



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 85-2018

**2018/2019 INDUSTRIAL STREETS RENEWAL PROGRAM – HENLOW BAY AND
HIGGINS AVENUE**

Note to Bidders: Please be aware of revisions to B15.4

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 2018/2019 Industrial Streets Renewal Program – Henlow Bay and Higgins Avenue

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, June 15, 2018.

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 view the Site without making an appointment.

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.
- B6.3 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/matmgmt/bidopp.asp>
- B6.4 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.
- B6.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 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 B18.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices, hard copy;
 - (c) Bid Security
 - (i) Form G1: Bid Bond and Agreement to Bond, or
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or
a certified cheque or draft;
- 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.
- B8.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B8.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B8.4.2 A hard copy of Form B: Prices must be submitted with the Bid. If there is any discrepancy between the Adobe PDF version of Form B: Prices and the Microsoft Excel version of Form B: Prices, the PDF version shall take precedence.
- B8.5 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.6 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 B18.1(a).
- B8.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.8 Bids shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1

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 13 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 and the corporate seal, if the corporation has one, shall be affixed;
 - (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.
- B9.5 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 For the convenience of Bidders, and pursuant to B8.4.2 and B18.3.2, an electronic spreadsheet Form B: Prices in Microsoft Excel (.xls) format is available along with the Adobe PDF documents for this Bid Opportunity on the Bid Opportunities page at the Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- 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. 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. CONFLICT OF INTEREST AND GOOD FAITH

B12.1 Bidders, by responding to this Bid Opportunity, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B12.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:

- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
- (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the Bid Opportunity process or the Work; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Bid Opportunity process) of strategic and/or material relevance to the Bid Opportunity process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.

B12.3 In connection with its Bid, each entity identified in B12.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Bid Opportunity process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B12.4 Without limiting B12.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

- B12.5 Without limiting B12.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
 - (b) require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B12.4 to avoid or mitigate a Conflict of Interest; and
 - (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B12.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B13. QUALIFICATION

- B13.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B13.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- B13.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- B13.4 Further to B13.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) or
 - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of

Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program or

- (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).

B13.5 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.

B13.6 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.

B14. BID SECURITY

B14.1 The Bidder shall provide bid security in the form of:

- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
- (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking 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 included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
- (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.

B14.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B14.1.2 All signatures on bid securities shall be original.

B14.1.3 The Bidder shall sign the Bid Bond.

B14.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.

B14.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B14.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B14.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B14.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B14.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B15. OPENING OF BIDS AND RELEASE OF INFORMATION

- B15.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.
- B15.1.1 Bidders or their representatives may attend.
- B15.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B14 will not be read out.
- B15.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the 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/>
- B15.3 After award of Contract, the name(s) of the successful Bidder(s), their address(es) 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/>
- B15.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B15.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B16. IRREVOCABLE BID

- B16.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B16.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B17. WITHDRAWAL OF BIDS

- B17.1 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.
- B17.1.1 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.
- B17.1.2 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 13 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B17.1.3 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 13 of Form A: Bid; and

- (c) if the notice has been given by any one of the persons specified in B17.1.3(b), declare the Bid withdrawn.

B17.2 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 B16.2 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, including the right to retain the Bidder's bid security.

B18. EVALUATION OF BIDS

B18.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B18.2 Further to B18.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B18.3 Further to B18.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B18.3.1 Further to B18.1(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.

B18.3.2 The electronic Form B: Prices and the formulas imbedded in that spreadsheet are only provided for the convenience of Bidders. The City makes no representations or warranties as to the correctness of the imbedded formulas. It is the Bidder's responsibility to ensure the extensions of the unit prices and the sum of Total Bid Price performed as a function of the formulas within the electronic Form B: Prices are correct.

B19. AWARD OF CONTRACT

B19.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B19.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B19.2.1 Without limiting the generality of B19.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with 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.

- B19.3 The Work of this Contract is contingent upon Council approval of sufficient funding in the 2018 and 2019 Capital Budget. If the Capital Budget approved by Council does not include sufficient funding for the Work, the City will have no obligation to award a Contract.
- B19.4 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 B18.
- B19.4.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the General Conditions for Construction, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of:

- (a) Phase 1 – 2018 Construction Work
- (b) Phase 2 – 2019 Construction Work

D2.2 **Phase 1 – 2018 Construction Work shall consist of:**

- (a) Pavement Rehabilitation
 - (i) Henlow Bay – Fultz Boulevard to Dovercourt Drive.
- (b) Concrete Reconstruction
 - (i) Henlow Bay – Dovercourt Drive to Scurfield Boulevard.

D2.3 **Phase 2 – 2019 Construction Work shall consist of:**

- (a) Concrete Reconstruction
 - (i) Higgins Avenue – Princess Street to Henry Avenue.

D2.4 The major components of the Work are as follows:

- (a) Pavement Rehabilitation
 - (i) Planing of existing asphalt
 - (ii) Removal of existing pavement;
 - (iii) Excavation of boulevard;
 - (iv) Full-depth concrete repairs of existing slabs and joints;
 - (v) Partial depth milling and asphalt patching of joints;
 - (vi) Construction of 100mm concrete sidewalk;
 - (vii) Installation of detectable warning surface tiles;
 - (viii) Placement of asphalt overlay (average thickness – 80mm); and
 - (ix) Boulevard restoration
- (b) Concrete Reconstruction
 - (i) Removal of existing concrete pavement;
 - (ii) Excavation of roadway and boulevard;
 - (iii) Removal of existing catch basins;
 - (iv) Complete external sewer point repairs as required;
 - (v) Installation of catch basins, catch pits, drainage connection pipes and subdrains;
 - (vi) Sub-grade compaction;
 - (vii) Placement of separation geotextile fabric;
 - (viii) Placement of geogrid (if required);
 - (ix) Placement of sub-base and base course materials;
 - (x) Construction of 200mm reinforced concrete pavement;
 - (xi) Construction of 230mm plain dowelled concrete pavement;
 - (xii) Construction of Barrier (180mm reveal) and Modified Curb (180mm reveal);

- (xiii) Construction of monolithic median;
- (xiv) Construction of asphalt swale (if required);
- (xv) Removal of existing aluminum balanced barrier rails and posts (if required);
- (xvi) Installation of aluminum balanced barrier rails and posts (if required);
- (xvii) Removal of existing railroad ties and tracks;
- (xviii) Adjustment of existing manholes and appurtenances;
- (xix) Placement of imported fill material;
- (xx) Placement of granular limestone surfacing material; and
- (xxi) Boulevard restoration;

D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
- (a) "CP" means Canadian Pacific Railway.

D4. CONTRACT ADMINISTRATOR

- D4.1 The Contract Administrator is WSP Canada Group Limited, represented by:
Vilko Maroti, P.Eng., CET
Manager, Urban Centers Manitoba
Telephone No. 204 227-5795
Email Address Vilko.Maroti@wsp.com
- D4.2 At the pre-construction meeting, Vilko Maroti, P.Eng., CET 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

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.
- D5.2 At least two (2) business days prior to the commencement of any Work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D5.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

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 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:

The City of Winnipeg
Attn: Chief Financial Officer
Office of the Chief Administrative Officer
Susan A. Thompson Building
2nd Floor, 510 Main Street
Winnipeg MB R3B 1B9

D7.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:

The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204-947-9155

D7.5 Bids Submissions must not be submitted to this facsimile number. Bids must be submitted in accordance with B8.

D8. FURNISHING OF DOCUMENTS

D8.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him/her at cost.

SUBMISSIONS

D9. AUTHORITY TO CARRY ON BUSINESS

D9.1 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.

D10. SAFE WORK PLAN

D10.1 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.

D10.2 The Safe Work Plan shall 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>

D11. INSURANCE

D11.1 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, broad form property damage cover 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) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- (d) Contractor's pollution liability (CPL) insurance in the amount of at least two million dollars (\$2,000,000) per occurrence and five million dollars (\$5,000,000) annual aggregate insuring against claims covering third party injury and property damage claims, and including clean-up costs and transported cargo as a result of pollution conditions arising suddenly or gradually from the Contractor operations and completed operations. Such policy to name the City as an additional insured and remain in place for a minimum of twelve (12) months following Total Performance.

D11.2 Deductibles shall be borne by the Contractor.

D11.3 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 the C4.1 for the return of the executed Contract.

D11.4 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.

D11.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.

D12. PERFORMANCE SECURITY

D12.1 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.

D12.1.1 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.

D12.2 If the bid security provided in his/her Bid was not a certified cheque or draft pursuant to B14.1(c), 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 letter of intent and prior to the commencement of any Work on the Site and in no event later than the date specified in the C4.1 for the return of the executed Contract.

D13. SUBCONTRACTOR LIST

D13.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at or prior to a pre-construction meeting, or at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the C4.1 for the return of the executed Contract.

D14. DETAILED WORK SCHEDULE

D14.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

D14.2 The detailed work schedule shall consist of the following:

- (a) a critical path method (C.P.M.) schedule for the Work.

D14.3 Further to D14.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:

D15. ENVIRONMENTAL PROTECTION PLAN

D15.1 Prior to commencing construction activities or delivery of materials to Site, submit an Environmental Protection Plan for review and approval by Contract Administrator. The Environmental Protection Plan shall present a comprehensive plan to address all of the Contractor’s chosen means and methods towards performing the Work that may impact the environment. The submission of the Environmental Protection Plan to the Contract Administrator shall in no way relieve the Contractor of full responsibility for the success or failure of all environmental management practices and procedures.

D15.1.1 Contaminated Soil

- (a) The excavated material on Higgins Avenue between STA. 7+70 and STA. 8+20 shall be disposed at a Class 1 Landfill. The City may impose a fine to the Contractor if the excavated material at the above noted location is not disposed accordingly.
- (b) The Contractor is advised that possible contaminated soil may be present within the project limit. The Contractor is to notify the Contract Administrator and follow the Soil Management Plan if contaminated soil is encountered during excavation.

D15.1.2 Materials Handling and Storage

- (a) Construction materials and debris will be prevented from entering sanitary sewer or land drainage sewer. In the event that materials and/or debris inadvertently enter the sanitary/land drainage system, the Contractor will be required to remove the material to an appropriate landfill or storage facility and restore the watercourse to its original condition.

D15.1.3 Fuel Handling and Storage

- (a) Fuels, lubricants, and other potentially hazardous materials as defined in The Dangerous Goods and Transportation Act shall be stored and handled within the approved storage areas.
- (b) The Contractor shall ensure that all fuel storage containers are inspected daily for leaks and spillage.
- (c) Products transferred from the fuel storage area(s) to specific Work Sites shall not exceed the daily usage requirement.
- (d) When servicing requires the drainage or pumping of fuels, lubricating oils or other fluids from equipment, a groundsheets of suitable material (such as HDPE) and size shall be spread on the ground to catch the fluid in the event of a leak or spill.
- (e) The area around storage sites and fuel lines shall be distinctly marked and kept clear of snow and debris to allow for routine inspection and leak detection.
- (f) A sufficient supply of materials, such as absorbent material and plastic oil booms, to clean up minor spills shall be stored nearby on Site. The Contractor shall ensure that additional material can be made available on short notice.
- (g) Machinery shall arrive on Site in a clean condition and shall be maintained to be free to fluid leaks.
- (h) A sufficient supply of materials, such as absorbent material and plastic oil booms, to clean up minor spills shall be stored nearby on Site. The Contractor shall ensure that additional material can be made available upon short notice. Additionally, appropriate staff on Site shall be trained for proper handling of deleterious liquids (i.e. fueling) and trained in preventing and cleaning up minor spills.

SCHEDULE OF WORK

D16. COMMENCEMENT

- D16.1 The Contractor shall not commence any Work until he/she is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D16.2 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 D9;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the twenty-four (24) hour emergency response phone number specified in D5.2.
 - (iv) the Safe Work Plan specified in D10;
 - (v) evidence of the insurance specified in D11;
 - (vi) the performance security specified in D12;
 - (vii) the subcontractor list specified in D13;
 - (viii) the detailed work schedule specified in D14; and
 - (ix) the environmental protection plan specified in D15.
 - (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.
- D16.3 The Contractor shall commence the Work on the Site within five (5) Working Days of receipt of the letter of intent.
- D16.4 The Contractor shall not commence Phase 2 of the Work as described in D2 and identified in Form B: Prices before May 13, 2019, weather permitting but no later than May 27, 2019.

D16.5 The City intends to award this Contract by July 13, 2018.

D17. WORKING DAYS

D17.1 Further to C1.1(jj);

D17.1.1 The Contract Administrator will determine daily if a Working Day has elapsed and will record his/her assessment. On a weekly basis the Contract Administrator will provide the Contractor with a record of the Working Days assessed for the preceding week. The Contractor shall sign each report signifying that he/she agrees with the Contract Administrator's determination of the Working Days assessed for the report period.

D17.1.2 Work done to restore the Site to a condition suitable for Work, shall not be considered "work" as defined in the definition of a Working Day.

D17.1.3 When the Work includes two or more major types of Work that can be performed under different atmospheric conditions, the Contract Administrator shall consider all major types of Work in determining whether the Contractor was able to work in assessing Working Days.

D18. RESTRICTED WORK HOURS

D18.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission forty-eight (48) hours in advance from the Contract Administrator for any work to be performed between 2000 hours and 0700 hours, or on Saturdays, Sundays, Statutory Holidays and or Civic Holidays.

D19. WORK BY OTHERS

D19.1 Work by others on or near the Site will include but not necessarily be limited to:

- (a) Manitoba Hydro:
 - (i) Manitoba Hydro will be removing and installing new street lighting hardware and de-energizing and energizing of the new street light plant. The Contractor is expected to cooperate with Manitoba Hydro to facilitate construction.
 - (ii) Manitoba Hydro will be adjusting existing guy-wires as required. The Contractor is expected to cooperate with Manitoba Hydro to facilitate construction.
- (b) BellMTS – BellMTS will be adjusting existing BellMTS manholes. The Contractor is expected to cooperate with BellMTS to facilitate construction.
- (c) Canadian Pacific – CP will be removing existing railroad ties and track as identified in Drawings C09 to C11. The Contractor is expected to cooperate with CP to facilitate construction.
- (d) City of Winnipeg Traffic Services Branch – The City of Winnipeg Traffic Services Branch will be placing regulatory signage and painting pavement parking as required. The Contractor is expected to cooperate with the City to facilitate construction.
- (e) City of Winnipeg Water and Waste Department - The City of Winnipeg W&WD will be completing a watermain renewal on Higgins Avenue as a part of 2018 Watermain Renewal Program (Bid Opportunity 134-2018). The watermain renewal is expected to be completed in 2018. The Contractor is expected to cooperate with the City to facilitate construction for any carryover/deficiency work in 2019.
- (f) City of Winnipeg Geomatics Branch – Various work on survey monuments;

D20. SEQUENCE OF WORK

D20.1 Further to C6.1, the sequence of work shall comply with the following:

D20.1.1 The Work shall be divided into two phases. Phase 1 – 2018 Construction Work and Phase 2 – 2019 Construction Work shall be subdivided into major items of work. The phase breakdown will be as follows:

(a) Phase 1 – 2018 Construction Work:

- (i) Pavement rehabilitation on Henlow Bay from Fultz Boulevard to Dovercourt Drive;
- (ii) Pavement reconstruction on Henlow Bay from Dovercourt Drive to Scurfield Boulevard.

(b) Phase 2 – 2019 Construction Work:

- (i) Pavement reconstruction on Higgins Avenue from Princess Street to Henry Avenue.

D20.1.2 Placement of asphalt material for partial depth patching of existing joints shall be completed within twenty four (24) after planing of joints.

D20.1.3 Placing the topsoil, surfacing material and finished grading of all boulevard and median areas shall be completed prior to commencing construction of asphaltic concrete overlays, including scratch courses.

D21. CRITICAL STAGES

D21.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

(a) Phase 1 – 2018 Construction Work described in D2 shall be totally completed within forty-five (45) consecutive Working Days and shall be completed in the 2018 construction season.

D21.2 When the Contractor considers the Work associated with Phase 1 – 2018 Construction Work to be completed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Completion. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.

D21.3 The date on which the Phase 1 – 2018 Construction Work has been accepted by the Contract Administrator as being completed to the requirements of the Contract is the date on which completion of Phase 1 – 2018 Construction Work has been achieved and the Working Days will stop until the commencement of Phase 2 – 2019 Construction Work.

D22. SUBSTANTIAL PERFORMANCE

D22.1 The Contractor shall achieve Substantial Performance within ninety (90) consecutive Working Days of the commencement of the Work as specified in D16.

D22.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.

D22.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D23. TOTAL PERFORMANCE

- D23.1 The Contractor shall achieve Total Performance within ninety-five (95) consecutive Working Days of the commencement of the Work as specified in D16.
- D23.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.
- D23.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D24. LIQUIDATED DAMAGES

- D24.1 If the Contractor fails to achieve Critical Stages, Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
- (a) Critical Stage D21.1(a) – Three thousand five hundred dollars (\$3,500.00);
 - (b) Substantial Performance – Three thousand five hundred dollars (\$3,500.00);
 - (c) Total Performance – One Thousand Five Hundred dollars (\$1,500.00).
- D24.2 The amounts specified for liquidated damages in D24.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.
- D24.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D25. SCHEDULED MAINTENANCE

- D25.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Reflective Crack Maintenance as specified in CW 3250; and ;
 - (b) Sod maintenance as specified in CW 3510.;
- D25.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D26. JOB MEETINGS

- D26.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.

D26.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D27. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D27.1 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).

D28. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D28.1 Further to B13.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B13.4.

MEASUREMENT AND PAYMENT

D29. PAYMENT

D29.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D29.2 Further to C12.10, if a Contractor enters into a subcontract for Phase 1 – 2018 Construction Work and a separate subcontract for Phase 2 - 2019 Construction Work, this may permit release, by the City, of the value of the holdback with respect to the subcontract for Phase 1 works in accordance with The Builders' Liens Act, such as Section 25.

WARRANTY

D30. WARRANTY

D30.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D30.2 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.

D30.2.1 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 D12)

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. 85-2018

2018/2019 Industrial Streets Renewal Program – Henlow Bay and Higgins Avenue
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 D12)**

(Date)

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

RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 85-2018
2018/2019 Industrial Streets Renewal Program – Henlow Bay and Higgins Avenue

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)

FORM J: SUBCONTRACTOR LIST
 (See D13)

2018/2019 Industrial Streets Renewal Program – Henlow Bay and Higgins Avenue

<u>Portion of the Work</u>	<u>Name</u>	<u>Address</u>
Supply of Materials		
Surface Works:		
Sub-base and base course material		
Separation geotextile fabric and geogrid		
Concrete		
Asphalt		
Topsoil and Sod		
Underground Works:		
Catch basins, catch pits, and precast concrete risers		
Drainage connection pipe and sewer service pipe		
Frame & Covers and lifter rings		
Subdrains		

FORM J: SUBCONTRACTOR LIST
(See D13)

2018/2019 Industrial Streets Renewal Program – Henlow Bay and Higgins Avenue

<u>Portion of the Work</u>	<u>Name</u>	<u>Address</u>
Installation and Placement		
Surface Works:		
Sub-base and base course material		
Separation geotextile fabric and geogrid		
Concrete		
Asphalt		
Topsoil and Sod		
Underground Works:		
Catch basins, catch pits, and precast concrete risers		
Drainage connection pipe and sewer service pipe		
Frame & Covers and lifter rings		
Subdrains		

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>	<u>Drawing (Original) Sheet Size</u>
17M-01932-00-C0	Cover Sheet	A1
17M-01932-00-C1	Henlow Bay – Fultz Blvd to Scurfield Blvd STA. 1+03 TO STA 2+50	A1
17M-01932-00-C2	Henlow Bay – Fultz Boulevard to Scurfield Blvd STA 2+50 TO STA 4+05	A1
17M-01932-00-C3	Henlow Bay – Fultz Boulevard to Scurfield Blvd STA 4+05 TO STA 5+65	A1
17M-01932-00-C4	Henlow Bay – Fultz Boulevard to Scurfield Blvd STA 5+65 TO STA 7+25	A1
17M-01932-00-C5	Henlow Bay – Fultz Boulevard to Scurfield Blvd STA 7+25 TO STA 8+54.48	A1
17M-01932-00-C6	Higgins Avenue – Henry Avenue to Princess Street STA 1+60.49 TO STA 2+20	A1
17M-01932-00-C7	Higgins Avenue – Henry Avenue to Princess Street STA 1+60.49 TO STA 2+20	A1
17M-01932-00-C8	Higgins Avenue – Henry Avenue to Princess Street STA 2+20 TO STA 3+60	A1
17M-01932-00-C8	Higgins Avenue – Henry Avenue to Princess Street STA 3+60 TO STA 4+95	A1
17M-01932-00-C9	Higgins Avenue – Henry Avenue to Princess Street STA 4+95 TO STA 6+40	A1
17M-01932-00-C10	Higgins Avenue – Henry Avenue to Princess Street STA 6+40 TO STA 7+70	A1
17M-01932-00-C11	Higgins Avenue – Henry Avenue to Princess Street STA 7+70 TO STA 9+24.33	A1
17M-01932-00-C12	Guardrail Layout and Details	A1

E2. GEOTECHNICAL REPORT

- E2.1 Further to C3.1, the geotechnical report is provided to aid the Contractor's evaluation of the pavement structure and/or existing soil conditions. The geotechnical report is contained in Appendix 'A'.

E3. PROTECTION OF EXISTING TREES

- E3.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
 - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
 - (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- E3.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.
- E3.3 No separate measurement or payment will be made for the protection of trees.
- E3.4 Except as required in clause E3.1(c) and E3.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

E4. TRAFFIC CONTROL

- E4.1 Further to clauses 3.6, 3.7 and 3.8 of CW 1130:
- (a) Where directed by the Contract Administrator, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes and planing drop-offs to the satisfaction of the Contract Administrator. Payment shall be in accordance with CW3410.
 - (b) In accordance with the Manual of Temporary Traffic Control on City Streets (MTTC), the Contractor ("Construction Agency" in the manual) shall be responsible for placing, maintaining and removing the appropriate temporary traffic control devices as specified by the MTTC or by the Traffic Management Branch of the City of Winnipeg Public Works Department. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by their own forces or subcontractor.
- E4.2 Notwithstanding E4.1, in accordance with the MTTC, the Contract Administrator shall make arrangements with the **Traffic Services Branch of the City of Winnipeg** to place, maintain, and remove all **regulatory signs** and traffic control devices authorized and/or required by the Traffic Management Branch in the following situations:
- (a) Parking restrictions,
 - (b) Stopping restrictions,
 - (c) Turn restrictions,
 - (d) Diamond lane removal,
 - (e) Full or directional closures on a Regional Street,

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

E4.2.1 An exception to E4.2 is the 'KEEP RIGHT/KEEP LEFT' sign (RB-25 / RB-25L) which shall be supplied, installed, and maintained by the Contractor at their own expense.

E4.2.2 Further to E4.2, where the Contract Administrator has determined that the services of the Traffic Services Branch are required, the City shall bear the costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

E5. TRAFFIC MANAGEMENT

E5.1 Further to clause 3.7 of CW 1130:

- (a) Single lane closures on intersecting and/or adjoining Regional Streets shall only be permitted during non-peak periods when required for construction activities when approved by the Traffic Management Branch. Storage/parking of materials, equipment or vehicles is not permitted on Regional Streets at any time unless approved by the Contract Administrator, in consultation with the Traffic Management Branch.

E5.1.1 Henlow Bay will be closed to through traffic. Local access shall be maintained. The Contractor shall sign the street "Road Closed No Exit" in accordance with the Manual of Temporary Traffic Control on City Streets. Additional signage must be provided at Scurfield Boulevard indicating that businesses are still open during construction, with mention to detour access from Fultz Boulevard, as required. The Contractor must coordinate construction activities to ensure access is provided to the properties at all times and must be maintained to the satisfaction of the Contract Administrator. The Contractor must also provide an **access management plan a minimum of 3 days prior to the commencement of construction activity on Henlow Bay**, acceptable to the Contract Administrator. No additional payment will be made to the Contractor to provide required signage and temporary access to businesses as identified in this clause.

E5.1.2 Higgins Avenue will be closed to through traffic. Local access shall be maintained. The Contractor shall sign the street "Road Closed No Exit" in accordance with the Manual of Temporary Traffic Control on City Streets. Vehicle access from Higgins Avenue to SAS Strategic Alarm Systems (#460 Higgins Avenue), CardPro. (#460), Canadian Refrigerated Equipment (#442 Higgins Avenue), Sheet Metal Workers Union (438 Higgins Avenue) and west approach to Atlas Graham Furgale (#324 Lizzie Street) shall be maintained at all times. Atlas Graham Furgale requires regular truck access, including 53' trailers to access reverse loading bay from Higgins Avenue. Vehicle access from Higgins Avenue to 4Sisters (#342 Higgins Avenue), Pampanga Restraurant & Banquet Hall (#349 Henry Avenue), West Car Service (#330 Stanley Street), Sun Chemical Limited (#321 Stanley Street), Union Gospel Mission (#320 Princess Street) and Access Storage (#345 Higgins Avenue) shall be maintained at all times. Access Storage requires regular truck access to west loading dock from Lizzie Street. Vehicle access from Stanley Street to Advance Robotic Duct Cleaning (#341 Stanley Street) shall be maintained at all times.. The Contractor must coordinate construction activities to ensure access is provided to the properties at all times and must be maintained to the satisfaction of the Contract Administrator. The Contractor must also provide an **access management plan a minimum of 5 days prior to the commencement of construction activity on Higgins Avenue**, acceptable to the Contract Administrator. No additional payment will be made to the Contractor to provide required temporary access to businesses as identified in this clause.

E5.1.3 Intersecting local street and private approach access shall be maintained al all times unless joint/slab repairs or planning/paving operations requires temporary closure.

- E5.1.4 Temporary closures are to be staggered such that consecutive intersections are not closed at the same time. Traffic on intersecting streets (Scurfield Boulevard, Fultz Boulevard, Princess Street, Stanley Street, Lizzie Street, and Henry Avenue) shall be maintained at all times. Temporary closures shall be completed during off-peak hours.
- E5.1.5 Should the Contractor be unable to maintain pedestrian or vehicular access to a business, he/she shall review the planned disruption with the business and the Contract Administrator, and take responsible measures to minimize the impact. The Contract shall provide a minimum of 48 hours notification to the affected business and the Contract Administrator, prior to disruption of access.
- E5.1.6 Flag persons may be necessary to maintain the flow of traffic during certain work operations.
- E5.1.7 Pedestrian access on Higgins Avenue must be maintained at all times.
- E5.1.8 Ambulance/emergency vehicle access must be maintained at all times.

E6. REFUSE AND RECYCLING COLLECTION

- E6.1 While access to refuse and/or recycling collection vehicles is restricted, on collection day(s) the Contractor shall move all of the affected property owners refuse and/or recycling materials to a nearby common area, prior to an established time, in accordance with E6.2 to permit the normal collection vehicles to collect the materials. Immediately following recycling collection the Contractor shall return recycling receptacles to the addresses marked on the receptacles.

- E6.2 Collection Schedule:

Henlow Bay from Fultz Boulevard to Scurfield Boulevard.

Collection Day(s): **Monday**

Collection Time: **07:00 to 20:00**

Common Collection Area: **Refuse and recycling collection is parking lot pickup. Maintain access to parking lots.**

Higgins Avenue from Princess Street to Henry Avenue.

Collection Day(s): **Thursday**

Collection Time: **07:00 to 20:00**

Common Collection Area: **Refuse and recycling collection is parking lot pick up. Maintain access to parking lots.**

- E6.3 No measurement or payment will be made for the work associated with this specification.

E7. PEDESTRIAN SAFETY

- E7.1 During the project, the Contractor shall ensure that proper and adequate signage and barricades are in place during sidewalk construction to direct any pedestrians within the construction zone either around the construction area or to the sidewalk on the opposite side of the street. The Contractor may also be required to install snow fencing to protect and keep pedestrians safely away from the construction area. The Contractor shall be responsible for maintaining the signage, barricades, and snow fence in a proper working condition, to the satisfaction of the Contract Administrator. No measurement for payment shall be made for this work.

E8. WATER OBTAINED FROM THE CITY

- E8.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

E9. SURFACE RESTORATIONS

- E9.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E10. PATCHING OF EXISTING PAVEMENT

DESCRIPTION

- E10.1 General
- E10.1.1 This specification covers patching of existing concrete pavement in preparation for an asphalt overlay.
- E10.1.2 Referenced Standard Construction Specifications
- (a) CW 3110 – Sub-Grade, Sub-Base and Base Course Construction.
 - (b) CW 3130 – Supply and Installation of Geotextile Fabrics.
 - (c) CW 3410 – Asphaltic Concrete Pavement Works.

MATERIALS

- E10.2 Crushed Sub-Base Material
- E10.2.1 Crushed Sub-base material will have a maximum aggregate size of 50 millimetre and be supplied in accordance with Section 2.1 of CW 3110.
- E10.3 Geotextile Fabric
- E10.3.1 Geotextile fabric will be supplied in accordance with Section 2 of CW 3130.
- E10.4 Asphalt Material
- E10.4.1 Asphalt material will be Type 1A and will be supplied in accordance with Sections 5 and 6 of CW 3410.

CONSTRUCTION METHODS

- E10.5 General
- E10.5.1 Remove existing concrete pavement to a minimum width of 1.5 metres at locations as shown on the Drawings or as directed by the Contract Administrator in accordance with Section 3.1 of Specification CW 3110.
- E10.5.2 Excavate to a depth of 350 millimetres below the top of the existing pavement.
- E10.5.3 Compact existing sub-grade to a minimum of 95% Standard Proctor Density.
- E10.5.4 Place separation/reinforcement geotextile fabric in accordance with Specification CW 3130.
- E10.5.5 Place and compact crushed sub-base material in accordance with CW 3110 to a 300 millimetres compacted depth. Compact to a minimum of 100% Standard Proctor Density.

- E10.5.6 Place and compact asphalt material to a 50 millimetres compacted depth matching the top of the existing concrete pavement. Compact to an average of 95% percent of the 75 Blow Marshall Density of the paving mixture with no individual test being less than 90% percent.
- E10.5.7 Each layer must be levelled and accepted by the Contract Administrator before the succeeding layer may be placed.
- E10.5.8 Additional excavation and placement of sub-base material beyond the identified pavement structure will be completed in accordance with CW 3110 as directed by the Contract Administrator.

MEASUREMENT AND PAYMENT

- E10.6 Pavement Patching
 - E10.6.1 Pavement patching will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Pavement Patching". The area to be paid for will be the total number of square metres of pavement patched in accordance with this specification, accepted and measured by the Contract Administrator.

E11. PARTIAL DEPTH PATCHING OF EXISTING JOINTS

DESCRIPTION

- E11.1 General
 - E11.1.1 This specification covers the Partial Depth Patching of existing concrete pavement joints.
 - E11.2 Referenced Standard Construction Specifications
 - (a) CW 3230 – Full-Depth Patching of Existing Slabs and Joints
 - (b) CW 3410 – Asphalt Concrete Pavement Works

MATERIALS

- E11.3 Asphalt Materials
 - E11.3.1 Asphalt material will be Type 1A supplied in accordance with Sections 5 and 6 of CW 3410.
- E11.4 Tack Coat
 - E11.4.1 Tack Coat will be undiluted SS-1 emulsified asphalt.

CONSTRUCTION METHODS

- E11.5 Planing of Joints
 - E11.5.1 Plane existing joints designated by the Contract Administrator to a minimum depth of 50 mm and a maximum of depth 90 mm to remove ravelled or deteriorated concrete. Width of joint to be planed will vary with depth.
 - E11.5.2 Should the depth of joint deterioration exceed the maximum indicated, as determined by the Contract Administrator, the entire joint shall be renewed and paid for in accordance with CW 3230 as a full depth joint repair. Planing completed shall be paid for in accordance with E11.7 of this specification
 - E11.5.3 Dispose of material in accordance with Section 3.4 of CW 1130.
- E11.6 Placement of Asphalt Material
 - E11.6.1 Prior to placement of asphalt material, the planed joint shall be swept or blow clean of any loose material.

- E11.6.2 Apply Tack Coat uniformly on the entire surface of the planed joint. The application rate shall not exceed 0.23 litres per square metre. The planed joint shall be dry prior to applying the tack coat.
- E11.6.3 Place and compact asphalt material in accordance with Section 9.3 of CW 3410 to the satisfaction of the Contract Administrator. The finished elevation of the patch shall be flush with surrounding pavement surface.
- E11.6.4 Compact the asphalt material to an average 95% of the 75 blow Marshall Density of the paving mixture with no individual test being less than 90 %.
- E11.6.5 Ensure that no traffic is allowed to travel over the patched area until the asphalt has cooled to atmospheric temperature.
- E11.6.6 Placement of asphalt material shall be done within twenty four (24) hours of planing of joints.

MEASUREMENT AND PAYMENT

- E11.7 Partial Depth Planing of Existing Joints
 - E11.7.1 Partial Depth Planing of Existing Joints will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Partial Depth Planing of Existing Joints". The area to be paid for will be the total number of square metres of joints planed in accordance with this specification, accepted and measured by the Contract Administrator.
- E11.8 Asphalt Patching of Partial Depth Joints
 - E11.9 Asphalt Patching of Partial Depth Joints will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Asphalt Patching of Partial Depth Joints". The area to be paid for will be the total number of square metres of joints patched in accordance with this specification, accepted, and measured by the Contract Administrator.

E12. RAILWAY TIES AND TRACKS REMOVAL

- E12.1 Description
 - E12.1.1 This specification shall covers pavement removal, excavation, railway ties and tracks removal and other related works.
- E12.2 Referenced Standards Construction Specification
 - E12.2.1 CW 3110- - Sub-grade, sub-base and base course construction.
- E12.3 Construction Methods
 - E12.3.1 Railway Ties and Tracks Removal
 - (a) Remove existing railway ties and tracks by demolishing, loading, hauling, and disposing of railway tracks and ties and any other material encountered from the site.
 - (b) The Contractor shall dispose of materials in accordance with Section 3.4 of CW 1130.
 - E12.3.2 Pavement Removal
 - (a) The Contractor shall remove existing pavement including curbs and asphalt overlays at locations shown on the drawing or as directed by the Contract Administrator in accordance with CW 3110.
 - E12.3.3 Excavation
 - (a) Further to CW 3110, the Contractor shall excavate in-situ material to the depth to accommodate the pavement structure as shown on the Drawings or as directed by the Contract Administrator. The Contractor shall excavate and dispose materials within 3m of existing ties and tracks.

- (b) The Contractor shall dispose excess material directly under the railway ties and tracks at a Class 1 Landfill.

E12.4 Measurement and Payment

- E12.4.1 Removal of existing railway ties and tracks will be measured on a linear meter basis and paid for at the Contract Unit price per linear meter for "Railway Tiles and Tracks Removal". The length to be paid for will be the total length of linear meters of railway ties and tracks removed in accordance with this Specification, accepted and measured by the Contract Administrator.
- E12.4.2 Pavement removal and excavation shall be included in the cost of "Railway Ties and Tracks Removal" and no separate measurement and payment will be made.

E13. SOFT EXCAVATION TO EXPOSE UNDERGROUND UTILITIES

E13.1 Description

- E13.1.1 This specification covers excavation of
- E13.1.2 These underground utilities include, but are not limited to, Manitoba Hydro cables, BellMTS cables, CPR communication cable, fiber optic cable, existing sewers, existing gas lines, and existing watermains.

E13.2 Materials

E13.2.1 Backfill Material

- (a) Backfill material for backfill of shafts after hydro-excavation has been completed shall consist of sand as per City of Winnipeg Standard Construction Specification CW 2030.

E13.3 Construction Methods

- E13.3.1 Prior to commencement of any construction works adjacent to underground utilities, the Contractor shall use soft digging or hand excavation to expose the underground utilities.
- E13.3.2 Once the elevation of the top of the pipe or duct has been determined the resulting excavation shall be backfilled with bedding sand to the elevation of the existing ground.

E13.4 Measurement and Payment

- E13.4.1 Soft excavation to expose underground utilities will be considered incidental to the Work. No measurement and payment will be made within this section.

E14. CONTAMINATED SOIL EXCAVATION

E14.1 Description

- E14.1.1 Further to CW 3110, this specification covers excavation of contaminated soil and other related works

E14.2 Referenced Standards Construction Specification

- E14.2.1 CW 3110- Sub-grade, sub-base and base course construction.

E14.3 Construction Methods

E14.3.1 Excavation

- (a) The Contractor shall excavate in-situ material to the depth to accommodate the pavement structure as shown on the Drawings or as directed by the Contract Administrator.
- (b) The Contractor shall dispose excess material at a certified Class 1 Landfill or at a location approved by the Contract Administrator.

E14.4 Measurement and Payment

- E14.4.1 Excavation of contaminated soil will be measured on a cubic meter basis and paid for at the Contract Unit price per cubic meter for "Contaminated Soil Excavation". The volume to be paid for will be the total cubic meters of contaminated soil excavated in accordance with this Specification, accepted and measured by the Contract Administrator.

E15. TREE REMOVAL

GENERAL

- E15.1 The Contractor is to note that the tree removal is to include the removal of the tree as shown on the drawings, as well as the root masses associated with the tree.

- E15.2 Construction Methods – as per CW 3010

MEASUREMENT AND PAYMENT

- E15.3 Tree removal will be paid for at the Contract Unit Price per each for "Tree Removal", measured on a per unit basis, which price shall be payment in full for completing all operations herein described and all other items incidental to the work included in this Specification, measured and accepted by the Contract Administrator.

E16. WATERMAIN AND WATER SERVICE INSULATION

DESCRIPTION

- E16.1 Notwithstanding 3.12 of CW 2110, this Specification covers the supply and installation of insulation in roadway excavations over watermains and water services.

- E16.2 Referenced Standard Construction Specifications:

- (a) CW 2030 - Excavation Bedding and Backfill
- (b) CW 3110 – Sub-grade, Sub-base and Base Course Construction

- E16.3 Referenced Standard Details:

- (a) SD-018 – Watermain and Water Service Insulation

MATERIALS

- E16.4 Acceptable insulation is:

- (a) Extruded Polystyrene rigid foam insulation – Type 4, 4" in thickness.
DOW - Roofmate or Highload 40,
Owen's Corning Foamular 350 or Foamular 400.
2" X 48" X 96", 2" X 24" X 96", 4" X 24" X 96"

- E16.5 Sand Bedding:

- (a) In accordance with CW 2030.

CONSTRUCTION METHODS

- E16.6 Prior to the installation of any sub-base material or geotextile material, locate all existing water services

- E16.7 Further to SD-018, where directed by the Contract Administrator, excavate the sub-grade to allow the top of the insulation to be installed flush with the surrounding sub-grade. Install the insulation on a level surface centered over the located watermain or water service for the full width of the roadway excavation. Install sand bedding if required to level the surface.

- E16.8 Stockpile and dispose of excavated material in accordance with CW 3110.
- E16.9 Thickness of insulation is 100 mm (4"). If using 50 mm (2") panels, two (2) layers are required. Total width of insulation to be as directed by the Contract Administrator. Place sufficient full width panels to meet or exceed the specified width.
- E16.10 Place insulation panels adjacent to each other over the specified area with no gaps between the panels and less than 15mm of elevation difference along the adjoined edges. Where 2" thick panels are being used, offset the top layer to prevent the panel joints from aligning with the joints in the lower layer.
- E16.11 Use full panels of insulation where possible. Where necessary cut insulation panels to obtain coverage to specified lengths. Insulation pieces shall be a minimum dimension of 300 mm in width or length.
- E16.12 Take appropriate measures to ensure panels are not displaced when installing geotextiles and during backfilling operations.

MEASUREMENT AND PAYMENT

- E16.13 Watermain and Water Service Insulation shall be measured on an area basis and paid for at the Contract Unit Price per square metre of "Watermain and Water Service Insulation". The area to be paid for shall be the total square metres of watermain and water service insulation supplied and installed in accordance with this specification, accepted and measured by the Contract Administrator.