



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 1068-2014

**WATER TREATMENT RESEARCH AND PROCESS OPTIMIZATION FACILITY
MECHANICAL AND ELECTRICAL CONSTRUCTION SERVICES**

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

PART B - BIDDING PROCEDURES

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

PART C - GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Definitions	1
D4. Contract Administrator	1
D5. Contractor's Supervisor	2
D6. Ownership of Information, Confidentiality and Non Disclosure	2
D7. Notices	2

Submissions

D8. Authority to Carry on Business	3
D9. Safe Work Plan	3
D10. Insurance	3
D11. Performance Security	3

Schedule of Work

D12. Commencement	4
D13. Substantial Performance	4
D14. Total Performance	5
D15. Liquidated Damages	5

Control of Work

D16. The Workplace Safety and Health Act (Manitoba) – Qualifications	5
--	---

Measurement and Payment

D17. Invoices	5
D18. Payment	6

Warranty

D19. Warranty	6
Form H1: Performance Bond	7

Form H2: Irrevocable Standby Letter of Credit	9
---	---

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
--	---

General Requirements

E2. Components of Work	4
------------------------	---

E3. Site Facilities	7
---------------------	---

E4. Site Restoration	8
----------------------	---

PART F - SECURITY CLEARANCE

F1. Security Clearance	1
------------------------	---

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 WATER TREATMENT RESEARCH AND PROCESS OPTIMIZATION FACILITY MECHANICAL AND ELECTRICAL CONSTRUCTION SERVICES

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, February 25, 2015.

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, the Bidder may make an appointment to view the Site by contacting the Contract Administrator.

B3.2 The Bidder is advised that appointments for viewing the site will only be conducted up to seven (7) Calendar Days before the closing of the Bid. The appointment may be scheduled with other Bidders to minimize disruptions at the facility.

B3.3 Site investigations are not mandatory.

B3.4 Bidders attending a Site Investigation are required to have successfully obtained a Public Safety Verification Check, as described in F1.3, to the Contract Administrator identified in D2.

B3.5 Bidders are responsible to provide their own personal protective equipment for the Site Investigation. CSA approved safety footwear is required.

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.

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.

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/>
- 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.
- B6.2.3 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 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;

(e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.

B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.

B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.

B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.

B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.

B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B15.

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.

B7.10 Notwithstanding B7.2 to B7.9, and in accordance with B8.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B15.1(a).

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 Submission 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 Submission.
- 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 B15.1(a).
- B8.8 If the Bid Submission is 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 Bids submitted by internet electronic 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 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 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.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. QUALIFICATION

- B11.1 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.
- B11.2 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>
- B11.3 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;
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba); and
 - (d) upon request of the Contract Administrator, obtain Security Clearances in accordance with Part F.
- B11.4 Further to B11.3(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/Subcontractors has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) 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
 - (b) 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
- (c) 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/>).

- B11.5 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.
- B11.6 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.

B12. OPENING OF BIDS AND RELEASE OF INFORMATION

- B12.1 Bids will not be opened publicly.
- B12.2 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/bidopp.asp>
- B12.3 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/>
- B12.4 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.

B13. IRREVOCABLE BID

- B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B13.2 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.

B14. WITHDRAWAL OF BIDS

- B14.1 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.
- B14.1.1 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.
- B14.1.2 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.
- B14.1.3 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 B14.1.3(b), declare the Bid withdrawn.

B14.2 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 B13.2 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.

B15. EVALUATION OF BIDS

B15.1 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.

B15.2 Further to B15.1(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.

B15.3 Further to B15.1(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.

B15.4 Further to B15.1(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 items 6 and 17, items 7,8,9,10,11 and 18, and items 12 and 19 and in the order listed, until a Total Bid Price within the budgetary provision is achieved.

B15.4.1 Further to B15.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B16. AWARD OF CONTRACT

B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B16.2 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.

B16.2.1 Without limiting the generality of B16.2, 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.

B16.3 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 B15.

B16.3.1 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.

B16.4 Notwithstanding C4, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

B16.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

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 mechanical and electrical labour and purchase of identified materials associated with the construction of the Water Treatment Research and Process Optimization Facility. The City shall serve as the Prime Contractor.

D2.2 As outlined in Part E - Specifications the major components of the Work are as follows:

- (a) Providing mechanical and electrical labour for the construction and to assist in the commissioning of the WTRPO.
- (b) Purchase of material and some equipment for the construction of the WTRPO.

D3. DEFINITIONS

D3.1 When used in this Bid Opportunity:

- (a) “**DAF**” means Dissolved Air Flotation;
- (b) “**HVAC**” means Heating, Ventilation and Air-Conditioning;
- (c) “**I&C**” means Instrumentation and Control;
- (d) “**MCC**” means Motor Control Centre;
- (e) “**PLC**” means Programmable Logic Controller;
- (f) “**PPE**” means Personal Protective Equipment;
- (g) “**Prime Contractor**” means the City of Winnipeg with duties as outlined in the Government of Manitoba Workplace Safety and Health Act W210 – Section 7;
- (h) “**PVC**” means Polyvinyl Chloride;
- (i) “**SOP**” means Safe Operating Procedure;
- (j) “**TSET**” means Thickened Sludge Equalization Tank;
- (k) “**WTP**” means City of Winnipeg Drinking Water Treatment Plant; and
- (l) “**WTRPO**” means Water Treatment Research and Process Optimization.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is CH2M HILL Canada Limited, represented by:

Kelly Griffiths, M.A.Sc.
Water Design Specialist

CH2M HILL Canada Limited
1301 Kenaston Boulevard
Winnipeg, MB, R3P 2P2, Canada
Telephone No. 204 488-2214 x 73063
Facsimile No. 204 488-2245

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

D4.3 Bids Submissions must be submitted to the address in B8.5.

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 address or 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 D4.1.

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

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/matmgmt/Safety/default.stm>

D10. INSURANCE

D10.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least five million dollars (\$5,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.
- (c) All risks course of construction insurance in the amount of one hundred percent (100%) of the total contract price, including testing and commissioning and coverage for damage to existing structures, to be 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 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.

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.

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.

SCHEDULE OF WORK

D12. COMMENCEMENT

D12.1 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.

D12.2 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 D8;
 - (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; and
- (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.
- (c) the Contract Administrator has confirmed receipt of Criminal Record Search Certificate and Public Safety Verification Checks for individuals that will be working on site.

D12.3 The Contractor shall commence the Work on the Site within fifteen (15) Working Days of receipt of the Purchase Order.

D13. SUBSTANTIAL PERFORMANCE

D13.1 The Contractor shall achieve Substantial Performance within one hundred (100) consecutive Working Days of the commencement of the Work as specified in D12.

D13.2 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.

D13.3 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.

D14. TOTAL PERFORMANCE

- D14.1 The Contractor shall achieve Total Performance within one hundred forty (140) consecutive Working Days of the commencement of the Work as specified in D12.
- D14.2 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.
- D14.3 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.

D15. LIQUIDATED DAMAGES

- D15.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City two hundred dollars (\$200) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D15.2 The amount specified for liquidated damages in D15.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D15.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D16. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

- D16.1 Further to B11.4, 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 B11.4.

MEASUREMENT AND PAYMENT

D17. INVOICES

- D17.1 Further to C12, the Contractor shall submit an monthly invoices for each portion of Work performed to:

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

- D17.2 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.

D17.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D17.4 Bids Submissions must be submitted to the address in B8.5.

D18. PAYMENT

D18.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D19. WARRANTY

D19.1 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.

D19.1.1 For the purpose of Performance Security, the warranty period shall be one (1) year.

D19.2 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.

D19.2.1 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. 1068-2014

WATER TREATMENT RESEARCH AND PROCESS OPTIMIZATION FACILITY MECHANICAL AND ELECTRICAL CONSTRUCTION SERVICES

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
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 1068-2014

WATER TREATMENT RESEARCH AND PROCESS OPTIMIZATION FACILITY MECHANICAL
AND ELECTRICAL CONSTRUCTION SERVICES

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>
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DIVISION 01

GENERAL REQUIREMENTS

01 11 00	Summary of Work
01 31 13	Project Coordination
01 31 19	Project Meetings
01 32 00	Construction Progress Documentation
01 33 00	Submittal Procedures
01 35 29.01	Health and Safety
01 41 00	Regulatory Requirements
01 43 33	Contractor's Field Requirements
01 45 16.13	Contractor Quality Control
01 61 00	Common Product Requirements
01 64 00	City-Furnished Products
01 77 00	Closeout Procedures
01 78 23	Operation and Maintenance Data
01 91 14	Equipment Testing and Facility Startup

DIVISION 03

CONCRETE

03 60 00	Grouting
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DIVISION 22

PLUMBING

22 30 00	Plumbing Equipment
22 40 00	Plumbing Fixtures

DIVISION 26

ELECTRICAL

26 05 00	Common Work Results For Electrical
26 05 20	Wire and Box Connector (0 – 1000 V)
26 05 21	Wires and Cables (0 – 1000 V)
26 05 22	Connectors and Termination
26 05 28	Grounding – Secondary
26 05 29	Hangers and Supports for Electrical System
26 05 32	Outlet Boxes, Conduit Boxes, and Fittings

26 05 34	Conduits, Conduits Fastening and Conduits Fitting
26 05 36	Cable Trays for Electrical System
26 09 43	Network Lighting Control
26 12 17	Dry Type Transformers Up to 600 V Primary
26 24 17	Panel Boards Breaker Type
26 24 19	Motor Control Centres
26 27 26	Wire Devices
26 28 21	Moulded Case Circuit Breakers
26 28 23	Disconnect Switches – Fuses and Non-Fuses
26 29 03	Control Devices
26 29 10	Motor Starters to 600 V
26 29 20	Variable Frequency Drives

DIVISION 29

INSTRUMENTATION AND CONTROLS

29 05 00	Common Work Instrumentation
29 10 01	Enclosures
29 15 01	Instrumentation Cable
29 25 01	Transmitters and Indicators
29 30 01	Switches and Relays
29 40 11	PLC I-O Index
29 40 21	Instrumentation Index
29 40 51	Programmable Logic Controller
29 50 01	Instrumentation Specification Sheet

DIVISION 40

PROCESS INTERGRATION

40 05 15	Piping Support Systems
40 27 00	Process Piping General
40 27 00.08	Stainless Steel Pipe and Fittings-General Service Data Sheet
40 27 00.09A	Stainless Steel Pipe, Tubing, and Fittings-Special Service Data Sheet
40 27 00.10	Polyvinyl Chloride (PVC) Pipe and Fitting Data Sheet
40 27 00.13	Copper and Copper Alloy Pipe, Tubing, and Fittings Data Sheet
40 27 00.30	Polypropylene Tubing and Fittings Data Sheet
40 27 01	Process Piping Specialties
40 27 02	Process Valves and Operators
40 80 01	Process Piping Leakage Testing

DIVISION 43

PROCESS GAS AND LIQUID HANDLING

43 21 13.23	Horizontal End Suction Centrifugal Pumps
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DIVISION 46

WATER AND WASTEWATER EQUIPMENT

46 00 00	Process Equipment Installation
46 01 01	DAF System Installation
46 02 01	Ozone Contactor Installation
46 02 02	Ozone System Equipment Installation
46 03 01	Filter Column and Backwash Installation
46 04 01	Chemical Feed Systems

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1-0601X-D0002-001	Cover Sheet
1-0601X-D0003-001	Process Flow Diagram
1-0601X-S0005-001	Isometric

STRUCTURAL (S)

1-0601X-S0001-001	Plan at 239.410 (for information only)
1-0601X-S0002-001	Walkway Plan at 245.000 (for information only)
1-0601X-S0003-001	Sections Sheet 1 of 2 (for information only)
1-0601X-S0003-002	Sections Sheet 2 of 2 (for information only)
1-0601X-S0004-001	Standard Details Sheet 1 of 4 (for information only)
1-0601X-S0004-002	Standard Details Sheet 2 of 4 (for information only)
1-0601X-S0004-003	Standard Details Sheet 3 of 4 (for information only)
1-0601X-S0004-004	Standard Details Sheet 4 of 4 (for information only)

PROCESS (P)

1-0601X-P0001-001	Raw Water Pumping P&ID
1-0601X-P0002-001	DAF Tank and Recycle System P&ID
1-0601X-P0003-001	Ozone Contactors P&ID
1-0601X-P0004-001	Filter Bank A (Sheet 1 of 2) P&ID
1-0601X-P0004-002	Filter Bank A (Sheet 2 of 2) P&ID
1-0601X-P0005-001	Filter Bank B (Sheet 1 of 2) P&ID
1-0601X-P0005-002	Filter Bank B (Sheet 2 of 2) P&ID
1-0601X-P0006-001	Chemical Feed Systems (Sheet 1 of 2) P&ID
1-0601X-P0006-002	Chemical Feed Systems (Sheet 2 of 2) P&ID
1-0601X-P0007-001	Ozone Generation and Destruct Systems P&ID

MECHANICAL (M)

1-0601X-M0002-001	Raw Water Supply to Pilot Plant/ Residuals Drain to TSET
1-0601X-M0003-001	Plan at 239.410
1-0601X-M0004-001	Partial Plan and Sections Sheet 1 of 3
1-0601X-M0004-002	Partial Plan and Sections Sheet 2 of 3
1-0601X-M0004-003	Partial Plan and Sections Sheet 3 of 3
1-0601X-M0005-001	Ozone Column Details
1-0601X-M0006-001	Filter Column Details
1-0601X-M0007-001	Dissolved Air Flotation Unit Plan and Sections (for information only)
1-0601X-M0007-002	Dissolved Air Flotation Unit Plan and Sections (for information only)
1-0601X-M0007-003	Dissolved Air Flotation Unit Details (for information only)
1-0601X-M0008-001	Standard Details Sheet 1 of 2
1-0601X-M0008-002	Standard Details Sheet 2 of 2

HVAC & PLUMBING (H)

1-0601X-H0003-001	Plumbing Plans and Schematic
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ELECTRICAL (E)

1-0601X-E0001-001	Plan at 239.410
1-0601R-E0006-001	Residuals Handling Area Second Floor Power and Lighting Plan
1-0601R-E0009-001	Residuals Handling Area Third Floor Power and Lighting Plan
1-0601B-E0006-004	(MCC #3A, 3B) 600V Single Line Diagram
1-0601M-E0019-001	Electrical Room Area First Floor Process Plan

AUTOMATION/ I & C (A)

1-0601X-A0001-001	CP-X10 PLC Rack Layout
1-0601X-A0002-001	CP-H10B PLC Rack Layout
1-0601X-A0003-001	PNL-X901 and PNL-X902 Schedules
1-0601X-A0004-001	Fiber Optic Patch Panel Interconnection Diagram
1-0601H-A0100-001	Plant Communication Network Overall Block Cable Diagram
1-0601H-A0101-001	Plant Communication Network Overall Block Cable Diagram
1-0601H-A0103-001	Plant Communication Network Overall Block Cable Diagram

GENERAL REQUIREMENTS

E2. COMPONENTS OF WORK

E2.1 The Work to be done under the Contract shall consist of mechanical and electrical labour and purchase of identified materials associated with the construction of the Water Treatment Research and Process Optimization Facility. The City shall serve as the Prime Contractor.

E2.2 The major components of the Work are as follows:

- (a) Supply one Mechanical Foreman for a period of 720 hours to facilitate in the construction of the City of Winnipeg Water Treatment Research and Process Optimization (WTRPO) Plant. The Mechanical Foreman shall have a minimum of 10 years' experience supervising the day to day activities on an industrial construction site. The Mechanical Foreman shall assist the City Representative to prepare a project schedule. The schedule shall include task hierarchy, manpower estimates, milestones, start-up and commissioning activities. The Mechanical Foreman shall prepare material take-offs and coordinate the purchasing of this material. The Mechanical Foreman shall work with the City Representative to schedule the mechanical installation portion of the work. The Mechanical Foreman shall direct the day to day activities/work of the journeyperson plumbers/ pipefitters/ millwrights. The Mechanical Foreman shall cooperate with the Electrical Foreman to maintain progress of both trades throughout the project. The Mechanical Foreman is to have experience in the layout and installation of PVC pressure piping (pigmented and clear), stainless steel piping with threaded fittings, stainless steel tubing with compression fittings and soldered copper tubing with pressure fittings. The Mechanical Foreman shall have experience in the layout and placement of pumps, compressors, tanks, installation of instrumentation and the layout and installation other equipment associated with WTRPO plant. The Mechanical Foreman shall review installation procedures prior to installing equipment. The Mechanical Foreman shall have experience in start-up, troubleshooting and commissioning of industrial systems. Labour hours to be broken out for:
 - (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work, and
 - (iii) Installation of hot water heater and emergency eyewashes/showers.
- (b) Supply one Electrical Foreman for a period of 720 hours to facilitate in the construction of the City of Winnipeg Water Treatment Research and Process Optimization (WTRPO) Plant. The Electrical Foreman shall have a minimum of 10 years' experience supervising the day to day activities on an industrial construction site. The Electrical Foreman shall assist the City Representative to prepare a project schedule. The schedule shall include task hierarchy, manpower estimates, milestones, start-up and commissioning activities. The Electrical Foreman shall prepare material take-offs and coordinate the purchasing of this material. The Electrical Foreman shall work with the City Representative to schedule the electrical installation portion of the work. The Electrical Foreman shall direct the day to day activities/work of the journeyperson electricians. The Electrical Foreman shall cooperate with the Mechanical Foreman to maintain progress of both trades throughout the project. The Electrical Foreman is to have experience in the layout and installation of cable tray, conduit systems, low voltage wiring (600V and less), instrumentation

wiring/terminations, fibre-optic cable and 347V lighting systems. The Electrical Foreman will have experience in the layout, placement and terminations of motor control centres (MCC) and programmable logic controller (PLC) cabinets. The Electrical Foreman shall review installation procedures prior to installing equipment. The Electrical Foreman will have experience in start-up, troubleshooting and commissioning of industrial systems. Labour hours to be broken out for:

- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (iii) Installation of hot water heater and emergency eyewashes/showers, and
 - (iv) Installation of new lighting.
- (c) Supply journeyperson plumbers, pipefitters, welders or millwrights (as dictated by the work requirement) for a total of 1,800 hours to facilitate in the construction of the City of Winnipeg Water Treatment Research and Process Optimization Facility. The journeyperson will have a minimum of five (5) years' experience similar to the work being completed on industrial construction sites. The journeyperson is to have experience in the layout and installation of PVC pressure piping (pigmented and clear), stainless steel tubing with compression fittings and soldered copper tubing with pressure fittings. The journeyperson will have experience in the layout and placement of pumps, compressors, tanks, installation of instrumentation and the layout and installation other equipment associated with Plant. Labour hours to be broken out for:
- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work, and
 - (iii) Installation of hot water heater and emergency eyewashes/showers.
- (d) Supply industrial electricians, instrumentation mechanics for a total of 1,360 hours to facilitate in the construction of the City of Winnipeg Water Treatment Research and Process Optimization Plant. The journeyperson will have a minimum of five (5) years' electrical/instrumentation experience on an industrial construction site. The journeyperson are to have experience in the layout and installation of cable tray, conduit systems, low voltage wiring (600V and less), instrumentation wiring/terminations, fibre-optic cable and 347V lighting systems. The journeyperson will have experience in the layout, placement and terminations of motor control centres (MCC) and programmable logic controller (PLC) cabinets. Labour hours to be broken out for:
- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (iii) Installation of hot water heater and emergency eyewashes/showers, and
 - (iv) Installation of new lighting.
- (e) Travel costs and time to and from the City of Winnipeg Water Treatment Plant from the Perimeter Highway at Dugald Road or Fermor Highway, which is a 14 km round-way trip. Costs to be charged per the representative union collective bargaining agreement. Employer provided vehicles will be charged at the same rate for employee provided vehicles per the collective bargaining agreements. Travel costs to be broken out for:
- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (iii) Installation of hot water heater and emergency eyewashes/showers, and
 - (iv) Installation of new lighting.
- (f) Office overhead costs associated with this Work broken out for:

- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (iii) Installation of hot water heater and emergency eyewashes/showers, and
 - (iv) Installation of new lighting.
- (g) The supply of mechanical materials and equipment required to complete the installation of the Facility. The drawings indicate the mechanical equipment the City will supply for installation under this Work. . Costs to be broken out for:
- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work, and
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work.
- (h) The supply of plumbing materials and equipment associated with the emergency eyewash/showers and hot water tank. The drawings indicate the plumbing equipment the City will supply for installation under this Work.
- (i) The supply of electrical materials and equipment required to complete the installation of the Facility. The specification indicate the electrical equipment and materials the City will supply for installation under this Work. Costs to be broken out for:
- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work,
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work, and
 - (iii) Installation of hot water tank and emergency eyewashes/showers.
- (j) The supply of instrumentation materials and devices required to complete the installation of the Facility. The drawings indicate the instrumentation components the City will supply for installation under this Work. Costs to be broken out for:
- (i) Installation of WTRPO less filter Bank B, include installation of FE/FIT-X4220 (flow meter and transmitter) in this component of work, and
 - (ii) Installation of filter Bank B with installation of systems after FE/FIT-X4220 (flow meter and transmitter) in this component of work, and
 - (iii) Installation of hot water tank and emergency eyewashes/showers.
- (k) The supply of lighting components and materials required to complete the installation of the Facility.
- (l) The rental of equipment (i.e. scaffolding, aerial work platforms)
- (m) The standard work day will be 8 hours (0800 hrs to 1630 hrs) Monday through Friday with a 30 minute lunch break and two coffee breaks that are a maximum of 15 minutes each. City of Winnipeg observed statutory holidays for this Contract will be:
- (i) New Year's Day,
 - (ii) Louis Riel Day,
 - (iii) Good Friday,
 - (iv) Easter Monday,
 - (v) Queen Victoria Day,
 - (vi) Canada Day,
 - (vii) August Civic Holiday,
 - (viii) Labour Day,
 - (ix) Thanksgiving,
 - (x) Remembrance Day,
 - (xi) ½ day Christmas Eve,
 - (xii) Christmas, and

(xiii) Boxing Day

- (n) Tradesmen will provide their own hand tools as outlined in their collective bargaining agreements. Any tools required over and above this for this work will be provided by the employers of the tradesmen. Any special tooling purchased for this project and charged to the City of Winnipeg shall remain the property of the City of Winnipeg.
- (o) All tradesmen must be familiar with the City of Winnipeg Health and Safety requirements for this specific site and follow the Safe Operating Procedures (SOP) for this site. Mandatory weekly tailgate safety meetings will be conducted at a minimum. Additional meetings maybe required depending on the nature of the work.
- (p) The foremen are to attend a weekly project coordination meeting with the City to plan out the weekly work schedule and review the previous week's status.
- (q) Overtime will be paid at the rates in accordance with the representative collective bargaining agreements and only with written/email instructions from City_Representative.
- (r) Journeypersons shall install all work in a safe and workmanlike manner and in accordance with applicable codes, regulations, City of Winnipeg Water and Wastewater Department Standards and project specifications. Whenever corrections have to be made to bring the work up to these requirements because of faulty or careless workmanship, the Journeyperson shall make such corrections on their own time unless the errors were made by order of the City Representative. In the event the error was made by the order of the Employer the Journeyperson shall be paid by the Employer outside the scope of this Work.
- (s) The work will be inspected regularly by representatives of the Contract Administrator and the applicable trades from the City of Winnipeg Water and Waste Department. Requested changes to the work are to be approved by the City and Contract Administrator.
- (t) All standard personal protective equipment/clothing are to be provided by the tradesperson or the Employer of the Tradesperson. In the event of specialty clothing or equipment specific to the nature of the site and not in the standard requirements for an industrial site the City will provide the personal protective equipment (PPE).

E2.3 The following items will be supplied under a separate contract or by City's own forces:

- (a) Mechanical ventilation including the chemical drums/pails and a fumehood for the laboratory;
- (b) Thermal insulation for piping and ductwork;
- (c) Testing, Adjusting and Balancing (TAB) of the air distribution systems;
- (d) PLC programming;
- (e) Painting;
- (f) SCADA programming;
- (g) Housekeeping pads and coring of ductwork openings;
- (h) Identification and labelling of equipment and piping;
- (i) Marking up of as-built drawings; and
- (j) Preparation of Operating and Maintenance Manuals.

E3. SITE FACILITIES

E3.1 The City as the Prime Contractor shall supply a bare office facility within the work area.

E3.2 The City will provide onsite washrooms.

E3.3 The City will provide onsite storage for equipment and material.

E3.4 The City's onsite waste container will be available to dispose of incidental construction refuse. Disposal of large items will be coordinated with the City for hauling out from site.

E4. SITE RESTORATION

E4.1 The City will be responsible for exterior site restoration of the construction site.

PART F - SECURITY CLEARANCE

- F1.1 Each individual proposed to perform Work under the Contract shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his place of residence and Public Safety Verification Checks.
- (a) Any cost or expense incurred by the Proponent that is associated with obtaining the required security clearances shall be borne solely by the Proponent.
- F1.2 A Criminal Record Search Certificate can be obtained from one of the following;
- (a) police service having jurisdiction at his/her place of residence; or
- (b) BackCheck, as described in F1.4; or
- (c) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <http://www.commissionaires.mb.ca/> .
- F1.3 Public Safety Verification Checks may be obtained from BackCheck as described in F1.4.
- F1.4 To use BackCheck for obtaining security clearance, a company must be registered as a City of Winnipeg vendor, which can be arranged as follows:
- (a) The Bidder can set up an account with BackCheck under their company name by completing the form at <http://www.backcheck.net/cityofwinnipeg/>. A primary contact person for the company is required, who will receive within 48 hours account information and instructions for requesting checks through BackCheck.
- (b) With the account information and instruction provided, the Bidder can begin requests for a Criminal Record Check and/or Public Safety Verification for individuals.
- (c) Each individual must provide the necessary information to complete a security check request. BackCheck will have results available for the City of Winnipeg and the company within 24 hours of submission.
- (d) If a Bidder is unsure if their company already has a City of Winnipeg vendor, Linda Ferens can be contacted via the e-mail below (and cc dmeyer@backcheck.net) to request a check for a vendor account under their company name.
- (e) If additional assistance is required to obtain security clearance through BackCheck, the Bidder may contact the following BackCheck Representative:
- Linda Ferens
Email: lferens@backcheck.net
Phone: (204) 999-0912
- F1.5 The original Criminal Record Search Certificate (Form P-253) will be provided by the Winnipeg Police Service to the individual applicant. The original has a validation sticker from the Winnipeg Police Service in the top right hand corner. The applicant shall:
- (a) Provide the original Criminal Record Search Certificate (Form P-253) to the Contract Administrator, unless clearances are obtained through BackCheck as described in F1.4.
- F1.6 Prior to the commencement of any Work, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform the Work.
- F1.7 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person will not be permitted to perform any Work.
- F1.8 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.

F1.9 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work.