

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 426-2008

**THE CITY OF WINNIPEG TRANSIT DEPARTMENT – ON STREET TRANSIT
PRIORITY IMPROVEMENTS – PHASE 2**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 The City of Winnipeg Transit Department – On Street Transit Priority Improvements – Phase 2

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 25, 2008.

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 B14.4.3, 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 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.
- B8.4 Form B: Prices is organized into Parts: Part A through F of the Work. Bidders shall provide a total price for each Part and, on the summary sheet, a Total Bid Price consisting of the sum of prices for Part A through F.

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 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 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) On Street Transit Priority Improvements – Phase 2
 - (i) Part A: Regent/Nairn Corridor - Regent Ave @ Lagimodiere Blvd
 - (ii) Part B: Regent/Nairn Corridor - Regent Ave @ Plessis Rd
 - (iii) Part C: McPhillips Corridor – McPhillips St @ Logan Ave
 - (iv) Part D: McPhillips Corridor – McPhillips St @ Selkirk Ave
 - (v) Part E: Henderson Corridor – Henderson Hwy @ Cobourg Ave
 - (vi) Part F: All Corridors – Miscellaneous Restorations

D2.2 The major components of the Work for all Parts generally include the following:

- (a) All Parts - General
 - (i) Excavation of existing boulevard, traffic island, private approaches, etc.
 - (ii) Adjustment, relocation, replacement of drainage inlets, water valves and other pavement appurtenances
 - (iii) Full depth concrete lane construction (sometimes tinted concrete at grade, sometimes overlaid with asphalt)
 - (iv) Construction of concrete curbs, sidewalks, medians, and other miscellaneous concrete slabs
 - (v) Boulevard grading and sodding
 - (vi) Placement of asphalt mainline, tie-ins, and patching as necessary

D2.3 The specific components of the Work for each Part include the following:

- (a) Part A: Regent/Nairn Corridor - Regent Ave @ Lagimodiere Blvd
 - (i) General – Cutting back WB and EB traffic islands to create Transit queue jump lane
 - (ii) Tinted at grade concrete lane adjacent to island
- (b) Part B: Regent/Nairn Corridor - Regent Ave @ Plessis Rd
 - (i) General – Cutting back EB traffic island to create Transit queue jump lane
 - (ii) Tinted at grade concrete lane
- (c) Part C: McPhillips Corridor – McPhillips St @ Logan Ave
 - (i) General – Construct new SBR auxiliary deceleration lane beginning at Hillock. Construct new right turn cut off and island.
 - (ii) Bus stop upgrade items including new shelter base, signage bases, paving stone details, and power pedestal
- (d) Part D: McPhillips Corridor – McPhillips St @ Selkirk Ave
 - (i) General – Extend SBLT lane back 30 m to Pritchard. Pritchard median opening to be maintained.
- (e) Part E: Henderson Corridor – Henderson Hwy @ Cobourg Ave

- (i) General – Improve geometry on southwest corner by realigning existing curb and sidewalk.
- (f) Part F: All Corridors – Miscellaneous Restorations
 - (i) General – Concrete restorations after Traffic Signals Branch work in various locations on the corridors other than those shown on Drawings. Work likely limited to intersection of Nairn/Watt
 - (ii) General – Concrete repairs in vicinity of work areas listed in other Parts such as full depth partial slab patches.
 - (iii) General – Reflective crack sealing during warranty period for work listed in other parts, and for Phase 1 work completed in 2007 at intersections of: Pembina Hwy @ University Cres; Pembina Hwy @ Jubilee Ave; Osborne St @ Corydon Ave; St. Mary's Rd @ Bishop Grandin Blvd; St. Mary's Rd @ Dunkirk Blvd; St. Anne's Rd @ Bishop Grandin Blvd; St. Anne's Rd @ Fermor Ave; and St. Anne's Rd @ Kingswood Ave.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Dillon Consulting Limited , represented by:

David Wiebe, P.Eng.
Project Manager
Suite 200- 895 Waverley Street
Winnipeg, Manitoba R3T 5P4
Telephone No. (204) 453-2301
Facsimile No. (204) 452-4412

D3.2 At the pre-construction meeting, David Wiebe, 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 three (3) 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;
 - (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.
- 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 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) Part A: Regent/Nairn Corridor - Regent Ave @ Lagimodiere Blvd
 - (i) Traffic signal poles, vehicle detector loop and pit relocations by Traffic Signals Branch.
 - (b) Part B: Regent/Nairn Corridor - Regent Ave @ Plessis Rd

- (i) Traffic signal poles, vehicle detector loop and pit relocations by Traffic Signals Branch.
- (c) Part C: McPhillips Corridor - McPhillips St @ Logan Ave
 - (i) Removal of existing bus shelter by Transit Department.
 - (ii) Traffic signal poles, vehicle detector loop and pit relocations by Traffic Signals Branch.
 - (iii) Light standards relocated to property line by Manitoba Hydro.
 - (iv) Power conduit to new power pedestal and shelter base in island by Manitoba Hydro or outside electrical contractor
 - (v) MTS pedestal relocated to property line by MTS crew.
- (d) Part D: McPhillips Corridor - McPhillips St @ Selkirk Ave
 - (i) Traffic signal poles, vehicle detector loop and pit relocations by Traffic Signals Branch.
- (e) Part E: Henderson Corridor - Henderson Hwy @ Cobourg Ave
 - (i) No major work by others expected.
- (f) Part F: All Corridors - Miscellaneous Restorations
 - (i) Traffic signal pole, controller, detector loop, and underground conduit installation by Traffic Signals Branch. Restorations by Contractor to be performed after this work complete.

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 at each Site 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 four (4) Sites under construction at any one time. Completion of a Site means that all of the necessary concrete and asphalt works are completed to the satisfaction of the Contract Administrator. Landscaping and boulevard restoration works can overlap with additional Sites if the Contractor can show that progress is being made.
 - (a) Part F is excluded from the sequence of work as it is partially dependant upon Traffic Signals Branch work schedule.
- 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 Sites under construction at any time.
- D17.1.3 The order of construction, based on necessary utility work and completion requirements shall be as follows:
 - (ii) Part C: McPhillips Corridor - McPhillips St @ Logan Ave
 - (iii) Part D: McPhillips Corridor - McPhillips St @ Selkirk Ave
 - (iv) Part A: Regent/Nairn Corridor - Regent Ave @ Lagimodiere Blvd
 - (v) Part B: Regent/Nairn Corridor - Regent Ave @ Plessis Rd
 - (vi) Part E: Henderson Corridor - Henderson Hwy @ Cobourg Ave
 - (vii) Part F: All Corridors - Miscellaneous Restorations

D18. SUBSTANTIAL PERFORMANCE

- D18.1 The Contractor shall achieve Substantial Performance within twenty two (22) 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 twenty five (25) 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, eight hundred dollars (\$1,800) 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 AND MISCELLANEOUS RESTORATIONS

- D21.1 The Contractor shall perform the following scheduled maintenance and concrete restorations in the manner and within the time periods required by the Specifications:
- (a) Reflective Crack Maintenance (during one year warranty period) as specified in CW 3250;
 - (b) Sodding (Maintenance Period) as specified in CW 3510;
 - (c) Part F: Concrete restorations after Traffic Signals Branch installations within two weeks at each Site.
- D21.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance and Part F work identified herein. All scheduled maintenance and Part F work shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance or Part F work 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 or Part F work.

CONTROL OF WORK

D22. JOB MEETINGS

- D22.1 Regular weekly job meetings will be held at one of the Sites. 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 one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D24.2 Notwithstanding C13.2 or D24.1, 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

D24.2.1 In such case the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

FORM H1: PERFORMANCE BOND
(See 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. 426-2008

The City of Winnipeg Transit Department – On Street Transit Priority Improvements – Phase 2 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. 426-2008

The City of Winnipeg Transit Department – On Street Transit Priority Improvements – Phase 2

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 L: DETAILED WORK SCHEDULE
 (See D12)

The City of Winnipeg Transit Department – On Street Transit Priority Improvements – Phase 2

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					
	0	5	10	15	20	25
Part A: Regent/Nairn Corridor - Regent Ave @ Lagimodiere Blvd						
Part B: Regent/Nairn Corridor - Regent Ave @ Plessis Rd						
Part C: McPhillips Corridor - McPhillips St @ Logan Ave						
Part D: McPhillips Corridor - McPhillips St @ Selkirk Ave						
Part E: Henderson Corridor - Henderson Hwy @ Cobourg Ave						
Part F: All Corridors - Miscellaneous Restorations	(Restorations within two weeks of Traffic Signals Branch work at each site)					

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 are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
	Cover Sheet	A1
1	Regent Corridor – Regent Ave @ Lagimodiere Blvd	A1
2	Regent Corridor – Regent Ave @ Plessis Rd	A1
3	McPhillips Corridor – McPhillips St @ Logan Ave	A1
4	McPhillips Corridor – McPhillips St @ Selkirk Ave	A1
5	Sections and Details	A1
6	Bus Stop Upgrade Details	A1

E2. PROTECTION OF EXISTING TREES

- E2.1 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 m of trees.
 - Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400 mm 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.
 - 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.
 - 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.

E2.2 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.

E2.3 No separate measurement or payment will be made for the protection of trees.

E2.4 Except as required in clause E2.1(c) and E2.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

E3. TRAFFIC CONTROL

E3.1 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.

E4. TRAFFIC MANAGEMENT

E4.1 Further to clause 3.7 of CW 1130-R1:

- E4.1.1 The Contractor may close the lane adjacent to the lane under construction to facilitate equipment staging and loading except as follows:
- (a) Part A: The adjacent eastbound lane shall not be closed between 1530 – 1730 hours. The adjacent westbound lane shall not be closed between 0700 – 0900 and 1530 – 1730 hours. The right turn movement at the islands shall be maintained at all times, except for short durations as approved by the Contract Administrator.
 - (b) Part B: The adjacent eastbound lane shall not be closed between 1530 – 1730 hours. The right turn movement at the islands shall be maintained at all times, except for short durations as approved by the Contract Administrator.
 - (c) Part C: The adjacent southbound lane shall not be closed between 0700 – 0900 hours. No restriction on adjacent westbound lane except that southbound right turn movement to westbound Logan must be accommodated for passenger vehicles at the intersection (not in right turn yield) but will be prohibited for larger vehicles.
 - (d) Part D: The adjacent southbound lane shall not be closed between 0700 – 0900 and 1530 – 1730 hours. The adjacent northbound lane shall not be closed between 1530 - 1730 hours.
 - (e) Part E: The adjacent southbound lane shall not be closed between 0700 – 0900 hours.
 - (f) Part F: No restriction on adjacent lane closure, unless otherwise instructed by the Contract Administrator.
- E4.1.2 Part C: Traffic Services Branch will provide and erect signage indicating there is no right turn from southbound McPhillips to westbound Logan except for passenger vehicles.
- E4.1.3 Part C: Contractor to stage construction to provide southbound McPhillips to westbound Logan right turn for passenger vehicles at intersection except when construction activities such as loading/unloading, placing concrete pavement, or placing asphalt overlay do not permit movement.
- E4.1.4 Part C: Hillock will be closed to through traffic. The Contractor to stage reconstruction of intersection of McPhillips and Hillock a lane at a time. The Contractor shall sign the street

“Road Closed – Local Access Only“ in accordance with the Manual of Temporary Traffic Control

- E4.1.5 Where left turn lanes exist, an additional lane to accommodate the left turn storage lane shall be maintained at all times.
- E4.1.6 When no work is being performed on a particular Part of the project, and providing it is safe for vehicles, adjacent lane closures will not be permitted, unless written consent is given by the Contract Administrator. It is expected that most Parts of the work should have the adjacent lane open when no work is being performed.
- E4.1.7 Intersecting street and private approach access shall be maintained at all times.
- E4.1.8 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.
- E4.1.9 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E5. PEDESTRIAN SAFETY

- E5.1 During the project, a temporary snow fence shall be installed if necessary in locations where open excavations are adjacent to pedestrian facilities. 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. WATER USED BY CONTRACTOR

- E6.1 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.

E7. SURFACE RESTORATIONS

- E7.1 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.

E8. OPERATING CONSTRAINTS AND CONSTRUCTION REQUIREMENTS FOR WORK OVER AND ADJACENT TO MTS DUCT LINE

- E8.1 Description
 - (a) This Section details operating constraints and construction requirements for all work to be carried out above or beside MTS duct-lines crossing through the construction sites. Contractor to verify locations of duct lines onsite. Known duct lines are at Part A, running along the north side of Regent at Lagimodiere Boulevard and Part C along the west side of McPhillips Street at Logan Avenue. Approximately 80 m of duct will be exposed on McPhillips, and approximately 10 m of duct will be exposed on Regent.
 - (b) Referenced Standard Construction Specifications
 - (i) CW-3110 – Sub-Grade, Sub-Base and Base-Course Construction
- E8.2 General Considerations for Work in Close Proximity to the MTS Duct-lines
 - E8.2.1 These duct lines are an important part of the MTS communication system and work in proximity to it shall be undertaken with caution. Both ducts have been hydro-excavated by

the Contract Administrator during design of the Work along the proposed construction area in order to determine their elevation and alignment. Both ducts are deep enough below the new road surface that construction is possible, however special constraints and requirements are necessary to prevent damage to the ducts during construction by heavy equipment and following construction by daily traffic loads.

Work around the MTS ducts shall be planned and implemented to minimize the time period that work is carried out in close proximity to it and to ensure that the ducts are not subjected to excessive construction related loads, including excessive vibrations and/or concentrated or asymmetrical lateral loads during backfill placement.

E8.3 Protection of the MTS Duct Line During Construction

- (a) The contractor must contact MTS prior to excavation so that they can send a representative to the Site to ensure that the duct is not damaged and to verify its condition upon excavation.
- (b) As shown on the drawings cement stabilized fill must be installed around the duct to a minimum width of 150 mm on either side, and up to the bottom of the base course from the top of the duct. Fibre Joint Filler must be installed between the duct and stabilized fill to create separation.
- (c) Cement stabilized fill to be 5 - 10 MPa, 4-7% air entrainment, 20 mm nominal aggregate size
- (d) No vibration of sub base or base course over MTS ducts or within 0.5 m laterally of the duct.
- (e) Use a plate packer (or smooth roller) to compact the sub-grade around the ducts.

E8.3.1 The Contractor shall ensure that all work crew members understand and observe the requirements of this specification. Prior to commencement of on-site work, the Contractor shall jointly conduct an orientation meeting with the Contractor Administrator with all superintendents, foremen and heavy equipment operators to make all workers on Site fully cognizant of the constraints and requirements associated with working near an MTS duct line.

E8.3.2 Employees of the Contractor or any Subcontractor that fail to comply with the conditions for working in close proximity to the duct line shall be promptly removed from the Site.

E8.4 Measurement and Payment

E8.4.1 Construction Adjacent to MTS Duct Line

- (a) No separate measurement or payment will be made for the materials or construction methods listed herein.

E9. CONSTRUCTION OF TINTED CONCRETE

E9.1 Description

E9.1.1 General

- (a) This specification covers the construction of "red" tinted concrete pavement, intended to delineate Transit only lanes at various locations in this project. The tinted concrete is finished at grade and is the width of the travel lane. Care must be taken with consistency in water/cement ratio and finishing as the color can be affected load to load.
- (b) Referenced Standard Construction Specifications
 - (i) CW 3310 – Portland Cement Concrete Pavement Works

E9.2 Materials and Equipment

E9.2.1 Concrete Materials

- (a) The Contractor shall base the tinted concrete mix on a mix design that has been approved for the 2008 construction season by the City of Winnipeg Research and Standards Engineer.
- (b) The base mix design shall conform to Section 6 of CW 3310 with the following alterations:
 - (i) Type 1 mix as per Section 6.2 of CW 3310.
 - (ii) Slump for hand placement shall be 80 mm +/- 20 mm prior to adding superplasticizers (if needed) to facilitate finishing without adding water to the surface.
- (c) Alterations to the base mix design will be considered by the Contract Administrator if necessary to account for the concrete tint material and finishing operations.

E9.2.2 Concrete Tint

- (a) "Red" coloured metal oxide pigment used to permanently color ready-mix concrete.
- (b) Approved product list:
 - (i) Lafarge Red (Premium) supplied through L.M. Scofield Company
 - (ii) SG160-2 Sunrise Red supplied through L.M. Scofield Company
- (c) Contractor to cast one colored concrete sample minimum 200 mm * 200 mm in area using base concrete mix for approval by Contract Administrator. Sample to be cured a minimum of 7 days before presentation to Contract Administrator.
- (d) Tinted concrete shall not be placed until sample color has been accepted by the Contract Administrator. The Contractor shall demonstrate that the sample will achieve the approximate color advertised by the pigment supplier using local concrete mix materials.

E9.2.3 Superplasticizers

- (a) Superplasticizers shall conform to the requirements of CSA CAN3-A266.5 and CAN3-A266.6, but must be compatible with the air-entraining agent. The agent shall be free of chlorides and shall not affect the air-entraining agent's ability to produce a satisfactory air-void system.

E9.2.4 Liquid Membrane-Forming Curing Compound

- (a) Curing compound shall be clear (no pigment), and water based conforming to the requirements of ASTM C309.

E9.2.5 Other Materials

- (a) All other materials as per CW 3310.

E9.2.6 Floating and Finishing Equipment

- (a) Use only wood or magnesium floats. Bull floats used for initial finishing shall be constructed of wood only.

E9.2.7 Other Equipment

- (a) All other equipment as per CW 3310.

E9.3 Construction Methods

E9.3.1 General

- (a) Concrete formwork, steel reinforcement, placement, curing, and joint sealing as per CW 3310 except as modified in the following clauses.
- (b) As shown on the drawings, construct formed 50 mm headers to define the lane edge and transverse termination of at-grade coloured concrete where the adjacent pavement is asphalt overlaid.
- (c) Clean finishing tools and equipment and let dry prior to finishing. Wet tools will fade the coloring. Wetting of tools during finishing operation is not permitted.

- (d) Place concrete at a consistent slump. No water shall be added on Site. Superplasticizer may be added at a rate suggested by the concrete supplier if additional workability is needed.
- (e) No localized water spray or fogging is permitted to assist in finishing as this will locally fade the color.
- (f) Clear curing compound only shall be used. The use of water curing or plastic film is not allowed. Plastic film for insulation in cold weather must be approved by the Contract Administrator.

E9.4 Measurement and Payment

E9.4.1 Construction of Tinted Concrete

- (a) Construction of Tinted Concrete will be measured on an area basis and paid for at the Contract Unit Price per square metre for the "Items of Work" listed below. The area to be paid for will be the total number of square metres of tinted concrete supplied and placed at grade, or below an asphalt overlay in accordance with this specification and accepted by the Contract Administrator.

E9.4.2 Items of Work:

- (i) Concrete Pavements, Median Slabs, Bull-noses, and Safety Medians;
- (ii) Construction of 230 mm Concrete Pavement (Plain-Dowelled, Tinted);
- (iii) Construction of 200 mm Concrete Pavement (Plain-Dowelled, Tinted).

E10. ASPHALT TIE-INS AND PATCHING ADJACENT TO AT GRADE TINTED CONCRETE

E10.1 Description

E10.1.1 General

- (a) This specification alters the scope of tie-ins and approaches to include asphalt patching next to at-grade tinted concrete. This patching is required to restore the riding surface adjacent to headers constructed as shown in the drawings.
- (b) Referenced Standard Construction Specifications
 - (i) CW 3410 – Asphaltic Concrete Pavement Works

E10.2 Materials and Equipment

E10.2.1 Asphalt Materials

- (a) Type 1A as per Section 5 and 6 of CW 3410.

E10.2.2 Equipment

- (a) Equipment as per Section 8 of CW 3410.

E10.3 Construction Methods

E10.3.1 General

- (a) Placement of asphalt tie-ins as per Section 9 of CW 3410.
- (b) Place asphalt overlay patches adjacent to at grade colored concrete using construction methods in Section 9 of CW 3410 in locations generally shown on the construction drawings.
- (c) Asphalt overlay patches shall be placed by hand methods and compacted with mechanical rollers.

E10.4 Measurement and Payment

E10.4.1 Asphalt Tie-Ins and Patching Adjacent to At Grade Tinted Concrete

- (a) Asphalt Tie-Ins and Patching Adjacent to At Grade Tinted Concrete will be measured on a weight basis and paid for at the Contract Unit Price per tonne for "Tie-Ins and Patches". The weight to be paid for will be the total number of tonnes of asphalt placed and compacted in accordance with this specification and accepted by the Contract Administrator, as measured on a certified weigh scale.

E11. CONCRETE AND PAVING STONE WORK FOR BUS STOP UPGRADE

E11.1 Description

E11.1.1 General

- (a) This specification covers the furnishing of all labour, equipment and materials required to complete the supply and installation of concrete slabs, footings and paving stone insert in concrete sidewalk to upgrade the Transit bus stop on the pedestrian island at the southwest corner of McPhillips Street at Logan Avenue.
- (b) Referenced Standard Construction Specifications
 - (i) CW 3310 – Portland Cement Concrete Pavement Works
 - (ii) CW 3335 – Installation of Interlocking Paving Stones on a Lean Concrete Base

E11.1.2 The details of construction are shown on the drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Excavation for piles and shelter base.
- (b) Granular Fill work as required.
- (c) Supply, erection and removal of all formwork as required.
- (d) Design of concrete mixes.
- (e) Supply, placing and curing of concrete of base for bus stop totem as shown on the Drawings.
- (f) Supply, placing and curing of concrete of base for bus stop flag as shown on the Drawings.
- (g) Supply, placing and curing of concrete of base for heated shelter as shown on the Drawings.
- (h) Supply, placing and curing of concrete base for power pedestal.
- (i) Co-ordination of the installation of all electrical and other items to be installed in the concrete works by an electrical contractor and Manitoba Hydro as facilitated through the Contract Administrator.
- (j) Co-ordination with the signage, shelter, and power pedestal suppliers as required and as facilitated through the Contract Administrator.
- (k) Detailing, supply and placing of reinforcing steel.
- (l) Supply and placing of concrete and paving stones for unit paver insert areas.
- (m) Installation of miscellaneous metal anchors, bolts, inserts and bases on concrete bases as supplied by the Contract Administrator.
- (n) Clean-up.

E11.2 Materials and Equipment

E11.2.1 Concrete for power pedestal, shelter, totem, and flag bases as follows:

- (a) Cement: Type 50 (HS)
- (b) Max. Coarse Aggregate: 20 mm
- (c) Min Compressive Strength at 28 days +25Mpa
- (d) Class of Exposure: S-2

- (e) Slump: 90mm ± 20 mm
- (f) Air Content: 5 to 8%
- (g) Flyash content: Max. 15% of Cementitious Material

E11.2.2 Unit Pavers (Interlocking Paving Stones) for Insert in Concrete Sidewalk

- (a) Blue Holland Stone Pavers 105*210*60 mm
- (b) Natural Holland Stone Pavers 210*210*60 mm

E11.2.3 Other Materials

- (a) Other materials as per Drawings listed in E1 and Drawing in Appendix A.
- (b) Other concrete and granular materials as per CW 3310 and CW 3335.

E11.2.4 Metal Anchor Bolts and Bases

- (a) Metal anchor bolts and metal bases for concrete bases are supplied to the contractor by sign manufacturer through the Contract Administrator. Bolts are to be installed using template provided.

E11.2.5 Electrical Conduit and Wiring

- (a) Conduit and wiring for the power pedestal and shelter base are supplied to the contractor by an outside electrical contractor through the Contract Administrator. Bolts are to be installed using template provided.

E11.3 Construction Methods

E11.3.1 Excavation for Piling

- (a) Excavate to line and grade as shown on the drawings and Appendix A.
- (b) Excavation for the pile shall be done by auguring to the sizes shown on the Drawings. Water jetting methods of excavation will not be permitted. The bearing surface shall be inspected and any loose material shall be cleaned out prior to casting concrete.
- (c) If, in the opinion of the Contract Administrator, casing is required to prevent the sides of the augured hole from sloughing in the casing shall be supplied and installed, at no cost to the City.
- (d) Sleeving will not be allowed for piles less than 600 mm diameter. The diameter of casing supplied shall be equal to the specified diameter of the foundation being constructed. If required, overboring shall be carried out to allow the installation of the casing, if so approved by the contract Administrator. No additional payment will be made for overboring. The casing shall be designed to withstand installation, withdrawal and earth pressure forces. The casing shall be withdrawn as the concrete is poured ensuring that the casing is at least 1 metre below the top of the freshly placed concrete until all concrete in the foundation is placed.
- (e) The pile excavation shall be kept dry at all times. The Contractor shall have on hand sufficient pumps to satisfy this requirement.
- (f) Rocks or boulders hindering the continuation of drilling shall be removed in whole or part, using approved methods.
- (g) If the excavation for the pile varies from the location shown on the drawing by more than 75 mm (3"), the excavation shall be enlarged so that the centreline of the reinforcing cage is within 75 mm (3") of its specified location and 75 mm (3") of concrete cover to the reinforcing steel is maintained.

E11.3.2 Pile Concrete Work

- (a) Construct pile as shown on the drawings and Appendix A.
- (b) The pile concrete shall be cast no later than 24 hours after the excavation has been completed.

- (c) The reinforcing cage shall be placed in the pile excavation prior to starting the concreting. Spacers shall be provided to keep the reinforcing cage in its correct location.
- (d) Reinforcement shall be clean, and free from all coatings, including ice, loose rust, dried concrete, which tend to reduce bond.
- (e) Reinforcement shall be formed accurately and secured in pile shaft and to required ties and spacers with annealed wire ties or suitable clips so that position and concrete cover, as called for on drawings is assured.
- (f) Reinforcing bars kinked, twisted, bent past a right angle, or reduced in cross section, will be rejected.
- (g) Electrical/hydro conduit in power pedestal supplied and roughly placed by others to be placed in final location by Contractor prior to concrete placement.
- (h) Do not place concrete until piles have been inspected.
- (i) Concrete placing shall be continuous from bottom to top of pile, and puddling or rodding or mechanical vibration carried on constantly to bring air bubbles to the surface and produce a uniform, homogeneous structure.
- (j) Finish exposed pile tops smooth and level at elevations shown on Drawings. Form top of pile or shaft as required.
- (k) Concrete shall be kept moist for at least the first 7 days after placing and the temperature of the concrete maintained above 10°C during this time.

E11.3.3 Shelter Base Concrete Work

- (a) Placing of concrete shall be in accordance with CW 3310 and as shown on drawings.
- (b) No concrete shall be placed until formwork, insulation, reinforcing steel, sleeves, hangers, anchors, inserts, electrical conduits, etc., required to be built into the concrete have been inspected by the Contract Administrator.
- (c) Electrical/hydro conduit in shelter base supplied and roughly placed by others to be placed in final location by Contractor prior to concrete placement.
- (d) Concrete shall be carefully worked around reinforcement and embedded fixtures, along surfaces and into corners of forms. Vibrators shall be used, and operated under experienced supervision; forms must be constructed to withstand their action.
- (e) The Contractor is advised that no joints will be allowed in the slab except as directed on Site in conjunction with the Contract Administrator.

E11.3.4 Unit Pavers (Interlocking Paving Stones)

- (a) Construct concrete sidewalk and unit pavers as per drawings and CW 3335.
- (b) Construct concrete sidewalk monolithically with adjacent concrete sidewalk.

E11.3.5 Metal Anchor Bolts and Bases

- (a) Contractor to install metal anchor bolts into concrete bases. Bolts are to be installed using template provided. Ensure bolts are installed as per sign manufacturer's requirements.
- (b) Contractor to install metal bases as supplied by the sign manufacturer following curing of concrete bases. Metal bases are to be installed plumb and level, Contractor is to use stainless steel washers to level bases as required.

E11.4 Measurement and Payment

E11.4.1 Concrete and Paving Stone Work for Bus Stop Upgrade

- (a) The various work items for the bus stop upgrade will be measured on a per item basis and paid for at the Contract Unit Price per item for the "Items of Work" listed below. The amount to be paid for will be the total number of each item supplied and

constructed in accordance with this specification and accepted by the Contract Administrator.

E11.4.2 Items of Work:

Concrete and Paving Stone Work for Bus Stop Upgrade

- (i) Supply and installation of concrete base for bus stop totem;
- (ii) Supply and installation of concrete base for bus stop flag;
- (iii) Supply and installation of concrete base for power pedestal;
- (iv) Supply and installation of concrete base for heated shelter;
- (v) Supply and installation of paving stone insert in concrete sidewalk.

E12. REMOVAL OF WOODEN FENCE

E12.1 Description

E12.1.1 General

- (a) This specification covers the removal of an existing wooden fence at the Part C: McPhillips Corridor – McPhillips St @ Logan Ave site. The fence is on City of Winnipeg property adjacent to the new sidewalk and must be removed to accommodate the sidewalk and new street lights.
- (b) Referenced Standard Construction Specifications
 - (i) Not applicable.

E12.2 Materials and Equipment

E12.2.1 General

- (a) Not applicable.

E12.3 Construction Methods

E12.3.1 General

- (a) Remove existing fence, including cross-members and posts using suitable methods to limits as directed by Contract Administrator. Avoid damage to adjacent curb or other items on private property.
- (b) Dispose of fence materials offsite.
- (c) Regrade boulevard around removed fence posts as necessary.

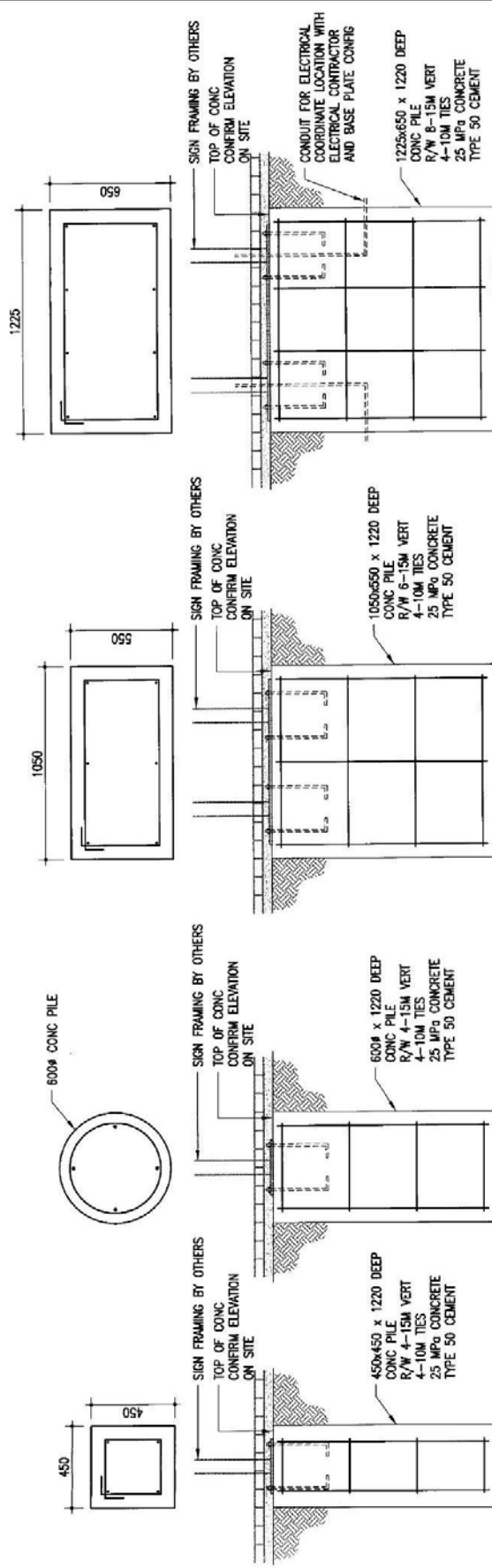
E12.4 Measurement and Payment

E12.4.1 Removal of Wooden Fence

- (a) Removal of Wooden Fence will be measured on an area basis and paid for at the Contract Unit Price per lineal metre for "Removal of Wooden Fence". The length to be paid for will be the total number of metres of fence removed and disposed of in accordance with this specification and accepted by the Contract Administrator.

APPENDIX “A”

BUS STOP UPGRADE FOUNDATION DETAILS



OPTION A
1:20

OPTION B
1:20

TRANSIT KIOSK FOUNDATION
1:20

BUS STOP TOTEM FOUNDATION
1:20

- ALL REINFORCING STEEL TO BE CSA G30.18 400 MPa NEW DEFORMED BARS
- CONCRETE COVER TO VERTICAL BARS SHALL BE 75.
- ANCHOR BOLTS TO BE PROVIDED BY OTHERS AND SET BY CONTRACTOR.

- ALL REINFORCING STEEL TO BE CSA G30.18 400 MPa NEW DEFORMED BARS
- CONCRETE COVER TO VERTICAL BARS SHALL BE 75.
- ANCHOR BOLTS TO BE PROVIDED BY OTHERS AND SET BY CONTRACTOR.

- ALL REINFORCING STEEL TO BE CSA G30.18 400 MPa NEW DEFORMED BARS
- CONCRETE COVER TO VERTICAL BARS SHALL BE 75.
- ANCHOR BOLTS TO BE PROVIDED BY OTHERS AND SET BY CONTRACTOR.



Certificate of Authorization
 Crosier Kilgour & Partners Ltd.
 No. 235 Date: MAY 15 2007



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Project	WINNIPEG TRANSIT SIGNS	MANITOBA
Sheet Title	FOUNDATIONS	Sheet No.
Design	JMN	Drawn By
	JMN	Date
		File
		2007-0251