PPE) while at the Site including but not limited to CSA approved footwear, hard hat, Hi-vis vest and eye protection. Bidders attending the site visits without proper PPE equipment will not be allowed to participate in the site visits walkthrough.
- B3.4 Building entry will not be permitted without current confined space entry certification and mask fit testing. Building entry is not required for the mandatory site visit.
- B3.5 Access to view the Site shall be only under the supervision of an authorized City representative.
- B3.6 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.
- B3.7 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.
- B3.8 The Bidder is responsible for determining:
 - (a) The requirements, constraints and resources for delivery and installation of the switchgear and associated equipment at the facility.
 - (b) The nature of the accessibility, surface and subsurface conditions at the Site.
 - (c) all other matters which could in any way affect this Bid, installation or the performance of the equipment.

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 <u>www.merx.com</u>.
- 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 nonresponsive.

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 <u>www.merx.com</u>.
- 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 D38. Any such costs shall be determined in accordance with D38.
- B10.2 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B10.3 The Bidder shall enter the Total Bid Price from Form B: Prices into the Total Bid Price field in MERX.
- B10.3.1 Bidders are advised that the calculation indicated in **Error! Reference source not found.** will prevail over the Total Bid Price entered in MERX.
- B10.3.2 Include a fixed fee cash allowance per Form B: Prices of \$30,000 CAD per station to address unforeseen issues if they arise. The cash allowance shall not be utilized without the expressed written consent of the Contract Administrator.

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.
 - (b) Shermco Industries.
- B11.3 Additional Material:
 - (a) Geotechnical Investigation Report provided by Trek Geotechnical in Appendix B.

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:

- 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 <u>https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf</u>
- 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;
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract;
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
 - (d) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B13.5 and D8).
 - (e) Shall have completed confined space entry training, and have developed a confined space work plan for work within City confined spaces;
 - (f) Shall have mask fit tests and masks readily available for all workers entering into City facilities;
 - (g) Shall have trade licenses, including but not limited to Electrical, Civil, Structural. Ensure staff have rigging certifications for equipment placement.
 - (h) Shall have Personnel gas monitoring training, provide and ensure proper operation gas monitors with warnings and alarms for toxic gases.
- 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:
 - 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
 - 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/.
- B13.5 Further to B13.3(d), the Bidder acknowledges they and all Subcontractors have obtained training required by the Accessibility for Manitobans Act (AMA) available at <u>Accessibility</u> <u>Training</u> 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.
- B13.8 The Bidder shall be aware of the following:
 - (a) Acknowledge the responsibility as the Contractor to ensure the Wastewater Services Division meets the commitments that are outlined in the Environmental Management Policy.
 - (b) Provide detailed information of all steps that will be taken to ensure that the Emergency Medical Services requirements are met upon request.
 - (c) Be aware that the following Acts, Regulations, and By-laws may apply to the work:

Federal:

- (a) Canadian Environmental Assessment Act;
- (b) Canadian Environmental Protection Act;
- (c) Fisheries Act and Regulations;
- (d) Pest Control Products Act;
- (e) Migratory Bird Convention Act; and
- (f) Transportation of Dangerous Goods Act and Regulations.

Provincial:

- (a) The Dangerous Goods Handling and Transportation Act;
- (b) The Endangered Species Act;
- (c) The Environment Act;
- (d) The Fire Prevention Act;
- (e) The Pesticides and Fertilizers Control Act;
- (f) The Manitoba Heritage Resources Act;
- (g) The Manitoba Noxious Weeds Act;
- (h) The Manitoba Nuisance Act;
- (i) The Public Health Act;
- (j) The Red River Floodway Act;
- (k) The Water Rights Act;
- (I) The Workplace Safety and Health Act; and
- (m) Applicable associated regulations.

Municipal

- (a) Neighbourhood Liveability By-law
- (b) Pesticide Management By-law
- (c) Sewer By-law
- (d) Solid Waste By-law
- (e) Water By-law
- (f) The City of Winnipeg By-Law
- B13.9 Have onsite staff that is trained and certified in the handling of the dangerous/hazardous goods, when said dangerous/hazardous goods are being utilized on site for the performance of the work.

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 on The City of Winnipeg, Corporate Finance, Purchasing Division website at https://www.winnipeg.ca/MatMgt/templates/files/Bidsecurity.pdf.

- B14.2 Bid security shall be submitted in a digital format meeting the following criteria:
 - (a) The version submitted by the Bidder must have valid digital signatures and seals;
 - (b) The version submitted by the Bidder must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
 - (c) The version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
 - (d) The verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
 - (e) The results of the verification must provide a clear, immediate and printable indication of pass or fail regarding B14.2(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 <u>www.merx.com</u>.
- 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 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 progressively deducting item(s) D. Cornish Flood Pumping Station in it's entirety, C, Colony Flood Pumping Station, and B. Galt Flood Pumping Station in the order listed, until a Total Bid Price within the budgetary provision is achieved.
- B18.5 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.
- B18.6 Bidders are advised that the calculation indicated in **Error! Reference source not found.** will prevail over the Total Bid Price entered in MERX.

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 D38 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 <u>http://www.winnipeg.ca/matmgt/gen_cond.stm</u>
- 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 major Work to be done under the Contract shall consist of the supply and installation of new outdoor Switchgear, utility metering, underground cabling at the following flood pumping stations:
 - (a) Mission Flood Pumping Station (5kV Switchgear)
 - (b) Cornish Flood Pumping Station (5kV Switchgear)
 - (c) Colony Flood Pumping Station. (5kV Switchgear)
 - (d) Galt Flood Pumping Station. (5kV Switchgear)
- D3.2 The major components of the Work are as follows:
 - (a) Outdoor switchgear installation and associated electrical upgrades,
 - (b) Coordination of Manitoba Hydro scope or work:
 - (i) Cable installation from hydro utility pole to medium voltage switchgear,
 - (ii) Installation of new metering and metering transformer in medium voltage switchgear.
 - (c) Switchgear concrete pad installation,
 - (d) Grounding upgrades,
 - (e) Excavation, shoring and backfilling as required,
 - (f) Site restoration and clean up,
 - (g) Adjusting breaker and relay settings based on a protection coordination study as supplied to the Contractor by the Contract Administrator,
 - (h) All other work as detailed in the drawings and technical specifications.
- 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?DocumentTypeId=2&DocId=5989
 - (b) Universal Design Policy http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=2&DocId=3604
- D3.4 The funds available for this Contract is \$970,000.00.

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) "Authority Having Jurisdiction" or "AHJ" 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;
 - (b) "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;
 - (c) **"Certificate of Final Inspection"** means the certificate of final inspections, obtained from the City of Winnipeg inspections department;
 - (d) "Code" or "code" means the latest local code applicable at the project location
 - (e) "C.P.M." means critical path method
 - (f) "CSA" means Canadian Standards Association;
 - (g) **"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);
 - (h) "PDF" means Portable Document Format;
 - (i) "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;
 - (j) "Standard" or "standard" means the latest standard that is in effect at the project location;
 - (k) "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;

D6. CONTRACT ADMINISTRATOR

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

David Becker, P. Eng Electrical and I&C Manager

Telephone No. 204-786-8080 (work) 204-292-0498 (mobile) Email Address david.becker@atkinsrealis.com

D6.2 At the pre-construction meeting, the Contract Administrator 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. UNFAIR LABOUR PRACTICES

- D9.1 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) <u>https://www.un.org/en/about-us/universal-declaration-of-human-rights</u> International Labour Organization (ILO) <u>https://www.ilo.org/global/lang-en/index.htm</u> conventions as ratified by Canada.
- D9.2 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.

- D9.3 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.).
- D9.4 Failure to provide the evidence required under D9.3, may be determined to be an event of default in accordance with C18.
- D9.5 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.
- D9.5.1 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.
- D9.5.2 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 D9.5. The City may also hold back the amount of the Unfair Labour Practice Penalty from payment for any amount it owes the Contractor.
- D9.5.3 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.

D10. FURNISHING OF DOCUMENTS

D10.1 Upon award of the Contract, the Contractor will be provided with 'issued for construction' Contract Documents electronically, including Drawings in PDF formal only.

SUBMISSIONS

D11. AUTHORITY TO CARRY ON BUSINESS

D11.1 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.

D12. SAFE WORK PLAN

- D12.1 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.
- D12.2 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
- D12.3 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.

D13. INSURANCE

- D13.1 The Contractor shall provide and maintain the following insurance coverage:
 - (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability 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, <u>including testing and commissioning</u> 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) Property insurance for any mobile office (if required by contractor), portable toilet, large equipment and machinery.
- D13.2 Deductibles shall be borne by the Contractor.
- D13.3 All subcontractors performing work on the project shall provide the Contractor with evidence of insurance as outlined in section D13.1 (a) and (b) and be registered 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 the insurance and Workers Compensation prior to the commencement of any Work on the site.
- D13.4 All policies shall be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D13.5 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.
- D13.6 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.

D14. CONTRACT SECURITY

- D14.1 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, <u>Form_H1_Performance_Bond</u>, in the amount of fifty percent (50%) of the Contract Price; and
 - (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, <u>Form H2 Labour and Material Bond</u>, in an amount equal to fifty percent (50%) of the Contract Price.

- D14.1.1 Where the contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the contract security must meet the following criteria:
 - (a) the version submitted by the Contractor must have valid digital signatures and seals;
 - (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
 - (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
 - (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
 - (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D14.1(b).
- D14.1.2 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in their discretion, exercised reasonably, allows.
- D14.1.3 Digital bonds passing the verification process will be treated as original and authentic.
- D14.2 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.
- D14.3 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 D14.1(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.

D15. SUBCONTRACTOR LIST

D15.1 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.

D16. EQUIPMENT LIST

D16.1 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.

D17. DETAILED WORK SCHEDULE

D17.1 The Contractor shall provide the Contract Administrator with a detailed work schedule for each of the 4 sites, at least ten (10) Business Days prior to the commencement of any Work on the Site.

- D17.2 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;
 - (d) Operational Shutdown Summary (OSS) document which detail the shutdown, work procedures, and re-energization procedures to be undertaken for station power outages.
 - (e) all acceptable to the Contract Administrator
- D17.3 Further to D17.2(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. The schedule shall include but not be limited to:
 - (a) Mobilization and demobilization;
 - (b) Structural concrete work,
 - (c) Electrical work;
 - (d) Electrical power outages (booked a minimum of 15 days ahead of time)
 - (e) Equipment startup;
 - (f) Commissioning and testing;
 - (g) Substantial Performance,
 - (h) Total Performance;
 - (i) Training;
 - (j) Submission of operation and maintenance manuals and As-Builts drawings (red line markups).
- D17.4 Further to D17.2(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.
- D17.5 Further to D17.2(c), the daily manpower schedule shall list the daily number of individuals on the Site for each trade.
- D17.6 The flood stations are part of the City of Winnipeg critical infrastructure. Power outages must be kept to a minimum. It is expected that work which does not affect the operations of the flood stations (preparation work) will be completed concurrently. Work must be done in a manner such that power outages affect only one station at a time.

D18. REQUIREMENT FOR SITE ACCESSIBILITY PLAN

- D18.1 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.
- D18.2 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.
- D18.3 The Accessibility Plan may also include figures, sketches, or drawings to demonstrate the proposed plan.
- D18.4 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
- D18.5 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.
- D18.6 Any changes to the Accessibility Plan must be approved by the Contract Administrator.
- D18.7 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the site has been maintained.
- D18.8 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

D19. COMMENCEMENT

- D19.1 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.
- D19.2 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 D11;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D12;
 - (iv) evidence of the insurance specified in D13;
 - (v) the contract security specified in D14;
 - (vi) the Subcontractor list specified in D15;
 - (vii) the equipment list specified in D16;
 - (viii) the detailed work schedule specified in D17;

- (ix) the Requirement for Site Accessibility Plan in D18;
- (x) the direct deposit application form specified in D33;
- (xi) Wastewater Services Division review and approval of all activities involving the sites. Such as site work hours, work scheduled and effected equipment notification; and
- (xii) Review and approval of Contractor created Operational Shutdown Summary reports for power outages.
- (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.
- D19.3 The Contractor shall commence the planning of the Work and begin ordering of equipment upon receipt of the award letter.
- D19.4 The City intends to award this Contract by March 7, 2025.
- D19.4.1 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.

D20. WORK BY OTHERS

- D20.1 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.
- D20.2 Work by others on or near the Site will include but not necessarily be limited to:
 - (a) Manitoba Hydro;
 - (b) Other Maintenance personnel or contractors.
- D20.3 Further to D20.1 the Contractor shall cooperate and coordinate all activities with all parties performing required Work by Others identified in D20.1 and accommodate the necessary area on Site required for the Work by Others to complete the Work

D21. WORKING DAYS

- D21.1 Further to C1.1, 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.
- D21.2 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.
- D21.3 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.
- D21.4 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.

D22. CRITICAL STAGES

- D22.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:
 - (a) Equipment order of the 5 kV Switches and metering by March 10, 2025.
 - (b) Order of all 5 kV cabling by March 10, 2025.
 - (c) Substantial Performance of Mission Flood Station by December 3, 2025
 - (d) Substantial Performance of Galt Flood Station by December 10, 2025
 - (e) Substantial Performance of Colony Flood by December 17, 2025
 - (f) Substantial Performance of Cornish Flood by December 24, 2025
 - (g) Minimum 10 days notice for facility outages. All expected power outages shall be during the month of November, during dry season and shall be kept to 1 3 days maximum in duration.
 - (h) Short duration power outages (6hrs) may be approved prior to dry season provided river levels and weather are favorable. May be approved on a case by case basis

D23. SUBSTANTIAL PERFORMANCE

- D23.1 The Contractor shall achieve Substantial Performance by January 30, 2026.
- D23.2 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.
- D23.3 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.
- D23.4 Substantial Performance requires all equipment to be operational, shop drawings, commissioning forms, draft manuals and red line drawings to be completed with the Contract Administrator approval provided.

D24. TOTAL PERFORMANCE

- D24.1 The Contractor shall achieve Total Performance by February 28, 2026.
- D24.2 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.
- D24.3 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.
- D24.4 Total Performance requires all commissioning forms to be completed with the Contract Administrator approval provided. The following items are required to qualify for Total Performance:
 - (a) All construction work has been completed including any deficiencies addressed;
 - (b) Contractor has removed trailer(s) along with equipment from site;
 - (c) All temporary fencing has been removed;
 - (d) Site has been restored to original condition and made safe for the public;

(e) Operational and Maintenance manuals completed to the requirements detailed in Specification 01 78 00 - Closeout Submittals, red line drawings, commissioning reports, training and all other close out documents must be submitted, reviewed and approved.

D25. LIQUIDATED DAMAGES

- D25.1 If the Contractor fails to achieve, 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) Substantial Performance one thousand dollars (\$1,000);
 - (b) Total Performance five hundred dollars (\$500).
- D25.2 The amounts specified for liquidated damages in D25.1 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.
- D25.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D26. SUPPLY CHAIN DISRUPTION SCHEDULE DELAYS

- D26.1 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.
- D26.2 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.
- D26.3 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.
- D26.4 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 D26.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D26.5 The Work schedule, including the durations identified in D22 to D24 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.
- D26.6 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.
- D26.7 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.

D27. SCHEDULED MAINTENANCE

- D27.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Adjustments to the protection / relay settings within the facilities in accordance with the arc flash study. The arc flash study will be completed by others and given to the contractor with the recommended settings.
 - (b) Relay and breaker settings adjustments shall be completed by the Contractor prior to achieving Substantial Performance.

CONTROL OF WORK

D28. JOB MEETINGS

- D28.1 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.
- D28.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever they deem it necessary.

D29. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D29.1 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).

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

D30.1 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.

D31. RESPONSIBILITY FOR PLANT AND MATERIALS

D31.1 The Contractor shall assume the risk of and responsibility for all materials stored at the site.

MEASUREMENT AND PAYMENT

D32. INVOICES

D32.1 Further to C12, the Contractor shall submit an invoice for each portion of Work performed :

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

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

D32.2 Invoices must clearly indicate, as a minimum:

- (a) the City's purchase order number;
- (b) the City's project number and title: 'S-1301 Flood Station Transformer Remediation and Upgrades 2025';
- (c) the City project representative's name;
- (d) date of delivery;
- (e) delivery address;
- (f) type and quantity of work performed;
- (g) the amount payable with GST and MRST shown as separate amounts; and
- (h) the Contractor's GST registration number.
- D32.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

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 **E4**, no payment will be made for Cash Allowances other than as set out in **E4.4**.

D34. PAYMENT SCHEDULE

- D34.1 Further to C12, payment shall be in accordance with the following payment schedule:
 - (a) Monthly invoices for Work performed during the previous calendar month.

WARRANTY

D35. WARRANTY

- D35.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D35.1.1 For the purpose of contract security, the warranty period shall be one (1) year.
- D35.2 Notwithstanding C13.2 or D35.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:
 - (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D35.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

DISPUTE RESOLUTION

D36. DISPUTE RESOLUTION

D36.1 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 D36.

- D36.2 The entire text of C21.4 is deleted, and amended to read: "Intentionally Deleted"
- D36.3 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 Contract or 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.
- D36.4 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.
- D36.5 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.
- D36.6 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.
- D36.7 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.
- D36.8 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 D36.7, 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

D37. INDEMNITY

- D37.1 Indemnity shall be as stated in C17.
- D37.2 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.
- D37.3 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

D38. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D38.1 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.
- D38.2 Further to D38.1, in the event that the obligations in D38 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.
- D38.3 For the purposes of D38:
 - (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.
- D38.4 Modified Insurance Requirements
- D38.4.1 If not already required under the insurance requirements identified in D13, 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.
- D38.4.2 If not already required under the insurance requirements identified in D13, 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.
- D38.4.3 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.

- D38.4.4 Further to D13.3, 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.
- D38.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D38.5 Indemnification By Contractor
- D38.5.1 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.
- D38.5.2 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.

- D38.6 Records Retention and Audits
- D38.6.1 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.
- D38.6.2 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 D38.6.1 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.
- D38.7 Other Obligations

- D38.7.1 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.
- D38.7.2 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.
- D38.7.3 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.
- D38.7.4 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.
- D38.7.5 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.
- D38.7.6 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 J: SUBCONTRACTOR LIST (See D15)

Name	Address
	<u></u>

FORM K: EQUIPMENT (See D16)

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:				
1				

FORM K: EQUIPMENT (See D16)

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 <u>http://www.winnipeg.ca/matmgt/Spec/Default.stm</u>.
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B7.
- E1.4 The following are applicable to the Work:

Specification No.	Specification Title
Division 01 –	General Conditions
01 33 00 01 45 00 01 51 00 01 52 00 01 61 00 01 73 03 01 74 11 01 78 00	Submittal Procedures Quality Control Temporary Utilities Construction Facilities Common Product Requirements Execution Requirements Cleaning Closeout Submittals
Division 03 –	Concrete
03 05 10 03 20 00	Cast-in-Place – Concrete Concrete Reinforcing
Division 26 –	Electrical
26 05 01 26 05 14 26 05 21 26 05 27 26 05 28 26 05 29 26 05 31 26 05 34 26 05 44 26 08 05 26 24 01 Division 31 –	Common Work Results - Electrical Power Cable and Overhead Conductors (1001 V) Wires and Cables (0-1000 V) Grounding - Primary Grounding - Secondary Hangers and Supports for Electrical Systems Splitters, Junction, Pull Boxes and Cabinets Conduits, Conduit Fastenings and Fittings Installation of Cables in Trenches and in Ducts Acceptance Testing Service Equipment Earthwork
31 23 10	Excavating, Trenching and Backfilling

Drawing No.	Drawing Name/Title

1-0163F-E0001-001-D0 1-0163F-E0001-001-00 1-0163F-E0001-002-00 1-0163F-E0002-001-00 1-0163F-E0003-001-00 1-0163F-E0005-001-00 1-0163F-E0005-001-00	Cover Sheet Mission Flood Pumping Station, Single Line Diagram, Demolition Mission Flood Pumping Station, Single Line Diagram Mission Flood Pumping Station, Single Line Diagram, Arc Flash Study Mission Flood Pumping Station, Site Plan - Electrical Mission Flood Pumping Station, Electrical & Grounding – Installation Details Mission Flood Pumping Station, 5kV Switchgear Three-line Schematic Mission Flood Pumping Station, Panel Schedule Mission Flood Pumping Station, Structural Foundation
1-0128F-E0001-001-D0	Colony Flood Pumping Station, Single Line Diagram, Demolition
1-0128F-E0001-001-00	Colony Flood Pumping Station, Single Line Diagram
1-0128F-E0001-002-00	Colony Flood Pumping Station, Single Line Diagram, Arc Flash Study
1-0128F-E0002-001-00	Colony Flood Pumping Station, Site Plan - Electrical
1-0128F-E0003-001-00	Colony Flood Pumping Station, Electrical & Grounding – Installation Details
1-0128F-E0004-001-00	Colony Flood Pumping Station, 5kV Switchgear Three-line Schematic
1-0128F-E0005-001-00	Colony Flood Pumping Station, Panel Schedule
1-0128F-S0001-001-00	Colony Flood Pumping Station, Structural Foundation
1-0132F-E0001-001-D0 1-0132F-E0001-001-00 1-0132F-E0001-002-00 1-0132F-E0002-001-00 1-0132F-E0003-001-00 1-0132F-E0004-001-00 1-0132F-E0005-001-00 1-0132F-S0001-001-00	Cornish Flood Pumping Station, Single Line Diagram, Demolition Cornish Flood Pumping Station, Single Line Diagram Cornish Flood Pumping Station, Single Line Diagram, Arc Flash Study Cornish Flood Pumping Station, Site Plan - Electrical Cornish Flood Pumping Station, Electrical & Grounding – Installation Details Cornish Flood Pumping Station, 5kV Switchgear Three-line Schematic Cornish Flood Pumping Station, Panel Schedule Cornish Flood Pumping Station, Structural Foundation
1-0142F-E0001-001-D0	Galt Flood Pumping Station, Single Line Diagram, Demolition
1-0142F-E0001-001-00	Galt Flood Pumping Station, Single Line Diagram
1-0142F-E0001-002-00	Galt Flood Pumping Station, Single Line Diagram, Arc Flash Study
1-0142F-E0002-001-00	Galt Flood Pumping Station, Site Plan - Electrical
1-0142F-E0003-001-00	Galt Flood Pumping Station, Electrical & Grounding – Installation Details
1-0142F-E0004-001-00	Galt Flood Pumping Station, 5kV Switchgear Three-line Schematic
1-0142F-E0005-001-00	Galt Flood Pumping Station, Panel Schedule
1-0142F-S0001-001-00	Galt Flood Pumping Station, Structural Foundation

E2. SOILS INVESTIGATION REPORT

E2.1 A limited geotechnical investigation report is included as Appendix B.

GENERAL REQUIREMENTS

E3. MOBILIZATION AND DEMOBILIZATION

- E3.1 Description
 - (a) This Specification shall govern mobilization and demobilization from site.
 - (b) The Work to be done by the Contractor under this Specification shall include the furnishing 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 as hereinafter specified.
- E3.2 The Work under this Specification shall include, but not be limited to:
 - (a) submission of Site layout plan;
 - (b) mobilizing and demobilizing on-Site Work facilities;

- (c) supplying, setting up, laying out and removing Site office facilities (if required);
- (d) submission of Site layout plan;
- (e) mobilizing and demobilizing on-Site Work facilities;
- (f) supplying, setting up, laying out and removing Site office facilities;
- (g) install, maintaining and removing any access roadway; and traffic control and traffic management.
- E3.3 Mobilization and demolition are in accordance with the most recent Standard Construction Specifications:
 - (a) CW 1120 Existing Services, Utilities and Structures; and
 - (b) CW 1130 Site Requirements.
- E3.4 Submittals
 - (a) The Contractor shall submit the following to the Contract Administrator fourteen (14) days prior to mobilization on-Site:
 - (i) a plan highlighting the Site layout plan which includes laydown area location(s), staging areas, office facility location, access road(s), temporary secure fencing limits and gate locations for review and approval.
 - (b) Contractor shall refer to the Drawings for limits of construction.
- E3.5 Materials and Equipment
 - (a) All Materials supplied under this Specification shall be of a type approved by the Contract Administrator and shall be subject to inspection and testing by the Contract Administrator.
 - (b) The Contractor shall be responsible for the supply, safe storage, and handling of all Materials as set forth in this Specification. All Materials shall be handled in a careful and workmanlike manner, to the satisfaction of the Contract Administrator.
 - (c) All equipment shall be of a type acceptable to the Contract Administrator and shall be kept in good working order.
- E3.6 Construction Methods
 - (a) Site Inspection:
 - (i) inspect the Site with the Contract Administrator to verify existing conditions prior to mobilizing on-Site; and
 - (ii) inspect the Site with the Contract Administrator soon after demobilizing on-Site, confirming Site has been restored to its original condition prior to initiation of Work.
- E3.7 Layout of On-Site Work Facilities:
 - (a) the Contractor shall mobilize all on-Site Work and other temporary facilities; and
 - (b) upon completion of construction activities, the Contractor shall remove all on-Site Work and other temporary facilities;
- E3.8 Cellular Telephone Communication:
 - (a) the Contractor's Site supervisor is required to carry, at all times, a cellular telephone, with voicemail;
- E3.9 Access Roadway:
 - (a) the Contractor shall maintain any access roadway they install;
 - (b) the access road shall be maintained on a regular basis to provide continual unrestricted Site access, to the satisfaction of the Contract Administrator; and
- E3.10 Snow and Ice Removal:
 - (a) if required, snow clearing shall be done by the Contractor on a regular basis; and

- (b) if required, snow cover shall be cleared from the construction Site prior to commencement of the Work. The methodology to clear the snow shall be subject to the approval of the Contract Administrator;
- E3.11 Restoration of Existing Facilities
 - (a) upon completion of the Work and demobilization, the Contractor shall restore existing facilities to their original condition, including snow removal, to the approval of the Contract Administrator.
 - (b) Restoration of grassed areas removed or damaged as a result of construction activities.
- E3.12 Measurement and Payment
 - (a) Mobilization and demobilization will be measured on a lump sum basis at the Contract Unit Price for "Mobilization and Demobilization" as shown in Form B: Prices, for supplying all Materials and for performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.
 - (b) thirty percent (30%) when Contract Administrator is satisfied that construction has commenced;
 - (c) fifty percent (50%) during construction, percentage distributed equally on a monthly basis at the discretion of the Contract Administrator; and
 - (d) twenty percent (20%) upon completion of the Work.
 - (i) The Contractor has achieved Substantial Performance;
 - (ii) The Contractor has demobilized;
 - (iii) The Contractor has restored and cleaned up the building and site.

E4. CASH ALLOWANCE FOR ADDITIONAL WORK

- E4.1 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.
- E4.2 A cash allowance has been included on Form B: Prices.
- E4.3 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.
- E4.4 Cost of additional work shall be evaluated by the methods outlined in C7.4, and a Change Work Order prepared by the Contract Administrator. Cost of the Change Work 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. A Change Work Order based on the agreed upon costs for performing the additional work shall be signed by both the Contract Administrator and Contractor representative in order to utilize funds under Additional Work Allowance.
- E4.5 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.
- E4.6 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.
- E4.7 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 markup 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.
- E4.8 In the event that a Third-Level Subcontractor is utilized, that is not approved for additional markup, the Contractor is responsible for coordinating the split of the maximum approved mark-up between the Contractor and Subcontractors.

E5. TRAFFIC CONTROL

- E5.1 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.
- E5.2 Further to (c), the Contractor shall make arrangement with the Traffic Services Branch of the City of Winnipeg to supply regulatory signs as required.
- E5.3 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the Site has been maintained.
- E5.4 Further to E5.1(c) and E5.1(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.
- E5.5 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.
- E5.6 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.

E6. DANGEROUS WORK CONDITIONS

- E6.1 Further to clause C6.24 of the General Conditions, the Contractor shall be aware that underground chambers, lower levels of the station, manholes, and sewers are considered a confined space and shall follow the "Guidelines for Confined Entry Work" as published by the Manitoba Workplace Safety and Health Division. The Contractor will be required to have Confined Space Entry Training and complete a permit each time work is to be performed in a Confined Space Area. Confined spaces are:
 - (a) Flood & Lift Station Wet Well.
 - (b) Flood & Lift Station Main Floor.
 - (c) Flood & Lift Station Lower Levels (including Pump Room, Motor Room, Entrance).
 - (d) Sewer manholes.
 - (e) Any other areas labelled as 'Confined Space' at the Site.
- E6.2 As part of provincial legislation for Confined Spaces, the Contractor will require a dedicated watch at all times staff are required to enter a Confined Space. The dedicated watch shall be solely for monitoring staff, providing regular check ins and initiating emergency response plans.
- E6.3 Mask fit testing is required for all personnel entering a confined space and must have a mask readily available on-site before entry.
- E6.4 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.
- E6.5 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, explosion range, and toxic gases. Testing equipment must be calibrated in accordance with manufacturer's specifications. The Contractor is responsible for all testing requirements.
- E6.6 The Contractor shall ventilate all confined spaces including underground chambers, tunnels, pipes 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.
- E6.7 Workers must wear a respirator or have supplied air at all times when entering a chamber, manhole or sewer where live sewage is present.
- E6.8 If products containing volatile organic carbons (VOCs) are used, the Contractor shall provide a photoionization detector (PID) on Site to monitor potential VOCs in the confined spaces. The gas detector and safety equipment conforming to the Act shall be made available to the Contract Administrator for his use during inspections. In addition, the Contract Administrator may collect discrete air samples for laboratory analysis.
- E6.9 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 his 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.

E7. EXISTING PUMPING STATION OPERATION DURING CONSTRUCTION

- E7.1 The flood pumping station shall remain operation 24/7 during wet weather (wet season) period is typically the start of March to the end of October.
- E7.2 The flood pumping equipment at the Flood Pumping Stations shall be briefly de-energized and put back into service on or prior to the Critical Stage indicated in D22.1. During the month of November, contingent upon the weather being 'dry' (as defined by the City of Winnipeg), it is permissible for the Contractor to take a 600VAC electrical service power outage at each of the flood stations for a period of 2 days at a time. During the power outage the Contractor shall make available a 120 / 240V, 5000W portable generator to provide basic building heating, power water line heat tracing and the PLC control cabinet for station monitoring. The station temperature shall be monitored by the Contractor. Stations are required to be maintained at or above 10°C and provide alternate sources of heating by the Contractor.
- E7.3 During the wet season, a flood station outage may be permitted subject to the duration of the outage (typically 6 hrs or less) and the river levels during that time.
 - (a) A flood station outage will be subject to Contract Administrator approval;
- E7.4 Should the power outage at the station exceed 2 calendar days, then the Contractor is responsible for providing a temporary 600V generator to power the 600V building loads. Note that the generator will not be required to power the flood pumps.
- E7.5 The existing Combined Sewer Overflow (CSO) equipment at the station shall remain in service to the greatest extent possible to allow the City to monitor wastewater overflows. Relocation of the CSO panel is not within the scope of the work.
- E7.6 The Contractor shall cooperate with and provide full access at all times for City personnel to carry out maintenance and operation duties.
- E7.7 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.
 - (a) No additional payments will be made for providing access to City forces on the site or any potential affect City Crew might have on the Contractor's work.

E8. LANDSCAPING

- E8.1 Description:
- E8.1.1 This specification shall cover surface restoration and associated items of Work for existing surfaces disturbed by construction activities.
- E8.2 Construction Methods:
- E8.2.1 Restoration of all existing surface areas disturbed by construction activities including but not limited to excavations for new electrical service equipment and associated conduit and cabling, operation of construction equipment, placement of field office or equipment trailer, snow clearing and where construction materials were stockpiled, shall be restored as follows:
 - (a) Grassed areas: sodding using imported topsoil in accordance with CW 3510.
 - (b) Gravel surfaces: in accordance with CW 3150.
 - (c) Asphalt surfaces: match existing base course and asphalt thickness or provide a minimum of 150 millimetres of base course and 75 millimetres of Type 1A Asphaltic concrete whichever is greater, in accordance with CW 3410.
 - (d) Pavement slabs in accordance with CW 3310.
 - (e) Interlocking pavement stones: CW 3330.

E8.3 Measurement and Payment:

- E8.3.1 Payment will based on Form B, as accepted and measured by the Contract Administrator.
 - (a) The Contractor is eligible for payment when the Contract Administrator is satisfied that the Contractor has met all the requirements.

E9. STRUCTURAL WORK

- E9.1 Supply materials and construct new electrical equipment foundation with piles and associated cap/slab as per drawings and specifications
- E9.2 Excavate and soft dig to allow for the installation of structural foundation for the 5 kV electrical switchgear (service).
- E9.3 Coordinate the exact location of the required concrete foundation for the 5 kV switchgear with the electrical trade
- E9.4 Coordinate, supply and install Rigid PVC conduit sleeves embedded in the concrete for cable entry into the equipment from below grade. Conduit sleeves shall extend beyond the perimeter of the concrete pad to allow for cable entry without disturbing the foundation.
- E9.5 The foundation drawings are based on 5 kV service equipment supplied from Strong Electric. If the Contractor choses an alternate vendor, then adjustments and modifications to the foundation installation to suit the new equipment shall be borne by the Contractor. The City will not entertain additional costs for foundation adjustments.

E10. ELECTRICAL WORK

- E10.1 Supply and install temporary electrical provisions as required to complete the work as specified.
- E10.2 Soft dig, excavate and expose existing Manitoba Hydro electrical service cable (5 kV cable) to allow for re-routing and reconnection to the new 5 kV electrical switchgear (service).
- E10.3 Provide demolition of systems in accordance with the electrical drawings and specifications.
- E10.4 In the event the Station flood pumps are not placed back into service within 2 calendar days from power de-energization then it is the Contractor's responsibility to provide temporary 600V generation, 600V distribution, motor starters, and controls to facilitate automatic operation of the flood pumps until the permanent equipment is commissioned and accepted by the Contract Administrator.
- E10.5 Maintain electrical service and operation of the existing flood stations during construction and placement of equipment. Take a brief power outage (2-3 days) for cabling connections and electrical service transition to the 5 kV electrical switchgear.
- E10.6 Complete an Operational Shutdown Summary (OSS) document for each station, and submit 10 working days prior to shutdown.
- E10.7 Coordinate with Manitoba Hydro to perform a 4160V service upgrade. All costs from Manitoba Hydro for their portion of the Work will be billed directly to the City, not the Contractor.
- E10.8 Coordinate with Manitoba Hydro for procurement and installation of new 5kV metering transformers (current transformers and potential transformers), utility meter, and connection of metering transformers to meter.
- E10.9 Provide the following in accordance with the electrical specifications included with this Bid Opportunity:
 - (a) Incoming service equipment switchgear, including:
 - (i) 5kV fusible disconnect,

- (ii) 5kV metering compartment,
- (b) Grounding rods, ground wells, and associated conductors associated with new 5kV Switchgear.
- E10.10 Provide high voltage cabling between the 5 kV service equipment and the padmount transformer.
- E10.11 Test and commission all new electrical equipment. Complete the included testing and commissioning forms for all new equipment.
- E10.12 Perform adjustment to relay protection settings and install arc flash labels supplied by the Contract Administrator.
- E10.13 Measurement and Payment:
- E10.13.1 Payment will be based on Form B, as accepted and measured by the Contract Administrator.
 - (a) A maximum of 95% may be submitted for progress payments prior to the total performance of the associated services, including the provision of as-built drawing mark-ups and O&M manuals.

E11. OPERATING AND MAINTENANCE (O&M) MANUALS

- E11.1 Each Station shall have a separate, complete Operations and Maintenance Manual.
- E11.2 Provide the Contract Administrator with manufacturer's technical literature for each component supplied detailing correct installation procedure and recommended operating and maintenance schedule, grades of lubricants required and assembly/disassembly instructions.
- E11.3 The Contractor shall provide one (1) electronic copy and two (2) hardcopy draft versions of the installation & storage, operation and maintenance instructions prior to each shipment of goods from the factory.
- E11.4 After the Contractor has reached Total Performance, provide the Contract Administrator with one (1) electronic copy for each review submission for the complete Operating and Maintenance Manuals.
- E11.5 For each station, provide the Contract Administrator with five (5) hard copies and five (5) electronic copies of the Contract Administrator reviewed and approved Operating and Maintenance Manuals. Bind hard copies in a three (3) "D-Ring", hard-covered, plastic jacketed binder with full cover and spine inserts. Organize contents into applicable sections of work, parallel to Specifications breakdown and provide tab dividers for separating sections along with cover sheets for each section. Provide each binder with USB for a complete electronic copy of Operating and Maintenance Manuals.
- E11.6 Each Tab requires a section index page to list the separate items in each tab along with the page number and number of pages. All pages shall be numbered.
- E11.7 Digital copies are to be word searchable and all tabs, indexes and refences cross-reference linked (hyperlink).
- E11.8 In addition to the information called in the Specifications, the following shall be included as part of the Operating and Maintenance Manuals:
 - (a) Title Sheet, labelled "Operation and Maintenance Instructions", containing Project Number & Name (S-1301– City of Winnipeg Transformer Remediation and Upgrades 2025 – Station Name), Date.
 - (b) Bid opportunity number and description of supplied goods;
 - (c) Table of Contents indicating all sections contained in the Operation and Maintenance manual.

- (d) Tab A Contractor Information
 - (i) Contractor name and address.
 - (ii) Contractor contact representative with phone number and email.
 - (iii) All Sub-Contractors names, addresses and contact information.
- (e) Tab B Warranty
 - (i) Letter of Warranty, signed and dated to include warranty start date (from the date of Total Performance), warranty end date, Contractor warranty information.
 - (ii) Description of work/parts that are covered under warranty and warranty durations.
- (f) Tab C equipment models, serial and performance specifications
 - (i) Quick reference pump model and serial number and pump specifications including pictures of supplied equipment.
 - (ii) Auxiliary equipment model, serial and specifications including pictures;
- (g) Tab D Products and Shop Drawings
 - (i) Specifications (as provided equipment).
 - (ii) Copy of all approved and as-constructed Shop Drawings. As-constructed Shop Drawings shall be sealed by a Professional Engineer licenced to practice engineering in the Province of Manitoba.
- (h) Tab E Spare Parts & Tools
 - (i) Provide instructions for handling and storage of spare parts.
 - (ii) Provide a listing of any special tools required to operate and/or maintain the products.
 - (iii) Provide a listing of all spare parts included with pictures of each part, part numbers, quantities and practical life spans.
- (i) Tab F Certified Factory Test Results
 - (i) General information page containing:
 - (a) Equipment information (model, serial, specifications)
 - (b) Dates equipment was tested
 - (c) Testing representatives.
 - (ii) Calibration of equipment used for testing procedures and test procedure arrangements.
 - (iii) Copy of all approved tests and documented information test forms completed at the factory, each test shall be signed by the Contractor representative and dated.
 - (iv) Factory inspection and verification reports/forms.
 - (v) Any additional performance reports.
 - (vi) Copy of current edition of factory certification for CSA and/or cUL compliance for Canadian Approval.
- (j) Tab G Sequence of Operation
 - (i) Sequence of Operation outlining how systems installed were designed to work.
 - (ii) Provide description of entire mechanical system, operation and control.
 - (iii) Provide operating instructions, including start-up and shutdown procedures.
- (k) Tab H Installation and Removal Instructions
 - (i) Provide instructions for handling and storage of equipment.
 - (ii) Provide instructions for installation and removal of equipment (including instruments).
- (I) Tab I Maintenance Activities

- (i) Provide part books that illustrate and list all assemblies, sub-assemblies, and components for easy reference.
- (ii) Provide instructions on preventative and corrective maintenance, with service procedures and recommended schedules.
- (iii) Schedule for when preventative maintenance should be performed on all products including pumps, instruments, replacement of spare parts, etc.
- (iv) Recommended frequency for each maintenance task, cleaning inspections and scheduled overhauls and/or reconditioning.
- (v) Provide maintenance checklist forms and test procedures for performing maintenance tasks for mechanical and electrical components.
- (vi) Provide troubleshooting table covering the complete control/electrical power systems, showing description of trouble, probable cause, and suggested remedial action.
- (vii) Cleaning: Instructions and schedules for all routine cleaning and inspection recommended, including recommended cleaners and lubricants.
- (viii) Inspection: Periodic inspection of equipment required for operation, cleaning or other reasons, with items to be inspected and inspection criteria given for motors, impeller, seals, bearings, instruments and other maintenance items.
- (ix) Instructions for minor repairs and/or adjustments required for preventative maintenance routines.
- (x) Instructions for any instruments and/or parts requiring calibration.
- (xi) Listing of any special tools required to service and/or maintain the equipment.
- (m) Tab J Inspection & Commissioning Reports
 - (i) Include two (2) field observation reports submitted for each site visit inspection and commissioning activities.
 - (ii) Confirmation letter identifying that all two (2) commissioning site visit activities were witnessed and verified to meet the requirements of the Specifications and the requirements of the project.
- (n) Tab K Commissioning report (To be provided by consultant)
- (o) Tab L- Lessons Learned
 - (i) Prepare a lessons learned report, including a summary of the project scope, issues that arose throughout the project lifecycle, contributing factors to the issues, corrective actions taken, and lessons learned on the project.
- (p) Tab M Training Operations and Maintenance documents & records
 - (i) The manual is to incorporate feedback from training sessions and answers to attendees' questions.
- (q) Tab N Provide a list of recommended preventative maintenance activities (maintenance schedule) for the 5 KV oil filled pad mounted transformers.
- (r) Tab O Spare
- (s) Tab P Spare

E12. SPARE PARTS

E12.1 Refer to specifications for all spare parts that are to be provided by the Contractor.

E13. TRAINING

E13.1 Furnish the services of a competent, factory-trained engineer or technician for one 4-hour onsite training period to instruct City personnel in the operation and maintenance of the equipment, on a date requested by the Contract Administrator.

- E13.2 Prepare and distribute appropriate training manual for use and reference during training session.
- E13.3 The training materials shall be sent to the Contract Administrator for approval at least two (2) weeks prior to the commencement of the training session. Make changes and make additions to the materials as directed by the Contract Administrator.
- E13.4 Training materials shall include printed training binders for 15 individuals. Materials shall include instructions on system shutdown, system switching, system isolation, energization, key interlocks, maintenance and troubleshooting, etc.
 - (a) All switching and isolation procedures shall be devolved in the format of a Safe Work Procedure detailing precautions, safety, tools and other items related to operations of equipment using provided templates as a guide and;
 - (b) Materials shall include color photographs of actual equipment and equipment operations.
- E13.5 Provide 15 printed hardcopies of training materials along with one PDF searchable training manual.
- E13.6 Contractor to provide training material, and one, 4-hour training session with hands-on demonstrations at one of the station sites.

List of Appendices

APPENDIX A – PROJECT DOCUMENT NUMBERING STANDARD APPENDIX B – GEOTECH REPORTS FOR MISSION, GALT, COLONY, CORNISH APPENDIX C – ELECTRICAL TEST FORMS APPENDIX D – HISTORICAL DRAWINGS APPENDIX E – ELECTRICAL DESIGN GUIDE APPENDIX F – SITE PICTURES APPENDIX G – OSS TEMPLATE