



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 304-2007

**VAUGHAN STREET – YORK AVENUE TO PORTAGE AVENUE - CONCRETE
REPAIRS AND ASPHALT OVERLAY**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 Vaughan Street – York Avenue to Portage Avenue - Concrete Repairs and Asphalt Overlay

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, May 24, 2007.

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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet 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.

B6. BID COMPONENTS

- B6.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices, hard copy;
 - (c) 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, may result in the Bid being determined to be non-responsive.
- 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 Branch
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 shall be printed below such signatures.

B7.4.2 All signatures should be witnessed, except where a corporate seal has been affixed.

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 B14.4.2, 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 Branch internet 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.

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 Branch internet site at <http://www.winnipeg.ca/matmgt>).

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 three (3) 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 Branch internet site 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, and shall be witnessed or sealed as required.

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 Branch, 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 Branch internet site 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 Branch internet site 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 (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 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 Subject to B15.2, 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.

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 Branch internet site at <http://www.winnipeg.ca/matmgt>.
- 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) Concrete Repairs, Asphalt Overlay and Related Works
 - (i) Vaughan Street from York Avenue to Portage Avenue

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

- (a) Concrete Repairs, Asphalt Overlay and Related Works
 - (i) Planing of existing asphalt and/or concrete
 - (ii) Full depth concrete patches to existing slabs and joints
 - (iii) Installation of catch basin and connection pipe
 - (iv) Placement of separation/reinforcement fabric
 - (v) Adjustments of drainage inlets, water valves, manholes and catchbasins
 - (vi) Installation of catchbasin and drainage connection pipe
 - (vii) Renewal and realignment of existing curbs (180mm) in gutter lanes as per quantities indicated in Form B
 - (viii) Placement asphalt overlay (average thickness –100mm)
 - (ix) Renewal of existing miscellaneous concrete slabs
 - (x) New concrete pavement at loading zone
 - (xi) Renewal of ramp curbs
 - (xii) Construct new sidewalk(s)
 - (xiii) Regrading existing paving stones

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

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 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 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:
The City of Winnipeg
Chief Administrative Officer Secretariat
Attn: Chief Administrative 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
Corporate 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

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 fifteen (15) 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 not commence the Work on the Site before June 4, 2007 and shall commence the Work on Site no later than June 11, 2007, as directed by the Contract Administrator and weather permitting. Additionally, the Contractor shall not start sooner than the fifth (5th) day following Substantial Completion of the water main renewal on Vaughan Street from Bid Opportunity 267-2007.

D13.4 The City intends to award this Contract by May 31,2007.

D13.5 If the actual date of award is later than the intended date, the dates specified for Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

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.

D14.1.3 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.

D15. RESTRICTED WORK HOURS

D15.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission 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.

D15.2 In accordance with the Manual of Temporary Traffic Control, Sections 2.03, 2.04, 2.05, and 2.06, should the Traffic Management Branch of the Public Works Department require that work on Regional Streets be carried out at night or on Sundays or on public holidays, where permitted by the City of Winnipeg Police Department, or that work be restricted or suspended during peak traffic hours, no additional compensation will be considered to meet these requirements.

D16. WORK BY OTHERS

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

- (a) Work by Manitoba Telecom Services – Provision and installation of riser rings, if required
- (b) Work by Manitoba Hydro – Installation of riser rings, if required
- (c) City of Winnipeg Traffic Services
- (d) City of Winnipeg Traffic Signals

D16.2 As part of its 2007 Watermain Renewal Program, The City of Winnipeg Water and Waste Department is renewing an existing watermain from York Avenue to the south side of Graham Avenue in the northbound lanes. The watermain renewal is not part of this project but can be referenced to Bid Opportunity No. 267-2007, closed April 11, 2007 Drawing No. D-9138 and Drawing No. D-9139. York Avenue to St. Mary Avenue is scheduled to be available by May 18, 2007 and is to be completed by June 1, 2007

D17. SEQUENCE OF WORK

D17.1 Further to C6.1, the sequence of work shall be as follows:

D17.1.1 The Work shall be divided into 3 Phases . Each Phase shall be subdivided into stages. Stages are further subdivided into major items of work. No stage shall commence until all previous stages have been completed, or with direction from the Construction Administrator.

D17.1.2 **Phase I** – York Avenue to St. Mary Avenue

- (a) Northbound Curb and Median Lanes; York Avenue to St. Mary Avenue – Lane at a time
 - (i) Planing of asphalt and concrete where required;

- (ii) Concrete pavement slab and joint work and adjustments to pavement structures and appurtenances;
 - (iii) Curb renewals, concrete boulevard works, sidewalk construction; and
 - (iv) Adjustment and placement of paving stones
- (b) Northbound Parking Lane; York Avenue to St. Mary Avenue
- (i) Planing of asphalt and concrete where required;
 - (ii) Concrete pavement slab and joint work and adjustments to pavement structures and appurtenances;
 - (iii) Curb renewals, concrete boulevard works, sidewalk construction; and
 - (iv) Adjustment and placement of paving stones
- (c) Final Lift of Asphalt; All Lanes

D17.1.3 **Phase II** – St. Mary Avenue to Graham Avenue

- (a) Northbound Curb and Median Lanes; St. Mary Avenue to Graham Avenue – Lane at a time
- (i) Planing of asphalt and concrete where required;
 - (ii) Concrete pavement slab and joint work and adjustments to pavement structures and appurtenances;
 - (iii) Curb renewals, concrete boulevard works, sidewalk construction; and
 - (iv) Adjustment and placement of paving stones
- (b) Southbound Curb Lane; St. Mary Avenue to Graham Avenue
- (i) Planing of asphalt and concrete where required;
 - (ii) Concrete pavement slab and joint work and adjustments to pavement structures and appurtenances;
 - (iii) Curb renewals, concrete boulevard works, sidewalk construction; and
 - (iv) Adjustment and placement of paving stones
- (c) Final Lift of Asphalt; All Lanes
- (i) All asphaltic concrete work shall be performed using a lane-at-a-time method (Refer to E5 for minimum requirements of traffic lanes to be left open at various times). The Contractor shall delay placing the final lift of asphalt on the roadway, so that the final lift of all lanes is placed in one operation

D17.1.4 **Phase III** – Graham Avenue to Portage Avenue

- (a) Northbound Curb and Median Lanes; Graham Avenue to Portage Avenue – Lane at a time
- (i) Concrete pavement slab and joint work and adjustments to pavement structures and appurtenances;
 - (ii) Curb repairs, concrete boulevard works, sidewalk construction; and
 - (iii) Adjustment and placement of paving stones
- (b) Southbound Curb Lane; Portage Avenue to Graham Avenue
- (i) Concrete pavement slab and joint work and adjustments to pavement structures and appurtenances;
 - (ii) Curb repairs, concrete boulevard works, sidewalk construction; and
 - (iii) Adjustment and placement of paving stones

D17.1.5 At the end of any day, there shall be no drop-off along any longitudinal joint, excepting the longitudinal joint between the gutter and approaches. Immediately following the completion of the asphaltic concrete works of Phase II, the Contractor shall clean up the Site and remove all plant, surplus material, waste and debris, other than that left by the City or other Contractors.

D17.1.6 Initial planing operations are limited to the tie-ins at the York Avenue and Vaughan Street intersection, and the St. Mary Avenue and Vaughan Street intersection. Plane pavement as required to create smooth transition into and out of the intersections.

D18. SUBSTANTIAL PERFORMANCE

D18.1 The Contractor shall achieve Substantial Performance within forty-five (45) 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 (50) 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 Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City one thousand dollars (\$1000) per Working Day for each and every Working Day following the day fixed herein for Substantial 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 Substantial 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.

CONTROL OF WORK

D21. JOB MEETINGS

D21.1 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.

D21.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D22. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D22.1 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) except as follows;

- (a) The watermain Contractor under Bid Opportunity 267-2007 will be the prime contractor until the watermain is complete, a by-block or by-whole inspection of Vaughan Street is held, and the Contract Administrator for Bid Opportunity 267-2007 notifies the Contract Administrator for Bid Opportunity 304-2007 that the road works can commence and at this time the road Contractor can become the Prime Contractor.

WARRANTY

D23. WARRANTY

D23.1 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.

D23.2 Notwithstanding C13.2 or D3.1, 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 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; or
- (b) Substantial Performance has been achieved.

D23.3 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 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 dated the

_____ day of _____, 20____, for:

BID OPPORTUNITY NO. 304-2007

Vaughan Street – York Avenue to Portage Avenue - Concrete Repairs and Asphalt Overlay

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)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D10)

(Date)

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

RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 304-2007

Vaughan Street – York Avenue to Portage Avenue - Concrete Repairs and Asphalt Overlay

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

FORM J: SUBCONTRACTOR LIST
(See D11)

Vaughan Street – York Avenue to Portage Avenue - Concrete Repairs and Asphalt Overlay

<u>Portion of the Work</u>	<u>Name</u>	<u>Address</u>
SURFACE WORKS:		
<i>Supply of Materials</i>		
Concrete		
Asphalt		
Paving Stones		
Base Course and Sub Base		
<i>Installation/ Placement</i>		
Concrete		
Asphalt		
Paving Stones		
Base Course and Sub-Base		
UNDERGROUND WORKS		
Catch Basins		

FORM L: DETAILED WORK SCHEDULE
 (See D12)

Vaughan Street – York Avenue to Portage Avenue – Concrete Repairs and Asphalt Overlay

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	50
Phase I: York Avenue to St. Mary Avenue					
Planing					
Concrete Joint and Slab repairs					
Curb Repairs					
Sidewalk					
Asphalt Scratch Course					
Asphalt Surface Course					
Phase II: St. Mary Avenue to Graham Avenue					
Planing					
Concrete Joint and Slab repairs					
Curb Repairs					
Sidewalk					
Asphalt Scratch Course					
Asphalt Surface Course					
Phase III: Graham Avenue to Portage Avenue					
Concrete Joint and Slab repairs					
Curb Repairs					
Sidewalk					

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 Branch internet site at <http://www.winnipeg.ca/matmgt>.
- 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 Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
P-3281-01	COVER SHEET VAUGHAN STREET CONCRETE REPAIRS AND ASPHALT OVERLAY YORK AVE. TO ST. MARY AVE. STA. 0+90 TO STA. 2+10	A1 A1
P-3281-02	VAUGHAN STREET CONCRETE REPAIRS AND ASPHALT OVERLAY ST. MARY AVE. TO GRAHAM AVE. STA. 2+10 TO STA. 3+50	A1
P-3281-03	VAUGHAN STREET CONCRETE REPAIRS AND ASPHALT OVERLAY GRAHAM AVE. TO PORTAGE AVE. STA. 3+50 TO STA. 4+80	A1
P-3281-04	VAUGHAN STREET CONCRETE REPAIRS AND ASPHALT OVERLAY MISCELLANEOUS DETAILS	A1

E2. GEOTECHNICAL REPORT

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:
- The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
 - 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.
 - 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. No measurement for payment will be made for this work.
- (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 Maintain a minimum of one lane of traffic northbound from York Avenue to Portage Avenue. Maintain between Portage Avenue and St. Mary Avenue, one lane for the southbound busway during their respective construction times.

E5.1.2 When additional construction work area is required to replace the concrete slabs in the northbound curb lane, south of the Vaughan Street and St. Mary Avenue intersection, the Contractor will place the necessary asphalt fill material at the "bump out", at the head of the west side parking lane to traverse the "bump out" and allow for vehicular movement through the intersection. Asphalt fill material will be considered incidental to the works. The City of Winnipeg will suspend parking in the west side parking lane between York Avenue and St. Mary Avenue to accommodate the closure of the centre northbound lane for additional construction room as necessary.

E5.1.3 Maintain the southbound bus lane, and centre northbound vehicular lane during the Vaughan Street and Graham Avenue intersection slab replacement. The City of Winnipeg will reroute buses requiring turns at the intersection.

E5.1.4 The slab replacement work using 24-Hour/ Early Opening concrete will be completed on a weekend during low vehicular and bus traffic flows. The City of Winnipeg will close the intersection at 20:00 hours on Friday and require that works necessary to complete the slab replacement be completed by 22:00 hours on Saturday to open the intersection to all traffic at 6:00 hours on Monday morning.

- E5.1.5 Closure of the southbound bus lane will be arranged with Winnipeg Transit when work occurs in the west curb lane from Portage Avenue to St. Mary Avenue.
- E5.1.6 Intersecting street and private approach access shall be maintained at all times.
- E5.1.7 Should the Contractor be unable to maintain pedestrian or vehicular 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.
- E5.1.8 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E6. PEDESTRIAN SAFETY

- E6.1 During the project, a temporary snow fence shall be installed around open excavations and pits. 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.
- E6.2 The contractor shall maintain open, a minimum of three (3) crosswalks during any construction works at the York, St. Mary, Graham and Portage Avenue intersections. A flag person will be required during work activities to assist pedestrians in crossing when manpower and equipment is blocking pedestrian visibility at the intersections.

E7. WATER USED BY CONTRACTOR

- E7.1 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.

E8. SURFACE RESTORATIONS

- E8.1 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.

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. RECYCLED CONCRETE BASE COURSE MATERIAL

DESCRIPTION

- E10.1 General
 - E10.1.1 Further to CW 3110, this specification covers supply and placement of recycled concrete base course material for Full-Depth Partial Slab Patches (Class A, B, C, & D), miscellaneous concrete slabs and sidewalks.

E10.2 Definitions

E10.2.1 Deleterious material – are materials such as vegetation, organic material, wood, glass, plastic, metal, reinforcing steel, building rubble, brick, salvaged asphalt materials, clay, shale, and friable particles.

E10.3 Referenced Standard Construction Specifications

- (a) CW 3110 – Sub-Grade. Sub-Base and Base Course Construction.
- (b) CW 3230 – Full-Depth Patching of Existing Pavement Slabs and Joints.
- (c) CW 3235 – Renewal of Existing Miscellaneous Concrete Slabs.
- (d) CW 3325 – Portland Cement Concrete Sidewalk.

MATERIALS

E10.4 Recycled Concrete Base Course Material

E10.4.1 Recycled concrete base course material when used for Full-Depth Partial Slab Patches (Class A, B, C, & D), miscellaneous concrete slabs and sidewalks will be considered equal to granular or limestone base course material specified in Section 2.2 of CW 3110.

E10.4.2 Recycled concrete base course material will be approved by the Contract Administrator.

E10.4.3 Recycled concrete base course material will consist of sound durable particles produced by crushing, screening, and grading of recovered concrete materials, free from soft material that would disintegrate through decay or weathering.

E10.4.4 The recycled concrete base course material will be well graded and conform to the following grading requirements:

Recycled Concrete Base Course Material Grading Requirements

CANADIAN METRIC SIEVE SIZE	PERCENT OF TOTAL DRY WEIGHT PASSING EACH SIEVE
20 000	100%
5 000	40% - 70%
2 500	25% - 60%
315	8% - 25%
80	6% - 17%

E10.4.5 Recycled concrete base course 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 C131, Test for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.

E10.4.6 The amount of deleterious material will be limited to a maximum of two percent of the total dry weight.

CONSTRUCTION METHODS

E10.5 Placement of Recycled Concrete Base Course Material

E10.5.1 Place and compact recycled concrete base course material as a levelling course to a maximum thickness of 50 millimetres.

E10.5.2 Spread materials uniformly to avoid segregation free of pockets of fine and coarse material.

E10.5.3 Level and compact to the finished elevation. Compact to 100% Standard Proctor Density for Full-Depth Partial Slab Patches (Class A, B, C, & D) and 90% Standard Proctor Density for miscellaneous concrete slabs and sidewalks.

E10.5.4 Maintain the finished material until the pavement or sidewalk is placed.

MEASUREMENT AND PAYMENT

E10.6 Recycled Concrete Base Course Material

- E10.6.1 The supplying, placing and compaction of recycled concrete base course material will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for the "Supplying and Placing Base Course Material" as specified in accordance with CW 3110.
- E10.6.2 No measurement or payment will be made for material placed as a levelling course under miscellaneous concrete slabs and sidewalks where the costs are included in accordance with CW 3235 and CW 3325.
- E10.6.3 No measurement or payment will be made for materials rejected by the Contract Administrator.

E11. ADJUSTMENT OF EXISTING GRANITE BARRIER CURB

DESCRIPTION

- E11.1 This Specification shall cover the adjustment of existing granite barrier curb.
- E11.2 The work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, and all things necessary for and incidental to the satisfactory performance and completion of all work as hereinafter specified.

MATERIALS

E11.3 Granite Barrier Curb

- E11.3.1 The Contractor shall be responsible for the supply, safe storage, and handling of the existing granite barrier curb to be adjusted
- E11.3.2 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the work in a reasonable time approved by the Contract Administrator. The Contractor shall keep all equipment in good working order, and have sufficient standby equipment available at all times, as required.
- E11.3.3 Ramp curb shall be cut and shaped, and raised or lowered to suit the pedestrian crossings along Vaughan Street at Graham Avenue.

CONSTRUCTION METHODS

E11.4 Adjusting Granite Barrier Curb

- E11.4.1 The paving stones adjacent to the existing granite curb to be adjusted shall be removed and reinstalled 0.3m from the front face of the curb sufficient to loosen the granite curb.
- E11.4.2 The existing granite curb shall be removed from its original location and stored in a safe location until it is required for re-installation.
- E11.4.3 After the adjacent pavement / paving stones has been removed, the curb base shall be constructed of granular base course material specified in CW 3110-R10 to the elevations indicated and to the satisfaction of the Contract Administrator.
- E11.4.4 The granite curb shall be re-installed at the elevations and locations as indicated by and to the satisfaction of the Contract Administrator.

QUALITY CONTROL

E11.5 Granite Barrier Cub

- E11.5.1 The Contract Administrator shall be afforded full access for the inspection and control testing of materials at the site to determine whether the material is being selected and placed in accordance with this Specification.

MEASUREMENT AND PAYMENT

E11.6 Adjustment of Granite Barrier Curb

E11.6.1 The adjustment of the existing granite curb will be measured on a linear metre basis. The length to be paid for shall be the total number of metres acceptably adjusted in accordance with this Specification and accepted by the Contract Administrator.

E11.6.2 Payment for excavation, granular base material shall be included in the cost of adjustment of the existing granite curb.

BASIS OF PAYMENT

E11.7 Adjustment of Granite Barrier Curb

E11.7.1 The adjustment of existing granite curb will be paid at the Contract Unit Price per linear metre for "Resetting Existing Granite Barrier Curb" measured as specified herein, which price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the work included in this Specification.

E12. INSTALLATION OF WINNIPEG TRANSIT PAVING STONES

DESCRIPTION

E12.1.1 This Specification shall amend Specification CW 3330 – R3

MATERIALS

(b) Add Clause 5.2.5:

Winnipeg Transit Paving Stones shall be "Holland Stone" Transit Blue; 105 x 210 x 60mm in pattern as indicated on the Drawings. Paving stones shall conform to the requirements of CAN3-A231.2, Precast Concrete Pavers. Further to CAN3-A231.2.6.1.1, where concrete pavers are shipped for installation before the pavers are 28 days old, the average compressive strength of these pavers at the time of delivery to the work site shall be not less than 40 MPa.

MEASUREMENT AND PAYMENT

(c) Add Clause 12.4:

Supply and installation of Winnipeg Transit Paving Stones will be measured on a surface area basis. The surface area to be paid for shall be the number of square metres constructed in accordance with this Specification and accepted by the Contract Administrator, as computed by measurements made by the Contract Administrator.

BASIS OF PAYMENT

(d) Add Clause 13.4

The supply and installation of Winnipeg Transit Paving Stones will be paid for at the Contract Unit Price per square metre for "Winnipeg Transit Paving Stones", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the work included in this Specification.

E13. UNIT PAVERS

DESCRIPTION

E13.1 This specification shall amend CW 3330-R3

E13.2 This Specification shall cover the supply and installation of unit pavers, bedding course of sand and lean-mix concrete for areas as indicated on the drawings.

MATERIALS

E13.3 Holland Stone Unit Pavers

E13.3.1 Half Holland Stone, colour to be Natural, Sizes to be 105mm x 210mm x 60mm depth.

CONSTRUCTION METHODS

E13.4 Installing Unit Pavers

E13.4.1 Paving stone shall be carefully packed and loaded for shipment using all reasonable and customary precautions against damage in transit. No material that may cause staining or discoloration shall be used for blocking or packing.

E13.4.2 Upon receipt at the building site or storage yard, the paving stone shall be stacked on timber or platforms at least 75mm above the ground, and extreme care shall be taken to prevent staining during storage. If storage is to be for a prolonged period, polyethylene or other suitable plastic film shall be placed between any wood and finished surfaces, and shall be used also as an overall protective covering.

E13.4.3 All joints to be tight and not to be wider than 3mm unless otherwise noted on the drawings.

E13.4.4 Pavers shall be installed in accordance with Standard Detail SD-240A.

E13.4.5 Existing paving stone shall be salvaged for installation as directed by the Contract Administrator.

MEASUREMENT AND PAYMENT

E13.5 The supply and placing of Unit Pavers will be measured on an area basis. The area to be paid for shall be the total number of square metres of Unit Pavers installed in accordance with this Specification, accepted by the Contract Administrator, as computed from the layout shown on the accepted drawings and measured in the field.

E13.6 The supply and placement of sand bedding and base material for Unit Pavers shall be included in the works and no separate measurement will be made.

E14. REMOVAL OF INTERLOCKING PAVING STONES

DESCRIPTION

E14.1.1 This Specification shall amend Specification CW 3330 – R3

E14.2 Add Clause 9.5:

The Contractor shall remove interlocking paving stones as directed by the Contract Administrator. The Contractor shall dispose, at the end of each working day, any unused or remaining concrete paving stones that are not required in regrading or to complete renewal works to a site agreed upon by the Contract Administrator. Any concrete paving stones required for regrading or replacement will be stockpiled in such a manner that does not interfere with pedestrian safety or mobility, and are not readily accessible to the public.

E14.3 Add Clause 12.4:

Removal of existing interlocking paving stone will be measured on a surface area basis. The surface area to be paid for shall be the number of square metres removed in accordance with this Specification and accepted by the Contract Administrator, as computed from measurements, made by the Contract Administrator.

E14.4 Add Clause 13.4:

Removal of existing interlocking paving stone will be paid for at the Contract Unit Price per square metre for "Remove Existing Paving Stone", measured as specified herein, which

price shall be payment in full for performing all operations herein described and all other items incidental to the work included in this Specification.

E15. RECYCLED CONCRETE BASE COURSE MATERIAL

DESCRIPTION

E15.1 General

E15.1.1 Further to CW 3110, this specification covers supply and placement of recycled concrete base course material for Full-Depth Partial Slab Patches (Class A, B, C, & D), miscellaneous concrete slabs and sidewalks.

E15.2 Definitions

E15.2.1 Deleterious material – are materials such as vegetation, organic material, wood, glass, plastic, metal, reinforcing steel, building rubble, brick, salvaged asphalt materials, clay, shale, and friable particles.

E15.3 Referenced Standard Construction Specifications

- (a) CW 3110 – Sub-Grade. Sub-Base and Base Course Construction.
- (b) CW 3230 – Full-Depth Patching of Existing Pavement Slabs and Joints.
- (c) CW 3235 – Renewal of Existing Miscellaneous Concrete Slabs.
- (d) CW 3325 – Portland Cement Concrete Sidewalk.

MATERIALS

E15.4 Recycled Concrete Base Course Material

E15.4.1 Recycled concrete base course material when used for Full-Depth Partial Slab Patches (Class A, B, C, & D), miscellaneous concrete slabs and sidewalks will be considered equal to granular or limestone base course material specified in Section 2.2 of CW 3110.

E15.4.2 Recycled concrete base course material will be approved by the Contract Administrator.

E15.4.3 Recycled concrete base course material will consist of sound durable particles produced by crushing, screening, and grading of recovered concrete materials, free from soft material that would disintegrate through decay or weathering.

E15.4.4 The recycled concrete base course material will be well graded and conform to the following grading requirements:

Recycled Concrete Base Course Material Grading Requirements

CANADIAN METRIC SIEVE SIZE	PERCENT OF TOTAL DRY WEIGHT PASSING EACH SIEVE
20 000	100%
5 000	40% - 70%
2 500	25% - 60%
315	8% - 25%
80	6% - 17%

E15.4.5 Recycled concrete base course 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 C131, Test for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.

E15.4.6 The amount of deleterious material will be limited to a maximum of two percent of the total dry weight.

CONSTRUCTION METHODS

E15.5 Placement of Recycled Concrete Base Course Material

- E15.5.1 Place and compact recycled concrete base course material as a levelling course to a maximum thickness of 50 millimetres.
- E15.5.2 Spread materials uniformly to avoid segregation free of pockets of fine and coarse material.
- E15.5.3 Level and compact to the finished elevation. Compact to 100% Standard Proctor Density for Full-Depth Partial Slab Patches (Class A, B, C, & D) and 90% Standard Proctor Density for miscellaneous concrete slabs and sidewalks.
- E15.5.4 Maintain the finished material until the pavement or sidewalk is placed.

MEASUREMENT AND PAYMENT

E15.6 Recycled Concrete Base Course Material

- E15.6.1 The supplying, placing and compaction of recycled concrete base course material will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for the "Supplying and Placing Base Course Material" as specified in accordance with CW 3110.
- E15.6.2 No measurement or payment will be made for material placed as a levelling course under miscellaneous concrete slabs and sidewalks where the costs are included in accordance with CW 3235 and CW 3325.
- E15.6.3 No measurement or payment will be made for materials rejected by the Contract Administrator.

APPENDIX 'A'

GEOTECHNICAL REPORT

APPENDIX 'A' - GEOTECHNICAL REPORT

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The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in pavement structure and/or soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities. The nature and extent of variations may not become evident until construction commences.

Geotechnical Report for Vaughan Street



**VAUGHAN STREET
PORTAGE AVENUE TO YORK AVENUE
2007 CITY OF WINNIPEG
STREET RENEWALS**

Prepared for
KGS Group
3rd Floor, 865 Waverley Street
Winnipeg, Manitoba
R3T 5P4

Prepared by
The National Testing Laboratories Limited
199 Henlow Bay
Winnipeg, Manitoba
R3Y 1G4

December 18, 2006

Summary of Core Samples

**2007 City of Winnipeg
 Street Renewals
 Geotechnical Investigation
 Vaughan Street
 Portage Avenue to York Avenue**

Testhole ID	Testhole Location	Pavement Surface		Pavement Structure Material		Sample Description	Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits		
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
TH1	Centre lane, 20 m N of Vaughan St./York Ave. intersection, 5.7 m W of E curb	Concrete	215	Granular	-	N/A	-	-	-	-	-	-	-	-	-
TH2	East lane, 27 m S of Vaughan St./St. Mary Ave. intersection, 1.9 m W of E curb	Concrete	225	Granular	675	Clay	1.5	40.1	0.0	0.2	5.9	93.9	108	27	81
TH3	West lane, 32 m N of Vaughan St./St. Mary Ave. intersection, 1.7 m E of W curb	Concrete	200	Granular	700	Clayey Silt	1.2	19.1	0.0	5.5	60.6	33.9	31	16	15
TH4	Centre lane, 59.5 m S of Vaughan St./Graham Ave. intersection, 5.8 m W of E curb	Concrete	200	Granular	-	N/A	-	-	-	-	-	-	-	-	-
TH5	Centre lane, 29 m S of Vaughan St./Portage Ave. intersection, 5.0 m E of W curb	Concrete	215	Granular	15	N/A	-	-	-	-	-	-	-	-	-

Note:

1. Testholes TH1, TH4 and TH5 were not drilled through to the subgrade due to the presence of underground utility cable in all lanes of Vaughan Street at these locations. Only coring of the concrete was conducted at these locations.
2. Granular fill was encountered underlying the concrete in all testholes. The thickness of granular materials could not be determined in testholes TH1 and TH4.

Test Hole Log for TH2

TESTHOLE TH2



Project Name: 2007 City of Winnipeg Street Renewals
Client: KGS Group
Site: Vaughan Street between Portage Avenue and York Avenue
Testhole Location: East lane, 27 m S of Vaughan St./St. Mary Ave. intersection, 1.9 m W of E curb

Date Drilled: December 7, 2006
Depth of Testhole: 2.1 m
Logged by: Sarah Didychuk

Subsurface Profile			Laboratory Testing					
Depth (m)	Symbol	Description	Moisture Content (%)		Gravel (%)	Sand (%)	Silt (%)	Clay (%)
			PL	LL				
0.0		Ground Surface						
0.0 - 0.8		Concrete						
0.8 - 1.1		Granular Fill - maximum 50 mm size, sand and gravel, dark brown, loose, some clay						
1.1 - 2.1		Clay - dark brown, moist, firm, high plasticity - brown below 1.1 m - and silt below 2.0 m						
1.5					0.0	0.2	5.9	93.9
2.1		End of testhole at 2.1 m below grade. No water seepage or soil sloughing were observed during or after completion of drilling.						

Test Hole Log for TH3

TESTHOLE TH3



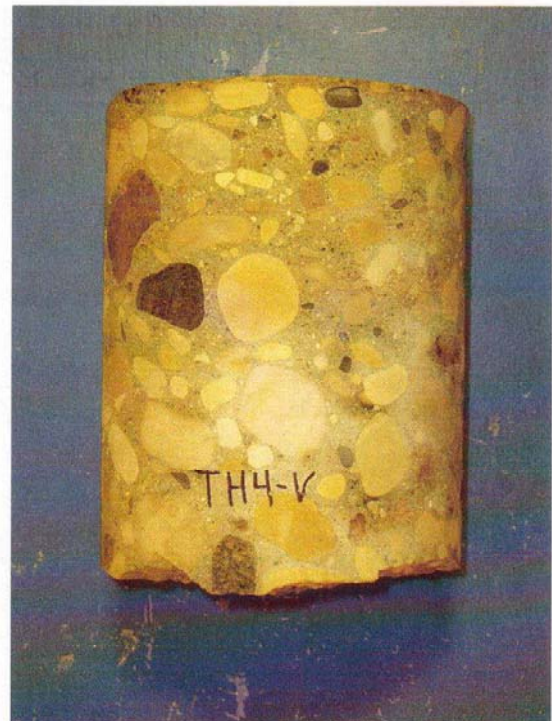
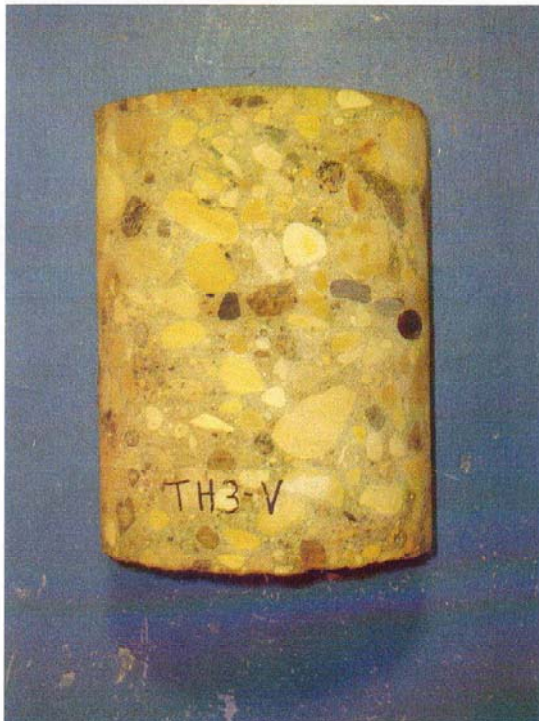
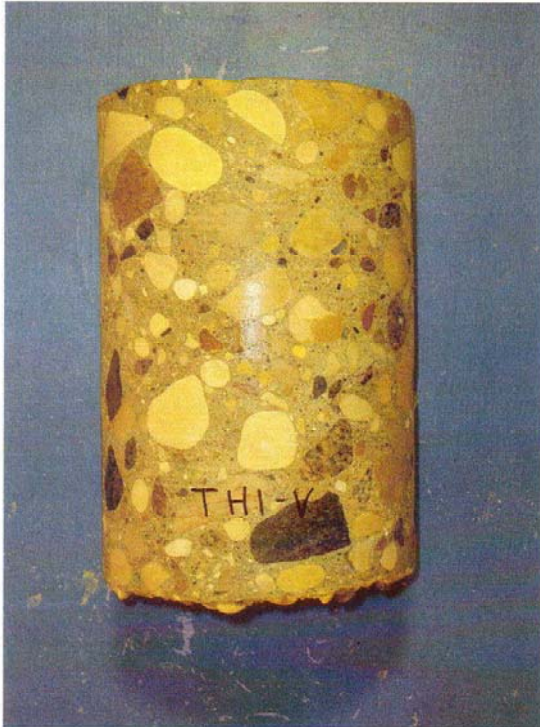
Project Name: 2007 City of Winnipeg Street Renewals
Client: KGS Group
Site: Vaughan Street between Portage Avenue and York Avenue
Testhole Location: West lane, 32 m N of Vaughan St./St. Mary Ave. intersection, 1.7 m E of W curb

Date Drilled: December 7, 2006
Depth of Testhole: 2.1 m
Logged by: Sarah Didychuk

Subsurface Profile			Laboratory Testing					
Depth (m)	Symbol	Description	Moisture Content (%)		Gravel (%)	Sand (%)	Silt (%)	Clay (%)
			PL	LL				
0.0		Ground Surface						
0.0 - 0.8		Concrete						
0.8 - 1.1		Granular Fill - maximum 50 mm size, sand and gravel, brown, loose						
1.1 - 2.0		Clayey Silt - tan, moist to wet, soft, low plasticity, trace fine grained sand, with clay			0.0	5.5	60.6	33.9
2.0 - 2.1		Clay - grey, moist, firm, high plasticity						
2.1 - 2.5		End of testhole at 2.1 m below grade. No water seepage or soil sloughing were observed during or after completion of drilling.						

Pavement Core Photos

**2007 City of Winnipeg Street Renewals
Vaughan Street
Portage Avenue to York Avenue**

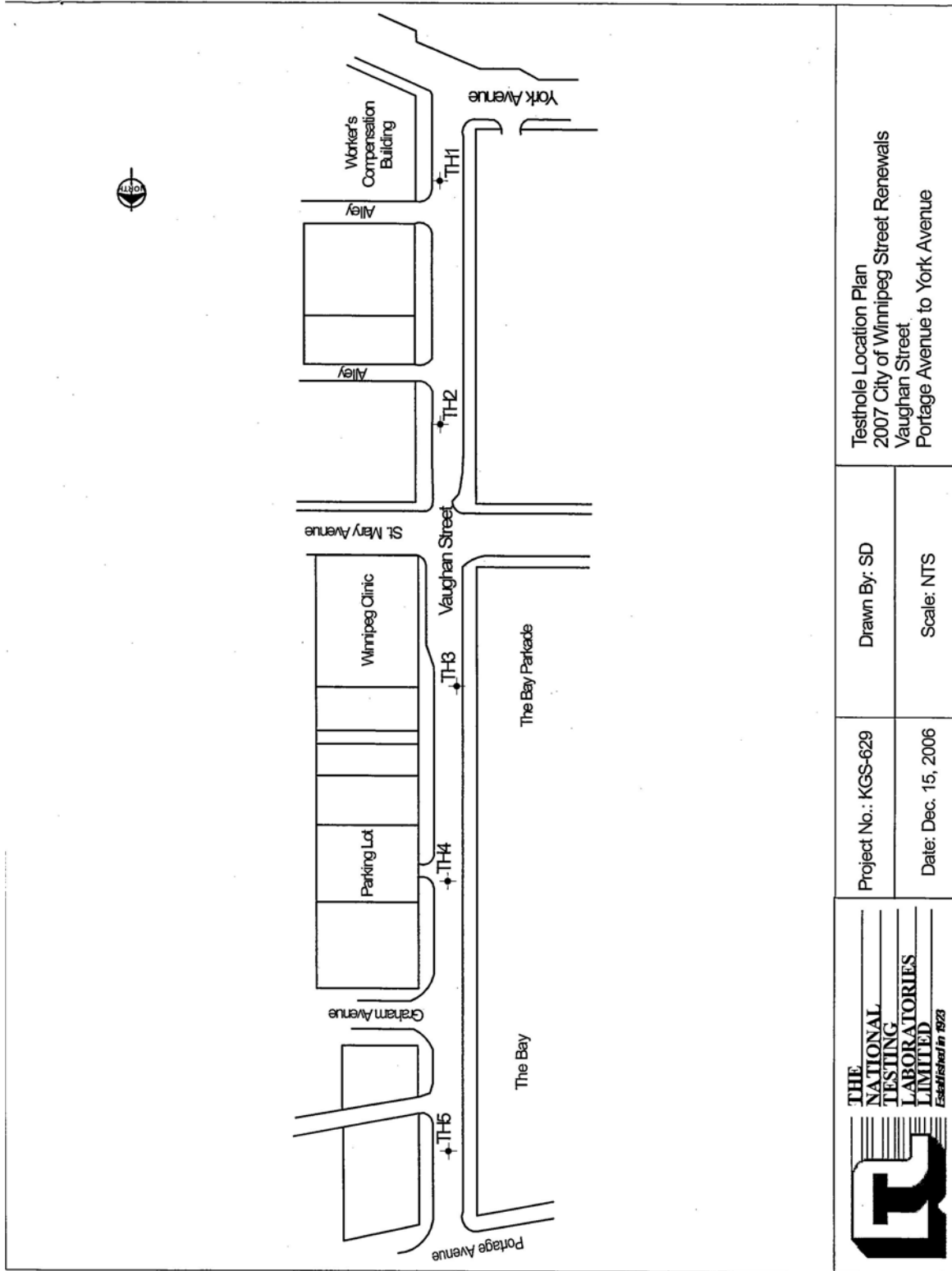



Pavement Core Photos

2007 City of Winnipeg Street Renewals
Vaughan Street
Portage Avenue to York Avenue



Test Hole Locations



		Project No.: KGS-629	Drawn By: SD	Testhole Location Plan 2007 City of Winnipeg Street Renewals Vaughan Street Portage Avenue to York Avenue
		Date: Dec. 15, 2006	Scale: NTS	