



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 353-2017

**NORTH END SEWAGE TREATMENT PLANT (NEWPCC) MAIN BUILDING HVAC
REPLACEMENT**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 NORTH END SEWAGE TREATMENT PLANT (NEWPCC) MAIN BUILDING HVAC REPLACEMENT

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 P.M. Winnipeg time, May 4, 2017.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to C3.1, a site meeting at the North End Sewage Treatment Plant Main Building 2230 Main Street Winnipeg will be held at 10:00 A.M. on April 20, 2017 to provide Bidders access to the Site.

B3.2 All persons in attendance are required to provide their own Personal Protective Equipment; at a minimum hard hat, safety footwear, and safety glasses.

B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, 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 Bid Opportunity 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 Bid Opportunity 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.

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 Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B5.3 Notwithstanding B5.1, all quotations, invoices and other pricing related information associated with the Standardized Goods and acquired by a Bidder or its Subcontractors through enquiries, investigation or any other means is confidential. Such information shall not be used or disclosed in any way, other than meeting the requirements of this Bid Opportunity.

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 Bid Opportunity, 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.

B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopplasp>

B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.

B7.2 Substitutes to the City's Standardized Goods, as identified in E10 will not be accepted.

B7.3 Substitutions for non-Standardized Goods not identified in E11 shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B7.4 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.

B7.5 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.
- B7.6 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B7.7 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.
- B7.7.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.8 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.9 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B7.10 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;
 - (b) Form B: Prices.
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 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, to constitute a responsive Bid.
- B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B8.5 If the Bid Submission is submitted by mail, courier, or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
 - The City of Winnipeg
 - Corporate Finance Department
 - Materials Management Division
 - 185 King Street, Main Floor
 - Winnipeg, MB R3B 1J1
- B8.5.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.

- B8.6 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B16.1(a).
- B8.8 Bids submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B8.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B8.8.2 Bid submitted by internet electron mail (e-mail) will not be accepted.

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two (2) 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, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B9.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
 - (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.4.2 All signatures shall be original.
- 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 a price in Canadian funds for each item of the Work identified on Form B: Prices
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Form B, Item A7: The Bidder shall enter the cost of the Standardized Goods to be supplied from Schneider Electric Canada Ltd. (Schneider) as part of the Standardized Control System and Motor Control Equipment agreement identified in E10. The cost shall be the base cost received from Schneider, without any mark-up or taxes applied.
- B10.4.1 Any mark-up to the supply of the Standardized Goods shall be deemed to be included in other applicable Form B lines.
- B10.5 Form B, Item A8: The Bidder shall enter the cost of the Standardized Goods to be supplied from Trans-West Supply Company Inc. (Trans -West) as part of the Standardized Instrumentation Agreement identified in E11. The cost shall be the base cost received from Trans-West, without any mark-up or taxes applied.
- B10.5.1 Any mark-up to the supply of the Standardized Goods shall be deemed to be included in other applicable Form B lines.
- B10.6 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DISCLOSURE

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

B12. QUALIFICATION

- B12.1 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.
- B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out Work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

- B12.4 Further to B12.3(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™) or
 - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program or
 - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>.)
- B12.5 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.

- B12.6 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. OPENING OF BIDS AND RELEASE OF INFORMATION

- B13.1 Bids will not be opened publicly.
- B13.2 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 Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B13.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE BID

- B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B14.2 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 for the time period specified in Paragraph 9 of Form A: Bid.

B15. WITHDRAWAL OF BIDS

- B15.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B14.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B16. EVALUATION OF BIDS

- B16.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- B16.2 Further to B16.1(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 owner so require.
- B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.
- B16.4 Further to B16.1(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.

B17. AWARD OF CONTRACT

- B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B17.2 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 responsible and qualified, and the Bids are determined to be responsive.

- B17.2.1 Without limiting the generality of B17.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar Work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B16.
- B17.3.1 Following the award of Contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity 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. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of the replacement of two (2) rooftop units and associated appurtenances of the Main Building at the City of Winnipeg's North End Sewage Treatment Plant (NEWPCC).

D2.2 The major components of the Work are as follows:

- (a) Supply and Delivery of two (2) new rooftop units:
 - (i) laboratory make up air unit, AHU-M639, and office air handling unit, AHU-M651;
 - (ii) removal and disposal of existing laboratory makeup air unit, AHU-M639, and office air handling unit, AHU-M651;
 - (iii) building structural roof reinforcing;
 - (iv) install two (2) new rooftop units to replace M-639 and M-651;
 - (v) fabricate and install maintenance platform;
 - (vi) provide electrical and control systems as specified;
 - (vii) test and Commission new rooftop units;
 - (viii) repair roof openings adjacent to both rooftop units.

D3. DEFINITIONS

D3.1 When used in this Bid Opportunity:

- (a) "NEWPCC" means North End Sewage Treatment Plant;
- (b) "Standardized Goods" means the respective goods identified in D22 that have been standardized by the City;
- (c) "Standardization Vendor" means a Contractor or supplier of Standardized Goods, as identified in D22.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is Dillon Consulting Limited, represented by:

Peter Tataryn, P. Eng.
Telephone No. (204) 453-2301
Email Address ptataryn@dillon.ca

D4.2 At the pre-construction meeting, Peter Tataryn, P. Eng. will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4.3 Bid Submissions must be submitted to the address in B8.

D5. CONTRACTOR'S SUPERVISOR

D5.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D6.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.
- D6.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D6.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator:
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D6.4 A Contractor who violates any provision of D6 may be determined to be in breach of Contract.

D7. NOTICES

- D7.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D7.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D7.3, D7.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D4.
- D7.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg
Chief Financial Officer
Facsimile No.: (204) 949-1174
- D7.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155
- D7.5 Bids Submissions **must not** be submitted to the above facsimile numbers. Bids must be submitted in accordance with B8.

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

- D8.1 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.

D9. SAFE WORK PLAN

- D9.1 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.
- D9.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/safety/default.stm>

D10. INSURANCE

- D10.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) wrap-up liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, written in the joint names of the City, the Contractor, and all subcontractors involved in the Project. Such liability policy to cover bodily injury, personal injury, property damage and products and completed operations consistent with industry standard policy wordings and include twenty-four (24) months completed operations following the total completion date;
 - (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 two million dollar (\$2,000,000.00) inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
 - (c) all risks course of construction insurance in the amount of one hundred percent (100%) of the total Contract Price, written in the name of the Contractor and The City of Winnipeg, at all times during the performance of the Work and until the date of Total Performance.
- D10.2 Deductibles shall be borne by the Contractor.
- D10.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.
- D10.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.
- D10.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.

D11. PERFORMANCE SECURITY

- D11.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D11.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D11.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

D12. SUBCONTRACTOR LIST

D12.1 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 seven (7) Calendar Days from notification of the award of Contract.

D13. DETAILED WORK SCHEDULE

D13.1 The Contractor shall provide the Contract Administrator with a detailed Work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D13.2 The detailed Work schedule shall consist of the following:

- (a) a critical path method (CPM) schedule for the Work;
- (b) a Gantt chart for the Work based on the CPM schedule;
- (c) all acceptable to the Contract Administrator.

D13.3 Further to D13.2(a), the CPM schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:

- (a) Mobilization;
- (b) shop drawings;
- (c) order rooftop units;
- (d) delivery of rooftop units;
- (e) installation of electrical works;
- (f) demolition / removal of existing rooftop units;
- (g) installation of roof reinforcing;
- (h) installation of rooftop units;
- (i) installation of control programming;
- (j) electrical and HVAC system testing;
- (k) pre commissioning;
- (l) performance verification;
- (m) commissioning;
- (n) training;
- (o) supply of operation and maintenance manuals including as built drawings;
- (p) Substantial Performance;
- (q) Completion of Deficiencies;
- (r) Total Performance.

- D13.4 Further to D13.2(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.
- D13.5 The schedule shall indicate any planned non-working days such as a holiday shutdown between Christmas and New Year's Eve:
- (a) no restricted working days exist at the NEWPCC. However, the Contractor should be aware that City operations staff will not be working at the NEWPCC from December 22, 2017 to December 27, 2017. If the Contractor continues working during these dates, then the Contractor shall account for this when developing their schedule;
 - (b) if Work is scheduled after 4:00 P.M. daily and on Saturdays or Sundays, the Contractor must inform NEWPCC Operations.

SCHEDULE OF WORK

D14. COMMENCEMENT

- D14.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D14.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence that the Contractor is 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;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D9;
 - (iv) evidence of the insurance specified in D10;
 - (v) the performance security specified in D11;
 - (vi) the Subcontractor list specified in D12 and
 - (vii) the detailed Work schedule specified in D13.
 - (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.
- D14.3 The Contractor shall commence the Work on the Site within fourteen (14) Working Days of receipt of the Purchase Order.
- D14.4 The City intends to award this Contract by June 1, 2017.
- D14.4.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D15. CRITICAL STAGES

- D15.1 The Contractor will achieve Critical Stages of the Work in accordance with the following requirements:
- (a) September 1, 2017 – Delivery of rooftop units: In order to install the rooftop units prior to October 2, 2017 after which operation of HVAC equipment is necessary to maintain the indoor air temperatures in the laboratory between 15°C and 30°C, and for which the Contractor shall install and operate temporary heating at their cost.

D16. SUBSTANTIAL PERFORMANCE

- D16.1 The Contractor shall achieve Substantial Performance by October 27, 2017.
- D16.2 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 re-inspected.
- D16.3 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.

D17. TOTAL PERFORMANCE

- D17.1 The Contractor shall achieve Total Performance by November 24, 2017.
- D17.2 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 re-inspected.
- D17.3 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.

D18. LIQUIDATED DAMAGES

- D18.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City of one thousand dollars (\$1000.00) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D18.2 The amount specified for liquidated damages in D18.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D18.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D19. JOB MEETINGS

- D19.1 Regular monthly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one (1) representative of the City and one (1) 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.
- D19.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D20. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D20.1 Further to C6.24, 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).

D21. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D21.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4

STANDARDIZATION

D22. STANDARDIZED GOODS

D22.1 The following goods have been standardized by the City and will be supplied by the Contractor:

- (a) Standardized Control System and Motor Control Equipment as per E10;
- (b) Standardized Instrumentation as per E11.

D23. CONTRACTUAL ARRANGEMENT

D23.1 Each Standardization Vendor shall be a Subcontractor of the Contractor.

D23.2 The City's Contract with each of the Standardization Vendors defines the prices and general terms of supply to the Contractor. Each Standardization Vendor is obligated to enter into a contract with the Contractor, based upon such prices and general terms of supply.

D23.2.1 The City is not a party to any Contract between a Standardization Vendor and the Contractor, or any Subcontractor.

D23.3 In the event that a potential dispute arises between the Contractor and a Standardization Vendor, the Contract Administrator shall be notified.

D24. PAYMENT OF STANDARDIZATION

D24.1 The Contractor is obligated to pay the Standardization Vendors in accordance with general terms of supply applicable to such Standardization Vendor.

D24.2 The Contractor's payment terms to the Standardization Vendor, in respect of Standardized Control System and Motor Control Equipment identified in E10, include the following:

D24.2.1 Except as noted in D24.2.2, payment shall be in Canadian Funds net thirty (30) Calendar Days after shipment.

D24.2.2 Payment for programmable logic controllers shall be in Canadian funds net thirty (30) Calendar Days and initiated based upon the following schedule:

- (a) upon approval of the shop drawings or forty (40) Calendar days after the last comprehensive submittal, in the event that a response is not made to the submittal twenty-five percent (25%) of the total value;
- (b) upon delivery of the complete PLC along with all associated as-manufactured documentation: sixty percent (60%) of the total value; or
- (c) in the event that the delivery is intentionally delayed, upon request by the Contractor, the following payment schedule would replace the sixty percent (60%) payment:

- (i) upon completion of the FAT and delivery of all as-manufactured documentation to the Contractor – thirty percent (30%) of the total value;
- (ii) forty (40) Calendar days after delivery of the as-manufactured documentation to the Contractor, or upon delivery, whichever comes sooner – thirty percent (30%) of the total value.
- (d) Upon successful commissioning and delivery of documentation or six (6) months after delivery, whichever comes first: fifteen percent (15%) of total value.

D24.3 The Contractor's payment to Standardized Vendor in respect of Standardized Instrumentation identified in E11, shall include the following:

D24.3.1 Payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Standardization Vendor's invoice.

MEASUREMENT AND PAYMENT

D24.4 The City's payment to the Contractor, associated with Standardized Goods, will be in accordance with C12.

D25. INVOICES

D25.1 Further to C12, the Contractor shall submit monthly invoices for Work performed during the previous calendar month to:

The City of Winnipeg
Corporate Finance - Accounts Payable
4th Floor, Administration Building, 510 Main Street
Winnipeg, MB R3B 1B9
Facsimile No.: 204-949-0864
Email: CityWpgAP@winnipeg.ca

D25.2 Invoices must clearly indicate, as a minimum:

- (a) the City's purchase order number;
- (b) date of delivery;
- (c) delivery address;
- (d) type and quantity of Work performed;
- (e) the amount payable with GST and MRST shown as separate amounts; and
- (f) the Contractor's GST registration number.

D25.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D26. PAYMENT

D26.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D27. WARRANTY

D27.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter, except where longer warranty periods are specified in the respective Specification sections, unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

- D27.1.1 For the purpose of Performance Security, the warranty period shall be one (1) year.
- D27.2 Notwithstanding C13.2, 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 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.
- D27.2.1 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.

FORM H1: PERFORMANCE BOND
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

BID OPPORTUNITY NO. 353-2017

NORTH END SEWAGE TREATMENT PLANT (NEWPCC) MAIN BUILDING HVAC REPLACEMENT

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

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

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

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

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

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

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D11)

(Date)

The City of Winnipeg
Legal Services Department
15 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 353-2017

NORTH END SEWAGE TREATMENT PLANT (NEWPCC) MAIN BUILDING HVAC REPLACEMENT,

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

E1.1 These Specifications shall apply to the Work.

E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.

E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>

E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.

E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.

E1.3 The following are applicable to the Work:

<u>Specification No.</u>	<u>Specification Title</u>
Division 01	General Requirements
013300	Submittal Procedures
017303	Execution Requirements
017411	Cleaning
017800	Closeout Submittals
017900	Demonstration and Training
Division 05	Metals
051223	Structural Steel for Building
Division 21	Mechanical
210501	Common Work Results for Mechanical
210720	Thermal Insulation for Piping
Division 22	Plumbing
221318	Drainage Waste and Vent Piping – Plastic
Division 23	HVAC
230501	Use of HVAC System During Construction
230505	Installation of Pipework
230513	Common Motor Requirements For HVAC Equipment
230529	Hangers and Support for HVAC Piping and Equipment
230593	Testing, Adjusting and Balancing for HVAC
230713	Thermal Insulation for Ducting
232115	Hydronic System: Copper
233114	Metal Ducts – Low Pressure to 500 PA
233300	Air Duct Accessories
233315	Dampers – Operating
237400	Build-Up Outdoor HVAC Equipment
Division 26	Electrical
260500	Common Work - Electrical
260520	Wire and Box Connector(0-1000-V)
260521	Wires and Cables
260529	Hangers and Support for Electrical Systems
260531	Splitters, Junction, Pull Boxes and Cabinets

262823 Disconnect Switches Fused and Non-Fused

Division 29

Instrumentation and Control

290500 Common Work Instrumentation
291001 Enclosures
291501 Instrumentation Cable
293011 Miscellaneous Panel Devices
293021 Power Supplies
294001 Control and Operator Interface Requirements
294011 PLC I-O Index
294021 Instrumentation Index
294051 Programmable Logic Controllers
295001 Instrumentation Specification Sheet

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
	Cover Sheet
S-01	Roof Framing Plans and Typical Notes
S-02	Framing Plans & Details Mechanical AHU M651
S-03	Framing Details for Mechanical MAU M639
M-1	Mechanical Demolition – Part Roof Plan
M-2	New HVAC – Part Roof Plan
E-01	Electrical – Roof Plan
E-02	Network Diagram
E-03	PLC Rack - Layout
P-1	P&ID – Makeup Air Unit M-639
P-2	P&ID – Air Handling Unit M-651
IL-01	Control Panel CP-M801 120VAC Power Supply
IL-02	Control Panel CP-M801 Rack 0, Slot 2, Wiring Diagram
IL-03	Control Panel CP-M801 Rack 0, Slot 2, Wiring Diagram
IL-04	Control Panel CP-M801 Rack 0, Slot 3, Wiring Diagram
IL-05	Control Panel CP-M801 Rack 0, Slot 4, Wiring Diagram
IL-06	Control Panel CP-M801 Rack 0, Slot 5, Wiring Diagram
IL-07	Control Panel CP-M801 Rack 0, Slot 6, Wiring Diagram
IL-08	Control Panel CP-M801 Rack 0, Slot 7, Wiring Diagram
NEP-1539A	Second Floor Plan Lighting & Power Layout
NEP-1540	Main Floor Plan Power & Equipment Layout

E2. HAZARDOUS MATERIALS

E2.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all Work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

E3. ELECTRICAL AND AUTOMATION DOCUMENTS

E3.1 Electrical and automation documents have been included as appendices and must be adhered to the City of Winnipeg Identification Standards. Refer to **Appendix A**.

GENERAL REQUIREMENTS

E4. SPECIFIC REQUIREMENTS

E4.1 The Contractor shall provide all materials, fabrications, finishes, temporary installation, documentation, shop drawings, means and methods necessary to fully install all of the new works identified on the contract drawings in a safe manner, fit-for-purpose intended. The description of Work provided herein is intended to be a general description of Work activities

and is not intended to be an exhaustive listing of all tasks necessary to complete the scope of installations given on the Drawings or specifications.

E4.2 Wire nuts

- (a) wire nuts are not permitted in conduit bodies;
- (b) wire nuts are permitted in junction boxes for lighting and receptacle wiring only. Wire nuts are not permitted for automation wiring.

E4.3 All conduit routes shall be approved by the Contract Administrator prior to installation of new conduit.

E5. SECURITY AND SAFETY

E5.1 The Contractor is responsible for all material and equipment stored on the Site.

E6. EXISTING FACILITY OPERATION DURING CONSTRUCTION

E6.1 The Contractor shall cooperate with and provide full access at all times for City personnel to carry out maintenance and operational duties:

- (a) no additional payments will be made for providing access to City forces on the Site or any potential affect City crews might have on the Contractor's Work.

E7. WORK PLAN

E7.1 The Contractor is required to develop a detailed Work plan and submit to the Contract Administrator for review within two (2) days of Commencement. The Work plan is to include:

- (a) the proposed construction sequence to be followed including all methods to be employed to ensure that no damage occurs to existing structures or adjacent properties;
- (b) description of all proposed methods of construction to be implemented;
- (c) specialized equipment that may be used;
- (d) any design revisions proposed to accommodate the Contractor's proposed method of construction;
- (e) the Contractor shall respond to any concerns that may be raised by the Contract;
- (f) administrator's review of the Contractor's construction methods submission.

E8. SITE RESTORATION

E8.1 Description

E8.1.1 This specification shall cover surface restoration and associated items of Work for existing surfaces disturbed by construction activities, as well as fencing.

E8.2 Construction Methods

E8.2.1 Restoration of all existing surface areas disturbed by construction activities including, but not limited to; 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.

CONTRACTOR SUPPLIED STANDARDIZED GOODS

E9. GENERAL REQUIREMENTS

- E9.1 Comply with the general requirements of E10 for all Standardized Goods supplied by the Contractor.
- E9.2 Comply with the following Standardization Goods requirements:
- E9.2.1 Control System and Motor Control Equipment in accordance with E10.
- E9.3 Contact the Contract Administrator regarding any potential uncertainty as to whether a good is covered under a standardization agreement.
- E9.4 The Contractor may utilize a Standardization Vendor to provide other goods required under the Contract, in addition to Standardized Goods.
- E9.5 The Contractor shall separately track all goods supplied under each standardization agreement
- E9.5.1 In the event that one or more Standardization Vendors are utilized to procure goods not covered under a standardization agreement, the Contractor shall ensure such goods are quoted, ordered, tracked and accounted in a separate manner.
- E9.6 Pricing
- E9.6.1 The City has obtained discounted pricing for Standardized Goods. Each Standardization Vendor is obligated to sell Standardized Goods to all prospective Contractors at the discounted price, provided the goods are for the City.
- E9.6.2 The Standardization Vendors may at their option provide lump sum pricing for goods packages. The Standardization Vendor is not required to provide breakout pricing details to the Contractor.
- E9.6.3 The Contractor and Subcontractors shall not utilize the City's agreements with the Standardization Vendors for any purpose other than City Work.
- E9.6.4 The City may audit the goods purchased from the Standardization Vendors under the standardization agreements and may identify to the Standardization Vendors any goods procured that are not associated with the Contract.
- E9.7 The Contractor is responsible for ensuring that the Material supplied by the Standardization Vendors meets the requirement of the Contract. The Contractor shall review and confirm quotations supplied by the Standardization Vendors to ensure that all required Material is supplied.
- E9.8 Without limiting or otherwise affecting any other term or condition of the Contract:
- E9.8.1 The supply of goods through a Standardization Vendor shall not relieve the Contractor of their obligations;
- E9.8.2 Errors or omissions by a Standardization Vendor shall not be a cause for a Change in Work;
- E9.8.3 Delays by a Standardization Vendor shall not be a cause for a Change in Work where the delay could have been avoided through reasonable planning, contingency allocation, or communication by the Contractor.
- E9.9 Submittals
- E9.9.1 Submittals shall be provided for Standardized Goods in accordance with the Specifications and typical industry practice. Submittals shall not be bypassed for Standardized Goods.

E10. STANDARDIZED CONTROL SYSTEM AND MOTOR CONTROL EQUIPMENT

- E10.1 The City has standardized on a specific vendor for the supply and delivery of control system and motor control equipment. The Standardization Vendor was selected via RFP 756-2013 and was awarded to Schneider Electric Canada Inc. (Schneider).
- (a) refer to E10.5.2 for contact information;
 - (b) copies of the tender documents are available from the City of Winnipeg Material Management's website.
- E10.2 Goods to be procured via this standardization agreement includes, but is not limited to:
- (a) programmable Controllers (PLCs) including all associated components, hardware and software;
 - (b) PLC to Infi90 Termination Unit migration cables;
 - (c) programmable Controller Programming Software;
 - (d) process Simulator Software;
 - (e) HMI System software;
 - (f) historian Server and Client Software;
 - (g) touchscreen HMI systems such as Magellis HMIs;
 - (h) touchscreen HMI Programming Software;
 - (i) Motor Control Centers including all components;
 - (j) loose VFDs, motor starters, soft starters, and associated components;
 - (k) Industrial Ethernet Switches as per design. Note that some Ethernet switches may be specified to be from other vendors due to application requirements. Refer to Drawings and specifications;
 - (l) Version Management Software; and,
 - (m) Information Server Software.
- E10.3 For clarity, this standardization agreement does not include:
- (a) computer workstation hardware including operating systems;
 - (b) computer server hardware, including operating systems and general terminal server / client software;
 - (c) thin client terminals;
 - (d) fused and un-fused disconnect switches not incorporated into a MCC or other motor starter;
 - (e) control stations and pendants not incorporated into a MCC or other motor starter;
 - (f) Electrical Transformers not in a MCC or motor starter;
 - (g) panel boards not integrated in a MCC;
 - (h) Switchboards / Switchgear not integrated in a MCC;
 - (i) System Integration Services (including programming and configuration);
 - (j) Control Panels to house PLCs;
 - (k) instrumentation;
 - (l) power supplies not integrated with the PLC / HMI systems; and
 - (m) terminal blocks not integrated with the PLC / HMI systems.
- E10.4 The following model series shall be utilized unless otherwise indicated in the Specifications, Drawings or otherwise approved by the Contract Administrator:
- (a) Quantum, M580, and M340 PLCs;

- (b) X80 PLC I/O;
- (c) Unity Pro programming software;
- (d) Vijeo Citect HMI systems;
- (e) Wonderware Historian;
- (f) Local HMI – Magellis HMIGTO or HMIGTU series;
- (g) Model 6 MCC – NEMA rated starters, Intelligent Ethernet (unless otherwise specified);
- (h) Altivar 61 series VFDs for variable torque applications; and
- (i) Altivar 71 series VFDs for variable torque applications.

E10.5 Commissioning and start-up:

E10.5.1 Commissioning and start-up of all goods purchased under this standardization agreement shall be performed by the Contractor. Schneider is only obligated to provide MCC start-up services under the Standardization Agreement. Coordinate with Schneider as required to understand the limitations of Schneider's MCC start-up services and provide all remaining testing, commissioning and start-up services to provide a complete commissioning and start-up.

E10.5.2 Primary contact for all quotations and purchases:

Garth Eastman
21 Omands Creek Blvd
Winnipeg, MB, R2R 2V2
Telephone: 204-631-0670
E-mail: garth.eastman@ca.schneider-electric.com

E10.6 Quotations and orders:

E10.6.1 Reference the following in all quotation requests and purchase orders:

- (a) this Bid Opportunity number; and
- (b) the standardization agreement number RFP 756-2013.

E11. STANDARDIZED INSTRUMENTATION

E11.1 The City has standardized on a specific vendor for the supply and delivery of specific instrumentation. The Standardization Vendor was selected via RFP 449-2014 and was awarded to Trans-West Supply Company Inc. (Trans-West).

- (a) copies of the tender documents are available from City of Winnipeg Material Management's website;
- (b) refer to E11.6 for contact information

E11.2 Goods to be procured via this standardization agreement include, but are not limited to:

- (a) Flowmeters – Electromagnetic;
- (b) Flowmeters – Differential pressure based;
- (c) Pressure Transmitters including manifold assemblies;
- (d) Temperature Transmitters including temperature elements and thermowells;
- (e) Ultrasonic Level Transmitters; and
- (f) Associated accessories.

E11.3 For clarity, this standardization agreement does not include:

- (a) Flowmeters - Coriolis;
- (b) Flowmeters – Thermal Dispersion;
- (c) Flowmeters – Ultrasonic;

- (d) Flow switches (i.e. mechanical);
 - (e) Pressure switches;
 - (f) Temperature switches;
 - (g) Radar Level Transmitters; and
 - (h) Level Switches (non-ultrasonic based).
- E11.4 The following model series shall be utilized unless otherwise indicated in the Specifications, Drawings or otherwise approved by the Contract Administrator:
- (a) Magnetic Flowmeter Flowtubes – SITRANS F M MAG 5100W series:
 - (i) SITRANS F M MAG 3100W series may be utilized where specified.
 - (b) Magnetic Flowmeter Transmitters - SITRANS F M MAG 6000 series;
 - (c) Pressure Transmitters - SITRANS P DS III;
 - (d) Temperature Transmitters:
 - (i) SITRANS TF (Process Applications)
 - (ii) SITRANS TH400 (HVAC applications)
 - (e) Ultrasonic Level Transmitters:
 - (i) Integrated applications: SITRANS Probe LU
 - (ii) Separate controller applications: Multiranger 100/200 with EchoMax transducers.
- E11.5 Field set-up and commissioning:
- E11.5.1 Field set-up and commissioning of the gas detection systems may be performed by Trans-West under the Standardization Agreement. Coordinate with Trans-West as required to understand the capabilities and limitations of Trans-West's field set-up and commissioning services and provide all remaining services to provide a complete commissioning and start-up.
- E11.5.2 The Contractor may provide field set-up and commissioning services for the instrumentation via alternate means, provided that this does not result in a reduction of the services or quality of work.
- E11.6 Primary contact for all quotations and purchases:
- Greg Troilo
President
126 Bannister Road
Winnipeg, MB, R3R 0S3
Telephone: 807-623-0909
E-mail: gregt@transwest-mb.com
- E11.7 Quotations and orders:
- E11.7.1 Reference the following in all quotation requests and purchase orders:
- (a) this Bid Opportunity number; and
 - (b) the standardization agreement number RFP 449-2014.
- E12. ADDITIONAL WORK**
- E12.1 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;
 - (b) other issues that occur on site, which require significant Contractor time to address.
- E12.2 Additional services 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 twenty-four (24) hours' notice is given prior to the Contractor's scheduled time to be on site.

E12.3 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. The Contract Administrator may also request a written quotation for the additional work. For any work, where a written quotation is provided, and subsequently authorized, the valuation of the work shall be as per the quotation, regardless of the actual cost to the Contractor.

E13. SPARE PARTS

E13.1 General

E13.1.1 The Contractor shall supply and deliver spare parts as indicated by the schedule below.

E13.1.2 Schedules:

Description	Quantity
Schneider Electric M580 CPU Module	1
24VDC, 10A Power Supply	1
Backplane for PLC	1

E13.2 Execution

E13.2.1 The Consumable and Spare Parts listed herein and any specialty tools shall be delivered to the NEWPCC staff in advance of Commissioning of AHU M639 and AHU M651.

E13.3 Measurement and Payment

E13.3.1 Payment for the supply and delivery of all items described herein will be paid out at the lump sum value for Spare Parts upon approval by the Contract Administrator.