



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 95-2010

RESTORATION OF BOULEVARD CUTS IN THE TRANSCONA AREA

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 RESTORATION OF BOULEVARD CUTS IN THE TRANSCONA AREA

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, May 7, 2010.

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 D4.1.

B3.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B3.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B3.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. ADDENDA

B4.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

B4.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.

B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>

B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B4.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 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 B13.
- 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, and in accordance with B6.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B13.1(a).

B6. BID COMPONENTS

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

- 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 Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B6.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B6.5.1 Samples or other components of the Bid Submission 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 Submission.
- B6.6 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.7 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 B13.1(a).
- B6.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.
- B6.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B6.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.
- 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 10 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;
- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

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

B7.4.2 All signatures shall be original.

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.

B8.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

B8.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

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

B9. QUALIFICATION

B9.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B9.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>

B9.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and

- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

B9.4 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.

B9.5 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. OPENING OF BIDS AND RELEASE OF INFORMATION

B10.1 Bids will not be opened publicly.

B10.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B10.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>

B10.4 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.

B11. IRREVOCABLE BID

B11.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B11.2 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 for the time period specified in Paragraph 9 of Form A: Bid.

B12. WITHDRAWAL OF BIDS

B12.1 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.

B12.1.1 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.

B12.1.2 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 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B12.1.3 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 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B12.1.3(b), declare the Bid withdrawn.

B12.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B11.2 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.

B13. EVALUATION OF BIDS

B13.1 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 there from (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.

B13.2 Further to B13.1(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.

B13.3 Further to B13.1(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.

B13.4 Further to B13.1(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.

B13.4.1 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.

B13.4.2 Further to B13.1(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. AWARD OF CONTRACT

B14.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B14.2 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.

B14.2.1 Without limiting the generality of B14.2, 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.

B14.3 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 B13.

- B14.3.1 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.
- B14.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B14.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of restoring boulevard cuts and other grassed areas with sod or topsoil and seed, in the Transcona area as identified on Drawing titled "Cut Permit Area and Zones – East Area Zones E3A, E3B & E3C".

D3. DEFINITIONS

D3.1 When used in this Bid Opportunity:

- (a) **"Area"** - is a generic term for one of geographic areas of the City of Winnipeg. The Area is identified on Drawing titled "Cut Permit Area and Zones – East Area Zones E3A, E3B & E3C".
- (b) **"Boulevard"** - means the area between the street line and the nearest edge of a roadway and/or the area separating the roadways of a divided highway, and includes grassed areas in parks, interchange areas and private property bordering a street line.
- (c) **"Cut"** - means an excavation made by a contractor, utility or the City to access an underground structure.
- (d) **"East Area"** - means the geographic area of the City of Winnipeg that is identified on Drawing titled "Cut Permit Area and Zones – East Area Zones E3A, E3B & E3C".
- (e) **"Final Round"** - means the last list of locations identified for restoration for an Area or a part of an Area with a Round Completion Date not later than the date specified for Total Performance of the Work.
- (f) **"Restoration Permit"** - means a permit issued in accordance with the Streets By-law No. 1481/77 to restore an excavation.
- (g) **"Revised Round"** - means a Round, that has been inspected, reviewed and edited to reflect the actual restoration work required.
- (h) **"Round"** - means a list of locations identified for boulevard restoration for an Area or a part of an Area that identifies a portion of the Work.
- (i) **"Round Commencement Date"** - means the earliest date that the Contractor can commence the Work specified for a Round.
- (j) **"Round Completion"** - means all of the Work identified on a Round (list) has been performed in accordance with the Contract Documents and has been certified by the

Contract Administrator as ready for commencement of the thirty (30) day maintenance period in accordance with Specification E7 and E8.

- (k) **“Round Completion Date”** - means the latest date by which the Contractor shall achieve Round Completion.
- (l) **“Round Period”** - means the number of days from the Round Commencement Date to the Round Completion Date, including both the Round Commencement Date and the Round Completion Date.
- (m) **“Short Notice Restoration”** - means a boulevard cut restoration that due to special circumstance requires completion in accordance with Supplemental Condition D18 and Specification E7 and E8.
- (n) **“Summarized Round”** - means an un-revised Round that shows only the estimated subtotals for each zone.
- (o) **“Trimmed Cut”** - means a cut that has been excavated, trimmed, filled, compacted with backfill material and is ready for placement and compaction of the top soil and placement for sod/seed and maintaining the sod/seed in accordance with E8.
- (p) **“Unrevised Round”** - means a Round where the locations and quantities shown are based on the information from the permits database prior to being inspected and assessed for actual restoration requirements. At this stage a Round is only a rough estimate of the actually restoration work required.
- (q) **“Un-trimmed Cut”** - means a cut that requires to be excavated, trimmed, filled and compact with the backfill material, placement and compaction of the top soil; placing the sod/seed and maintaining the sod/seed in accordance with E7.
- (r) **“Zone”** - means a portion of an Area as illustrated on the Drawing titled “Cut Permit Area and Zones – East Area Zones E3A, E3B & E3C”.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is:

Mr. Rolf K. Doerries, C.E.T.
Technologist III
106-1155 Pacific Avenue
Winnipeg, Manitoba
R3E 3P1

Telephone No. (204) 986-4112

Facsimile No. (204) 986-5302

D4.2 At the pre-construction meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D5. CONTRACTOR'S SUPERVISOR

D5.1 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.

D6. NOTICES

D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.

D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

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

D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

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 should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg,

Corporate Finance, Materials Management Division website at
<http://www.winnipeg.ca/matmgt/Safety/default.stm>

D9. INSURANCE

- D9.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability 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) all risks course of construction insurance in the amount of one hundred percent (100%) of the total Contract Price, written in the name of the Contractor and The City of Winnipeg, at all times during the performance of the Work and until the date of Total Performance.
- D9.2 Deductibles shall be borne by the Contractor.
- D9.3 The Contractor shall provide the Contract Administrator 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 seven (7) Calendar Days from notification of the award of Contract by Purchase Order.
- 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 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), 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 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 Purchase Order and prior to the commencement of any Work on the Site.

SCHEDULE OF WORK

D11. COMMENCEMENT

- D11.1 The Contractor shall not commence any Work until he is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D11.2 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 Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10;
 - (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.
- D11.3 The Contractor shall commence the Work on the Site on the Round Commencement Date indicated on the first round. The Commencement Date for the first round shall be no earlier than seven (7) Working Days of receipt of the Purchase Order.

D12. WORK SCHEDULE

- D12.1 The Rounds (lists) supplied by the Contract Administrator shall be the schedule for the Work.

D13. SCHEDULING OF THE WORK

- D13.1 Appendix "A" is an example of the Rounds to be provided to the Contractor.
- D13.2 Rounds:
- (a) Round numbering is to be determined by the Contract Administrator. Normally the numbering suffix will reflect the number of Rounds or lists required to include each Zone of an Area with a Zone only appearing on one list. i.e. if three Rounds or lists are required to include all the zones for an Area the Rounds might be numbered as Round #A, Round #B, and Round #C. If all zones are included in a Round then no suffix would be used.
 - (b) The first two (2) zones, revised in accordance with D14, of each Round will be delivered to the Contractor no later than one (1) day prior to the Round Commencement. Subsequent revised zones will be delivered within 2 business days of receipt of a request by the Contractor. No more than two (2) zones may be requested in any one day.
 - (c) Round Periods will normally be from two (2) to four (4) weeks.
 - (d) Each Round list will specify the "Round Commencement Date" and "Round Completion Date". The Round Commencement Date will follow the specified Round Completion Date of a preceding Round adjusted in accordance with D14.
 - (e) There may be a lapse period between Rounds. Therefore a Round Commencement Date may not immediately follow the Round Completion Date of the previous Round.
 - (f) The locations on each Round list will be grouped by Zone.
 - (g) The Final Round will not have a Round Completion Date past the date specified for Total Performance.
- D13.3 The Work of each round shall be performed in accordance with Supplemental Condition D17.

D13.4 Failure to achieve completion of a Round by the specified Round Completion Date will not result in the subsequent Round Commencement Date being delayed.

D13.5 The following is an example of a possible scheduling for the Rounds:

Round #	Round Commencement Date	Round Completion Date
Round IA	May 25, 2010	June 11, 2010
Round IB	June 14, 2010	July 2, 2010
Round IIA	July 12, 2010	July 23, 2010
Round IIB	August 3, 2010	August 13, 2010
Round IIIA	August 23, 2010	September 3, 2010
Round IIIB	September 7, 2010	October 1, 2010
Round IV	October 4, 2010	October 29, 2010

D14. LAYOUT OF THE WORK AND REVISIONS OF QUANTITIES AND LOCATIONS

D14.1 The Contract Administrator will visit each location on the Unrevised Round and will mark out the limits of the Work required to complete the restoration. The Contract Administrator will measure the area marked out at each location and record the quantities on the Round list. The Contract Administrator will estimate the maximum area of seeding that is required for each location and record the quantities on the list.

D14.2 Some locations will not require any restoration or may not be ready for restoration. The Contract Administrator may strike out or delete such locations.

D14.3 The Contract Administrator will provide the Contractor with copies of the Revised Round list on a Zone by Zone basis.

D14.4 The Contractor shall use the field markings, the "Insp. Quantity" and "Seeding (TS/S)", quantities shown on the Revised Round list(s) to complete the restorations. No measurement for payment will be made for sod placed above the "Insp. Quantity" shown or for materials placed outside the limits of the Work, for each location. No measurement for payment will be made for seeding areas greater than the "Seeding (TS/S)" quantity, shown for each location on the Round.

D14.5 Where the Contractor places less sod or seed than the revised quantities shown on the Round, the Contract Administrator may not accept the location for measurement for payment.

D14.6 Where the field marks are not visible the Contractor may make arrangements with the Contract Administrator to have the location marked. The absence or visibility of the field markings will not alter the conditions of measurement described in D14.4.

D14.7 Where the Contractor is of the opinion that there is a discrepancy between the "Insp. Quantity" and/or the "Seeding (TS/S)" quantity and the amount of material required to complete the restoration for a location on a Round, he shall make a request that the Contract Administrator review the location. The location will be adjusted at the Contract Administrator's discretion, the location will be marked and the "Insp. Quantity" will be revised as necessary to reflect any corresponding adjustment.

D15. ADDITIONS TO A ROUND

- D15.1 It may be necessary during the course of the Work to supplement the current Round with additional locations.
- D15.2 Should additions to the Round be required, the Contract Administrator will make a determination in accordance with D16 with respect to extending the current Round Completion Date.
- D15.3 Additions to a Round for a zone that has been completed in accordance with E7 and E8 will be considered as "Short Notice (SN)" restorations as per D18.

D16. EXTENSION OF ROUND COMPLETION DATES

- D16.1 The "Permit Quantity" shown on the Rounds are the quantities on the Restoration Permits and are provided for the Inspectors use and for summarization purposes.
- D16.2 Quantities on a Round will be revised in accordance with D14.
- D16.3 Round Periods are established on the basis of the actual work not exceeding an average daily rate of sod placed per day. The rates are as follows:

<i>Area</i>	<i>Rate (sq.m./day)</i>
<i>East Area Zones E3A, E3B & E3C</i>	<i>100</i>

- D16.4 Should the actual revised amount of sod to be placed, including any additions in accordance with D15, to complete a Round be greater than the average daily rate multiplied by the Round Period, the Round Completion Date shall be extended in accordance with the example in D16.5

D16.5 Example

Round Commencement Date = July 5	Round Completion Date = July 23										
Round Period = 15 days (Working Days)											
Average Daily Rate = 100 sq.m./day											
Total Permit Quantity = 1,854 sq.m.											
Total Revised Inspector Quantity = 1,545 sq.m.											
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Round Period(days)</td> <td style="width: 5%;">X</td> <td style="width: 20%;">avg. daily rate(sq.m./day)</td> <td style="width: 5%;"></td> <td style="width: 50%;">= Round Period Maximum quantity</td> </tr> <tr> <td style="text-align: center;">15</td> <td style="text-align: center;">X</td> <td style="text-align: center;">100</td> <td></td> <td style="text-align: right;">= 1,500 sq.m.</td> </tr> </table>		Round Period(days)	X	avg. daily rate(sq.m./day)		= Round Period Maximum quantity	15	X	100		= 1,500 sq.m.
Round Period(days)	X	avg. daily rate(sq.m./day)		= Round Period Maximum quantity							
15	X	100		= 1,500 sq.m.							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Total revised Inspector quantity</td> <td style="width: 5%;">-</td> <td style="width: 30%;">Round Period maximum quantify</td> <td style="width: 5%;"></td> <td style="width: 20%;">=</td> </tr> <tr> <td style="text-align: center;">1,545</td> <td style="text-align: center;">-</td> <td style="text-align: center;">1,500</td> <td></td> <td style="text-align: right;">= 45 sq.m.</td> </tr> </table>		Total revised Inspector quantity	-	Round Period maximum quantify		=	1,545	-	1,500		= 45 sq.m.
Total revised Inspector quantity	-	Round Period maximum quantify		=							
1,545	-	1,500		= 45 sq.m.							

In this example the Round Completion Date would be extended by:
 Round Period maximum quantity /average daily rate = Quantity over maximum
 $45 / 100 = 0.45$
 fractions of a day will be rounded up to a full day, therefore extension = one (1) day.

- D16.6 Further to C16, only long term inclement weather, will be considered with respect to adjusting the Work Schedule, as determined by the Contract Administrator. The Contractor shall improve his methods, increase his plant and employ additional or more qualified labour as necessary to ensure that the Work is kept on schedule.

D17. SEQUENCING (ORDER OF OPERATIONS) OF THE WORK

- D17.1 The restoration of un-trimmed boulevard cuts encompasses four major operations as follows:
 - (a) Excavating, trimming, filling, and compacting the backfill material.
 - (b) Placing and compacting the top soil.

- (c) Placing the sod/seed.
- (d) Maintaining the sod/seed in accordance with E7.

D17.2 The restoration of trimmed boulevard cuts encompasses three major operations as follows:

- (a) Placing and compacting the top soil.
- (b) Placing the sod/seed.
- (c) Maintaining the sod/seed in accordance with E8.

D17.3 The Contractor shall carry out the Work for each Round in the following manner;

- (a) the Work shall be done on a zone to zone basis in the order that the zones appear on the Round, unless prior written permission is granted by the Contract Administrator; and
- (b) no one operation of the first three (3) major operations of un-trimmed boulevard cuts and no one operation of the first two (2) major operations of trimmed boulevard cuts herein listed, shall be commenced in a zone until that same operation has been completed for the preceding zone.

D17.4 Where the Contractor utilizes two or more crews that will be working independently, permission may be granted to amend condition D17.23(a) to allow the crews to work in separate zones. Condition D17.23(b) will apply to each independent crew. A crew shall consist of no fewer than three (3) people.

D18. SHORT NOTICE RESTORATIONS

D18.1 "Short Notice (SN)" restorations shall be completed as specified in E7 and E8. "Short Notice (SN)" restorations will be limited to a maximum of two (2) in any week where the locations are not in the same block, and four (4) in any week where two or more of the locations are in the same block and are assigned to the Contractor at the same time. Locations assigned as "Short Notice (SN)" restorations may or may not be on the current Round.

D18.2 "Short Notice (SN)" restorations will be included in determining an extension of the Round Completion Period in accordance with D16.

D19. RESTRICTED WORK HOURS

D19.1 Further to clause 3.10 of CW 1130-R2, 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.

D20. CRITICAL STAGES

D20.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) Each Round shall be completed by its Round Completion Date adjusted as required in accordance with D16.

D21. SUBSTANTIAL PERFORMANCE

D21.1 The Contractor shall achieve Substantial Performance by October 27, 2010.

D21.2 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.

D22. TOTAL PERFORMANCE

- D22.1 The Contractor shall achieve Total Performance by October 29, 2010.
- D22.2 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.

D23. LIQUIDATED DAMAGES

- D23.1 If the Contractor fails to achieve Critical Stages, in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Calendar Day for each and every Calendar Day following the days fixed herein for same during which such failure continues:
- (a) Each Round five hundred - dollars (\$500.00)
- D23.2 The amounts specified for liquidated damages in D23.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.
- D23.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D24. SCHEDULED MAINTENANCE

- D24.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Sod maintenance as specified in E7 and E8;
 - (b) Seed maintenance as specified in E7 and E8.
- D24.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D25. JOB MEETINGS

- D25.1 Job meetings will be held at the Site at the dates and times established by City's inspector. The inspector will provide the Contractor with a minimum of twenty-four (24) hours of notice of these meetings. No more than two (2) Site job meetings will be held per week. These meetings shall be attended by a minimum of one representative of the Contractor, preferably the Superintendent, and one representative of the City, normally the inspector. At these meetings the Contractor shall provide the Contract Administrator's representative, the inspector, with an up to date copy of the Round(s) in progress. The Contractor shall indicate on the copy of the list the applicable completion dates, of the first three major items of Work identified in D17.1 for each location on the list for un-trimmed boulevard cuts and of the first two major items of work identified in D17.2 for each location on the list for trimmed boulevard cuts, in the appropriate columns.
- D25.2 Additional job meetings will be held at 1155 Pacific Avenue at the dates and times established by the Contract Administrator. The Contract Administrator will provide the Contractor with a minimum of twenty-four (24) hours of notice of these meetings. These meetings shall be attended by a minimum of one representative of the Contractor and the Contract Administrator

or his designated representative. Each representative shall be a responsible person capable of expressing the position of the Contractor or Contract Administrator respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedules.

D25.3 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D26. COMMUNICATION WITH CONTRACTOR

D26.1 Further to C6.23 of the General Conditions, the Contractor's Supervisor shall be equipped at all times during prosecution of the Work with a fully operational and functioning cellular phone. The phone number for this phone shall be provided to the Contract Administrator prior to the commencement of the Work. Should the phone number be changed at any time during the duration of the Contract the Contract Administrator shall be notified immediately.

D27. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D27.1 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

D28. PROGRESS ESTIMATES

D28.1 Notwithstanding C12.7 of the General Conditions, by the fourteenth (14th) Calendar Day after Round Completion, or as soon thereafter as possible, the Contract Administrator shall, subject to having received all necessary information from the Contractor by the seventh (7th) Calendar Day after Round Completion, prepare a progress estimate setting out the quantity and value of the work performed completing the Round.

D29. PAYMENT OF QUANTITIES CONDITIONAL TO TERMINATION OF MAINTENANCE PERIOD.

D29.1 By the fourteenth (14th) Calendar Day after the termination of the maintenance period has been granted by the Contract Administrator for **all locations** on a Round, or as soon thereafter as possible, the Contract Administrator shall, prepare a progress estimate for the twenty-five percent (25%) of the remaining sod quantities and for 35 percent (35%) of the remaining seed quantities conditional to termination of the maintenance period.

D30. DIMINUTION

D30.1 Further to C7.5 of the General Conditions, the major components of the Work intended to be done under the Contract are estimated based on the summation of:

- (a) the total unrestored mud cut quantities on Restoration Permits issued by the City prior to bid preparation; and
- (b) the total mud cut quantities on Restoration Permits issued by the City following bid preparation that are deemed ready for restoration by the Contract Administrator.

The quantity of seeding required is proportional to the quantity of sod.

D30.2 Notwithstanding C7.5, no claim shall be made for damages on the ground of loss of anticipated profit on Work diminished or on any other ground should the value of the Contract Price be diminished by an amount not exceeding fifty percent (50%) as a result of the major components of the Work as identified in D30.1 not meeting the estimated approximate quantities on Form B: "Prices".

D31. PAYMENT

D31.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

BID OPPORTUNITY NO. 95-2010

RESTORATION OF BOULEVARD CUTS IN THE TRANSCONA AREA

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

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

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 95-2010

RESTORATION OF BOULEVARD CUTS IN THE TRANSCONA AREA

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)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
PW-ENG-01	Cut Permit Area and Zones – East Area Zones E3A, E3B & E3C	Letter
PW-ENG-02	Backflow Protection Arrangement for Water Supply from Hydrant	Letter

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 metres of trees.
 - Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
 - Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - 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. ADJUSTMENT OF EXISTING BOULEVARD STRUCTURES AND APPURTENANCES

- E3.1 Where boulevard structures or appurtenances exist that will require adjustment prior to the cut restoration being completed, the Contractor shall notify the Contract Administrator immediately. The Contract Administrator shall make the necessary arrangements to have the structure(s) adjusted by others. Where the adjustment is not completed within forty-eight (48) hours of the Contractor giving notification, the cut(s) identified will not be considered in determining completion of the Round by the specified Round Completion Date

E4. TRAFFIC CONTROL

- E4.1 Further to clauses 3.6 and 3.7 of CW 1130-R2:
- (a) In accordance with the Manual of Temporary Traffic Control in Work Areas on City Streets, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

E5. WATER OBTAINED FROM THE CITY

- E5.1 Further to clause 3.7 of CW 1120-R1, 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.

E6. AUTHORIZED WORK ON PRIVATE PROPERTY

- E6.1 Further to clause 3.11 of CW 1130-R2, the Contractor shall limit his operations to the minimum area necessary for undertaking restorations that extend on to private property and he shall be responsible for all damages outside the limits of the authorized work, resulting from his work on private property. Particular care shall be taken to prevent damage to buildings, sidewalks, driveways, trees and plants.

E7. BOULEVARD RESTORATIONS OF UN-TRIMMED CUTS

E7.1 DESCRIPTION

- E7.1.1 This Specification shall cover the preparation of the un-trimmed boulevard cuts, the supply and placing of cultivated turf grass sod, and seeding.
- E7.1.2 Referenced Standard Construction Specifications
- (a) CW 1130 – Site Requirements
 - (b) CW 3510 – Sodding
 - (c) CW 3520 - Seeding
 - (d) CW 3110 – Sub-grade, Sub-base and Base Course Construction
 - (e) CW 3540 – Topsoil and Finish Grading for Establishment of Turf Areas

E7.2 MATERIALS

- E7.2.1 Testing and supply of cultivated turf grass sod and topsoil shall be in accordance with CW 3510.
- E7.2.2 Grass seed shall be supplied in accordance with CW 3520.

E7.2.3 Backfill

E7.2.3.1 Suitable site material as approved by the Contract Administrator or imported fill material supplied in accordance with Section 2.5 of CW 3110-R12, shall be used for backfill material. The material used as backfill shall be free of wood, vegetation, concrete or asphalt rubble and all stones larger than 25 mm in diameter.

E7.3 EQUIPMENT

E7.3.1 Track equipment shall not be used.

E7.3.2 Grading/Excavation

E7.3.2.1 The Contractor shall use a backhoe or wheeled excavator capable of directly loading and unloading materials from delivery/hauling equipment to the cut restoration site.

E7.4 CONSTRUCTION METHODS

E7.4.1 Compaction

E7.4.1.1 The existing in-situ material and any placed backfill material shall be mechanically compacted to the satisfaction of the Contract Administrator.

E7.4.1.2 Compaction of the backfill shall be accomplished by mechanical means. Acceptable methods shall include tamping with a back hoe bucket, using a machine mounted pneumatic plate compactor or using a drum compactor.

E7.4.2 Grading

E7.4.2.1 Grading of the boulevards to receive sod/seed shall be understood to mean the required backfilling or excavation so that the boulevards, after compaction, are at a uniform depth of 100 mm below finished boulevard grade.

E7.4.2.2 Grading of boulevards shall include the removal of existing material up to 600 mm above the finished boulevard grade and excavation to achieve a uniform grade 100 mm below finished boulevard grade.

E7.4.2.3 Grading of boulevards shall include all backfilling up to a vertical height of 300 mm to reach a uniform grade 100 mm below finished boulevard grade.

E7.4.2.4 Backfill material shall be compacted to a minimum of 90% Standard Proctor Density.

E7.4.2.5 Where the existing elevation of the backfill material is such that it would be necessary to exceed the limits specified herein for backfilling or excavating to restore a boulevard cut, the Contractor shall immediately notify the Contract Administrator who will make arrangements to have the backfill material adjusted to the specified limits by others.

E7.4.2.6 The Contractor shall not deposit or stockpile excavated material in the right-of-way.

E7.4.3 Trimming

E7.4.3.1 Trimming of the boulevards and medians to receive sod shall be understood to mean the excavation of existing material to provide a uniform shape for sod placement. Trimming includes the cutting of the edges to form straight or uniform curved edges and the removal of trimmed turf material. Where the Contractor is unable to trim the cut to obtain a uniform shape within the limits marked, he shall notify the Contract Administrator to have the limits of the cut marked prior to trimming.

E7.4.4 Disposal of Material

E7.4.4.1 Disposal of unused excavated or trimmed material shall comply with Section 3.4 of CW 1130-R2 of the Standard Construction Specifications

E7.4.5 Topsoil and Finish Grading

E7.4.5.1 Preparation, placing and finish grading of the topsoil shall be completed in accordance with Specification CW 3540-R5.

- E7.4.5.2 To prevent the formation of depressions or water pockets, the Contractor shall smooth out any undulations or irregularities in the top soil surface prior to placing the sod.
- E7.4.5.3 The Contractor shall not deposit or stockpile topsoil on a paved surface.
- E7.4.6 General
- E7.4.6.1 The Contractor shall not commence sodding or seeding until the finished topsoil surface has been inspected and approved by the Contract Administrator.
- E7.4.7 Placement of Sod/Seed
- E7.4.7.1 The sod shall be placed in accordance with CW 3510. Seed shall be placed in accordance with E7.4.9.
- E7.4.7.2 Notwithstanding the last three paragraphs of Clause 9.5 of CW 3510, sod and seed shall be placed in accordance with D14 after September 15.
- E7.4.7.3 After September 15, as the Rounds are revised in accordance with D14, consideration will be given to each locations probable exposure to winter street maintenance activities. Locations where high exposure is predicted, such as regional streets and collector/bus route streets, especially where the Cut is in close proximity to the roadway, will be omitted.
- E7.4.7.4 Where the termination of the sod/seed maintenance period is not achieved in accordance with Clause E7.4.16 in the same year it is placed, the Contractor shall be responsible for replacement of any sod/seed damaged over the winter due to winter-kill, ice damage, sand/salt applications on adjacent streets or from snow removal or spring clean up equipment.
- E7.4.8 Watering and Rolling
- E7.4.8.1 Watering and rolling shall be in accordance with CW 3510.
- E7.4.9 Seeding
- E7.4.9.1 As directed by the Contract Administrator damaged boulevard areas in the vicinity of boulevard cuts or boulevard cuts in areas where the existing surrounding boulevard has little or no turf, will be corrected by seeding as follows:
- E7.4.9.2 Topsoil shall be spread to a compacted depth of not less than 50 mm for boulevard damages and not less than 100 mm for cut restorations. Grass seed shall be sown at a rate of 100 grams per 10 square metres (1.0 kg per 100 sq.m.). The Contractor shall sow the seed into the approved seed bed by using seeding equipment suitable for the area involved and to the satisfaction of the Contract Administrator. Seed shall be embedded into soil to a depth of 5mm within one (1) hour of sowing. All seeded areas shall be rolled with a mechanical roller of minimum weight of 220 kg and a minimum width of 760 mm to a uniform even surface, level with adjoining curbs, sidewalks or sod.
- E7.4.9.3 Water shall be applied in sufficient quantities and frequencies to obtain seed germination and growth. Watering shall be controlled to prevent seed washout.
- E7.4.9.4 No seeding shall be done on frozen soils, or when any other conditions unfavourable to the successful seed germination exist.
- E7.4.10 Short Notice Restorations
- E7.4.10.1 The Contract Administrator may direct the Contract to have a specific location in the Area sodded/seeded on "Short Notice (SN)". Upon receipt of such notice the Contractor is to have the identified location sodded/seeded in accordance with this specification within forty-eight (48) hours of the notification.
- E7.4.10.2 Where the Contractor fails to complete a "Short Notice (SN)" restoration within the period specified, the Contract Administrator may arrange to have the restoration completed by others and deduct the costs thereof from any payment to be made to the Contractor.
- E7.4.11 Restricted Access Sodding

- E7.4.11.1 The access to some of the locations identified to be sodded may be restricted to smaller manual equipment, such as wheelbarrows and shovels. The Contractor shall use the size and type of equipment that permits the restoration to be done without causing any damage to the surrounding surfaces or structures at the site. All damages caused by the Contractor's negligence, carelessness, or failure to use the appropriate equipment shall be repaired to the satisfaction of the Contract Administrator at the Contractor's expense.
- E7.4.12 Restoration of Gas Service Inspection Holes
- E7.4.12.1 Where new communication plant is installed in developed areas, bore holes are often made where the new plant crosses existing gas services to inspect for damages. The diameter of these holes is normally less than 300mm. Sand or other granular material is sometimes used to backfill the holes. Restoration of these holes with sod includes the replacement of sand or granular backfill with topsoil to a minimum depth of 200mm below finished grade.
- E7.4.13 Commencement of Thirty (30) Day Maintenance Period
- E.7.4.13.1 Immediately after the sod/seed has been placed to the satisfaction of the Contract Administrator, the Contractor shall provide and pay for continuous maintenance of the sodded/seeded area until the criteria specified for termination of the maintenance period in Clause E7.4.16 has been met.
- E7.4.13.2 The Contract Administrator will not allow the Thirty (30) Day Maintenance Period to commence until the following requirements are met:
- (a) The cultivated turf grass sod supplied meets the seed mixture requirements specified in Clause E7.2.1.
 - (b) The sod is free of bare and dead spots.
 - (c) The cultivated turf grass sod does not contain more than 10 broadleaf weeds per 50 square metres.
 - (d) Sodded/seeded areas has been rolled to form a firm, uniform even surface level with adjoining areas.
 - (e) The sod shall have sufficient shoot density that no surface soil is visible within sod.
 - (f) The height of the top growth of the sod is between 50 - 60 mm.
 - (g) The sodded/seeded area is free of any visual obstructions such as leaves.
 - (h) Sodded area is free of any turf damaging insects.
- E7.4.13.3 Any deficient, damaged or vandalized areas shall be resodded or reseeded by the Contractor within three (3) working days after receiving notification from the Contract Administrator and the area so resodded or reseeded, shall be further maintained until it meets the criteria specified in Clause E7.4.16.
- E7.4.13.4 In situations where the commencement of the Thirty (30) Day Maintenance Period is not granted by the Contract Administrator before the end of a growing season, the Thirty (30) Day Maintenance Period will commence on May 15 of the following year or such date as is mutually agreed upon by all parties, at which time all sodded/seeded areas must meet the requirements listed above.
- E7.4.14 Maintenance of Sodded and Seeded Areas
- E7.4.14.1 Immediately after the sod/seed have been placed to the satisfaction of the Contract Administrator, the Contractor shall provide and pay for continuous maintenance of the sodded/seeded area until the criteria specified for termination of the maintenance period in Clause E7.4.16 has been met.
- E7.4.14.2 The Contractor shall mow at regular intervals to a height of between 50 - 60 mm. No more than thirty percent (30%) of the grass height shall be cut at any one mowing. Remove clippings that will smother grassed areas.

- E7.4.14.3 The Contractor shall water sodded/seeded areas in sufficient quantities and frequencies required to obtain root development and sod growth and seed germination and grass growth.
- E7.4.14.4 Any damage which may occur through washout of the soil during the maintenance period shall be repaired and maintained until it meets the criteria specified in Clause E7.4.16.
- E7.4.14.5 The Contractor shall clean and remove all dead vegetation, leaves, debris and snowmold from sodded and seeded areas to encourage healthy and uniform grass growth.
- E7.4.14.6 Given the need for weed control, the Contractor shall have in possession a Pesticide Applicator's License and Pesticide Use Permit for pesticide applications related to this Specification.
- E7.4.14.7 The Contractor shall apply herbicide when broadleaf weeds start developing in competition with grass. Apply herbicide in accordance with the City of Winnipeg Weed Control Standards and Procedures, manufacturer's instructions and the Manitoba Agriculture Guide to Crop Protection and Herbicide Recommendations for Landscape Applicators, latest editions and the following criteria:
- (a) Use 2,4-D Amine or MCPA Amine herbicide for susceptible broadleaf weeds.
 - (b) Use a mixture containing 2,4-D Amine or MCPA Amine, Mecoprop and Dicamba for 2,4-D resistant plants.
 - (c) Do not apply to newly seeded turf until after the second or third mowing.
 - (d) Do not water within 24 hours after application.
 - (e) Apply when winds are less than 20 km/h and air temperature is above 10 degrees Celsius.
 - (f) Avoid use of pure Dicamba solutions near trees and shrubs.
- E7.4.14.8 Given the need for insect control, the Contractor shall have in his possession a Pesticide Applicator's License and a Pesticide Use Permit for pesticide applications related to this Specification. Use standard commercial products in accordance with the manufacturer's instructions and the Manitoba Agriculture Guide to Crop Protection (latest edition) for the particular insect/insects involved.
- E7.4.14.9 Copies of the Pesticide Applicator's License and the Pesticide Use Permit must be submitted to the Contract Administrator prior to commencement of pesticide application.
- E7.4.14.10 All persons handling insecticides shall be fully aware of toxicological rules and regulations governing their use.
- E7.4.14.11 The Contractor shall inform the Contract Administrator immediately of any dangerous occurrence.
- E7.4.15 Spring Clean Up
- E7.4.15.1 Where termination of the sod maintenance period has not been achieved in accordance with Clause E7.4.16 prior to the end of a growing season, regardless of when the sod/seed was placed, the Contractor shall complete all operations related to the clean up of the work area in the following spring. This shall include the cleaning and removal of all dead vegetation, leaves, debris, snowmold and any sand or gravel resulting from winter sanding/deicing operations from turf areas to encourage healthy and uniform grass growth. All costs for spring clean up operations shall be incidental to the costs for sodding and seeding.
- E7.4.16 Termination of Maintenance Period
- E7.4.16.1 The Contract Administrator will terminate the maintenance period for sodded and seeded areas after the following criteria has been met:
- (a) The certified seed sowed meets the requirements specified in clause E7.2.2.

- (b) The work site is clean and the sodded and seeded areas are free of any visual obstructions such as leaves.
- (c) The seeded area has been rolled and has a firm, uniform even surface.
- (d) The sodded and seeded areas are free of bare and dead spots and without more than 10 broadleaf weeds per 50 square metres.
- (e) Grass roots are well anchored into the underlying topsoil and the sodded and seeded areas have established into a healthy, vigorously growing condition.
- (f) Sodded areas are free of visible joints.
- (g) The sodded and seeded areas have sufficient shoot density that no surface soil is visible when the grass has been cut to a height of 50 - 60 mm.
- (h) Sodded and seeded area has been cut to a height of 50 - 60 mm within two working days before the final inspection.
- (i) Sodded and seeded area is free of any turf damaging insects.

E7.4.16.2 If the sodded and seeded areas do not meet the above criteria, the deficient area shall be resodded or reseeded as applicable within three (3) working days after receiving notification from the Contract Administrator and maintained by and at the expense of the Contractor in accordance with Clauses E7.4.13 and E7.4.14 herein.

E7.4.16.3 In situations where the termination of the maintenance period is not granted by the Contract Administrator before the end of a growing season, the maintenance period will commence as described in Clause E7.4.13.

E7.4.17 Site Clean-Up

E7.4.17.1 During both the placement and maintenance of sod/seed, all sidewalks, streets, approaches, driveways and properties near the sodding and seeding operations shall be kept clean at all times by the Contractor.

E7.4.17.2 Upon completion of the project, the Contractor shall immediately remove all excess material, debris and equipment from the work site.

E7.5 MEASUREMENT AND PAYMENT

E7.5.1 Sodding

E7.5.1.1 Sodding will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Sodding" classified into one the categories listed in the items of work below. The area to be paid for will be the total number of square metres of sod supplied, placed and maintained in accordance with this specification, accepted and measured by the Contract Administrator, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E7.5.1.2 No measurement will be made for sod placed outside the limits of placement directed by the Contract Administrator, or for sod placed that does not meet the requirements for the commencement of the thirty (30) day maintenance period.

- E7.5.1.3 Items of work:
- (a) Sodding*
 - i) Area greater than or equal to 4 and less than or equal to 6
 - ii) Area greater than 6 and less than or equal to 15
 - iii) Area greater than 15 and less than or equal to 40
 - iv) Area greater than 40
 - (b) Short Notice Sodding*
 - (c) Restricted Access Sodding*
 - (d) Embankment Sodding*

(e) Sodding Gas Service Inspection Holes**

* The minimum area for each location will be four (4) square metres.

** The minimum area for each location will be a one (1) square metres and the maximum will be four (4) square metres. If more than four (4) square meters of sod is required to complete an individual restoration, the area greater than one (1) square meter will be measured and paid for in the appropriate category for "Sodding" and the one (1) square meters will be paid for as Sodding Gas Service Inspection Holes.

E.7.5.1.4 Payment for Sodding shall be in accordance with the following:

- Seventy-five (75%) of quantity following supply and placement
- Remaining twenty-five (25%) of quantity following termination of the maintenance period.

E7.5.2 Seeding

E7.5.2.1 Supply, placement and maintenance of seed will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Seeding" classified into one the categories listed in the items of work below. The area to be paid for will be the total number of square metres seeded and maintained in accordance with this specification, accepted and measured by the Contract Administrator, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E7.5.2.2 No measurement will be made for seeding placed outside the limits of placement directed by the Contract Administrator, or for seeding placed that does not meet the requirements for the commencement of the thirty (30) day maintenance period.

E7.5.2.3 Items of work: (a) Seeding
i) Damages
ii) Cuts

E7.5.2.4 Payment for Seeding shall be in accordance with the following:

- Sixty-five (65%) of quantity following supply and placement
- Remaining thirty-five (35%) of quantity following termination of the maintenance period.

E7.5.3 Grading

E7.5.3.1 Grading of boulevards to receive sod shall be incidental to the cost of sodding and will not be measured for payment.

E7.5.3.2 Grading of boulevards to receive seed will be measured on an area basis and shall be paid for at the Contract Unit Price per square metre for "Boulevard Grading". The area to be paid for shall be the total number of square metres graded in accordance with this Specification and accepted by the Contract Administrator, as computed from measurements made by the Contract Administrator, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E8. BOULEVARD RESTORATIONS OF TRIMMED CUTS

E8.1 DESCRIPTION

E8.1.1 This Specification shall cover the preparation of the trimmed boulevard cuts, the supply and placing of cultivated turf grass sod, and seeding.

E8.1.2 Referenced Standard Construction Specifications
(a) CW 1130 – Site Requirements

- (b) CW 3510 – Sodding
- (c) CW 3520 - Seeding
- (d) CW 3540 – Topsoil and Finish Grading for Establishment of Turf Areas

E8.2 MATERIALS

E8.2.1 Testing and supply of cultivated turf grass sod and topsoil shall be in accordance with CW 3510.

E8.2.2 Grass seed shall be supplied in accordance with CW 3520.

E8.3 EQUIPMENT

E8.3.1 Track equipment shall not be used.

E8.3.2 Topsoil and Finish Grading

E8.3.2.1 The Contractor shall use a backhoe or wheeled excavator capable of directly loading and unloading materials from delivery/hauling equipment to the cut restoration site.

E8.4 CONSTRUCTION METHODS

E8.4.1 Topsoil and Finish Grading

E8.4.1.1 Preparation, placing and finish grading of the topsoil shall be completed in accordance with Specification CW 3540-R5.

E8.4.1.2 To prevent the formation of depressions or water pockets, the Contractor shall smooth out any undulations or irregularities in the top soil surface prior to placing the sod.

E8.4.1.3 The Contractor shall not deposit or stockpile topsoil on a paved surface.

E8.4.2 General

E8.4.2.1 The Contractor shall not commence sodding or seeding until the finished topsoil surface has been inspected and approved by the Contract Administrator.

E8.4.3 Placement of Sod/Seed

E8.4.3.1 The sod shall be placed in accordance with CW 3510. Seed shall be placed in accordance with E8.4.5.

E8.4.3.2 Notwithstanding the last three paragraphs of Clause 9.5 of CW 3510, sod and seed shall be placed in accordance with D13 after September 15.

E8.4.3.3 After September 15, as the Rounds are revised in accordance with D14, consideration will be given to each locations probable exposure to winter street maintenance activities. Locations where high exposure is predicted, such as regional streets and collector/bus route streets, especially where the Cut is in close proximity to the roadway, will be omitted.

E8.4.3.4 Where the termination of the sod/seed maintenance period is not achieved in accordance with Clause E8.4.11 in the same year it is placed, the Contractor shall be responsible for replacement of any sod/seed damaged over the winter due to winter-kill, ice damage, sand/salt applications on adjacent streets or from snow removal or spring clean up equipment.

E8.4.4 Watering and Rolling

E8.4.4.1 Watering and rolling shall be in accordance with CW 3510.

E8.4.5 Seeding

E8.4.5.1 As directed by the Contract Administrator damaged boulevard areas in the vicinity of boulevard cuts or boulevard cuts in areas where the existing surrounding boulevard has little or no turf, will be corrected by seeding as follows:

- E8.4.5.2 Topsoil shall be spread to a compacted depth of not less than 50 mm for boulevard damages and not less than 100 mm for cut restorations. Grass seed shall be sown at a rate of 100 grams per 10 square metres (1.0 kg per 100 sq.m.). The Contractor shall sow the seed into the approved seed bed by using seeding equipment suitable for the area involved and to the satisfaction of the Contract Administrator. Seed shall be embedded into soil to a depth of 5mm within one (1) hour of sowing. All seeded areas shall be rolled with a mechanical roller of minimum weight of 220 kg and a minimum width of 760 mm to a uniform even surface, level with adjoining curbs, sidewalks or sod.
- E8.4.5.3 Water shall be applied in sufficient quantities and frequencies to obtain seed germination and growth. Watering shall be controlled to prevent seed washout.
- E8.4.5.4 No seeding shall be done on frozen soils, or when any other conditions unfavourable to the successful seed germination exist.
- E8.4.6 Short Notice Restorations
- E8.4.6.1 The Contract Administrator may direct the Contract to have a specific location in the Area sodded/seeded on "Short Notice (SN)". Upon receipt of such notice the Contractor is to have the identified location sodded/seeded in accordance with this specification within forty-eight (48) hours of the notification.
- E8.4.6.2 Where the Contractor fails to complete a "Short Notice (SN)" restoration within the period specified, the Contract Administrator may arrange to have the restoration completed by others and deduct the costs thereof from any payment to be made to the Contractor.
- E8.4.7 Restricted Access Sodding
- E8.4.7.1 The access to some of the locations identified to be sodded may be restricted to smaller manual equipment, such as wheelbarrows and shovels. The Contractor shall use the size and type of equipment that permits the restoration to be done without causing any damage to the surrounding surfaces or structures at the site. All damages caused by the Contractor's negligence, carelessness, or failure to use the appropriate equipment shall be repaired to the satisfaction of the Contract Administrator at the Contractor's expense.
- E8.4.8 Commencement of Thirty (30) Day Maintenance Period
- E8.4.8.1 Immediately after the sod/seed has been placed to the satisfaction of the Contract Administrator, the Contractor shall provide and pay for continuous maintenance of the sodded/seeded area until the criteria specified for termination of the maintenance period in Clause E8.4.11 has been met.
- E8.4.8.2 The Contract Administrator will not allow the Thirty (30) Day Maintenance Period to commence until the following requirements are met:
- (a) The cultivated turf grass sod supplied meets the seed mixture requirements specified in Clause E8.2.1.
 - (b) The sod is free of bare and dead spots.
 - (c) The cultivated turf grass sod does not contain more than 10 broadleaf weeds per 50 square metres.
 - (d) Sodded/seeded areas has been rolled to form a firm, uniform even surface level with adjoining areas.
 - (e) The sod shall have sufficient shoot density that no surface soil is visible within sod.
 - (f) The height of the top growth of the sod is between 50 - 60 mm.
 - (g) The sodded/seeded area is free of any visual obstructions such as leaves.
 - (h) Sodded area is free of any turf damaging insects.
- E8.4.8.3 Any deficient, damaged or vandalized areas shall be resodded or reseeded by the Contractor within three (3) working days after receiving notification from the Contract

Administrator and the area so sodded or reseeded, shall be further maintained until it meets the criteria specified in Clause E8.4.11.

- E8.4.8.4 In situations where the commencement of the Thirty (30) Day Maintenance Period is not granted by the Contract Administrator before the end of a growing season, the Thirty (30) Day Maintenance Period will commence on May 15 of the following year or such date as is mutually agreed upon by all parties, at which time all sodded/seeded areas must meet the requirements listed above.
- E8.4.9 Maintenance of Sodded and Seeded Areas
- E8.4.9.1 Immediately after the sod/seed have been placed to the satisfaction of the Contract Administrator, the Contractor shall provide and pay for continuous maintenance of the sodded/seeded area until the criteria specified for termination of the maintenance period in Clause E8.4.11 has been met.
- E8.4.9.2 The Contractor shall mow at regular intervals to a height of between 50 - 60 mm. No more than thirty percent (30%) of the grass height shall be cut at any one mowing. Remove clippings that will smother grassed areas.
- E8.4.9.3 The Contractor shall water sodded/seeded areas in sufficient quantities and frequencies required to obtain root development and sod growth and seed germination and grass growth.
- E8.4.9.4 Any damage which may occur through washout of the soil during the maintenance period shall be repaired and maintained until it meets the criteria specified in Clause E8.4.11.
- E8.4.9.5 The Contractor shall clean and remove all dead vegetation, leaves, debris and snowmold from sodded and seeded areas to encourage healthy and uniform grass growth.
- E8.4.9.6 Given the need for weed control, the Contractor shall have in possession a Pesticide Applicator's License and Pesticide Use Permit for pesticide applications related to this Specification.
- E8.4.9.7 The Contractor shall apply herbicide when broadleaf weeds start developing in competition with grass. Apply herbicide in accordance with the City of Winnipeg Weed Control Standards and Procedures, manufacturer's instructions and the Manitoba Agriculture Guide to Crop Protection and Herbicide Recommendations for Landscape Applicators, latest editions and the following criteria:
- (i) Use 2,4-D Amine or MCPA Amine herbicide for susceptible broadleaf weeds.
 - (j) Use a mixture containing 2,4-D Amine or MCPA Amine, Mecoprop and Dicamba for 2,4-D resistant plants.
 - (k) Do not apply to newly seeded turf until after the second or third mowing.
 - (l) Do not water within 24 hours after application.
 - (m) Apply when winds are less than 20 km/h and air temperature is above 10 degrees Celsius.
 - (n) Avoid use of pure Dicamba solutions near trees and shrubs.
- E8.4.9.8 Given the need for insect control, the Contractor shall have in his possession a Pesticide Applicator's License and a Pesticide Use Permit for pesticide applications related to this Specification. Use standard commercial products in accordance with the manufacturer's instructions and the Manitoba Agriculture Guide to Crop Protection (latest edition) for the particular insect/insects involved.
- E8.4.9.9 Copies of the Pesticide Applicator's License and the Pesticide Use Permit must be submitted to the Contract Administrator prior to commencement of pesticide application.
- E8.4.9.10 All persons handling insecticides shall be fully aware of toxicological rules and regulations governing their use.
- E8.4.9.11 The Contractor shall inform the Contract Administrator immediately of any dangerous occurrence.

E8.4.10 Spring Clean Up

E8.4.10.1 Where termination of the sod maintenance period has not been achieved in accordance with Clause E8.4.11 prior to the end of a growing season, regardless of when the sod/seed was placed, the Contractor shall complete all operations related to the clean up of the work area in the following spring. This shall include the cleaning and removal of all dead vegetation, leaves, debris, snowmold and any sand or gravel resulting from winter sanding/deicing operations from turf areas to encourage healthy and uniform grass growth. All costs for spring clean up operations shall be incidental to the costs for sodding and seeding.

E8.4.11 Termination of Maintenance Period

E8.4.11.1 The Contract Administrator will terminate the maintenance period for sodded and seeded areas after the following criteria has been met:

- (o) The certified seed sowed meets the requirements specified in clause E8.2.2.
- (p) The work site is clean and the sodded and seeded areas are free of any visual obstructions such as leaves.
- (q) The seeded area has been rolled and has a firm, uniform even surface.
- (r) The sodded and seeded areas are free of bare and dead spots and without more than 10 broadleaf weeds per 50 square metres.
- (s) Grass roots are well anchored into the underlying topsoil and the sodded and seeded areas have established into a healthy, vigorously growing condition.
- (t) Sodded areas are free of visible joints.
- (u) The sodded and seeded areas have sufficient shoot density that no surface soil is visible when the grass has been cut to a height of 50 - 60 mm.
- (v) Sodded and seeded area has been cut to a height of 50 - 60 mm within two working days before the final inspection.
- (w) Sodded and seeded area is free of any turf damaging insects.

E8.4.11.2 If the sodded and seeded areas do not meet the above criteria, the deficient area shall be resodded or reseeded as applicable within three (3) working days after receiving notification from the Contract Administrator and maintained by and at the expense of the Contractor in accordance with Clauses E8.4.8 and E8.4.9 herein.

E8.4.11.3 In situations where the termination of the maintenance period is not granted by the Contract Administrator before the end of a growing season, the maintenance period will commence as described in Clause E8.4.8.

E8.4.12 Site Clean-Up

E8.4.12.1 During both the placement and maintenance of sod/seed, all sidewalks, streets, approaches, driveways and properties near the sodding and seeding operations shall be kept clean at all times by the Contractor.

E8.4.12.2 Upon completion of the project, the Contractor shall immediately remove all excess material, debris and equipment from the work site.

E8.5 MEASUREMENT AND PAYMENT

E8.5.1 Sodding

E8.5.1.1 Sodding will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Sodding" classified into one the categories listed in the items of work below. The area to be paid for will be the total number of square metres of sod supplied, placed and maintained in accordance with this specification, accepted and measured by the Contract Administrator, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E8.5.1.2 No measurement will be made for sod placed outside the limits of placement directed by the Contract Administrator, or for sod placed that does not meet the requirements for the commencement of the thirty (30) day maintenance period.

E8.5.1.3 Items of work: (a) Sodding*

- i) Area greater than or equal to 4 and less than or equal to 6
- ii) Area greater than 6 and less than or equal to 15
- iii) Area greater than 15 and less than or equal to 40
- iv) Area greater than 40

(b) Short Notice Sodding*

(c) Restricted Access Sodding*

(d) Embankment Sodding*

* The minimum area for each location will be four (4) square metres.

E8.5.1.4 Payment for Sodding shall be in accordance with the following:

- Seventy-five (75%) of quantity following supply and placement
- Remaining twenty-five (25%) of quantity following termination of the maintenance period.

E8.5.2 Seeding

E8.5.2.1 Supply, placement and maintenance of seed will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Seeding" classified into one the categories listed in the items of work below. The area to be paid for will be the total number of square metres seeded and maintained in accordance with this specification, accepted and measured by the Contract Administrator, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification.

E8.5.2.2 No measurement will be made for seeding placed outside the limits of placement directed by the Contract Administrator, or for seeding placed that does not meet the requirements for the commencement of the thirty (30) day maintenance period.

E8.5.2.3 Items of work: (a) Seeding

- i) Damages
- ii) Cuts

E8.5.2.4 Payment for Seeding shall be in accordance with the following:

- Sixty-five (65%) of quantity following supply and placement
- Remaining thirty-five (35%) of quantity following termination of the maintenance period.

E9. SURFACE RESTORATIONS

E9.1 Further to clause 3.3 of CW 1130-R2, 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

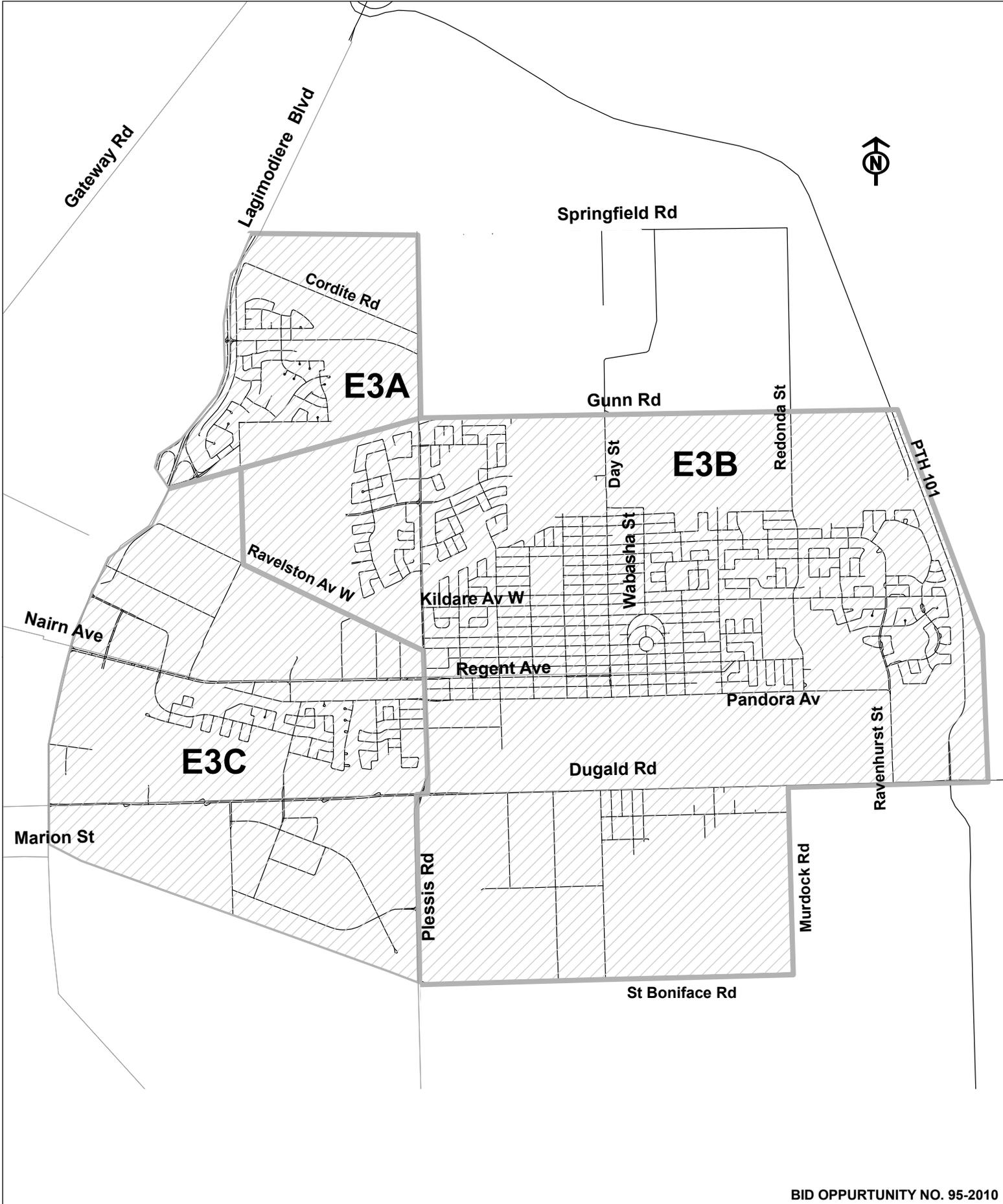
permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

APPENDIX 'A'

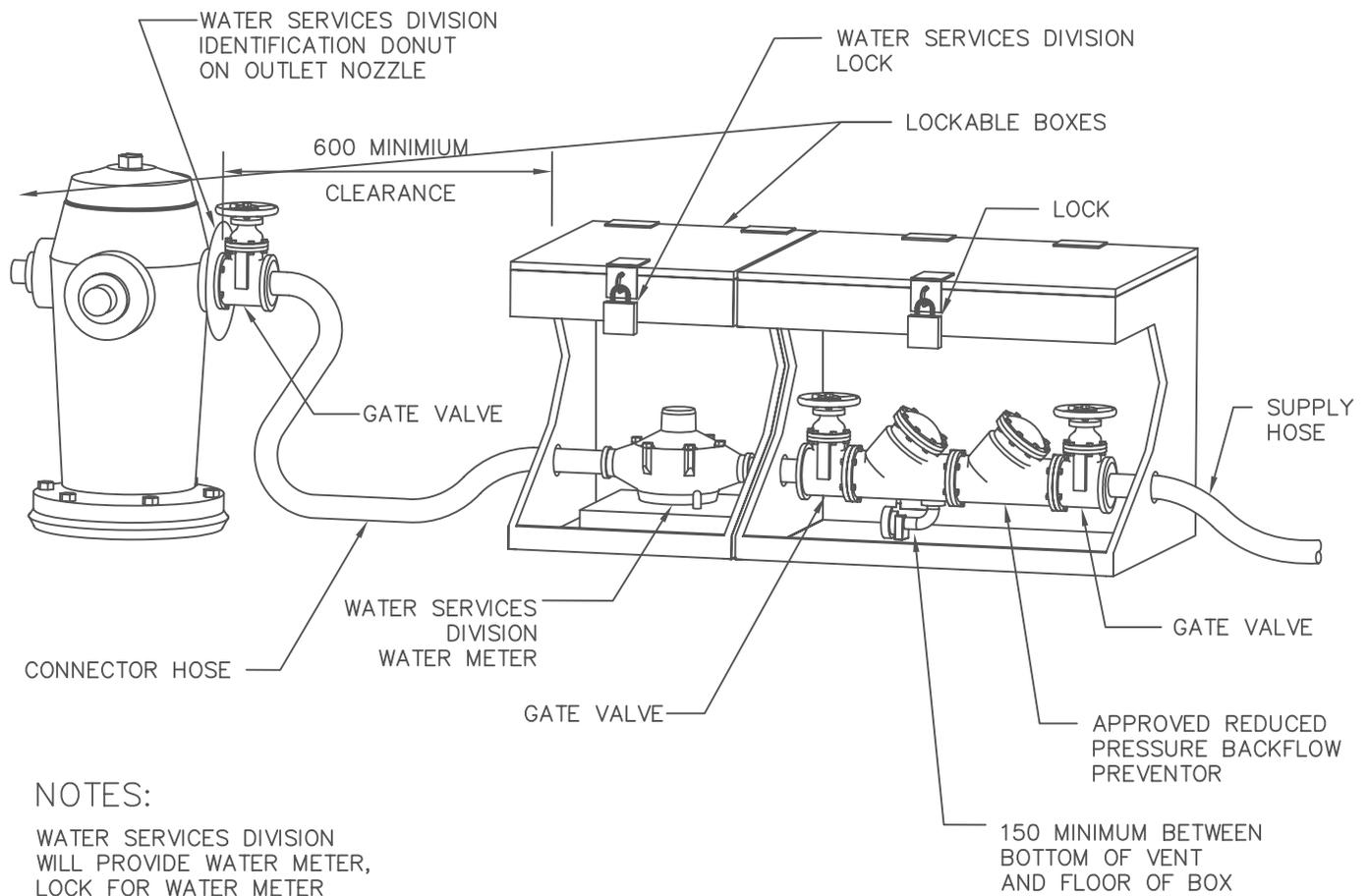
ROUNDS

"ROUNDS SAMPLE"

Area: Round No: Sub Zones:				Round Commencement Date: Avg. Daily Rate: Duration: Round Completion Date:			Bid Opp. No.: Contractor: Inspector:				Types: SN - Short Notice Sodding RA - Restricted Access Sodding EB - Embankment Sodding GAS - Gas Line Inspection Holes					Major Operations: 1. Excavating, trimming, filling & compacting the backfill 2. Placing the top soil 3. Placing sod/seed, top dressing 4. Maintaining sod/seed						
Map Ref #	Permit No.	Date	Zone No.	Number	Street	Applicant	Date Insp.	Permit Quantity	Insp. Quantity	Sodding	Blvd. Grading	TS/S Damages	TS/S Cuts	Supply S'walk Blocks	Adj. S'walk Blocks	Regrd. Pav. Stones	Date Operation Completed				Additional Comments	
																	1	2	3	4		
1	081292(2)	14-Jun-07	S1A	18	ATKINSON RD		09-Jun-08	22														
2	084604(1)	27-May-08	S1A	733	BUCKINGHAM RD		15-Jul-08	5														
3	081921(1)	20-Aug-07	S1A		CATHCART ST[& GRANT - S/E CORNER]		05-Sep-07	4														
4	081486(1)	06-Jul-07	S1A	291	CATHCART ST		23-Jul-07	11														
4A	085334(1)	30-Jul-08	S1A	761	CATHCART ST		19-Aug-08	12													Cut in blvd. @ 761 & opp @ 764	
5	085076(1)	08-Jul-08	S1A	549	CHARLESWOOD RD		19-Aug-08	15													Cuts on both E & W blvd	
6	080327(1)	12-Mar-07	S1A	797	CHARLESWOOD RD		28-May-07	4														
7	083984(1)	18-Mar-08	S1A	817	CHARLESWOOD RD		15-Jul-08	15													Mud/sink @ valve at # 817, mud along back of ditch # 821	
8	084327(1)	25-Apr-08	S1A	895	CHARLESWOOD RD		15-Jul-08	5														
				S1A Total				93														
1	085101(1)	11-Jul-08	S1B	10	ALDERSHOT BLVD		26-Aug-08	4														
2	084529(1)	20-May-08	S1B		DONCASTER ST[& Tuxedo Ave]		21-May-08	4														
3	084496(1)	13-May-08	S1B	66	FOLKESTONE BLVD		27-Jun-08	6														
4	083065(1)	22-Nov-07	S1B	110	GIRTON BLVD		21-May-08	4														
5	082646(1)	17-Oct-07	S1B	110	GIRTON BLVD (Opp.)		04-Dec-07	12													opposite on E. blvd.	
6	081133(1)	04-Jun-07	S1B	110	GIRTON BLVD		29-Jun-07	4														
7	082777(1)	26-Oct-07	S1B	2255	GRANT AVE		27-Jun-08	30													Cuts on E & W blvd. Tuxedo, N. of Grant	
8	084637(1)	28-May-08	S1B	456	GRENADIER DR		27-Jun-08	4														
9	083260(1)	14-Dec-07	S1B	212	GRENFELL BLVD		21-May-08	6														
10	084442(1)	05-May-08	S1B	214	GRENFELL BLVD		08-Jul-08	6														
				S1B Total				80														
1	081675(1)	24-Jul-07	S2A	291	BEAVERBROOK ST		23-Aug-07	13													mud and sink for priv prop. mud only for blvd ruts.	
2	082842(1)	31-Oct-07	S2A	304	BEAVERBROOK ST		05-Nov-07	6													Should be 301 Beaverbrook	
3	075298(1)	01-Dec-05	S2A	93	BOREBANK ST AND (OPP. @ # 92) 2 CUTS		19-Apr-06	6													MTNR - JUNE 06 - HOUSE CONSTRUCTION - UNFINISHED YARD MTNR - SEPT 06 - NEW HOUSE - UNFINISHED YARD MTNR - OCT 06 - NEW HOUSE - UNFINISHED YARD mtnr - july 07 - unfin yard	
4	081257(1)	12-Jun-07	S2A	117	BOREBANK ST		29-Jun-07	4													mud cut on private prop.	
5	082339(1)	21-Sep-07	S2A	221	CAMBRIDGE ST		27-Sep-07	20													mud cut opp.	
6	078832	10-Oct-06	S2A	416	CAMBRIDGE ST		17-Oct-06	19														
7	077408(1)	20-Jun-06	S2A	713	CAMBRIDGE ST		03-Aug-06	4													MTNR - SEPT 06 - NEW HOUSE - UNFINISHED YARD MTNR - OCT 06 - NEW HOUSE - UNFINISHED YARD mtnr - july 07 - unfin yard	
8	074489(1)	28-Sep-05	S2A	713	CAMBRIDGE ST		01-Nov-05	10													(2 cuts) FAXED OCTOBER 13, 2005. MTNR - JUNE 06 - NEW HOUSE - UNFINISHED YARD MTNR - SEPT 06 - NEW HOUSE - UNFINISHED YARD MTNR - OCT 06 - NEW HOUSE - UNFINISHED YARD mtnr - july 07 - unfin yard	
				S2A Total				82														
				Grand Total				255														



BID OPPURTUNITY NO. 95-2010



NOTES:

WATER SERVICES DIVISION WILL PROVIDE WATER METER, LOCK FOR WATER METER COMPARTMENT AND IDENTIFICATION DONUT.

ONLY WATER SERVICES DIVISION STAFF WILL OPERATE HYDRANTS.

DIMENSIONS IN MILLIMETRES

BID OPPORTUNITY NO. 95-2010



The City Of Winnipeg
Water & Waste Department

Reference Spec. No. CW 1120
CW 2110

BACKFLOW PROTECTION
ARRANGEMENT
FOR WATER SUPPLY
FROM HYDRANT

Designed By:
RWK

Drawn By:
RWK

Scale:
N.T.S.

Checked By:
TW

Date: 03-01-22
Revised :

Drawing No.

Approved:

PW-ENG-02