

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 752-2014

2014 GRANULAR ROADWAY RENEWAL PROGRAM-PIPELINE ROAD FROM TEMPLETON AVENUE TO MOLLARD AVENUE

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 2014 GRANULAR ROADWAY RENEWAL PROGRAM-PIPELINE ROAD FROM TEMPLETON AVENUE TO MOLLARD AVENUE

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, August 19, 2014.
- 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 D33.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

- B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
 - (a) was known to the Bidder before receipt hereof; or
 - (b) becomes publicly known other than through the Bidder; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
 - B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/bidopp.asp
 - B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 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, only to the Bidder who requested approval of the substitute.

- B7.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B7.10 Notwithstanding B7.2 to B7.9, in accordance with B8.6, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B16.1(a).

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
 - 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, to constitute a responsive Bid.
- 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 B16.1(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 12 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 B16.4.2, 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. QUALIFICATION

- B11.1 The Bidder shall:
 - (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B11.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/debar.stm
- B11.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- B11.4 Further to B11.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
 - (a) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (b) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (c) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/.
- B11.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B11.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B12. BID SECURITY

- B12.1 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.
 - B12.1.1 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.
 - B12.1.2 All signatures on bid securities shall be original.
 - B12.1.3 The Bidder shall sign the Bid Bond.
 - B12.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- B12.2 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.
 - B12.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B12.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
 - B12.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B12.3 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.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

- B13.1 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.
 - B13.1.1 Bidders or their representatives may attend.
 - B13.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B12 will not be read out.
- B13.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/

- B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/
- B13.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE BID

- B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B14.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work 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.

B15. WITHDRAWAL OF BIDS

- B15.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
 - B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
 - B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
 - (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B14.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B16. EVALUATION OF BIDS

- B16.1 Award of the Contract shall be based on the following bid evaluation criteria:
 - (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
 - (c) Total Bid Price;

- (d) economic analysis of any approved alternative pursuant to B7.
- B16.2 Further to B16.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.
- B16.4 Further to B16.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
 - B16.4.1 Further to B16.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
 - B16.4.2 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.

B17. AWARD OF CONTRACT

- B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B17.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B17.2.1 Without limiting the generality of B17.2, the City will have no obligation to award a Contract where:
 - (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B16.
 - B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

CO. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of:
 - (a) Granular Road Renewal
 - (i) Pipeline Road-Templeton Avenue to Mollard Avenue
- D2.2 The major components of the Work are as follows:
 - (a) Granular Road Renewal
 - (i) Excavation existing gravel surface
 - (ii) Compaction of subgrade
 - (iii) Placement of separation/reinforcement fabric
 - (iv) Supply and placement geogrid, as required
 - (v) Placement and compaction of sub-base and base course
 - (vi) Ditch excavation
 - (vii) Ditch grading
 - (viii) Culvert installation and removing of existing culverts
 - (ix) Driveway approach restoration
 - (x) Ditch restoration
 - (xi) Placement of chip seal surface treatment

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is KGS Group , represented by:

Roy Houston

Manager of Civil/ Municipal Services

Telephone No. (204) 896-1209 Facsimile No. (204) 986-0754

- D3.2 At the pre-construction meeting, Roy will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.
- D3.3 Bids Submissions must be submitted to the address in B8.8

D4. CONTRACTOR'S SUPERVISOR

- D4.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D4.2 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 D4.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.
- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
 - (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 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. FURNISHING OF DOCUMENTS

D7.1 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

D8. AUTHORITY TO CARRY ON BUSINESS

D8.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D9. SAFE WORK PLAN

- D9.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D9.2 The Safe Work Plan 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

D10. INSURANCE

- D10.1 The Contractor shall provide and maintain the following insurance coverage:
 - (a) commercial general liability insurance, in the amount of at least 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) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
 - (c) 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.
- D10.2 Deductibles shall be borne by the Contractor.
- D10.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in the C4.1 for the return of the executed Contract.
- D10.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D11. PERFORMANCE SECURITY

- D11.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
 - (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
 - D11.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D11.2 If the bid security provided in his/her Bid was not a certified cheque or draft pursuant to B12.1(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.

D12. SUBCONTRACTOR LIST

D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at 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.

D13. DETAILED WORK SCHEDULE

D13.1 The Contractor shall provide the Contract Administrator with a detailed work schedule (Form L: 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.

SCHEDULE OF WORK

D14. COMMENCEMENT

- D14.1 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.
- D14.2 The Contractor shall not commence any Work on the Site until:
 - (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D8;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the twenty-four (24) hour emergency response phone number specified in D4.2.
 - (iv) the Safe Work Plan specified in D9;
 - (v) evidence of the insurance specified in D10;
 - (vi) the performance security specified in D11;
 - (vii) the subcontractor list specified in D12;
 - (viii) the detailed work schedule specified in D13.
 - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D14.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D15. WORKING DAYS

- D15.1 Further to C1.1(jj);
- D15.1.1 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.

- D15.1.2 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.
- D15.1.3 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.

D16. RESTRICTED WORK HOURS

D16.1 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.

D17. WORK BY OTHERS

- D17.1 Work by others on or near the Site will include but not necessarily be limited to:
 - (a) City of Winnipeg Geomatics Branch;
 - (b) Manitoba Hydro lowering of gas service lines;
 - (c) Manitoba Hydro Construction of new Fleet Services Centre north of Mollard Avenue;

D18. SEQUENCE OF WORK

- D18.1 Further to C6.1, the sequence of work shall be as follows:
- D18.1.1 The Work shall be divided into two (2) Phases. Each Phase shall be subdivided into stages. Stages are further subdivided into major items of work.
 - - (i) Excavation existing gravel surface
 - (ii) Compaction Sub-grade
 - (iii) Placement of separation /reinforcement fabric and geogrid
 - (iv) Supply and placement of Sub-base and base course material
 - (v) Ditch grading
 - (vi) Culvert installation
 - (vii) Placement topsoil and seed
 - (viii) Restoration of approaches on Southbound lane

No construction shall commence on the subsequent northbound lane until all work is completed on the southbound lane.

D18.1.3 Phase II - Northbound lane of Pipeline Road

- (i) Excavation existing gravel surface
- (ii) Compaction Sub-grade
- (iii) Placement of separation/reinforcement fabric and geogrid
- (iv) Supply and placement of Sub-base and base course material
- (v) Ditch excavation
- (vi) Culvert installation
- (vii) Placement topsoil and seed.

- (viii) Restoration of approaches on Northbound lane
- D18.1.4 Placing the topsoil and finished grading of all boulevard and median areas shall be completed prior to commencing construction of Chip Seal surface treatment, including the emulsion surface coating.
- D18.1.5 Placement of Chip Seal Surface Treatment shall be placed after full completion Northbound and Southbound lanes. Immediately following the completion of the Chip Sealing Work the Contractor shall clean up the Site and remove all surplus material, waste and debris from both lane of the road.

D19. SUBSTANTIAL PERFORMANCE

- D19.1 The Contractor shall achieve Substantial Performance within thirty-five (35) consecutive Working Days of the commencement of the Work as specified in D14.
- D19.2 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.
- D19.3 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.

D20. TOTAL PERFORMANCE

- D20.1 The Contractor shall achieve Total Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D14.
- D20.2 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.
- D20.3 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.

D21. LIQUIDATED DAMAGES

- D21.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City two thousand one hundred dollars (\$2100) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D21.2 The amount specified for liquidated damages in D21.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D21.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D22. SCHEDULED MAINTENANCE

- D22.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Seeding as specified in CW-3520-R7;
- D22.2 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

D23. JOB MEETINGS

- D23.1 Regular weekly job meetings will be held at 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.
- D23.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D24. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D24.1 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).

D25. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

Putther to B11.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B11.4.

MEASUREMENT AND PAYMENT

D26. PAYMENT

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

WARRANTY

D27. WARRANTY

D27.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire 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.

- D27.2 Notwithstanding C13.2 or D27.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance Performance if:
 - (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
 - D27.2.1 In such case the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

FORM H1: PERFORMANCE BOND

(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT
(hereinafter called the "Principal"), and
(hereinafter called the "Surety"), are held and firmly bound unto THE CITY OF WINNIPEG (hereinafter called the "Obligee"), in the sum of
dollars (\$)
of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
WHEREAS the Principal has entered into a written contract with the Obligee for
BID OPPORTUNITY NO. 752-2014
2014 GRANULAR ROADWAY RENEWAL PROGRAM-PIPELINE ROAD FROM TEMPLETON AVENUE TO MOLLARD 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:	(Name of Principal)	
(Witness as to Principal if no seal)	Per:	(Seal)
	(Name of Surety) By: (Attorney-in-Fact)	(Seal)

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

(See D11)

(Date)	
The City of Winnipeg Legal Services Department 185 King Street, 3rd Floor Winnipeg MB R3B 1J1	
RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 752-2014	
2014 GRANULAR ROADWAY RENEWAL PROGRAM-PIPELINE ROAD FROM TEMPLETON AVENUE TO MOLLARD 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 exceed in the aggregate	ding
Canadian doll	ars.
This Standby Letter of Credit may be drawn on by you at any time and from time to time upon wr demand for payment made upon us by you. It is understood that we are obligated under this Star Letter of Credit for the payment of monies only and we hereby agree that we shall honour your deman payment without inquiring whether you have a right as between yourself and our customer to make a demand and without recognizing any claim of our customer or objection by the customer to payment by	ndby d for such
The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that made.	
Partial drawings are permitted.	
We engage with you that all demands for payment made within the terms and currency of this Star Letter of Credit will be duly honoured if presented to us at:	ndby
(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 D12)

2014 GRANULAR ROADWAY RENEWAL PROGRAM-PIPELINE ROAD FROM TEMPLETON AVENUE TO MOLLARD AVENUE

Portion of the Work	<u>Name</u>	<u>Address</u>

FORM L: DETAILED WORK SCHEDULE

(See D13)

2014 GRANULAR ROADWAY RENEWAL PROGRAM-PIPELINE ROAD FROM TEMPLETON AVENUE TO MOLLARD AVENUE

ompletion is achieved. ems of Work Time Period in Working Days					
Nome of Work	10	20	30	35	40
Remove Existing Gravel Surface					
Sub-grade Compaction					
Geotextile Fabric Installation/Geogrid					
Sub-base/Base Installation					
Ditch excavation/grading					
Culvert installation and abandonment existing					
Chip Seal Treatment					
Restoration					

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:

Drawing No.	<u>Drawing Name/Title</u>	<u>Drawing</u>
		(Original) Sheet
	0	<u>Size</u>
	Cover Sheet	
001	Templeton Ave to Mollard Ave - Templeton Ave to STA 0+80	A1
002	Templeton Ave to Mollard Ave - STA 0+80 to STA 1+90	A1
003	Templeton Ave to Mollard Ave - STA 1+90 to STA 3+00	A1
004	Templeton Ave to Mollard Ave - STA 3+00 to STA 3+90	A1
005	Templeton Ave to Mollard Ave - STA 3+90 to STA 5+00	A1
006	Templeton Ave to Mollard Ave - STA 5+00-to STA 6+10	A1
007	Templeton Ave to Mollard Ave - STA 6+10 to STA 7+20	A1
008	Templeton Ave to Mollard Ave - STA 7+20 to STA 8+20	A1
009	Templeton Ave to Mollard Ave - STA 8+20 to STA 9+30	A1
010	Templeton Ave to Mollard Ave - STA 9+30 to STA 10+00	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 and 3.7 of CW 1130:
 - (a) Where directed, 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 in Work Areas on City Streets, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all 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:
 - E5.1.1 The Contractor shall maintain northbound lane of traffic at all times during construction on southbound lane (Phase I);
 - E5.1.2 The Contractor shall maintain southbound lane of traffic at all times during construction of the northbound lane (Phase II).
 - E5.1.3 Intersecting street and private approach access shall be maintained at all times.
 - E5.1.4 Should the Contractor be unable to maintain pedestrian or vehicular access to a residence or business, he/she shall review the planned disruption with the business or residence and the Contract Administrator, and take reasonable measures to minimize the impact. The Contractor shall provide a minimum of 48 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.
 - E5.1.5 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.
 - E5.1.6 Further to E5.1.3 and E5.1.4, the Contractor shall be responsible for providing suitable access to private residences at all times. Installation of temporary approaches prior to replacement of culverts in existing private approaches shall be performed where maintaining use of the existing approach during culvert replacement is not permitted. Temporary approaches for private residences shall be installed in accordance with E11.

- E5.1.7 Prior to commencing construction the Contractor shall submit their Site access plan to the Contract Administrator for approval.
- E5.1.8 On Pipeline Road, no lane closures beyond what is permitted in the traffic management plan will be permitted without the written permission of the Contract Administrator. The Contractor shall sign the street "Road Closed Local Access Only" in accordance with the Manual of Temporary Traffic Control.

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:

Pipeline Road from Templeton Avenue to Mollard Avenue.

Collection Day(s): Wednesday

Collection Time: 7:00 a m to 6:00 p m

Common Collection Area: Southeast corner of Pipeline Road and Storie Road

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

E7. WATER OBTAINED FROM THE CITY

E7.1 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.

E8. SURFACE RESTORATIONS

E8.1 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.

E9. INFRASTRUCTURE SIGNS

E9.1 The Contractor shall obtain infrastructure signs from the Traffic Services Sign Shop at 421 Osborne Street. The Contractor shall mount each sign securely to a rigid backing material approved by the Contract Administrator. The Contractor shall fasten each sign to a suitable support and erect and maintain one sign at each street as directed by the Contract Administrator. When the Contract Administrator considers the Work on the street complete, the Contractor shall remove and dispose of the signs and supports. No measurement for payment will be made for performing all operations herein described and all other items incidental to the work described

E10. TEMPORARY APPROACHES

E10.1 Where the Contractor is unable to maintain access to a private residence via the existing private approach to the residence or during removal and replacement of culverts underneath the

approach, the Contractor shall construct a temporary approach to the residence adjacent to the existing one to provide the homeowner uninterrupted vehicular access to their property during construction.

MATERIALS

- E10.2 The Contractor shall supply, place and compact granular material to provide a temporary approach to a private residence adjacent to the existing approach being worked on. The contractor may use suitable excavated granular material from Pipeline Road excavation as temporary fill material for the temporary approaches, provided that it can be compacted sufficiently to permit vehicles to traverse the temporary approach without causing rutting or getting stuck.
- E10.3 The Contractor shall supply and place a temporary drain pipe underneath the temporary approach to maintain an outlet for ditch drainage until the temporary approach is removed. The temporary drain pipe shall be no smaller than 250mm diameter. The Contractor is permitted to re-use existing culverts removed from site as temporary drain pipes underneath temporary approaches, provided that they are of sound condition and free of debris.
- E10.4 Upon completion of the culvert removal and replacement underneath the respective existing approach and restoration of the surface grade of the existing approach, the Contractor shall remove the temporary approach and drain pipe.
- E10.5 Granular material and drain piping used for temporary approaches shall be removed from site and shall not be re-used in construction of Pipeline Road.

MEASUREMENT AND PAYMENT

- E10.6 Construction of temporary approaches shall be at the Contract Unit Price for "Temporary Approaches" for each temporary approach constructed and measured by the Contract Administrator. The unit price shall include all labour, equipment and materials necessary to construct the temporary approach and remove it in accordance with this specification.
- E10.7 Supply and placement of suitable granular material for temporary approaches shall be incidental to the cost of constructing the temporary approach.
- E10.8 Supply and placement of the temporary drain pipe shall be incidental to the cost of constructing the temporary approach.
- E10.9 Removal and disposal of granular material off-site shall be incidental to the cost of construction the temporary approach.

E11. CULVERT DEBRIS GRATING

- E11.1 The Contractor shall supply and install debris grating on each end of all culverts installed in this contract.
- E11.2 The diameter of the culvert debris grates shall match the diameter of the culvert to which they are to be affixed; 600mm diameter or 750mm diameter respectively.
- E11.3 Shop drawings shall be submitted for the debris gratings and shall be installed as shown on the drawings. Galvanizing shall be hot-dip conforming to requirements of CSA G164- N1981 to a minimum net retention of 600g/m2. All bolts and nuts shall be typical steel, conforming to ASTM A-320 Grade B8M. All welding shall be fully approved by the Canadian Welding Bureau in conformance with CSA Standard W47.1. Welding shall be done by currently licensed welders only. Welding splatter and other fabricator burrs, where exposed, shall be ground off and/or filed smooth, and left ready for subsequent operations. All miscellaneous metal, after fabrication, shall be hot-dip galvanized. No separate measurement will be made for hot-dip galvanizing.

MEASUREMENT AND PAYMENT

E11.4 Supply and installation of 600mm diameter debris grate for the culvert crossing underneath will be paid for at the Contract Unit Price per unit for "600mm Debris Grate" for each debris grate supplied and installed in accordance with this specification.. The unit price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E12. CHIP SEAL SURFACE TREATMENT

E12.1 This Specification covers the supply and placement of one layer of chip seal surface treatment.

MATERIALS

E12.2 Chip Seal surface treatment material shall be processed through a wash plant to remove fines and dust. The cost of the washing operation shall be included in the cost of the material. The asphalt surface treatment material will conform to the following grading requirements:

CANADIAN METRIC	PERCENT OF TOTAL DRY WEIGHT PASSING
SIEVE SIZE	EACH SIEVE
	100MM MAX. AGGREGATE
10 000	100%
5 000	30 – 85%
2 500	0 – 20
1 250	0 – 10
80	0 - <1

- Note: Traffic gravel and Seal Coat (Aggregate) material when subjected to the abrasion test will have a loss of not more than 35% when tested in accordance with grading B of ASTM (American Society for Testing and Materials) C131, Test for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. As well, the aggregate retained on the No. 5 000 sieve will contain not less than 35% crushed aggregate as determined by actual particle count. Crushed aggregate will be considered as that aggregate having at least one fractured face.
- E12.2.2 The Contractor or sub contractor shall demonstrate the ability to manufacture Seal Coat (Aggregate) chips and shall have produced material of similar gradation within the last three (3) years. Upon a request from the Contract Administrator, the Bidder shall have three (3) Business days to provide proof of ability and experience as per B10.4.
- E12.3 Emulsified asphalt shall be HF 150S emulsion.

EQUIPMENT

- E12.4 The Contractor shall ensure as a minimum, the following equipment is on-site:
 - (a) Asphalt surface treatment oil distributor
 - (b) Asphalt surface treatment aggregate material spreader
 - (c) Steel drum roller vibratory
 - (d) Rubber tired wobbly roller self-propelled
 - (e) Loader
 - (f) Sweeper

CONSTRUCTION METHODS

E12.5 Surface Preparation

E12.5.1 Ensure base course material is properly shaped and bladed to the satisfaction of the Contract Administrator. Final surface shall be crowned to provide proper drainage, shall be free of potholes and washboard and tight. The base course shall be well mixed with little segregation of coarse material.

E12.6 Survey Requirements

E12.6.1 The Contract Administrator shall provide survey stakes with grades for excavation and the placement of the subbase and base material. It shall be the responsibility of the Contractor to maintain and protect this survey information for the duration of the project. Any survey infrastructure removed, damaged, or destroyed by the Contractor or their equipment, without the consent of the Contract Administrator, shall be replaced by the Contract Administrator at the cost of the Contractor.

E12.7 Chip Seal Surface Treatment

- E12.7.1 Emulsion shall be applied at a temperature as specified in the manufacturer's requirements and at a rate of 1.35 litres per m². Emulsion shall not be sprayed wider than the width of which the aggregate will be placed in a single pass. Spraying of the emulsion shall not precede the distribution of asphalt surface treatment material by more than 750 m, and shall be applied on a clean dry surface on a day when the atmospheric temperature is not less than 5 °C.
- E12.7.2 Spread asphalt surface treatment material with a chip spreader at a uniform thickness immediately on the freshly placed oil. Aggregate shall be applied evenly to cover the emulsion to the approval of the Contract Administrator.
- E12.7.3 The Contractor shall roll the entire surface with a steel drum roller to embed the chips.
- E12.7.4 Finish rolling shall take place with rubber tired wobbly rollers to the satisfaction of the Contract Administrator.
- E12.7.5 Once the oil has cured, remove excess loose chips with sweeper as directed by the Contract Administrator.

MEASUREMENT AND PAYMENT

E12.8 The supplying, placing, rolling, and finishing of the chip seal surface treatment will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Chip Seal Surface Treatment". The area to be paid for will be the total number of square metres of chip seal surface treatment placed in accordance with this Specification, accepted and measured by the Contract Administrator.

E13. ROCKFILL RIPRAP

- E13.1 Description
- E13.1.1 This Specification shall cover the supply and placement of rockfill riprap.
- E13.2 Materials
- E13.2.1 The rockfill material for use as riprap shall consist of a clean free draining, sound, dense, durable, crushed rock. The material shall be free from organics, roots, silts, sand, clay, snow, ice or any other material that would detract from the strength and drainage characteristics of clean rockfill.
- E13.2.2 Individual particles shall be shaped such that no dimension is greater than two times the smallest dimension. Flat, elongated, or platy particle shapes will not be accepted.
- E13.2.3 Should the Contractor choose to use limestone, it shall be durable white crystalline limestone. Softer buff to yellow dolomite or dolostone will not be accepted.
- E13.2.4 The rockfill material shall meet the following requirements:

Parameter	Test Method	Specified Limit
Bulk Specific Gravity	ASTM C127	2.6 minimum
Absorption	ASTM C127	2.5 % maximum
LA Abrasion Loss	ASTM C131	32% maximum
Soundness	ASTM C88	13% maximum
Gradation	ASTM D5519	See below

E13.2.5 Rockfill riprap shall be well graded having a full range and even distribution of sizes and shall conform to the following gradation:

Canadian Metric Sieve Size (millimeters)	Percent of Total Dry Weight Passing Each Sieve
450	100%
300	35-80%
100	20-60%
50	10-30%
5	0-5%

E13.3 Submittals

- E13.3.1 The Contractor shall submit the proposed supplier(s) and location of quarry Sites for supply of riprap.
- E13.3.2 Representative samples of the rockfill riprap submitted for material testing purposes shall be completed as specified herein.

E13.4 Quarry Sites

E13.4.1 Contractors supplying rockfill riprap shall be responsible for demonstrating that the material is of adequate quality and volume to meet the material specifications contained herein.

E13.5 Testing and Approval

- E13.5.1 All materials set forth in this Specification shall be subject to inspection and testing by the Contract Administrator or by the testing laboratory designated by the Contract Administrator. There shall be no charge for any materials taken by the Contract Administrator for testing purposes.
- E13.5.2 The Contract Administrator will visit proposed quarry Sites for inspection of the proposed rockfill material and quarry faces a minimum of fourteen (14) days prior to supply and placement of riprap.
- E13.5.3 No supply and placement of riprap will be permitted prior to the Contract Administrator reviewing the source.
- E13.5.4 The procedures for preparation of all rockfill samples for use in material inspection and testing shall be subject to review and acceptance by the Contract Administrator for individual tests. The samples may be obtained from crushed and processed material at the sizing necessary for specific tests if the material is deemed to be representative of the riprap that will be used, subject to the acceptance of the Contract Administrator.
- E13.5.5 The testing frequency necessary to confirm the material quality will be specified at the discretion of the Contract Administrator.

E13.6 Construction Methods

- E13.6.1 Rockfill riprap shall be restored over west ditch low spots around catch basins and over sideslopes after they are backfilled to the lines and grades shown on the drawings.
- E13.6.2 Rockfill Riprap shall be pushed or rolled into place in such a manner that the larger rocks are uniformly distributed and the smaller rocks serve to fill the places between the larger rocks such that excessive segregation of the various particle sizes does not occur.
- E13.6.3 Sufficient levelling shall be done to produce a neat and uniform surface, conforming to the shape and dimensions shown on the Drawings.
- E13.6.4 The allowable fill tolerances shall be within ± 50 mm of the grades and thickness shown on the Drawings, provided positive downslope grading is achieved.
- E13.6.5 Provide a smooth uniform surface from the existing grade and new riprap when placing outside edges or transitions, as accepted by the Contract Administrator.
- E13.6.6 Temporary stockpiling of riprap along the riverbank shall not be permitted. Material shall be placed to the required lines and grade shown the Drawing immediately upon delivery to the Site.
- E13.7 Measurement and Payment
- E13.7.1 The supply and placement of rockfill riprap shall be measured on a weight basis and paid for at the Contract Unit Price for "Rockfill Riprap". The weight to be paid for shall be the total number of metric tonnes of rockfill supplied and placed in accordance with this Specification, as measured by a certified weigh scale and accepted by the Contract Administrator.
- E13.7.2 The Contractor shall provide the weigh tickets to the Contract Administrator for the material supplied to the Site at the time of delivery. No payment will be made for any weigh tickets which are not supplied at the time of delivery, or which are lost.

E14. DITCH INLET GRATE

- E14.1 The Contractor shall supply and install domed ditch inlet grates on existing catchbasins in the ditches on Pipeline Road at the locations as directed on the drawings.
- E14.2 The Ditch Inlet Grate shall be manufactured per the detail on drawing 010, "Templeton Ave to Mollard Ave Sections and Details 1".
- E14.3 Shop drawings shall be submitted for the ditch inlet grates and shall be installed as shown on the drawings.
- E14.4 Galvanizing shall be hot-dip conforming to requirements of CSA G164- N1981 to a minimum net retention of 600g/m2. The Contractor shall galvanize the entire ditch inlet grate assembly after complete fabrication. All bolts and nuts shall be steel conforming to ASTM A-320 Grade B8M. All welding shall be fully approved by the Canadian Welding Bureau in conformance with CSA Standard W47.1. Welding shall be done by licensed welders only. No separate measurement will be made for hot-dip galvanizing.
- E14.5 The Contractor shall remove and dispose of the existing frames and covers on the catchbasins where domed ditch inlet grates are to be installed. Disposal of the existing frame and cover shall be incidental to the cost for supply and installation of the new domed cover.

MEASUREMENT AND PAYMENT

E14.6 Supply and installation of Ditch Inlet Grate will be paid for at the Contract Unit Price for "Ditch Inlet Grate" for each ditch inlet grate supplied and installed in accordance with this specification. The unit price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.