

## THE CITY OF WINNIPEG

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 444-2013** 

2013 GRANULAR LANE IMPROVEMENT PROGRAM - CONTRACT 2

## **TABLE OF CONTENTS**

PART A - BID SUBMISSION	
Form A: Bid Form B: Prices Form G1: Bid Bond and Agreement to Bond Form G2: Irrevocable Standby Letter of Credit and Undertaking	18 20
PART B - BIDDING PROCEDURES	
B1. Contract Title B2. Submission Deadline B3. Enquiries B4. Addenda B5. Substitutes B6. Bid Components B7. Bid B8. Prices B9. Qualification B10. Bid Security B11. Opening of Bids and Release of Information B12. Irrevocable Bid B13. Withdrawal of Bids B14. Evaluation of Bids B15. Award of Contract	
PART C - GENERAL CONDITIONS	
C0. General Conditions	1
PART D - SUPPLEMENTAL CONDITIONS	
General D1. General Conditions D2. Scope of Work D3. Contract Administrator D4. Contractor's Supervisor D5. Notices D6. Furnishing of Documents  Submissions D7. Authority to Carry on Business D8. Safe Work Plan D9. Insurance D10. Performance Security	
D11. Subcontractor List D12. Detailed Work Schedule	2
Schedule of Work	
D13. Commencement D14. Working Days D15. Restricted Work Hours D16. Sequence of Work D17. Substantial Performance D18. Total Performance D19. Liquidated Damages	£ 5 6 6
Control of Work D20. Job Meetings D21. Prime Contractor – The Workplace Safety and Health Act (Manitoba)  Measurement and Payment	6

D22. Payment	7
<b>Warranty</b> D23. Warranty	7
Form H1: Performance Bond Form H2: Irrevocable Standby Letter of Credit Form J: Subcontractor List Form L: Detailed Work Schedule	8 10 12 13
PART E - SPECIFICATIONS	
General E1. Applicable Specifications and Drawings E2. Protection Of Existing Trees E3. Traffic Control E4. Traffic Management E5. Refuse and Recycling Collection E6. Pedestrian Safety E7. Water Obtained From the City E8. Surface Restorations E9. Vibratory Compaction around Private Swimn E10. Tree Trimming	1 1 2 2 2 2 4 4 4 4 4 9 10 10 10 10 10 10 10 10 10 10 10 10 10
E10. Tree mining E11. Catch Basin Apron E12. Envirogrid	4 4 5
E13. Infrastructure Signs E14. Excavation Equipment	6 6
E15. Site Layout E16. Crushed Sub-base Material	6 7

#### **PART B - BIDDING PROCEDURES**

#### **B1.** CONTRACT TITLE

B1.1 2013 GRANULAR LANE IMPROVEMENT PROGRAM – CONTRACT 2

#### **B2. SUBMISSION DEADLINE**

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, May 29, 2013.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

#### **B3. ENQUIRIES**

- B3.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B3.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B3.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B3.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

## B4. ADDENDA

- B4.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B4.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <a href="http://www.winnipeg.ca/matmgt/bidopp.asp">http://www.winnipeg.ca/matmgt/bidopp.asp</a>
- B4.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- 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/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- 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/she 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/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.
- B5.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B5.10 Notwithstanding B5.2 to B5.9, in accordance with B6.6, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

#### **B6.** BID COMPONENTS

- B6.1 The Bid shall consist of the following components:
  - (a) Form A: Bid;
  - (b) Form B: Prices, hard copy;

- (c) Bid Security
  - Form G1: Bid Bond and Agreement to Bond, or Form G2: Irrevocable Standby Letter of Credit and Undertaking, or a certified cheque or draft;
- B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.
- B6.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B6.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B6.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B6.4.2 A hard copy of Form B: Prices must be submitted with the Bid. If there is any discrepancy between the Adobe PDF version of Form B: Prices and the Microsoft Excel version of Form B: Prices, the PDF version shall take precedence.
- B6.5 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B14.1(a).
- B6.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B6.8 Bids shall be submitted to:

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

#### B7. BID

- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
  - (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- 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/her own name, it shall be signed by the Bidder;
  - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
  - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, shall be affixed;
  - (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B7.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B7.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

#### B8. PRICES

- B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B8.1.1 For the convenience of Bidders, and pursuant to B6.4.2 and B14.4.3, an electronic spreadsheet Form B: Prices in Microsoft Excel (.xls) format is available along with the Adobe PDF documents for this Bid Opportunity on the Bid Opportunities page at the Materials Management Division website at <a href="http://www.winnipeg.ca/matmgt/">http://www.winnipeg.ca/matmgt/</a>
- 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 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B8.5 Form B: Prices is organized into Parts: Each lane is a separate part, labelled by their corresponding locations. In addition, there is a provisional items part. 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 lanes and provisional items.

#### **B9. QUALIFICATION**

- B9.1 The Bidder shall:
  - (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
  - (b) be financially capable of carrying out the terms of the Contract; and
  - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B9.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
  - (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information

Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmqt/debar.stm

- B9.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
  - (a) have successfully carried out work similar in nature, scope and value to the Work; and
  - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
  - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- B9.4 Further to B9.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
  - (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
  - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <a href="http://www.winnipeg.ca/matmgt/">http://www.winnipeg.ca/matmgt/</a>
- B9.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B9.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

#### **B10.** BID SECURITY

- B10.1 The Bidder shall provide bid security in the form of:
  - (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
  - (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
  - (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.
- B10.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.
- B10.1.2 All signatures on bid securities shall be original.
- B10.1.3 The Bidder shall sign the Bid Bond.
- B10.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.

- B10.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B10.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B10.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B10.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B10.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

#### B11. OPENING OF BIDS AND RELEASE OF INFORMATION

- B11.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.
- B11.1.1 Bidders or their representatives may attend.
- B11.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B10 will not be read out.
- B11.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <a href="http://www.winnipeg.ca/matmgt/">http://www.winnipeg.ca/matmgt/</a>
- B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <a href="http://www.winnipeg.ca/matmgt/">http://www.winnipeg.ca/matmgt/</a>
- 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/her 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/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

#### **B14.** EVALUATION OF BIDS

- B14.1 Award of the Contract shall be based on the following bid evaluation criteria:
  - (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B5.
- B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she 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 adjusted, if necessary, as follows:
  - (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price; or
  - (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting lanes in the reverse order they are represented. That is, Havelock Ave. Lane will be deducted first followed by Roberta Ave. / Greene Ave. Lane, and so on until a Total Bid Price within the budgetary provision is achieved.
- 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 Any bid with an apparent imbalance between the unit prices for the lane parts and the provisional items part may be determined to be non-responsive and rejected by the Award Authority in its sole discretion, acting reasonably.

B14.4.3 The electronic Form B: Prices and the formulas imbedded in that spreadsheet are only provided for the convenience of Bidders. The City makes no representations or warranties as to the correctness of the imbedded formulas. It is the Bidder's responsibility to ensure the extensions of the unit prices and the sum of Total Bid Price performed as a function of the formulas within the electronic Form B: Prices are correct.

#### B15. AWARD OF CONTRACT

- B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:
  - (a) the prices exceed the available City funds for the Work;
  - (b) the prices are materially in excess of the prices received for similar work in the past;
  - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
  - (d) only one Bid is received; or
  - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B14.
- B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

## **PART C - GENERAL CONDITIONS**

## C0. GENERAL CONDITIONS

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

#### PART D - SUPPLEMENTAL CONDITIONS

#### **GENERAL**

#### D1. GENERAL CONDITIONS

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

#### D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of:
  - (a) Granular Lane Improvements
    - (i) Havelock Ave. / Portland Ave. Lane Bounded By Havelock Ave., Portland Ave., St. David Rd. And St. George Rd.
    - (ii) Cunnington Ave. / Springside Dr. Lane Bounded By Cunnington Ave., Springside Dr., Kilarney St. And St. Mary's Rd.
    - (iii) Birchdale Ave. / Lawndale Ave. Lane -Bounded By Birchdale Ave., Lawndale Ave., Lyndale Dr., And Coniston St.
    - (iv) Goulet St. / Marion St. Lane Bounded By Goulet St., Marion St., Rue Youville, And The Seine River
    - (v) Doucet St / Marion St. Lane Bounded By Doucet St., Marion St., Dufresne Ave. And Archibald St.
    - (vi) Gagnon St. / St. Charles St. Lane Bounded By Gagnon St., St. Charles St., Lepine Ave. And Oxbow Bend Rd.
    - (vii) Harris Blvd. / Oakdean Blvd. Lane Bounded By Harris Blvd., Oakdean Blvd., Emo Ave., And Portage Ave.
    - (viii) Ave De L'Eglise / Ave St. Therese Lane Bounded By Ave De L'Eglise, Ave St. Therese, Rue Campeau, And Rue La Barriere
    - (ix) Roberta Ave. / Greene Ave. Lane -Bounded By Roberta Ave., Greene Ave., Woodvale St., And Henderson Hwy.
    - (x) Havelock Ave. Lane Bounded By Havelock Ave., St George Rd., St. George School, And St. Andrews Rd.
- D2.2 If any of the locations are eliminated pursuant to B14.4, the time periods stipulated in D17 for Substantial Performance of the Work and in D18 for Total Performance of the Work will be reduced proportionally by the Contract Administrator acting reasonably.
- D2.3 Bidders are advised the Provisional Items contain items that may be used on any of the Lanes as necessary and is not a location of work in itself.
- D2.4 The major components of the Work are as follows:
  - (a) Work applicable to all Lanes:
    - (i) Excavation
    - (ii) Sub-grade Compaction
    - (iii) Placement of geotextile (separation OR separation/reinforcement geotextile fabric)
    - (iv) Placement of base course
    - (v) Boulevard grading
  - (b) Work applicable to some Lanes as "test sections" as shown on the drawings:
    - (i) Adjustment of Catchbasins
    - (ii) Construction of subdrains or trenchdrains
    - (iii) Installation of EnviroGrid
    - (iv) Placement of recycled concrete base course

- (v) Construction of Catch Basin Apron
- (c) Work that may be required at some Lanes at the interface to the cross street approach These items are included as a contingency:
  - (i) Renewal of barrier Curb
  - (ii) Spot concrete or asphalt pavement repair

#### D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Genivar, represented by:

Mr. Scott Minty Project Manager

Telephone No. 204 477 6650 Facsimile No. 204 474 2864

- D3.2 At the pre-construction meeting, Mr. Scott Minty will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.
- D3.3 Bids Submissions must be submitted to the address in B6.8

#### D4. CONTRACTOR'S SUPERVISOR

- D4.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D4.2 At least two (2) business days prior to the commencement of any Work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D4.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

#### D5. 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 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D5.3 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:

The City of Winnipeg Legal Services Department Attn: Director of Legal Services

Facsimile No.: 204-947-9155

#### 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/her at cost.

#### SUBMISSIONS

#### D7. AUTHORITY TO CARRY ON BUSINESS

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

#### D8. SAFE WORK PLAN

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D8.2 The Safe Work Plan shall be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <a href="http://www.winnipeg.ca/matmgt/safety/default.stm">http://www.winnipeg.ca/matmgt/safety/default.stm</a>

#### 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) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
  - (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- D9.2 Deductibles shall be borne by the Contractor.
- D9.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in the C4.1 for the return of the executed Contract.
- D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

#### D10. PERFORMANCE SECURITY

- D10.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
  - (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or

- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D10.2 If the bid security provided in his/her 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.
- D12.2 The detailed work schedule shall consist of the following:
  - (a) a critical path method (C.P.M.) schedule for the Work;
  - (b) a Gantt chart for the Work based on the C.P.M. schedule; and all acceptable to the Contract Administrator.
- D12.3 Further to D12.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:

#### SCHEDULE OF WORK

## D13. COMMENCEMENT

- D13.1 The Contractor shall not commence any Work until he/she is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D13.2 The Contractor shall not commence any Work on the Site until:
  - (a) the Contract Administrator has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D7;
    - (ii) evidence of the workers compensation coverage specified in C6.15;
    - (iii) the twenty-four (24) hour emergency response phone number specified in D4.2.
    - (iv) the Safe Work Plan specified in D8;
    - (v) evidence of the insurance specified in D9;

- (vi) the performance security specified in D10;
- (vii) the subcontractor list specified in D11 and;
- (viii) the detailed work schedule specified in D12.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D13.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.
- D13.4 The City intends to award this Contract by July 02, 2013.
- D13.4.1 If the actual date of award is later than the intended date, the dates specified for Critical Stages, 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/her assessment. On a weekly basis the Contract Administrator will provide the Contractor with a record of the Working Days assessed for the preceding week. The Contractor shall sign each report signifying that he/she agrees with the Contract Administrator's determination of the Working Days assessed for the report period.
- 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. SEQUENCE OF WORK

- D16.1 Further to C6.1, the sequence of work shall be as follows:
- D16.1.1 Providing that the Work on each lane 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) lanes under construction at any one time. Completion of a lane means that the final lift of granular material has been placed and compacted to the satisfaction of the Contract Administrator and the lane is open to the public.
- D16.1.2 Where the Contractor utilizes two (2) or more crews that work independently on the same major component of the Work as identified in D2, the Contract Administrator may approve an increase to the maximum number of streets under construction at any time.

## D17. SUBSTANTIAL PERFORMANCE

D17.1 The Contractor shall achieve Substantial Performance within twenty five (25) consecutive Working Days of the commencement of the Work as specified in D13.

D17.2 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.

D17.3 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.

#### D18. TOTAL PERFORMANCE

- D18.1 The Contractor shall achieve Total Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D13.
- D18.2 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.
- D18.3 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.

#### D19. LIQUIDATED DAMAGES

- D19.1 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 five hundred dollars (\$1500) per working day for each and every working day following the day fixed herein for Substantial Performance during which such failure continues.
- D19.2 The amount specified for liquidated damages in D19.1 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.
- D19.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### **CONTROL OF WORK**

#### D20. JOB MEETINGS

- D20.1 Regular weekly job meetings will be held at one of the lanes determined by the contract administrator. These meetings shall be attended by a minimum of one representative of the Contract Administrator, 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.
- D20.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

#### D21. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D21.1 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).

#### **MEASUREMENT AND PAYMENT**

#### D22. PAYMENT

D22.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

#### WARRANTY

#### D23. WARRANTY

- D23.1 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.
- D23.2 Notwithstanding C13.2 or D23.1, 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.
- D23.2.1 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)

١	K	١	d	$\boldsymbol{c}$	۱	٨	1	Δ	1	1	1	١/	ΙF	١.	d	Р	١.	/	т	Н	ΙF	C	\F	=	P	R	F	C	F	٨	IΤ	2	Т	Ή	Δ	т
ı	r		v	١.	,,	v١	,	$\mathbf{H}$			- 1	v	ш	- 1	v		) 1						Эľ		_	$\overline{}$			1	11		. 7		_	~	

KNOV	V ALL MEN BY TH	ESE PRESENTS THAT
(herei	nafter called the "P	rincipal"), and
	nafter called the "S the "Obligee"), in t	Surety"), are held and firmly bound unto <b>THE CITY OF WINNIPEG</b> (hereinafter he sum of
		dollars (\$)
sum tl	he Principal and th	da to be paid to the Obligee, or its successors or assigns, for the payment of which e Surety bind themselves, their heirs, executors, administrators, successors and cally, firmly by these presents.
WHEF	REAS the Principal	has entered into a written contract with the Obligee for
BID O	PPORTUNITY NO	. 444-2013
		IMPROVEMENT PROGRAM – CONTRACT 2 de 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) (b) (c) (d) (e)	forth in the Contr perform the Worl make all the pay in every other re Contract; and indemnify and sa demands of eve claims, actions Compensation A performance or	rform the Contract and every part thereof in the manner and within the times set act and in accordance with the terms and conditions specified in the Contract; in a good, proper, workmanlike manner; ments whether to the Obligee or to others as therein provided; espect comply with the conditions and perform the covenants contained in the ave harmless the Obligee against and from all loss, costs, damages, claims, and ry description as set forth in the Contract, and from all penalties, assessments, for loss, damages or compensation whether arising under "The Workers ct", or any other Act or otherwise arising out of or in any way connected with the non-performance of the Contract or any part thereof during the term of the warranty period provided for therein;
		N SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety ble for a greater sum than the sum specified above.
nothin or rele	g of any kind or m	ECLARED AND AGREED that the Surety shall be liable as Principal, and that atter whatsoever that will not discharge the Principal shall operate as a discharge the Surety, any law or usage relating to the liability of Sureties to the contrary
IN WI	TNESS WHEREOF	the Principal and Surety have signed and sealed this bond the
	day of	, 20

SIGNED AND SEALED in the presence of:	(Name of Principal)	
(Witness as to Principal if no seal)	Per:	(Seal)
	Per:	
	(Name of Surety)	
	By: (Attorney-in-Fact)	(Seal)

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

(See D10)

(Date)
The City of Winnipeg Legal Services Department 185 King Street, 3rd Floor Winnipeg MB R3B 1J1
RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 444-2013
2013 GRANULAR LANE IMPROVEMENT PROGRAM – CONTRACT 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 writte demand for payment made upon us by you. It is understood that we are obligated under this Standb 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 suc 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 upo it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it b made.
Partial drawings are permitted.
We engage with you that all demands for payment made within the terms and currency of this Standb Letter of Credit will be duly honoured if presented to us at:
(Address)
and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.
Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on
(Date)

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

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

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

Name	of bank or financial institution)
⊃er:	
	(Authorized Signing Officer)
⊃er:	
	(Authorized Signing Officer)

## FORM J: SUBCONTRACTOR LIST

(See D11)

## 2013 GRANULAR LANE IMPROVEMENT PROGRAM – CONTRACT 2

Portion of the Work	<u>Name</u>	<u>Address</u>
Supply of Materials:		
Geotextiles and EnviroGrid		
Base Course and Granular Materials		
Recycled Concrete Base Course		
Concrete/Asphalt		
Other		
Installation/Placement:		
Excavation and Sub-Grade Compaction		
Geotextiles and EnviroGrid		
Granular Materials		
Concrete/Asphalt		

## FORM L: DETAILED WORK SCHEDULE

(See D12)

## 2013 GRANULAR LANE IMPROVEMENT PROGRAM - CONTRACT 2

Items of Work	Time Period in Working Days										
	5	10	15	20	25	30					
Havelock Ave / Portland Ave Lane											
Cunnington Ave / Springside Dr Lane											
Birchdale Ave / Lawndale Ave Lane											
Doucet St / Marion St Lane											
Gagnon St / St Charles St Lane											
Harris Blvd / Oakdean Blvd Lane											
Ave De L'Eglise / Ave St Therese Lane											
Roberta Ave / Greene Ave Lane											
Havelock Ave Lane											

## **PART E - SPECIFICATIONS**

#### **GENERAL**

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 The City of Winnipeg Standard Construction Specifications in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 The City of Winnipeg Standard Construction Specifications is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/Spec/Default.stm
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

Drawing No.	Drawing Name/Title	<u>Drawing</u>
		(Original) Sheet
		<u>Size</u>
444-2013-00	Cover Sheet	24x36
444-2013-01	Havelock Ave. / Portland Ave. Lane	24x36
444-2013-02	Cunnington Ave. / Springside Dr. Lane	24x36
444-2013-03	Birchdale Ave. / Lawndale Ave. Lane	24x36
444-2013-04	Goulet St. / Marion St. Lane	24x36
444-2013-05	Doucet St. / Marion St. Lane	24x36
444-2013-06	Gagnon St. / St. Charles St. Lane	24x36
444-2013-07	Harris Blvd. / Oakdean Blvd. Lane	24x36
444-2013-08	Ave. De L'Eglise / Ave. St. Therese Lane	24x36
444-2013-09	Roberta Ave. / Greene Ave. Lane	24x36
444-2013-10	Havelock Ave. Lane	24x36

#### **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:
  - (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
  - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
  - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
  - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.

- (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- 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/her 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:
  - (a) Where directed, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes and planing drop-offs to the satisfaction of the Contract Administrator. Payment shall be in accordance with CW3410.
  - (b) In accordance with the Manual of Temporary Traffic Control in Work Areas on City Streets, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

#### E4. TRAFFIC MANAGEMENT

- E4.1 Further to clause 3.7 of CW 1130:
- E4.1.1 When any lane is under construction, the Contractor shall sign that lane "Road Closed" in accordance with the Manual of Temporary Traffic Control
- E4.1.2 Access to buildings shall be from the front street only. Intersecting street access shall be maintained at all times.
- E4.1.3 Pedestrian and ambulance/emergency vehicle access must be maintained at all times to the front street.
- E4.1.4 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

#### E5. REFUSE AND RECYCLING COLLECTION

- E5.1 While access to refuse and/or recycling collection vehicles is restricted, on collection day(s) the Contractor shall move all of the affected property owners refuse and/or recycling materials to a nearby common area, prior to an established time, in accordance with E5.2 to permit the normal collection vehicles to collect the materials. Immediately following recycling collection the Contractor shall return recycling receptacles to the addresses marked on the receptacles.
- E5.2 Collection Schedule:

#### Havelock Ave. / Portland Ave. Lane.

Collection Day(s): Tuesday

Residents will be instructed to switch to front street. No collection required

Common Collection Area: from Contractor.

#### Cunnington Ave. / Springside Dr. Lane.

Collection Day(s): Tuesday

Residents will be instructed to switch to front street. No collection required

Common Collection Area: from Contractor.

Birchdale Ave. / Lawndale Ave. Lane

Tuesday Collection Day(s):

Residents will be instructed to switch to front street. No collection required

Common Collection Area: from Contractor.

Goulet St. / Marion St. Lane

Collection Day(s): Tuesday

Residents will be instructed to switch to front street. No collection required

Common Collection Area: from Contractor.

**Doucet St. / Marion St. Lane** 

Collection Day(s): Tuesday

Residents will be instructed to switch to front street. No collection required

from Contractor. Common Collection Area:

Gagnon St. / St. Charles St. Lane

Collection Day(s): **Thursday** 

Residents will be instructed to switch to front street. No collection required

Common Collection Area: from Contractor.

Harris Blvd. / Oakdean Blvd. Lane

Collection Day(s): **Thursday** 

Residents will be instructed to switch to front street. No collection required

from Contractor. Common Collection Area:

Ave. De L'Eglise / Ave. St. Therese Lane

Collection Day(s): Friday

Residents will be instructed to switch to front street. No collection required

Common Collection Area: from Contractor.

Roberta Ave. / Greene Ave. Lane

Wednesday Collection Day(s):

Residents will be instructed to switch to front street. No collection required

Common Collection Area: from Contractor.

**Havelock Ave. Lane** 

Collection Day(s): Tuesday

Residents will be instructed to switch to front street. No collection required

Common Collection Area:

from Contractor.

#### E6. PEDESTRIAN SAFETY

E6.1 During the project, a temporary snow fence shall be installed. 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.

#### E7. WATER OBTAINED FROM THE CITY

E7.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

#### E8. SURFACE RESTORATIONS

E8.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

#### E9. VIBRATORY COMPACTION AROUND PRIVATE SWIMMING POOLS

- E9.1 The Contractor is to note that there are swimming pools on adjacent private property on various lane locations in this project. There is a concern that vibratory compaction of the sub-grade or base course may damage a pool.
- E9.2 The Contractor is to perform a site visit to verify the location of any pools, and notify their employees.
- E9.3 Use static compaction only within 5 m of any swimming pool. Further to CW 3110, minimum sub-grade and base course Standard Proctor density will be lowered to 90% and 95% respectively. However, the Contractor shall make an attempt to meet the standard densities as listed in CW 3110.

## E10. TREE TRIMMING

- E10.1 Further to E2, the Contractor shall take precautionary steps to prevent damage from construction activities to existing trees overhanging the backlane area:
  - (a) Perform a walkthrough of each Lane with the Contract Administrator at least two (2) weeks prior to the commencement of construction to identify trees or branches that may be damaged by unloading gravel trucks, excavation equipment, or other activities.
  - (b) The Contractor is to note that "clear cutting" all branches overhanging the backlane right of way is not acceptable. The Contractor may have to use smaller equipment than used on residential streets to perform the work.
  - (c) Nothwithstanding E10.1(b), the Contractor is to provide a drawing or sketch outlining the areas requiring trimming to the Contract Administrator.
  - (d) The Contract Administrator will arrange for the homeowner or City of Winnipeg Forestry Branch to trim the trees.

## E11. CATCH BASIN APRON

**DESCRIPTION** 

## E11.1 General

E11.1.1 This specification shall cover the construction of 150 mm reinforced concrete pavement a distance of 4.5 m in length on either side of existing catch basins. This is done in an effort

to prevent the catch basins from being covered over by base course during routine blading and maintenance of the lanes.

- E11.1.2 Referenced Standard Construction Specifications
  - (a) CW 3310 Portland Cement Concrete Pavement Works
  - (b) SD-220A Catch Basin and Manhole Isolation Detail (New Pavements)

#### MATERIALS AND EQUIPMENT

E11.2 As per clause 5 of CW 3310.

#### **CONSTRUCTION METHODS**

- E11.3 As per clause 9 of CW 3310, as modified by subsequent clauses below.
- E11.4 Construct catch basin apron using 150 mm thick reinforced concrete pavement.
- E11.5 Form concrete as shown on drawings, providing a ramp on either end of the apron for granular material to be placed up to. Where the apron drops below grade, construct a smooth radius of at least 25 mm.
- E11.6 Provide a single transverse sawcut, 3 mm wide and 50 mm deep at the centreline of the catchbasin, and at the location where the apron drops below grade. Provide a single longitudinal sawcut, 3 mm wide and 50 mm deep at the centreline of the catchbasin.
- E11.7 Isolate catch basin from adjacent apron as per SD-220A

#### MEASUREMENT AND PAYMENT

E11.8 Construction of catch basin aprons will be paid for at the Contract Lump Sum Price for each "Catch Basin Apron". The amount to be paid for will be the total number of catch basin aprons constructed in accordance with this specification, accepted and measured by the Contract Administrator.

#### E12. ENVIROGRID

#### **DESCRIPTION**

- E12.1 General
- E12.1.1 This specification shall cover the supply and installation of EnviroGrid. This product provides cellular confinement of the base course in spot locations to provide a more stable road structure.

#### **MATERIALS**

- E12.2 EnviroGrid® –EGA208P manufactured by Geo Products, LLC.
- E12.2.1 "8P" refers to eight inch (200 mm) cell depth, and perforated cells.
- E12.2.2 The sections are shipped to the jobsite in collapsed form.
- E12.2.3 Expanded size is 2.56 m x 6.52 m by 200 mm depth.

#### **EQUIPMENT**

E12.3 Manual installation only. No specialized equipment is necessary.

#### CONSTRUCTION METHODS

E12.4 Perform these works after excavation of sub-grade and placement of the specified geotextile fabric as shown on the drawings.

- E12.5 Refer to the drawings for the general location of the EnviroGrid product.
- E12.6 Determine where the first section of EnviroGrid is to be placed and put stakes at the four corners.
- E12.7 Stretch a section beyond its intended length and then allow it to relax. Place the section over the embedded stakes. Additional stakes may be needed along the perimeter in order to get full expansion of each cell. Adjacent sections are installed in a similar fashion and butted or stapled together to achieve continuous coverage.
- E12.8 Cut full sections of EnviroGrid as necessary to match the width of the lane.
- E12.9 Install the base course material in the first rows of cells with a front-end loader or dump truck and push the rock into cells using shovels or a bulldozer blade. A "ramp" of fill material immediately adjacent to the EnviroGrid will likely be necessary to allow equipment to climb onto the EnviroGrid. Continue until all cells are filled. Never allow any equipment to drive over unfilled cells. Always overfill the cells slightly to allow for consolidation.
- E12.10 Compact the EnviroGrid system. The most common method of compacting is through multiple passes by the tracked equipment used to spread the infill to satisfaction of Contract Administrator. A vibrating roller and/or water may be required to achieve the specified level of compaction.
- E12.11 Continue placement of base course material over the EnviroGrid structure and compact to final depth as shown on the drawings.

#### MEASUREMENT AND PAYMENT

E12.12 Supply and installation of EnviroGrid will be paid for at the Contract Unit Price per square metre for "EnviroGrid", The area to be paid for will be the total number of square meters of EnviroGrid that is installed in accordance with this specification, accepted and measured by the Contract Administrator.

#### E13. INFRASTRUCTURE SIGNS

E13.1 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

## E14. EXCAVATION EQUIPMENT

- E14.1 During roadway excavation, excavation equipment must not travel on the exposed subgrade.
- E14.2 During sub drain excavation, light weight track excavation equipment may travel on the exposed subgrade.
- E14.3 Upon completion of excavation and installation of sub drains, any irregularities or unevenness in the subgrade shall be corrected to the satisfaction of the Contract Administrator, at the Contractor's expense, before commencement of compaction and sub-base construction.

#### E15. SITE LAYOUT

E15.1 The contractor will be provided with elevations of high points, low points and grade change points for all lane locations.

E15.2 The contractor shall determine intermediate grade points to the satisfaction of the contract administrator.

## E16. CRUSHED SUB-BASE MATERIAL

E16.1 The supplying, placing and compaction of crushed sub-base material will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for the "Supplying and Placing Crushed Sub-Base Material". The volume to be paid for will be the total number of cubic metres of crushed sub-base material supplied and placed, accepted and measured by the Contract Administrator.