



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 492-2009

**PROVINCE OF MANITOBA/CITY OF WINNIPEG: 2009 LOCAL STREET RENEWALS
– ASHBURN STREET, LARK STREET, PACIFIC AVENUE**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 Province of Manitoba/City of Winnipeg: 2009 Local Street Renewals – Ashburn Street, Lark Street, Pacific Avenue

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 15, 2009..
- 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. ENQUIRIES

- B3.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B3.2 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.
- B3.3 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.
- B3.4 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.
- B3.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. ADDENDA

- B4.1 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.
- B4.2 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.
- B4.2.1 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>
- B4.2.2 The Bidder is responsible for ensuring that he 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.
- B4.3 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.

B5. SUBSTITUTES

- B5.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B5.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B5.3 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.
- B5.4 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.
- B5.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his 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.
- B5.6 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.
- B5.6.1 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 wishes to inform.
- B5.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B5.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his 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 B14.
- B5.9 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.
- B5.10 Notwithstanding B5.2 to B5.9, in accordance with B6.6, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

B6. BID COMPONENTS

B6.1 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;

B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.

B6.3 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.

B6.4 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.

B6.4.1 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.

B6.4.2 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.

B6.5 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.

B6.6 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 B14.1(a).

B6.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B6.8 Bids shall be submitted to:

The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B7. BID

B7.1 The Bidder shall complete Form A: Bid, making all required entries.

B7.2 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 own name, his 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 own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B7.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.

B7.3 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.

B7.4 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 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 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.

B7.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B7.5 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.

B8. PRICES

B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B8.1.1 For the convenience of Bidders, and pursuant to B6.4.2 and B14.4.3, 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>

B8.2 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.

B8.3 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.

B8.4 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B9. QUALIFICATION

B9.1 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.

- B9.2 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>
- B9.3 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);
- B9.4 Further to B9.3(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 valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment 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>)
- B9.5 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.
- B9.6 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.

B10. BID SECURITY

- B10.1 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.
- B10.1.1 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.
- B10.1.2 All signatures on bid securities shall be original.
- B10.1.3 The Bidder shall sign the Bid Bond.

- B10.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- B10.2 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.
- B10.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B10.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B10.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B10.3 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.

B11. OPENING OF BIDS AND RELEASE OF INFORMATION

- B11.1 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.
- B11.1.1 Bidders or their representatives may attend.
- B11.1.2 Bids determined by the Manager of Materials, or his designate, to not include the bid security specified in B10 will not be read out.
- B11.2 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>
- B11.3 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>
- B11.4 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.

B12. IRREVOCABLE BID

- B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B12.2 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.

B13. WITHDRAWAL OF BIDS

- B13.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

- B13.1.1 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.
- B13.1.2 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.
- B13.1.3 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 B13.1.3(b), declare the Bid withdrawn.
- B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 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.

B14. EVALUATION OF BIDS

- B14.1 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 B9 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B5.
- B14.2 Further to B14.1(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.
- B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B14.4 Further to B14.1(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.
- B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B14.4.2 Further to B14.1(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.
- B14.4.3 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.

B15. AWARD OF CONTRACT

- B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B15.2 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.
- B15.2.1 Without limiting the generality of B15.2, 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.
- B15.3 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 B14.
- B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his 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) Pavement Reconstruction
 - (i) Ashburn Street – Sargent Avenue to Wellington Avenue
 - (ii) Lark Street – Bannatyne Avenue to William Avenue
 - (iii) Pacific Avenue – Ellen Street to Princess Street

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

- (a) Pavement Reconstruction
 - (i) Removal of existing pavement
 - (ii) Excavation
 - (iii) Installation of subdrains
 - (iv) Replacement of manholes (where required)
 - (v) Installations of catchbasins/catch-pits and connection pipe
 - (vi) Placement of separation/reinforcement fabric
 - (vii) Placement and compaction of sub-base and base course materials
 - (viii) Construction of 150mm concrete pavement (reinforced)
 - (ix) Construct 180mm barrier curb
 - (x) Adjustment of existing manholes
 - (xi) Renewal of sidewalk (where required)
 - (xii) Restoration of boulevard

D3. CONTRACT ADMINISTRATOR

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

Roy Houston, P.Eng.
Manager of Civil/Municipal Services
3rd Floor – 865 Waverley Street, Winnipeg, Manitoba, R3T 5P4
Telephone No. (204) 896-1209
Facsimile No. (204) 896-0754

D3.2 At the pre-construction meeting, Roy Houston, P.Eng. will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4. CONTRACTOR'S SUPERVISOR

D4.1 At the pre-construction meeting, the Contractor shall identify his 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. NOTICES

D5.1 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.

D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

D5.3 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 address or facsimile number:

The City of Winnipeg
Chief Financial Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

D5.4 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 address or facsimile number:

The City of Winnipeg
Internal Services Department
Legal Services Division
Attn: City Solicitor
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

D6. FURNISHING OF DOCUMENTS

D6.1 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 at cost.

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

D7.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D8. SAFE WORK PLAN

D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D8.2 The Safe Work Plan 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>

D9. INSURANCE

D9.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability, 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 for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- (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.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 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.

D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D10. PERFORMANCE SECURITY

D10.1 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.

D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D10.2 If the bid security provided in his Bid was not a certified cheque or draft pursuant to B10.1(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.

D11. SUBCONTRACTOR LIST

D11.1 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.

D12. DETAILED WORK SCHEDULE

D12.1 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

D13. COMMENCEMENT

D13.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.

D13.2 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 D7;
 - (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 D8;
 - (v) evidence of the insurance specified in D9;
 - (vi) the performance security specified in D10;
 - (vii) the subcontractor list specified in D11; and
 - (viii) the detailed work schedule specified in D12;
- (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.

D13.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D14. WORKING DAYS

D14.1 Further to C1.1(gg);

D14.1.1 The Contract Administrator will determine daily if a Working Day has elapsed and will record his 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 agrees with the Contract Administrator's determination of the Working Days assessed for the report period.

D14.1.2 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. RESTRICTED WORK HOURS

D15.1 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.

D16. WORK BY OTHERS

D16.1 Work by others on or near the Site will include but not necessarily be limited to:

(a) City of Winnipeg Water and Waste performing watermain renewals on Ashburn Street;

D17. SEQUENCE OF WORK

D17.1 Further to C6.1, the sequence of work shall comply with the following:

D17.1.1 Providing that the Work on each street is completed in a similar order to the order that the Work was commenced in, the Contractor will be permitted to have a maximum of three (3) streets under construction at any one time. Completion of a street means that all of the necessary concrete, asphalt including approaches and landscaping Work is completed to the satisfaction of the Contract Administrator.

D17.1.2 Where the Contractor utilizes two (2) or more crews that work independently on the same major component of the Work as identified in D2, the Contract Administrator may approve an increase to the maximum number of streets under construction at any time.

D17.1.3 Placing the topsoil and finished grading of all boulevard and median areas shall be completed prior to commencing construction of asphaltic concrete overlays, including scratch courses.

D17.1.4 Construction activity on Ashburn Street shall not commence until construction of a new watermain, by others, is completed. This Work is expected to be completed by June 15, 2009, depending upon weather..

D18. SUBSTANTIAL PERFORMANCE

D18.1 The Contractor shall achieve Substantial Performance within fifty (50) consecutive Working Days of the commencement of the Work as specified in D13.

D18.2 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.

D18.3 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.

D19. TOTAL PERFORMANCE

D19.1 The Contractor shall achieve Total Performance within fifty-five (55) consecutive Working Days of the commencement of the Work as specified in D13.

D19.2 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.

D19.3 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.

D20. LIQUIDATED DAMAGES

- D20.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City one thousand dollars (\$1000.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D20.2 The amount specified for liquidated damages in D20.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D20.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D21. SCHEDULED MAINTENANCE

- D21.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Sodding as specified in CW 3510;
 - (b) Seeding as specified in CW 3520;
- D21.2 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

D22. JOB MEETINGS

- D22.1 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.
- D22.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D23. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D23.1 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).

WARRANTY

D24. WARRANTY

- D24.1 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.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$ _____)

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

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

BID OPPORTUNITY NO. 492-2009

Province of Manitoba/City of Winnipeg: 2009 Local Street Renewals – Ashburn Street, Lark Street, Pacific 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)

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 (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

FORM L: DETAILED WORK SCHEDULE
 (See D12)

Province of Manitoba/City of Winnipeg: 2009 Local Street Renewals – Ashburn Street, Lark Street, Pacific Avenue

For each item of Work, indicate the cumulative percentage proposed to be completed by the end of each time period until 100% completion is achieved.					
Items of Work	Time Period in Working Days				
	10	20	30	40	45
<u>Ashburn Street – Sargent Ave. to Wellington Ave.</u>					
Removals and underground works					
Concrete slab pour					
Concrete curbs					
Boulevard Restoration					
<u>Lark Avenue – Bannatyne Ave. to William Ave.</u>					
Removals and underground works					
Concrete slab pour					
Concrete curbs					
Boulevard Restoration					
<u>Pacific Avenue –Ellen St. to Princess St.</u>					
Removals and underground works					
Concrete slab pour					
Concrete curbs					
Boulevard 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:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
	Cover Sheet	A1
0001	Ashburn Street - Street Reconstruction – STA 0+97.18 to STA 2+15	A1
0002	Ashburn Street - Street Reconstruction – STA 2+15 to STA 3+50	A1
0003	Ashburn Street - Street Reconstruction – STA 3+50 to STA 4+66.14	A1
0004	Lark Street - Street Reconstruction – STA 0+93.75 to STA 2+03.99	A1
0005	Pacific Avenue - Street Reconstruction – STA 0+94.79 to STA 2+15	A1
0006	Pacific Avenue - Street Reconstruction – STA 2+15.0 to STA 3+40.0	A1
0007	Pacific Avenue - Street Reconstruction – STA 3+40.0 to STA 4+30.1	A1
0008	Miscellaneous Details	A1

E2. GEOTECHNICAL REPORT

E2.1 Further to C3.1, the geotechnical report is provided to aid the Contractor's evaluation of the 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 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-R1:

- (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, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Section 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 Section 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-R1:

E5.1.1 The Contractor shall schedule construction activities to meet the following:

- (a) Ashburn Street and Lark Street will be closed to all traffic. The Contractor shall sign the street "Road Closed " in accordance with the Manual of Temporary Traffic Control.
- (b) Pacific Avenue shall be constructed so as to maintain access to the parking lot on the north side, west of #315 Pacific Avenue, opposite the intersection of Paulin Street. Access to this parking lot can be maintained either directly from Paulin Street onto Pacific Avenue, or with permission of the Winnipeg Parking Authority, through the parking lot on the southwest corner of Paulin Street and Pacific Avenue.
- (c) Further to E5.1.1(b), Pacific Avenue shall be constructed to maintain access to the approach to the parking lot on the southwest corner of Pacific Avenue and Princess Street.

E5.1.2 Should the Contractor be unable to maintain an existing access to a residence or business, he 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 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.

E5.1.3 Pedestrian and 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:

Ashburn Street, from Sargent Avenue to Wellington Street.

Collection Day(s): 4

Collection Time: 7:00 a.m.

Common Collection Area: Backlane. Collection will not affect construction.

Lark Street Avenue, from Bannatyne Avenue to William Avenue

Collection Day(s): 5

Collection Time: 7:00 a.m.

Common Collection Area: Northwest Corner of Lark Street and Bannatyne Avenue.

Pacific Avenue, from Ellen Street to Princess Street.

Collection Day(s): 5

Collection Time: 7:00 a.m.

Common Collection Area: Northeast corner of Ellen Street and Pacific Avenue.

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

E7. PEDESTRIAN SAFETY

E7.1 During the project, for any deep excavations left open overnight or weekends, such as storm sewer connections, a temporary snow fence shall be installed until backfilling is complete. The Contractor shall be responsible for maintaining the snow fence in a proper working condition. No measurement for payment shall be made for this work.

E8. WATER USED BY CONTRACTOR

E8.1 Further to clause 3.7 of CW 1120-R1, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.

E9. SURFACE RESTORATIONS

E9.1 Further to clause 3.3 of CW 1130-R1, 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. INFRASTRUCTURE SIGNS

E10.1 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

E11. 100MM CRUSHED CONCRETE SUB-BASE MATERIAL

DESCRIPTION

E11.1 Further to CW 3110, this specification covers the supply and placement of 100mm crushed concrete sub-base material for unstable sub-grades.

E11.2 Referenced Standard Construction Specifications

E11.2.1 CW 3110 – Sub-grade, Sub-base and Base Course Construction

MATERIALS

E11.3 100mm crushed concrete sub-base material will be approved by the Contract Administrator. The 100mm crushed concrete sub-base material will conform to the following grading requirements:

CANADIAN METRIC SIEVE SIZE	PERCENT OF TOTAL DRY WEIGHT PASSING EACH SIEVE 100MM MAX. AGGREGATE
100 000	97% - 100%
25 000	30% - 50%
80	5% Max.

E11.3.1 Maximum size of material shall not exceed 150mm.

E11.4 100mm crushed concrete sub-base material will be a mixture of reclaimed concrete and asphaltic concrete. The contents of the material will be limited to the following percentages based on weight.

- (a) minimum of 85% recycled concrete
- (b) maximum of 15% recycled asphaltic concrete
- (c) maximum of 3% clay
- (d) maximum of 1% foreign material

CONSTRUCTION METHODS

E11.5 Place sub-base material by end dumping down the centre of the excavation. The sub-base shall be pushed forward and levelled to thickness equal to cover the entire sub-grade width, thickening the section to allow support for the hauling operations and avoid damage to the geotextile and/or geogrid. This procedure shall continue until all sub-base material has been placed down the centre of the excavation.

E11.6 Level sub-base material utilizing a track type dozer.

E11.7 Initial compaction of the sub-base material shall consist of two complete passes utilizing vibratory type equipment capable of setting the material. Each pass shall be over lapped by half the width of the roller. All additional compaction shall be completed utilizing static type

equipment. No trucks, rubber tire loaders or graders will be allowed to travel on the sub-base material until the Contract Administrator has approved the compaction of the sub-base.

- E11.8 The final compacted thickness of the sub-base material shall be a minimum of 300 mm thickness.

MEASUREMENT AND PAYMENT

- E11.9 The supplying, placing and compaction of crushed sub-base material will be measured on a weight basis and paid for at the Contract Unit Price per tonne for the "100mm Crushed Concrete Sub-base Material". The weight to be paid for will be the total number of tonnes of 100mm crushed concrete sub-base material supplied and placed in accordance with this specification, accepted and measured by the Contract Administrator.
- E11.10 The weight to be paid for will be the total number of tonnes of 100mm crushed concrete sub-base material as measured on a certified weigh scale.
- E11.11 Only material placed within the limits of excavation will be included in the payment for 100mm crushed concrete sub-base material.
- E11.12 No measurement or payment will be made for materials rejected by the Contract Administrator.

E12. AQUEDUCT SHORING ON PACIFIC AVENUE

DESCRIPTION

- E12.1 Existing Shoring along Aqueduct
- E12.1.1 Original timber excavation shoring exists along the Aqueduct on Pacific Avenue. During excavation, the Contractor shall carefully excavate around any of the timbers encountered and cut the shoring at the depth of the proposed road subgrade and remove the material. The Contractor shall not remove the shoring by any means that may damage the adjacent Aqueduct.
- E12.1.2 The Contractor shall dispose of the shoring material that is removed in accordance with Section 3.4 of CW 1130.
- E12.1.3 No measurement or payment will be made for the work described in Section E12.1, and shall be considered incidental to the price for excavation.
- E12.2 Sub-base Construction
- E12.2.1 Within 5 metres of the centre of the Branch 1 aqueduct on Pacific Avenue, the subgrade and sub-base shall be compacted with non-vibratory compaction equipment.
- E12.2.2 No measurement or payment will be made for the Work described in Section E12.2, and shall be considered incidental to the price for subgrade compaction and/or crushed sub-base material.

E13. SITE SECURITY AND SAFETY AROUND AQUEDUCT

- E13.1 Security
- E13.1.1 The Contractor shall be responsible for site security and safety, as stated below:
- (a) Provide 24 hour site security personnel during all periods, if any, when the Aqueduct is exposed and the Contractor's staff members are not present on Site.
 - (b) Report all Site trespassing or suspicious activity immediately to McPhillips Control Centre at 986-4781.

- (c) Refrain from providing statements with respect to water supply, site security or emergency situations to the media. All media inquiries in this regard shall be directed to the City of Winnipeg Customer Services.

E13.2 Safety

- E13.2.1 The Contractor shall be responsible for all aspects of Site and public safety, in compliance with D23.
- E13.2.2 The Contractor shall arrange for all required safety watches in the vicinity of buried and overhead utilities, and shall pay for all required safety watch fees.
- E13.3 Payment for security as described in this Specification shall be borne by the Contractor.

E14. CONDITION AND PROTECTION OF THE AQUEDUCT

E14.1 Condition of the Aqueduct

- E14.1.1 The Branch 1 Aqueduct is constructed of circa 1919 pre-cast reinforced concrete pipe, and is jointed with copper waterstops. All work procedures conducted by the Contractor on and/or near the Aqueduct shall be well planned and executed to ensure that the Aqueduct is not subjected to construction related loads, including excessive vibrations and concentrated or asymmetrical lateral loads during backfill placement.

E14.2 Protection of the Aqueduct

- E14.2.1 Contractors carrying out repair work in the vicinity of the Aqueduct shall ensure that:
 - (a) Equipment shall only be permitted to cross the Aqueduct at designated locations.
 - (b) Granular material, construction material, soil or other material shall not be stockpiled on the Aqueduct or within 5 metres of the Aqueduct Centreline.
 - (c) Construction practices shall not subject the Aqueduct to asymmetrical loading at any time.
 - (d) Construction practices or procedures at or near the Aqueduct shall not impart excessive vibration loads on the Aqueduct and/or cause settlement of the subgrade below the Aqueduct.
 - (e) Further to Specification CW 2030, only smooth edged excavation buckets. Soft excavation or hand excavation shall be used for excavation adjacent to and over the Aqueduct.
- E14.2.2 It is the Contractor's responsibility to ensure that all work crew members understand and observe the requirements of Specification E16. Prior to commencement of on-site work, the Contractor's superintendent, foreman and heavy equipment operators shall attend an orientation meeting that will outline restriction for working on and around the Aqueduct.

E15. ENVIRONMENTAL PROTECTION

- E15.1 The Contractor shall be aware that the Branch 1 Aqueduct is for potable water supply and no contamination by fuel, chemicals, etc. shall be permitted at any time. Fuels or chemicals shall not be stored within 30 metres of the Aqueduct.
- E15.2 The Contractor shall plan and implement the Work of this Contract strictly in accordance with the requirements of the environmental protection measures as herein specified.
- E15.3 The Contractor is advised that at least the following Acts, Regulations, and By-laws apply to the Work:
 - E15.3.1 Federal
 - (a) Canadian Environmental Protection Act (CEPA) c.16

(b) Transportation of Dangerous Goods Act and Regulations, c.34

E15.3.2 Provincial

- (a) The Dangerous Goods Handling and Transportation Act D12
- (b) The Environment Act c.E125
- (c) The Fire Prevention Act F80
- (d) The Manitoba Nuisance Act N120
- (e) The Public Health Act c.P20.
- (f) The Workplace Safety and Health Act W120
- (g) And current applicable associated regulations.

E15.4 The Contractor is advised that the following environmental protection measures apply to the Work.

E15.4.1 Materials Handling and Storage

- (a) Construction materials shall not be stored within five (5) metres of the Aqueduct centreline.

E15.4.2 Fuel Handling and Storage

- (a) The Contractor shall abide by the requirements of Manitoba Environment for handling and storage of fuel products.
- (b) All fuel handling and storage facilities shall comply with The Dangerous Goods and Transportation Act Storage and Handling of Petroleum Products Regulation and any local land use permits.
- (c) 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.
- (d) The Contractor shall ensure that all fuel storage containers are inspected daily for leaks and spillage.
- (e) Products transferred from the fuel storage area(s) to specific work sites shall not exceed the daily usage requirement.
- (f) When servicing requires the drainage or pumping of fuels, lubricating oils or other fluids from equipment, a groundsheet 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.
- (g) Refuelling of mobile equipment and vehicles shall take place at least 100 metres from a watercourse.
- (h) The area around storage sites and fuel lines shall be distinctly marked and kept clear debris to allow for routine inspection and leak detection.
- (i) 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.

E15.4.3 Waste Handling and Disposal

- (a) The construction area shall be kept clean and orderly at all times during and at completion of construction.
- (b) At no time during construction shall personal or construction waste be permitted to accumulate for more than one day at any location on the construction site, other than at a dedicated storage area as may be approved by the Contract Administrator.
- (c) Indiscriminate dumping, littering, or abandonment shall not take place.
- (d) No on-site burning of waste is permitted.

- (e) Equipment shall not be cleaned near watercourses; contaminated water from onshore cleaning operations shall not be permitted to enter watercourses..

E15.4.4 Dangerous Goods/Hazardous Waste Handling and Disposal

- (a) Dangerous goods/hazardous waste are identified by, and shall be handled according to, The Dangerous Goods Handling and Transportation Act and Regulations.
- (b) The Contractor shall be familiar with The Dangerous Goods Handling and Transportation Act and Regulations.

E15.4.5 Emergency Spill Response

- (a) The Contractor shall ensure that due care and caution is taken to prevent spills.
- (b) The Contractor shall report all major spills of petroleum products or other hazardous substances with the potential for impacting the environment and threat to human health and safety to the Contract Administrator and Manitoba Environment, immediately after occurrence of the environmental accident, by calling the 24-hour emergency telephone phone number (204) 945-4888.
- (c) The Contractor shall designate a qualified supervisor as the on-site emergency response coordinator for the project. The emergency response coordinator shall have the authority to redirect manpower in order to respond in the event of a spill.
- (d) The following actions shall be taken by the person in charge of the spilled material or the first person(s) arriving at the scene of a hazardous material accident or the on-site emergency response coordinator:
 - (i) Notify emergency-response coordinator of the accident:
 - i. identify exact location and time of accident
 - ii. indicate injuries, if any
 - iii. request assistance as required by magnitude of accident (Manitoba Environment 24-hour Spill Response Line (204) 945-4888, Police, Fire Department, Ambulance, company backup)
 - (ii) Assess situation and gather information on the status of the situation, noting:
 - iv. personnel on Site
 - v. cause and effect of spill
 - vi. estimated extent of damage
 - vii. amount and type of material involved
 - viii. proximity to waterways and the Aqueduct
 - (iii) If safe to do so, try to stop the dispersion or flow of spill material:
 - ix. approach from upwind
 - x. stop or reduce leak if safe to do so
 - xi. dyke spill material with dry, inert sorbent material or dry clay soil or sand
 - xii. prevent spill material from entering waterways and utilities by dyking
 - xiii. prevent spill material from entering any openings by covering with rubber spill mats or dyking
 - (iv) Resume any effective action to contain, clean up, or stop the flow of the spilled product.
- (e) The emergency response coordinator shall ensure that all environmental accidents involving contaminants shall be documented and reported to the Manitoba Environment according to The Dangerous Goods Handling and Transportation Act Environmental Accident report Regulation 439/87.

E15.4.6 Controlled Products

- (a) Materials classified as "Controlled Products" under Regulation 52/88, "Workplace Hazardous Materials Information System", including amendments, are prohibited inside the Aqueduct, unless the material will be directly employed in the Work.

E16. EXCAVATION, BEDDING AND BACKFILL ON PACIFIC AVENUE

E16.1 Description

- (a) This specification is applicable to all excavation, bedding and backfill on Pacific Avenue and shall amend and supplement Specification CW 2030

E16.2 Design

E16.2.1 Shoring

- (a) Excavation shoring for sewer external point repairs shall be designed by a Professional Engineer, registered in the Province of Manitoba. Shoring components, bracing and walers shall conform to the latest revision of the "Construction Safety Act" of the Department of Labour of the Government of Manitoba. Shoring shall not impose point loading on the Aqueduct pipe, and shall prevent lateral movement of the Aqueduct pipe. Shoring shall also be designed to prevent sloughing and caving, and to accommodate installation of all pipe and fittings.
- (b) Shop drawings for shoring systems are to be submitted for review in accordance to Clause 1.5 of Specification CW 1110.
- (c) Drilled caissons will not be permitted.

E16.3 Construction Methods

E16.3.1 Excavation

- (a) The Contractor shall note that natural gas pipelines may conflict with the proposed works. Requirements for working in proximity to these pipelines are listed in Clause 16.3.3 of this Specification.
- (b) Excavation for sewer external point repairs or manhole replacements adjacent to the Aqueduct shall be conducted with smooth-edged buckets.
- (c) Excavation within 0.3 metres of the Aqueduct in any direction shall be completed by hand and/or soft excavation methods to preclude the possibility of causing damage to the Aqueduct. Damage to the Aqueduct and its accessory components caused by the Contractor's operation shall be rectified at the Contractor's expense.
- (d) Excavation within 0.3 metres of all other pipes and utilities shall be completed by hand and/or soft excavation methods. Damage to utilities caused by the Contractor's operation shall be rectified at the Contractor's expense.
- (e) All pipes to be removed from within the excavations shall be demolished and removed from the excavation. Where necessary to prevent damage to surrounding utilities, structures, or where neat pipe cuts are required, pipes to be removed shall be saw cut for the entire circumference prior to demolition and removal.
- (f) Excavations shall be kept dewatered at all times.

E16.3.2 Gas Pipeline Bedding and Backfill

- (a) Bedding and initial backfill for all exposed gas pipelines shall be sand to 150mm above the pipe.
- (b) No compaction equipment will be permitted to operate directly above any gas pipeline until a minimum of 600mm backfill material has been placed above the pipe.

E16.3.3 Work Around Natural Gas Pipelines

- (a) Two natural gas pipelines may conflict with the proposed reconstruction works on Pacific Avenue. One, a 300mm diameter high pressure transmission main, the other a 50mm diameter medium pressure distribution main.
- (b) Any work within 4m of the high pressure natural gas main on Pacific Avenue requires a Manitoba Hydro High Pressure Safety Watch. The Contractor shall contact the Notre Dame District office 2 weeks prior to any work commencing within 4 m of the high pressure natural gas main to arrange for a Manitoba Hydro High Pressure Safety

Watch. The contact from Manitoba for arranging the safety watch is Kevin Leathwood (District Supervisor), phone number 360-5972.

- (c) In the event of exposure of the gas main during construction for the road replacement, the Contractor shall have Manitoba Hydro Personnel install rockwrap on the gas main prior to backfilling.
- (d) Manitoba Hydro will provide a High Pressure Safety Watch on Pacific Avenue at no charge to the Contractor during normal working hours of 8:00-16:30. Any High Pressure Safety Watch personnel required outside of normal working hours will incur a cost to be borne directly by the Contractor, at Manitoba Hydro's hourly overtime rates.

E16.4 Measurement and Payment

E16.4.1 Shoring

- (a) The cost of designing and installation of shoring for the sewer external point repair on Pacific Avenue shall be considered incidental to the unit price for sewer repair.

E17. RE-INSTALL EXISTING CURB INLET

E17.1 Description

- (a) This specification covers the salvage and re-installation the existing curb inlet on the north side of Pacific Avenue at approximately Station 2+48.5, in accordance with City of Winnipeg Standard Detail SD-222

E17.2 Materials

- (a) The Contractor shall re-use the existing curb inlet frame at Station 2+48.5 and construct a concrete box structure behind the curb to support the frame, as detailed in SD-222, acceptable to the Contract Administrator.
- (b) A new PVC lead, up to 1.0 metre, connecting to the catchbasin at Station 2+48.5 shall be included in the installation.

E17.3 Measurement and Payment

- (a) Payment shall be at the Contract unit price for "Re-install Existing Curb Inlet" for each curb inlet frame salvaged and re-installed in accordance with this specification.
- (b) The Contract unit price shall include up to 1.0 metre of 250mm diameter PVC lead pipe connecting the curb inlet to the catchbasin.

E18. SOFT EXCAVATION TO EXPOSE GAS PIPELINE

E18.1 Description

- (a) This specification covers the soft excavation to expose gas pipelines to determine the depth of the pipe and whether it will interfere with the planned construction.
- (b) On Pacific Avenue, a 300mm diameter high pressure gas pipeline runs along the length of the road along the north side of the street. Excavation on Pacific will be at locations at either end of the limits of construction as well as near catchbasin locations along the north side of the street.
- (c) On Lark Street and Ashburn Street, construction will cross a 50mm diameter gas line.

E18.2 Methods

- (a) Prior to commencement of excavation of the road, the Contractor shall use soft digging or hand excavation to expose the 300mm diameter high-pressure gas pipeline at locations on Pacific Avenue, as directed by the Contract Administrator.

- (b) The Contractor shall follow all procedures for working around the gas pipeline as required by Manitoba Hydro and the Specifications in this Bid Opportunity, including, but not limited to, procuring Manitoba Hydro Safety Watch during excavation.
- (c) Locations of soft digging to expose the gas pipeline on Pacific Avenue will be one excavation near each of the six (6) inlets along the north side of Pacific Avenue, as well as at each end of the construction (Ellen Street and Princess Street).
- (d) Locations of soft digging to expose gas pipelines on Lark Street and Ashburn Street will be as follows:
 - (i) Northwest intersection of Sargent Avenue and Ashburn Street
 - (ii) Southwest intersection of Wellington Avenue and Ashburn Street.
 - (iii) Intersection of Bannatyne Avenue and Lark Street
 - (iv) Backlane approaches along the west side of Lark Street
 - (v) Southwest intersection of William Avenue and Lark Street.
- (e) The Contract Administrator will identify the locations for Soft Excavation in the field.

E18.3 Measurement and Payment

- (a) Payment shall be at the Contract unit price for "Soft Excavation to Expose Gas Pipeline" for each location where a soft dig excavation was performed to expose the gas pipeline.

E19. GAS PIPELINE GENERAL REQUIREMENTS

E19.1 Description

- (a) This specification addresses general requirements for working in proximity to natural gas mains.

E19.2 Requirements

- (a) A minimum 900mm of cover shall be maintained in all areas where equipment will be crossing, traveling or compacting over high pressure gas mains.
- (b) A minimum of 600mm of cover shall be maintained in all areas where equipment will be crossing, traveling or compacting over medium pressure gas mains.
- (c) If equipment must cross, travel or compact over a gas main with less than minimum depth of cover, earth bridging or ½" steel plates shall be placed over the main and extend a minimum of 1.0m on either side at each crossing location.

E19.3 Measurement and Payment

- (a) Costs associated with Gas Pipeline General Requirements are considered incidental to the Work.