

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 432-2016

ASBESTOS ABATEMENT OF NORTH END WATER POLLUTION CONTROL CENTRE (NEWPCC); 2230 MAIN STREET

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 ASBESTOS ABATEMENT OF NORTH END WATER POLLUTION CONTROL CENTRE (NEWPCC); 2230 MAIN STREET

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, June 1, 2016.
- 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 Contract Administrator or an authorized representative will be available at the Site at 10:30a.m. on May 18, 2016 to provide Bidders access to the Site.
- B3.2 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 D3.1.
- 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 B16.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
 - (a) Form A: Bid;
 - (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 B16.1(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;
 - 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 the lump sum price in Canadian funds for the Work on Form B: Prices.
- B10.2 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/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/.
- 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/bidopp.asp
- 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 B12 (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 City 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 lump sum price 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.
- B17.4 Notwithstanding C4, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B17.5 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

CO. 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 asbestos abatement of the exterior wall portions of buildings with the NEWPCC following Type 1 Asbestos Procedures.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Sean Gordon

Wastewater Services, Water & Waste Department

Telephone No. 204 986-5607

Email Address sgordon@winnipeg.ca

- D3.2 At the pre-construction meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.
- D3.3 Bids Submissions must be submitted to the address in B8.

D4. CONTRACTOR'S SUPERVISOR

D4.1 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.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D5.1 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.
- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 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.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

D6.1 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.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 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

D6.4 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

D6.1 Bids Submissions must not be submitted to this facsimile number. Bids must be submitted in accordance with B8.

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

D7.1 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.

D8. SAFE WORK PLAN

- D8.1 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.
- D8.2 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

D9. INSURANCE

- D9.1 The Contractor shall provide and maintain the following insurance coverage:
 - (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;

The City of Winnipeg

- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence:
- (c) if applicable, Contractor's Pollution Liability Insurance in the amount of at least one million dollars (\$1,000,000);
- (d) Certificate of insurance to specifically state the operations include "asbestos abatement".
- D9.2 Deductibles shall be borne by the Contractor.
- D9.3 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D9.4 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.
- D9.5 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. PERFORMANCE SECURITY

- D10.1 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 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
 - 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.
- D10.1.1 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.
- D10.2 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

D11. COMMENCEMENT

- D11.1 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.
- D11.2 The Contractor shall not commence any Work on the Site until:
 - (a) the Contract Administrator has confirmed receipt and approval of:
 - evidence of authority to carry on business specified in D7; (i)
 - (ii) evidence of the workers compensation coverage specified in C6.15;

- (iii) the Safe Work Plan specified inD8;
- (iv) evidence of the insurance specified in D9;
- (v) the performance security specified in D10;
- (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.
- D11.3 The City intends to award this Contract by June 27, 2016.

D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance by August 30, 2016.
- D12.2 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.
- D12.3 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.

D13. TOTAL PERFORMANCE

- D13.1 The Contractor shall achieve Total Performance by September 30, 2016.
- D13.2 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.
- D13.3 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.

D14. LIQUIDATED DAMAGES

- D14.1 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 one hundred dollars (\$100.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D14.2 The amount specified for liquidated damages in D14.1 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.
- D14.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D15. JOB MEETINGS

- D15.1 A pre-construction meeting shall be held with the Contract Administrator, the Contractor and the NEWPCC staff.
 - (a) The purpose of this meeting is to confirm the requirements of the Work, and procedures for communication of issues and clarifications over the course of the Work.

- D15.2 A final meeting and walkthrough of the site will be completed based on the Contractor achieving Total Performance of the Work.
 - (a) Once the Contractor believes they have achieved Total Performance for the Work, they shall request the site meeting with all parties.
 - (b) Should the site-walkthrough deem the Work to not be performed to Total Performance, the areas of deficiency shall be noted. Additional on-site meetings to confirm Total Performance is achieved may be required at the request of the Contract Administrator.

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

D16.1 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).

D17. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D17.1 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.

MEASUREMENT AND PAYMENT

D18. INVOICES

D18.1 Further to C12, the Contractor shall submit an invoice 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

- D18.2 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.
- D18.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.
- D18.4 Bid Submissions must not be submitted to the above facsimile number. Bids must be submitted in accordance with B8.

D19. PAYMENT

D19.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D20. WARRANTY

D20.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND

(See D10)

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. 432-2016		
ASBESTOS ABATEMENT OF NORTH END WATER POLLUTION CONTROL CENTRE (NEWPCC); 2230 MAIN STREET		
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___ .

(Name of Principal)	
Per:	(Seal)
Per:	
(Name of Surety)	
By: (Attorney-in-Fact)	(Seal)
	Per:

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

(See D10)

(Date)	
The City of Winnipeg Legal Services Department 185 King Street, 3rd Floor Winnipeg MB R3B 1J1	
RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 432-2016	
ASBESTOS ABATEMENT OF NORTH END WATER POLLUTION CONTROL CENTRE (NEWPCC); 2230 MAIN STREET	
Pursuant to the request of and for the account of our customer,	
(Name of Contractor)	
WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceed in the aggregate	gnib
Canadian dolla	ars.
This Standby Letter of Credit may be drawn on by you at any time and from time to time upon wridemand for payment made upon us by you. It is understood that we are obligated under this Stan Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand payment without inquiring whether you have a right as between yourself and our customer to make a demand and without recognizing any claim of our customer or objection by the customer to payment by	dby for such
The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn us to be the standard of th	
Partial drawings are permitted.	
We engage with you that all demands for payment made within the terms and currency of this Star Letter of Credit will be duly honoured if presented to us at:	ıdby
(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)
⊃er:	
	(Authorized Signing Officer)
⊃er:	
	(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>Drawing No.</u> <u>Drawing Name/Title</u>

A-1 NEWPCC Exterior Asbestos Work Reference Locations

E2. HAZARDOUS MATERIALS

- E2.1 Asbestos in need of removal has been identified throughout the building, particularly along the exterior of select buildings at the plant. Refer to the Asbestos Locations Drawing and Reference Photos for the approximate extents of the asbestos work.
- E2.2 Other than the ACM's identified, 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. Requirements for the removal of hazardous materials shall be evaluated and dealt with by the City, and the Contractor shall await further instruction by the Contract Administrator.

E3. LOCATION AND ACCESS TO FACILITIES

- E3.1 The Work specified hereinafter will take place at the NEWPCC, located at 2230 Main Street Winnipeg, MB, R2V 4T8.
- E3.2 Access to the facility will be between 7:00 am and 6:00 pm, Monday to Sunday.
- E3.3 Inform the Contract Administrator at least 24 hours in advance where the Contractor intends to carry out Work outside normal working hours. Do not initiate work outside normal working hours without the Contract Administrator's approval except when the Work is unavoidable or absolutely necessary for:
 - (a) Preventing injury to any person or saving the life of any person; or
 - (b) Preventing damage to property where the circumstances placing the property in danger could not reasonably have been foreseen and where the immediate carrying out of such Work is necessary in order to prevent damage to that property; in which case the Contractor shall immediately advise the Contract Administrator in writing that such Work outside the normal working hours is necessary and of the reasons for this. He shall also state the nature and extent of Work to be carried out.

- E3.4 Coordinate activities with City personnel and any other contractors that may be working concurrently on the Site.
- E3.5 All Contractor personnel are to sign in upon arrival at the plant and sign out prior to leaving the plant each day.
- E3.6 The Contractor must comply with all City policies set forth in this document, and detailed instructions provided after the Work is awarded.

E4. FACILITY OPERATION REQUIREMENTS

- E4.1 The facilities related to the Work are critical to the treatment of wastewater for the City of Winnipeg. Under no condition shall equipment or power be shut down without prior permission of the Contract Administrator. Similarly, coordination and approval are required prior to returning the equipment back into service.
- E4.2 The Work shall be scheduled and performed such that there is minimal disturbance to NEWPCC plant operation.
- E4.3 It is possible that equipment failure within the NEWPCC, or another unforeseen condition, could cause an event where construction must be stopped immediately and equipment brought back online. The City, upon their sole discretion, may delay or stop the Work at any time, require the Contractor to return all or equipment into service as soon as possible, and reschedule the Work.

E5. OUTLINE OF WORK

- E5.1 Supply all labour, material, plant and equipment necessary to safely execute and complete all Work of this contract.
- E5.2 Protect surfaces, building fabrics and items remaining within the Asbestos Work Area.
- E5.3 Protect and maintain electrical, mechanical and other services passing through the Asbestos Work Area required to maintain such services in Occupied Areas. Isolate and protect remaining services. Failure to maintain designated services may result in serious disruption of The City of Winnipeg's operations.
- E5.4 Isolate the Work Area from adjoining spaces through the installation of specified hoardings, seals and enclosures at the perimeter of each phase or Work area.
- E5.5 Remove, clean and replace at completion of Work, non-operating mechanical and electrical equipment, ducting, building components, materials or items removed to accommodate Asbestos removal.
- E5.6 Remove and dispose of as Asbestos-containing waste, building components, materials and items contaminated by Asbestos that cannot be effectively cleaned.
- E5.7 Encapsulate remaining ACMs at locations where removal is deemed impractical. Encapsulation will not be permitted where removal of building materials or structures scheduled for demolition will facilitate access to the Asbestos materials in question.
- E5.8 Remove and dispose of the following as Asbestos-containing waste:
 - (a) Exterior black mastic on black foam.
 - (b) Exterior cement Transite panels.
- E5.9 Handling, removal, clean-up or repair of ACMs or surfaces contaminated with Asbestos is to be performed following wet removal techniques. except at locations adjacent to high voltage lines, live steam lines, etc., where the use of water may result in a hazardous condition for the workers. Do not commence Work at such locations without notifying the Contract Administrator in writing. Complete removal at such locations with dry removal techniques.

- E5.10 Hoardings used to separate the Work area from Occupied Areas, are to remain in place until completion of Work in the area by other trades or until directed by the Contract Administrator.
- E5.11 Final clean Work area to remove visible signs of Asbestos, other debris or settled dust.
- E5.12 Apply lock-down agent to exposed surfaces throughout the Work area, and to surfaces from which any Asbestos had been removed.

E6. REGULATIONS

E6.1 Comply with Federal, Provincial, and local requirements, provided that in any case of conflict among those requirements or with these specifications, the more stringent requirements shall apply. Work shall be performed under regulations in effect at the time Work is performed.

E7. QUALITY ASSURANCE

- E7.1 Removal and handling of Asbestos-containing or contaminated materials is to be performed by persons trained in the methods, procedures and industry practices for Asbestos Abatement.
- E7.2 Ensure Work proceeds to schedule, meeting all requirements of this specification.
- E7.3 Complete Work so that at no time airborne dust, visible debris, or water runoff contaminate areas outside the Asbestos Work Area.
- E7.4 Any contamination of surrounding area (indicated by visual inspection or air monitoring) shall necessitate the clean-up of effected area, and in the same manner applicable to an Asbestos Work Area at no cost to the City of Winnipeg.
- E7.5 All Work of this section involving electrical, mechanical, carpentry, glazing, etc., shall be performed by licensed persons experienced and qualified for the Work required.

E8. INSPECTION

- E8.1 From commencement of Work until completion of clean-up operations, the Contract Administrator's Representative is empowered by the Contract Administrator to inspect for compliance with the requirements of governing authorities, adherence to specified procedures and materials, and to inspect for final cleanliness and completion.
- E8.2 The Contract Administrator's representative is empowered by the Contract Administrator to order a shutdown of Work when leakage of Asbestos from the controlled Work area has occurred or is likely to occur.
- E8.3 Any deviation from the requirements of the specifications or governing authorities that is not approved in writing may result in a stoppage of Work, at no cost to the City of Winnipeg.
- E8.4 Additional labour or materials expended by the Contractor to rectify unsatisfactory conditions and to provide performance to the level specified shall be at no additional cost to the City of Winnipeg.
- E8.5 Facilitate inspection and provide access as necessary. Make good Work disturbed by inspection and testing at no cost to the City of Winnipeg.
- E8.6 The following Milestone Inspections are to take place at defined points throughout the abatement operation specific to each phase or Work area:
 - (a) Contaminated Perimeter Preparation
 - (i) Inspection of preparation of Asbestos Work Area.
 - (b) Dismantling Inspection
 - (i) Inspection after application of lock-down agent as required.

- (ii) This inspection will be included as part as Substantial Performance certification.
- (c) Final Inspection
 - (i) Final inspection after dismantling of perimeter isolation and decontamination facility, prior to project turnover.
- E8.7 Provide minimum 24 hours written notice to the Contract Administrator of any request for scheduling of Milestone Inspections.
- E8.8 Do not proceed with next phase of Work until written approval of each milestone is received from the Contract Administrator.

E9. AIR MONITORING

- E9.1 Air monitoring will **not** be required as part of scope of work. Contract Administrator may request air monitoring to be completed upon special request.
- E9.2 Air monitoring will be performed using Phase Contrast Microscopy (PCM) following the National Institute for Occupational Safety and Health Method 7400.
- E9.3 Co-operate in the collection of air samples, including providing Workers to wear sample pumps for up to full-shift periods. Contractor will be responsible for the cost of testing equipment repairs or resampling resulting from the actions of the Contractor's forces.
- E9.4 Results of PCM samples of 0.05 fibres per millilitre of air (fibre/mL) or greater, outside an Asbestos Work Area, will indicate Asbestos contamination of these areas. Respond as follows:
 - (a) Suspend Work within the adjoining Asbestos Work Area until written authorization to resume Work has been received from the Contract Administrator.
 - (b) Isolate and clean area in the same manner applicable to the Asbestos Work Area.
 - (c) Maintain Work area isolation, and repeat clean-up operations until visually inspection and air monitoring results are at a level equal to that specified.
 - (d) At the discretion of the Contract Administrator provide additional negative air units at locations specified in response to elevated fibre levels being detected in the Clean Change Room or Occupied Areas.
- E9.5 Results of PCM samples in excess of 0.01 fibres per millilitre of air (fibre/mL), collected within the Asbestos Work Area after the Site has passed a visual inspection, and an acceptable coat of lock-down agent has been applied, will indicate Asbestos contamination of these areas. Respond as follows:
 - (a) Maintain Work area isolation and re-clean entire Work area. Then apply another acceptable coat of lock-down agent to exposed surfaces throughout the Work area.
 - (b) Repeat above measures until visually inspected and air monitoring results are at a level equal to that specified.
- E9.6 Additional labour or materials expended by the Contractor to rectify unsatisfactory conditions and to provide performance to the level specified shall be at no additional cost to the City of Winnipeg.
- E9.7 Cost of additional inspection and sampling performed as a result of elevated fibre levels in areas outside the Asbestos Work Area or from within the work area following completion of Work, will be back charged to the Contractor.

E10. NOTIFICATION

E10.1 Not later than ten (10) days before commencing Work on this project, notify in writing the local office of Manitoba Labour and Immigration, Workplace Safety and Health Division. Provide telephone notification again immediately prior to start of Work.

- E10.2 Notify sanitary landfill site prior to disposal of ACMs as per local requirements.
- E10.3 Inform all trades on Site of the presence and location of ACMs identified in the contract documents.

E11. WORKER PROTECTION

E11.1 General

- (a) Instruct workers before allowing entry to the Asbestos Work Area. Instruction shall include training in use of respirators, dress, entry and exiting from an Asbestos Work Area, and all other aspects of Work procedures and protective measures.
- (b) Workers shall not eat, drink, smoke or chew gum or tobacco except in established locations outside the Asbestos Work Area.
- (c) Provide and post at access points to the Asbestos Work Area, the procedures described under Worker Protection.

E11.2 Respiratory Protection

- (a) During wet removal and cleaning of Asbestos-containing or contaminated materials, supply and use at a minimum, full face-piece powered air purifying positive pressure dust respirators with HEPA filters.
- (b) During dry removal, or if fibre levels within the Work enclosure exceeds permissible levels for use of PAPR during wet removal, supply and use Type C, pressure demand supplied air respirators with full face-piece and egress filters. Ensure workers exiting the enclosure do not disconnect their respirators from supply air hose until they have entered the shower stall.
- (c) Workers applying polyurethane foam shall wear full face respirators with organic vapour cartridges. Dispose of cartridges after each shift.
- (d) Provide and ensure the use of respiratory equipment appropriate for the Work being performed for persons who are required to enter the Asbestos Work Area.
- (e) Respiratory protective devices shall be certified by the National Institute of Occupational Safety and Health (NIOSH) or other testing agency acceptable to governing authorities.
- (f) Maintain respiratory equipment in proper functioning and clean condition or remove from Site.
- (g) Respiratory equipment shall be identified with permanent markings with current list of persons utilizing such equipment displayed in a clean area on Site.
- (h) Filters used shall be tested following each use in accordance with manufacturer's specifications or replaced at the following minimum frequency:
 - Replace cartridge filters for negative pressure respirator every 16 hours of wear unless tested on-Site.
 - (ii) Replace PAPR cartridge filters every 8 hours of wear unless tested on Site.
 - (iii) Mark filters for rotation and regular replacement. Once worn in an Asbestos Work Area filters may not be removed from the project Site except for disposal.
- (i) Ensure that no person required to enter an Asbestos Work Area has facial hair which affects the seal between respirator and face.
- (j) Store respirators, and tested filters that will be reused, in an established clean area on Site. Charge batteries in this area.

E11.3 Protective Clothing and Equipment

(a) All personnel required to enter the Asbestos Work Area must use disposable full body coveralls with attached head covering. Once coveralls are worn, treat and dispose of as Asbestos-contaminated waste.

(b) Use hard hats, safety shoes and other protective apparel required by applicable construction safety regulations.

E12. VISITOR PROTECTION

- E12.1 Provide clean protective clothing, equipment and approved respirators to Authorized Visitors.
- E12.2 Instruct Authorized Visitors in the use of protective clothing, respirators, and Asbestos Work Area entry and exit procedures.
- E12.3 Maintain one (1) emergency access kit (equipped with respirator, protective clothing, etc.) at each access point to Asbestos Work Area for use by Contract Administrator or authorized visitors.

E13. SIGNAGE

- E13.1 Work Area Signs: Post signs in both official languages at access points to the Asbestos Work Area. Where possible, provide signage immediately prior to entering Asbestos Work Area but out of public view.
- E13.2 Container Signs: Label containers for the disposal of Asbestos as follows:
 - (a) CAUTION CONTAINS ASBESTOS FIBRES (25 mm high).
 - (b) Do Not Mishandle (19 mm high).

E14. WASTE AND MATERIAL HANDLING

- E14.1 Asbestos-containing or contaminated materials removed during the work shall be treated, packaged, transported and disposed of as Asbestos-contaminated waste.
- E14.2 Materials that could tear or puncture a 6 mil (0.15mm) polyethylene bag shall be packaged and disposed of in sealed rigid waste containers specified.
- E14.3 Redundant non-ACMs, rubble and debris removed during contaminated Work shall be treated, packaged, and disposed of as Asbestos contaminated waste. With written approval of the Contract Administrator, non-porous materials may be cleaned, sprayed with a sealer and disposed of as clean waste.
- E14.4 Transportation of all waste and materials through Occupied Areas of the building is limited to quiet hours along predetermined routes and must be covered or placed within unmarked carts. Clean-up waste routes and loading area after each load. Use Asbestos abatement precautions if appropriate or requested by the Contract Administrator or Representative.
- E14.5 Garbage bins shall be dropped at designated locations and shall remain covered and enclosed (locked) while at the building Site.
- E14.6 Pick-up and drop off of garbage bin(s) shall be at pre-approved times, and must not interfere with building operations.

E15. DUMP MONITORING

- E15.1 Ensure each shipment of containers is accompanied by a Contractor's representative who will supervise dumping of containers and ensure all guidelines and regulations are followed.
- E15.2 Equip each shipment of containers with full personal protective equipment and tools required to properly clean-up spilled Asbestos in the case of a failure in an Asbestos Waste Container.

E16. MATERIALS AND EQUIPMENT

- E16.1 Materials and equipment must be in good condition and free of Asbestos, Asbestos debris, and fibrous materials. Disposable items must be of new materials only.
- E16.2 Asbestos Waste Container: Impermeable container acceptable to Ministry of the Environment and disposal Site. Labelled as required, comprised of the following:
 - (a) A sealed 6 mil (0.15 mm) polyethylene bag, inside a second 6 mil (0.15 mm) sealed polyethylene bag.
 - (b) A sealed 6 mil (0.15 mm) polyethylene bag, positioned inside or outside a rigid sealed container of sufficient strength to prevent perforation of the container during filling, transportation and disposal.
- E16.3 Lock-down Agent: Sealant for purpose of trapping residual dust and shall be capable of withstanding surface temperature of substrate. Product must be compatible with replacement materials and must have flame spread & smoke development ratings of less than 50 and shall leave no stain when dry.
 - (a) Acceptable product: Serpiflex Shield or approved equal.
- E16.4 Polyethylene Sheeting: 6 mil (0.15 mm) minimum thickness, unless otherwise specified, in sheet size to minimize joints.
- E16.5 Polyurethane Foam: Slow expanding one component foamed-in place polyurethane rigid insulation. Foam must have acceptable fire and smoke development ratings or be removed at completion of Work.
- E16.6 Protective Coveralls: Disposable full body coveralls complete with hoods.
 - (a) Acceptable material: Tyvek coveralls or approved equal.
- E16.7 Rip-Proof Polyethylene Sheeting: 8 mil (0.20 mm) fabric made up from 5 mil (0.13 mm) weave and two (2) layers of 1.5 mil (0.05 mm) poly laminate or approved equal. In sheet size to minimize on-Site seams and overlaps.
- E16.8 Sprayer: Airless sprayer capable of providing a fine mist or spray while maintaining sufficient velocity to penetrate surface of ACM through to substrate without blowing loose the material as it is being wetted.
- E16.9 Wetting Agent: Non-sudzing surface active agent.
 - (a) Acceptable product: Aqua-Gro or approved equal.

E17. EXECUTION

- E17.1 Clean Site Preparation
 - (a) Moving of equipment, tools, supplies, and stored materials which can be performed without disturbing ACMs will be performed by others.
 - (b) Erect appropriate barriers between Asbestos Work Area and Occupied Areas.
 - (c) Pre-clean all surfaces using HEPA vacuum or damp cloth prior to installing protection.
 - (d) Where Site Conditions permit the isolation of existing power supply within the Asbestos Work Area without disturbance of Asbestos ensure existing power supply to Work area is isolated at panel, tagged, disconnected or grounded where necessary. Power supply to remaining areas of building must not be disrupted during Work of this Section.
 - (e) Maintain fire alarms, sensors and detectors operational. Provide necessary protection without hampering the detection ability of this system.

- (f) Independently seal below ceiling openings to Work area using polyethylene, tape, caulking, polyurethane foam, etc., including but not limited to windows, doors, vents, diffusers, etc.
- (g) Seal openings in floor using plugs, tape, caulking, rip-proof polyethylene, etc.. Floor openings are to be sealed independently prior to installation of floor polyethylene. Include floors of duct and service shafts.
- (h) Pre-clean with HEPA vacuum and make watertight all electrical trenches and headers located in floor of Work area using caulking and tape. Cover entire plate or panel with two
- Provide required tools, equipment, vacuums and Asbestos waste receptacles within the Asbestos Work Area.
- (j) Post required signs at all access points to the sealed Asbestos Work Area.

E18. MAINTENANCE OF CONTAMINATED ASBESTOS WORK AREA

- E18.1 Maintain enclosures in tidy condition and free of dislodged Asbestos or other debris.
- E18.2 Ensure Asbestos Abatement Work Area enclosures, barriers, and polyethylene linings are effectively sealed and taped. Repair damage and remedy defects immediately.
- E18.3 Visually inspect enclosures at beginning and end of each working period. Inspection must be performed by overall superintendent or shift superintendent.

E19. WET REMOVAL OF ASBESTOS

- E19.1 Proceed with selective demolition of mechanical and electrical equipment, building components, materials and items scheduled for demolition at locations required to facilitate access to concealed Asbestos-containing materials.
- E19.2 Ensure any non-Asbestos debris or rubble generated during this selective demolition is removed from the immediate area prior to commencement of any Asbestos removal.
- E19.3 This Section shall remain responsible for the clean-up and disposal of all debris or rubble not able to be successfully segregated from Asbestos-containing or contaminated materials during the selective demolition as completed by this Section.
- E19.4 In areas of wet removal of spray or trowel applied material, spray Asbestos with amended water using airless spray equipment. Saturate Asbestos to prevent release of airborne fibres during removal. Fully saturated Asbestos may be scraped directly into waste containers or may be allowed to fall to floor.
- E19.5 All dislodged debris and fibres shall be maintained in wet state and placed in waste containers for disposal as Work progresses and at the end of each shift.
- E19.6 Repeatedly mist the air throughout the performance of this Work while maintaining surfaces within the Asbestos Work Area in a damp state.
- E19.7 Remove as directed by the Contract Administrator, non-operating mechanical services, ducting, ceiling structures or similar items, obstructions and sections of walls at service shafts, chases and cavities as required to remove Asbestos-containing materials.
- E19.8 Following completion of gross Asbestos removal Work, perform the following:
 - (a) Wet clean all surfaces from which Asbestos has been removed with stiff bristle brushes, vacuums, wet-sponges etc. to remove visible residue and fibrous materials.
 - (b) Wet clean all other surfaces in the Asbestos Work Area, including the decontamination facilities, equipment, surfaces of polyethylene sheeting, floor and walls surfaces, ducts and similar items not covered with polyethylene sheeting.

- (c) Remove all wash water as contaminated waste.
- (d) Repeat final cleaning procedures until the Work area is at a standard of cleanliness acceptable to the Contract Administrator.
- E19.9 As Work progresses, and at regular intervals, transport sealed and labelled Asbestos waste containers from the Asbestos Work Area to an authorized waste disposal Site.

E20. DRY REMOVAL OF ASBESTOS

- E20.1 At Site locations where the use of wet removal methods may result in a hazardous condition to Contractor's personnel or may risk damage to City of Winnipeg's property, dry removal methods are to be used. Do not commence Work at such locations without notifying the Contract Administrator in writing.
- E20.2 Where required to complete both wet and dry removal Work within the same Work area, schedule dry removal Work in advance of wet removal Work.
- E20.3 Other than as specified below, all preparation and general procedures for wet removal apply.
- E20.4 Cleaning hose or wands, tools, etc., shall be non-conductive.
- E20.5 Live cables that are to be disturbed or relocated shall be handled using non-conductive protective gloves, under the direction of a qualified electrician.
- E20.6 Any scaffolding or platform to be used shall be grounded to the building ground bus or nearest cable tray ground bus at least two (2) grounding points using minimum #2/70 copper insulated wire.
- E20.7 Perform cleaning using dry methods. Do not use water or lock-down agent except where approved or instructed to by the Contract Administrator.
- E20.8 Control dust levels within dry removal Work areas as follows:
 - (a) Add water to Asbestos waste containers to saturate waste prior to sealing container.
 - (b) Wherever possible and without jeopardizing worker safety, repeatedly mist the air throughout the removal process while maintaining non-conductive surfaces within the Asbestos Work Area in a damp state.

E21. APPLICATION OF LOCK-DOWN AGENT

- E21.1 Obtain the Contract Administrator's written authorization to proceed prior to applying lock-down agent.
- E21.2 Paint surfaces from which Asbestos-containing material has been removed with a heavy coat (two (2) passes) of lock-down agent.
- E21.3 Apply one (1) coat of lock-down agent as required to cover all other surfaces in the Asbestos Work Area, including all polyethylene and surfaces scheduled for demolition.
- E21.4 Schedule Air Monitoring Clearance before proceeding.

E22. ASBESTOS WORK AREA TEARDOWN AND DISMANTLING

E22.1 Clean up

- (a) Equipment used in contaminated Asbestos Work Area shall be washed to remove Asbestos contamination, or double bagged for transportation prior to being removed from Asbestos Work Areas.
- (b) Seal vacuum, hoses and fittings, and all tools used in contaminated Work Site in 6 mil polyethylene bags prior to removal from Work Area.

(c) Clean-up Asbestos Work Area, and all other surfaces that may be contaminated.