



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 712-2009**

**PROVISION OF TREE PLANTING – INSTALLATION AND MAINTENANCE**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 PROVISION OF TREE PLANTING – INSTALLATION AND MAINTENANCE

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, **October 22, 2009**.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

### **B3. SITE INVESTIGATION**

B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.

### **B4. ENQUIRIES**

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B4.2 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 promptly notify the Contract Administrator of the error, discrepancy or omission at least two (2) Business Days prior to the Submission Deadline.

B4.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.

B4.4 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.

B4.5 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.

B4.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

### **B5. ADDENDA**

B5.1 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.

B5.2 The Contract Administrator will issue each addendum at least one (1) Business Day prior to the Submission Deadline, or provide at least one (1) Business Day by extending the Submission Deadline.

B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B5.2.2 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.

B5.3 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.

## **B6. SUBSTITUTES**

B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.

B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least two (2) Business Days prior to the Submission Deadline.

B6.4 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 Contract;
- (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 Contract.

B6.5 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.

B6.6 The Contract Administrator will provide a response in writing, at least one (1) Business Day prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.

B6.6.1 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.

B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.

B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.

B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B6.10 Notwithstanding B6.2 to B6.9, and in accordance with B7.5, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

## **B7. BID SUBMISSION**

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
  - (b) Form B: Prices.
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 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.
- B7.4 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.5 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B14.1(a).
- B7.6 The Bid may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.7 If the Bid 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
- B7.7.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.8 If the Bid is submitted by facsimile transmission, it shall be submitted to (204) 949-1178
- B7.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B7.9 Bids submitted by internet electronic mail (e-mail) will not be accepted.

## **B8. BID**

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 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.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.

- B8.3 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.
- B8.4 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 and the corporate seal, if the corporation has one, should be affixed;
  - (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B8.5 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.

## **B9. PRICES**

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Notwithstanding C11.1.1, prices on Form B: Prices shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B9.2 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.
- B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B9.4 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

## **B10. QUALIFICATION**

- B10.1 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, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; 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.
- B10.2 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>

- B10.3 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).
- B10.4 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.
- B10.5 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.

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

- B11.1 Bids will not be opened publicly.
- B11.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B11.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

### **B12. IRREVOCABLE BID**

- B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B12.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

### **B13. WITHDRAWAL OF BIDS**

- B13.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B13.1.1 Notwithstanding C22.5, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B13.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.



- B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
  - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
  - (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.
- B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

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

- B14.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B6;
- B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B14.4 Further to B14.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B14.4.2 Further to B14.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B14.5 This Contract will be awarded as a whole.

#### **B15. AWARD OF CONTRACT**

- B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid in accordance with B14.

B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

B15.4 Notwithstanding C4.1, the City will issue a purchase order to the successful Bidder in lieu of the execution of a Contract.

B15.5 The Contract Documents, as defined in C1.1(n), in their entirety shall be deemed to be incorporated in and to form a part of the purchase order notwithstanding that they are not necessarily attached to or accompany said purchase order.

## PART C - GENERAL CONDITIONS

### C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Supply of Services* (Revision 2007 04 12) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Supply of Services* 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](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 Supply of Services*.

## **PART D - SUPPLEMENTAL CONDITIONS**

### **GENERAL**

#### **D1. GENERAL CONDITIONS**

D1.1 In addition to the *General Conditions for Supply of Services*, 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 supply and planting of trees and perennial grasses and maintenance of the new plantings.

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

- (a) Supply and installation of deciduous and coniferous trees and perennial grasses
- (b) Supply and installation of planting bed and mulch; and
- (c) Maintenance of trees and perennial grasses.

#### **D3. DEFINITIONS**

D3.1 When used in this Bid Opportunity:

- (a) "**User**" means a person, department or other administrative unit of the City authorized by the Contract Administrator to order Work under this Contract;

#### **D4. CONTRACT ADMINISTRATOR**

D4.1 The Contract Administrator is:

Christina Harris  
Urban Designer  
City of Winnipeg  
Parks, Riverbanks and Community Initiatives Branch  
Planning and Land Use Division  
Planning, Property and Development Department  
15-30 Fort St.  
Winnipeg. MB R3C 4X5

Telephone No. (204) 986-7436

Facsimile No. (204) 986-7524

D4.2 At the pre-commencement 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 Further to C6.19, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in his employ.

D5.2 Before commencement of Work, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

- D5.2.1 Further to C5.5 Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

## **D6. NOTICES**

- D6.1 Notwithstanding C22.3, 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

## **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. INSURANCE**

- D8.1 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; such liability policy to also contain a cross-liability clause, non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work;
  - (b) if required, 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), to remain in place at all times during the performance of the Work.
- D8.2 Deductibles shall be borne by the Contractor.
- D8.3 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 on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.
- D8.4 The Contractor shall not cancel, materially alter, or cause the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.
- D8.5 The City shall have the right to alter the limits and/or coverages as reasonably required from time to time during the continuance of this agreement.

## **CONTROL OF WORK**

### **D9. COMMENCEMENT**

- D9.1 The Contractor shall not commence any Work until he is in receipt of a notice of award from the City authorizing the commencement of the Work.

- D9.2 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 C6.14; and
    - (iii) evidence of the insurance specified in D8.
  - (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.
- D9.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order. Should the Contractor be unable to commence the Work this year due to weather, the Work shall commence as soon as possible in spring 2010.

#### **D10. SUBSTANTIAL PERFORMANCE**

- D10.1 The Contractor shall achieve Substantial Performance within twenty five (25) consecutive Working Days of the commencement of the Work as specified in D9.
- D10.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D10.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

#### **D11. TOTAL PERFORMANCE**

- D11.1 The Contractor shall achieve Total Performance within five (5) consecutive Working Days of the date that Substantial Performance is inspected.
- D11.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D11.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

#### **D12. LIQUIDATED DAMAGES**

- D12.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City Five Hundred dollars (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D12.2 The amount specified for liquidated damages in D12.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D12.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

**D13. EXISTING SERVICES AND UTILITIES**

D13.1 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

**D14. ACCESS TO SITE**

D14.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.

D14.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property.

**D15. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY**

D15.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to City of Winnipeg Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.

D15.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area.

D15.3 The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 metres from the dripline of existing trees.

D15.4 The Contract Administrator will identify trees to be at risk. For those trees identified to be at risk, the Contractor shall install snow fencing at the dripline around the trees to establish a tree protection zone or suitable protection shall be applied as approved by the Contract Administrator.

D15.5 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 by an arborist with a valid Manitoba Arborist License at the face of excavation.

D15.6 Operation of equipment within the drip line of the trees shall be kept to a 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 drip lines of trees. The drip line of a tree shall be considered to be all of the ground surface located beneath the tree and radiating out to 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.

D15.6.1 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.

D15.7 No separate measurement or payment will be made for the protection of trees.

## **D16. SCHEDULED MAINTENANCE**

- D16.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications as specified in E18.
- D16.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein.

## **D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

- D17.1 Further to C6.23, 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).

## **D18. SAFETY**

- D18.1 The Contractor shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.
- D18.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.
- D18.3 The Contractor shall do whatever is necessary to ensure that:
- (a) no person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
  - (b) the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of its performance;
  - (c) adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;
  - (d) adequate sanitation measures are taken and facilities provided with respect to the Work;
  - (e) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or Plant;
  - (f) fire hazards in or about the Work are eliminated.

## **D19. DETAILED WORK SCHEDULE**

- D19.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site.
- D19.2 The detailed work schedule shall consist of the following dates:
- (a) start date;
  - (b) installation dates of trees within each park location;
  - (c) expected completion.
- D19.3 Other milestone dates appropriate to this project should also be included to make the Contract Administrator aware of them.

## **MEASUREMENT AND PAYMENT**

### **D20. INVOICES**

- D20.1 Further to C11, the Contractor shall submit an invoice for each order delivered to:
- The City of Winnipeg  
Corporate Finance - Accounts Payable  
4th Floor, Administration Building, 510 Main Street



Winnipeg MB R3B 1B9

Facsimile No.: (204) 949-0864

Email: [CityWpgAP@winnipeg.ca](mailto:CityWpgAP@winnipeg.ca)

D20.2 Invoices must clearly indicate, as a minimum:

- (a) the City's purchase order number;
- (b) date of tree planting;
- (c) park in which tree was planted;
- (d) type and quantity of goods delivered and planted;
- (e) the amount payable with GST and MRST shown as separate amounts; and
- (f) the Contractor's GST registration number.

D20.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

## **D21. PAYMENT**

D21.1 Further to C11, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

D21.2 Further to C11, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

## **WARRANTY**

### **D22. WARRANTY**

D22.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to E18 and E23. Any replacement trees planted due to tree mortality shall be maintained and have a warranty period of two (2) years.

D22.2 Notwithstanding C13.2 or D22.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:

- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.

D22.3 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

E1.1 These Specifications shall apply to the Work.

E1.2 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
T-1-B	FALL 2009 TREE PLANTING LOCATIONS
M-42-B	MORAY & BRUCE PARK – Proposed Tree Planting
O-19-E	OLYMPIC PARK – Proposed Tree Planting
K-25-B	KING EDWARD – SILVER PARK - Proposed Tree Planting
K-5-O	KIRKBRIDGE PARK - Proposed Tree Planting
SCD-515	CONIFEROUS TREE PLANTING (PARKS)
SCD-517	STANDARD GUIDELINE FOR THE PLANTING OF TREES

E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B6.

### TREE PLANTING IN PARKS

#### E2. GENERAL

E2.1 This specification shall cover the supply and installation of nursery grown trees in accordance with the working drawings and the Contract documents on all properties that are owned by, or under the jurisdiction of, the City of Winnipeg.

E2.2 The Contractor shall ensure only experienced personnel, under the direction of a skilled supervisor, shall execute all of the Work. The supervisor shall be on Site at all times during the Work and shall be authorized to make binding decisions on behalf of the Contractor.

E2.3 It is understood that the Contract Administrator shall consult with the City Forester on matters which do not conform to, or which are not addressed, by these Specifications.

E2.4 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed in Form B Prices, shall apply to the Work.

(a) *The City of Winnipeg Standard Construction Specifications* is available on the information. Connection page at the City of Winnipeg Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

(b) The version in effect three (3) Business Days before the Submission Deadline shall apply.

#### E3. PUBLIC SAFETY/TRAFFIC CONTROL

E3.1 In accordance with the Manual of Temporary Traffic Control, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Section of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Section of the City of Winnipeg in connection with the works undertaken by the Contractor. The requirements shall include the following:

(a) The Contractor shall barricade the sidewalk surrounding the Work;

(b) The Contractor shall maintain traffic flow and ensure that protection is afforded to the road user and that the Contractor's operations shall in no way interfere with the safe operation of traffic.

#### **E4. TREE SITES & LAYOUT**

- E4.1 The park sites and approximate tree planting locations are found within the attached Drawings. Exact planting locations are to be determined on site by the Contract Administrator.
- E4.1.1 The Contractor shall obtain all necessary utility clearances prior to the commencement of planting and in a timely manner so as not to jeopardize the schedule of the complete tree planting operation.
- E4.1.2 The Contractor is to comply with the instructions on the utility clearance sheets.
- E4.1.3 Trees are not to be planted directly above underground utilities, unless hydro-excavation techniques are used.
- E4.1.4 Where a specified planting Site conflicts with underground utilities, the Contractor may modify the precise location in compliance with the utility clearances and the following Minimum Distance Guidelines:
- (a) Intersections: 6m;
  - (b) Private approaches: 1.5m;
  - (c) Light standards, hydro poles, hydrants, manholes and sewer grates: 3m
- E4.1.5 Where a planting Site must be modified by more than 1 metre, the Contractor must receive prior approval from the Contract Administrator or designate.

#### **E5. SUPPLY & PREPLANTING CARE OF TREES**

- E5.1 The Contractor shall be responsible for supplying and transporting trees to the appropriate planting Sites.
- E5.2 The Contractor shall coordinate the shipping of trees and excavation of tree pits to ensure no more than a maximum of a 24 hour time lapse has occurred between the plant material arriving on Site and the installation of that plant material.
- (a) Trees shall be transported with care taken to prevent damage:
    - (i) Protect trees against abrasion, exposure and extreme temperature change during transit;
    - (ii) Avoid binding of trees with rope or wire that would damage bark, break branches or destroy natural shape of tree;
    - (iii) Point of contact with equipment shall be padded;
    - (iv) Give full support to root ball of trees during lifting:
      - (A) Each balled specimen shall be handled with sufficient care, so that the root balls shall not be broken;
      - (B) Broken root balls or root ball consisting of loose soil will not be accepted and shall be replaced;
      - (C) Broken roots of deciduous stock shall be pruned back prior to planting.
  - (b) Trees with broken or damaged trunks or branches are not acceptable. Trees with damaged trunks, however caused, will be rejected. No exceptions shall be made in this respect;
  - (c) Keep roots moist and protected from sun and wind:
    - (i) Trees that cannot be planted immediately shall be well protected against damage and drying out; if necessary, trees shall be heeled-in in a shaded area and watered well.

#### **E6. LOCATION AND SCHEDULE OF WORK**

- E6.1 The Contractor's operations shall be limited to the minimum encroachment on private properties necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on or over private property.

E6.2 The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress are maintained to residences.

## **E7. MATERIALS**

E7.1 The Contractor shall be responsible for the supply of

- (a) plant material,
- (b) the safe handling, pick up and delivery of trees to the planting Sites,

E7.2 All materials supplied by the Contractor under these Specifications shall be subject to random inspection and testing by the Contract Administrator.

E7.2.1 The Contract Administrator may reject any material(s) that do not comply.

E7.2.2 There shall be no charge to the City for any material samples taken for testing by the Contract Administrator.

## **E8. TREES**

E8.1 Trees shall be the size and variety noted on the Plant List attached to the end of this specification section. Plant material which does not have the specified root ball diameter as mentioned in plant list will be rejected.

E8.2 All nursery stock supplied shall be Canadian prairie nursery grown, of the species and sizes indicated on the drawings. Quality shall be in accordance with the latest "Guide Specification for Nursery Stock of the Canadian Nursery Trades Association".

E8.3 Any nursery stock dug from native stands, wood lots, orchards or neglected nurseries and which have not received proper cultural maintenance as advocated by the Canadian Nursery Trades Association, shall be designated as "collected plants". The use of "collected plants" will not be permitted unless approved by the Contract Administrator.

E8.4 The Contract Administrator reserves the right to inspect the plant material at their original source or supplier, and to instruct the supplier on root and branch pruning requirements.

E8.5 Nomenclature of specified nursery stock shall conform to the International Code of Nomenclature for Cultivated Plants and shall be in accordance with the approved scientific names given in the latest edition of standardized Plant Names. The names of varieties not names therein are generally in conformity with the names accepted in the nursery trades.

E8.6 Plants larger than specified may be used if approved by the Contract Administrator. The use of such plants shall not increase the Contract price.

E8.7 All nursery stock shall be measured when the branches are in their normal position. Height and spread dimensions specified refer to the main body of the plant and not from branch tip.

E8.8 Where trees are measured by calliper (cal.), reference is made to the diameter of the trunk measured 300 mm above ground as the tree stands in the nursery.

E8.9 All nursery stock shall be well branched, true to type, structurally sound, possess a well developed, undamaged root system and shall be free of disease, insect infestations, rodent damage, sunscald, frost cracks and other abrasion or scare to the bark. All parts of the nursery stock shall be moist and show live, green cambium when cut.

E8.10 All trees shall have one only, sturdy, reasonably straight and vertical trunk and a well balanced crown with fully developed leader. All evergreens shall be symmetrically grown and branched from ground level up, and must be balled and burlapped unless noted otherwise on the plant list. At least one plant of each variety supplied shall bear a tag showing both the botanical and common name of the plant.

E8.11 Protection of Stock

- (a) All nursery stock shall be well protected from damage and drying out from the time of digging until the time of planting on site. All roots shall be cleanly cut; split roots are not acceptable.
- (b) Nursery stock shall be transplanted with care to prevent damage. Points of contact with equipment shall be padded. All nursery stock, which cannot be planted immediately upon arrival at the site, shall be well protected to prevent drying out and shall be kept moist until commencement of planting.

E8.12 All nursery stock is to meet the requirements of this specification regardless as to whether it is supplied by the City or the Contractor.

E8.13 Plant Material

Quantity	Common Name/botanical name	Size / Remarks
<b>SOUTH PARKS</b>		
9	Blackhills Spruce/ <i>Picea glauca</i> var. <i>densata</i>	2400mm ht. Straight trunk. Evenly branched, full bushy tree, no broken leaders, well branched to grade. Two stakes per tree
5	Fallgold Black Ash / <i>Fraxinus nigra</i> 'Fallgold'	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia. rootball. Two stakes per tree
21	Discovery Elm / <i>Ulmus davidiana</i> 'Discovery'	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia. rootball. Two stakes per tree
1	American Basswood / <i>Tilia americana</i>	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia. rootball. Two stakes per tree
15	Harvest Gold Little Leaf Linden / <i>Tilia mongolica</i> 'Harvest Gold'	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia. rootball. Two stakes per tree
13	Manitoba Maple / <i>Acer negundo</i>	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia rootball. Two stakes per tree
<b>NORTH PARKS</b>		
4	Discovery Elm / <i>Ulmus davidiana</i> 'Discovery'	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia. rootball. Two stakes per tree
5	American Basswood / <i>Tilia americana</i>	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia. rootball. Two stakes per tree
3	Harvest Gold Little Leaf Linden / <i>Tilia mongolica</i> 'Harvest Gold'	Min. 60 to 70 mm calliper, 3500mm ht. Single straight trunk. Specimen quality. Well branched head above 1830mm ht. Minimum 800 mm dia. rootball. Two stakes per tree
3	Norlin Linden / <i>Tilia cordata</i> 'Norlin'	Min. 60 to 70 mm calliper, 3500 mm ht. Single straight trunk. Specimen quality Well branched head above 1830mm ht. Minimum 800 mm dia. root ball. Two stakes per tree

## **E9. PLANTING SOIL**

- E9.1 The planting soil shall be topsoil that complies with CW 3540, Section 5.2.
- (a) Further to CW 3540 Section 5.2, planting soil shall contain maximum ten percent (10%) organic matter (peat, rotted manure or composted material).
- E9.2 At the discretion of the Contractor Administrator, planting soil may be subject to tests for nitrate, phosphate, potassium, sulphate, pH, E.C. (salinity), and volume of organic matter, by a testing laboratory designated by the Contract Administrator.
- E9.3 The Contract Administrator reserves the right to reject planting soil not conforming to the requirements of these Specifications.

## **E10. WATER**

- E10.1 The Contractor shall provide water, so that
- (a) All costs to provide water for the watering operation and all associated costs shall be borne by the Contractor. These costs may include hydrant permit and meter rental fees.
- (b) Further to clause 3.7 of CW 1120-R1, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.
- E10.1.1 Water shall be free of oils, acids, alkalis, salts and other substances that may be detrimental to plant growth. Water suitable for human consumption shall be acceptable without testing.
- E10.1.2 Water from rivers and streams shall not be used without prior approval of the Contract Administrator.
- E10.2 Should the Contract Administrator determine that water quality testing is necessary, an approved testing laboratory shall perform the test at the sole expense of the Contractor.

## **E11. TREE PROTECTION/SUPPORT DURING INSTALLATION**

- E11.1 Upon completion of the planting operation, the Contractor shall slice open a 100 mm diameter x 600 mm long section of plastic weeping tile material and place around the base of each tree trunk.
- E11.2 Stakes shall be T-rail iron stakes 40 x 40 x 5 x 1540 mm long, primed with 1 brush coat of zinc rich plant paint to CGSB 1-GP-191B. Stakes shall be uniform in style and colour.
- E11.3 The guying straps shall be attached in accordance with the drawings referenced in SCD-517 and SCD-515 and shall be of a material that is non-abrasive to the tree to prevent girdling injury:
- (a) Hose-covered wire, flexible belting or any strong, soft wide strips of material is acceptable.
- E11.4 Where wire is used, ensure ends are twisted tight:
- (a) Protruding ends are unacceptable.

## **E12. MULCH**

- E12.1 The Contractor shall provide mulch. Mulch shall:
- (a) be a clean bark or wood chip free of leaves, branches and other extraneous matter; and
- (b) consist of chips not less than 15 mm nor larger than 75 mm in size and not more than 20 mm thick.

### **E13. TREE PITS**

E13.1 Tree Pits shall be excavated using the following methods (see SCD-517 for deciduous trees and SCD-515 for coniferous trees):

- (a) Tree pits shall be minimum 2 times the diameter of the root ball.
- (b) Tree pits shall be excavated using a backhoe or hand shovel.
- (c) Pit depth shall be such that the top of the root ball is even with the existing grade

E13.2 The sides of all tree pits shall be scarified to the depth of one shovel blade.

E13.3 The bottom of all excavations shall be protected against freezing.

E13.4 Tree pits shall be left open for a maximum of 24 hours.

- (a) Pits that are left open overnight must be covered with a sheet of plywood and be marked with a minimum of one (1) safety cone.
  - (i) Plywood shall be a minimum thickness of 5/8".

### **E14. PLANTING PERIOD**

E14.1 The Contractor shall not plant trees during periods of extreme heat, at the discretion of the Contract Administrator.

- (a) The City of Winnipeg reserves the right to refuse acceptance of any or all trees failing to meet the above timing restrictions.

### **E15. PLANTING**

E15.1 The Contractor is expected to plant trees as follows:

- (a) all trees shall be set plumb and shall be placed in the centre of the tree pit;
- (b) trees shall be placed on undisturbed soil and to a depth equal to that at which they were originally growing at the nursery.
- (c) once the tree has been set in its final position, burlap on the root ball shall be cut from the top 1/3 of the root ball:
  - (i) If a wire basket has been used, it shall be cut off from the top 1/3 of the root ball.
  - (ii) All twine shall be removed from the root ball.
- (d) after the root ball is prepared, fill tree pit with planting soil as per E9, in layers of 150 mm depth and compact the independent layers of soil by tamping;
- (e) tamp soil around root system to eliminate air voids;
- (f) grade the area around the tree according to the drainage type; and
- (g) All planting areas shall be levelled, raked and edged to give a neat appearance.

E15.2 Upon completion of the planting operation, the Contractor shall:

- (a) install tree trunk protection (as per E11.1 around the base of each tree trunk);
- (b) install stakes and straps (see E11.1 through E11.4), if deemed necessary;
- (c) if, upon inspection by the Contract Administrator or designate, it is determined that a stake is necessary (e.g. windblown tree) the Contractor shall be responsible for installing the stake and strap as requested;
- (d) form a water dish from the soil around the outside edge of the root ball with a berm 100 mm in height:
  - (i) Soil shall not be piled around the tree trunk.
- (e) install wood chips or other mulch (as per E12);
- (f) administer watering;

- (i) watering must be done slowly to ensure that water does not run away from the root zone and so the top 300 mm of the soil around the root system of the tree are well saturated;
- (ii) use a low-pressure open flow nozzle and hose; and
- (iii) The water stream must not gouge out a hole in the soil or mulch.

#### **E16. AFTER HOURS WORK**

E16.1 Further to Clause GC.&.01 of the General Conditions, the Contractor shall obtain written permission from the Contract Administrator for any Work to be performed outside regular working hours including any Sunday or Statutory Holiday. Regardless of the Contract Administrator's approval, any such Work done by the Contractor between these hours shall conform to all applicable Laws, By-Laws and Ordinances.

#### **E17. SITE CLEAN UP**

E17.1 During the planting operations, all sidewalks, streets, approaches, driveways and properties near or about the planting operations, shall be kept clean at all times by the Contractor.

E17.2 All clay and in-situ material shall be removed from the Site by the Contractor by the end of the Working Day (if piled in the street) or within 48 hours (if piled on boulevards or in parks).

E17.3 Upon completion of the Work, the Contractor shall immediately remove all excess material and debris from the Work Site and shall leave the Site in a clean and orderly manner.

#### **MAINTENANCE OF NEW TREE PLANTINGS**

##### **E18. GENERAL**

E18.1 The Contractor shall cover the maintenance of trees for a period of two years from the date of the tree planting was completed. The Contractor shall furnish all labour, materials, equipment and services necessary to perform ongoing care of the plant material, which shall include but not be limited to:

- (a) Mulching, in accordance with E12.1 and E19.1(d);
- (b) Watering, in accordance with E10.1, E10.2 and E19.1(e);
- (c) Weed Control, in accordance with E19.1(f).

##### **E19. METHODS**

E19.1 The Contractor shall:

- (a) program the timing of operations to plant growth, weather conditions and use of the Site;
- (b) do each operation continuously and complete within a reasonable time period;
- (c) store equipment and materials off-site;
- (d) add additional mulch as required to maintain minimum constant depth of mulch;
  - (i) clean up edges and contain mulch within the designated area;
- (e) water trees as follows:
  - (i) immediately upon being planted and every week for the first three (3) weeks after planting;
  - (ii) thereafter, watering shall be done every 7 – 14 days between May and October or as frequently as necessary (compensating appropriately for weather) to sustain vigorous plant growth;
  - (iii) by watering slowly to ensure that water does not run away from the root zone and so the top 300 mm of soil around the root system of the tree is well saturated;



- (iv) by using a low pressure open flow nozzle and hose. The water stream must not gouge out a hole in the soil or mulch;
  - (v) by using the recognized standard for tree watering as approximately 8-10 times during the growing season with the following amounts of water depending on the calliper of the tree – the rule of thumb is 40 litres of water per 25 mm calliper;
  - (vi) by recognizing watering requirements of trees are dependant upon on a number of variables such as tree species, soil type, when planted, and weather including precipitation. These watering requirements are a minimum standard and shall be followed unless otherwise directed by the Contract Administrator or his designate.
  - (vii) by applying a final watering for all trees, regardless of when planted, that shall be completed after temperatures fall below freezing to ensure adequate moisture in root zone at freeze-up;
- (f) maintain surface of tree pit by hand weeding during the watering process as follows:
- (i) do not allow weeds to establish for a period longer than two (2) weeks; and
  - (ii) do not use any herbicides for weed control near trees unless authorized by the Contract Administrator.
- E19.2 The Contractor must inform the Contract Administrator of watering progress and schedule by 9:00 AM each day of watering.
- E19.3 The Contractor must inform the Contract Administrator immediately of any equipment breakdown or delay in watering and maintenance. Once a watering cycle is completed, submit a log-sheet to the Contract Administrator identifying the following:
- (a) the location where maintenance Work is carried out; and
  - (b) preventative or corrective measures required which are outside Contractors' responsibility.
- E19.4 Any trees planted to replace trees that have died during the maintenance period will receive full 2 years maintenance from the date that the replacement tree was accepted.

## **E20. TREE PROTECTION/SUPPORT**

- E20.1 The tree protection collars, staking material and all attachments to trees shall be removed by the Contractor upon completion of the maintenance period.

## **E21. SITE SAFETY AND TRAFFIC CONTROL**

- E21.1 Site Safety and Traffic Control measures shall be carried out in all areas on or adjacent to roadways (see E3.1).

## **E22. DAMAGE TO PROPERTY**

- E22.1 The Contractor shall take every precaution not to damage, injure or mark any existing structures or landscaping on the street allowance or adjacent properties.
- E22.2 Should any damage be caused by the Contractor, their employees or equipment, it shall be restored or replaced at the Contractor's expense and to the satisfaction of the Contract Administrator. This applies even if damage results from work done in the process of correcting deficiencies.

## **E23. TREE MORTALITY**

### **CONTRACTOR SUPPLIED TREES**

- E23.1 If a Contractor-supplied tree dies and the Contractor has not been submitting the regular maintenance records in accordance with these specifications, then the cost to supply, plant and

maintain a replacement tree as originally indicated in the contract document, shall be at the sole expense of the Contractor.

E23.2 If a Contractor-supplied tree dies and the Contractor has been submitting the regular maintenance records in accordance with these specifications, that tree will be added to the Contract at the originally specified bid price to be supplied, planted and maintained by the Contractor in accordance to this specification.

E23.3 Replacement trees shall receive 2 years maintenance as outlined in the contract document, from the date of replacement.

E23.4 Inspections of replacement trees will be conducted by City of Winnipeg staff.

## **E24. PLANTING BED PREPARATION AND MULCH**

### **E24.1 Description**

E24.1.1 The Work to be done by the Contractor under this Specification shall cover planting bed preparation, include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and herein specified.

### **E24.2 Materials**

#### **Planting Soil**

E24.2.1 Planting Soil shall consist of black top soil, a fertile friable natural loam containing by volume not less than 4% and no more than 25% of organic matter for clay loams, and not less than 2% and no more than 25% for sandy loams, with an acidity value ranging from pH 6.0 to 8.0 and capable of sustaining vigorous plant growth. Topsoil is to be free of any mixture of subsoil, clay lumps and free of stones and other extraneous matter. It is not to contain couch or crab grass rhizomes.

#### **Mulch**

E24.2.2 Mulch shall be locally available clean bark or wood chip mulch free of leaves, branches and other extraneous matter. The recommended mulch shall consist of chips not less than 15mm not larger than 75mm in size and not more than 20mm thick.

#### **Water**

E24.2.3 Water shall be potable and free of minerals which may be detrimental to plant growth.

#### **Fertilizer**

E24.2.4 Fertilizer shall be complete synthetic slow release fertilizer with maximum 35% water soluble nitrogen.

### **E24.3 Construction Methods**

#### **General**

E24.3.1 Contractor shall visit the Site and verify all data and dimensions and report any errors, omissions or discrepancies to the Contract Administrator prior to any installation. Planting bed to be prepared as shown in Drawing O-19-E.

#### **Planting Bed Preparation**

E24.3.2 Contractor shall co-ordinate Site excavation Works with landscaping to ensure minimal additional excavation for planting beds. All remaining areas to be excavated shall be to the shape shown on the Drawings. Planting Beds shall be excavated with vertical sides and material removed as shown on Drawings.

E24.3.3 Upon excavation of the planting bed, the excavation shall be backfilled with a topsoil mixture to a depth to permit adequate installation and stabilization of the plant material. Topsoil shall be placed in accordance with City of Winnipeg Standard Construction Specification CW 3540-R5 to a 300mm depth.

E24.3.4 All areas and locations provided for planting shall be staked according to layout shown on the Drawings. Excavation shall not proceed until the layout has been inspected and approved by the Contract Administrator. Excavation shall not be undertaken until all underground utilities have been located and protected.

Supply and Installation of Mulch

E24.3.5 Contractor to supply and install bark mulch in planting bed and boulder riprap area. Mulch supplied shall cover entire planting area to a consistent depth of 75mm.

**E25. PLANT MATERIAL & MAINTENANCE**

**PERENNIALS**

Quantity	Common Name/botanical name	Size / Remarks
<b>NORTH PARKS</b>		
9	Karl Foerster Reed Grass / <i>Calamagrostis acutifolia</i> 'Karl Foerster'	#1 container, well developed root system, 0.6m spacing
12	Blue Oat Grass / <i>Helictotrichon sempervirens</i>	1 gallon pot size, 0.5m spacing

E25.1 Description:

- (a) This specification shall cover the supply and installation of nursery grown ornamental perennial grasses to the prepared planting bed.
- (b) The City reserves the right to reduce the quantity of ornamental perennial grasses in order to meet the budgetary constraints.

E25.2 Maintenance

- (a) The Contractor shall be responsible for the maintenance of the perennials for a period of one (1) year from the date of Substantial Performance. Any areas planted after September 15th, the maintenance period will commence on May 15th of the following year or such date as mutually agreed upon by all parties.
- (b) Water to ensure soil moisture conditions for optimum growth and health of plant material. Ensure watering techniques do not cause erosion.
- (c) Remove weeds bi-monthly.
- (d) Replace or re-spread damaged, missing or disturbed mulch.
- (e) For non-mulched areas, cultivate monthly to keep top layer of soil friable.
- (f) If required to control insects, fungus and disease, use appropriate control methods in accordance with Federal, Provincial and Municipal regulations. Obtain product approval from Contract Administrator prior to application.
- (g) Apply fertilizer as directed by manufacturer's specifications.
- (h) Remove dead, broken or hazardous branches from plant material.
- (i) Remove and replace dead plants and plants not in healthy growing condition. Make replacements in same manner as specified for original plantings.

- (j) Submit monthly written reports to Contract Administrator identifying:
  - (i) Maintenance work carried out.
  - (ii) Development and condition of plant material.
  - (iii) Preventative or corrective measures required which are outside Contractor's responsibility.

#### E25.2.1 Replacements

- (a) During the Maintenance Period, the Contractor shall remove from Site any plant material that has died or failed to grow satisfactorily as determined by the Contract Administrator and replace as per Specifications within a maximum ten (10) day period from notification.
- (b) Defective plants shall be replaced within three (3) days of notification to the Contractor.
- (c) The Contractor shall extend Maintenance and Warranty on replacement tree for a period equal to the original Maintenance and Warranty Periods.
- (k) The Contractor shall continue such replacement, Maintenance and Warranty until the perennials are acceptable.

#### E25.3 Materials

##### E25.3.1 General

- (a) All nursery stock supplied shall be Canadian prairie nursery grown, of the species and sizes indicated on the drawings. Quality shall be in accordance with the latest "Guide Specification for Nursery Stock of the Canadian Nursery Trades Association".
- (b) Any nursery stock dug from native stands, wood lots, orchards or neglected nurseries and which have not received proper cultural maintenance as advocated by the Canadian Nursery Trades Association, shall be designated as "collected plants". The use of "collected plants" will not be permitted unless approved by the Contract Administrator.
- (c) The Contract Administrator reserves the right to inspect the plant material at their original source, and to instruct the supplier on root and branch pruning requirements.
- (d) Nomenclature of specified nursery stock shall conform to the International Code of Nomenclature for Cultivated Plants and shall be in accordance with the approved scientific names given in the latest edition of standardized Plant Names. The names of varieties not names therein are generally in conformity with the names accepted in the nursery trades.
- (e) Plants larger than specified may be used if approved by the Contract Administrator. The use of such plants shall not increase the Contract price.
- (f) All nursery stock shall be well branched, true to type, structurally sound, possess a well developed, undamaged root system and shall be free of disease, insect infestations, rodent damage, sunscald, frost cracks and other abrasion or scare to the bark. All parts of the nursery stock shall be moist and show live, green cambium when cut.
- (g) At least one plant of each variety supplied shall bear a tag showing both the botanical and common name of the plant.

##### E25.3.2 Protection of Stock

- (a) All nursery stock shall be well protected from damage and drying out from the time of digging until the time of planting on site. All roots shall be cleanly cut; split roots are not acceptable.
- (b) Nursery stock shall be transplanted with care to prevent damage. Points of contact with equipment shall be padded. All nursery stock, which cannot be planted immediately upon arrival at the site, shall be well protected to prevent drying out and shall be kept moist until commencement of planting.

#### E25.4 Construction Methods

- (a) After inserting the plant and filling the planting hole with topsoil, water shall be poured in until the pit is thoroughly soaked. Filling of the hole shall then be completed and the fill-in soil shall be packed firmly around the roots, leaving a concave surface for convenient watering 75 mm below rounding and grade elevation. After filling, the planting shall be watered at frequent intervals.
- (b) Planting shall be done during periods suitable to weather conditions and locally accepted practice. All nursery stock shall be set plumb in the centre of pits and at levels as shown on the planting details after settlement has taken place.
- (c) Nursery stock shall be faced to give the best appearance or relationship to adjacent structures and to the approval of the Contract Administrator.

#### E25.5 Guarantee of Nursery Stock

E25.5.1 The Contractor shall agree and guarantee to replace and replant any nursery stock found dead and/or in poor condition within two years from the date of the Certificate of Total Performance, at his cost. "Poor condition" shall be interpreted as meaning nursery stock on which branches are dying, or have not shown satisfactory growth of leaves. All replacements plants shall be installed within from the date of notification from the City, unless the City extends the time period, as a result of seasonal or climatic considerations.

- (a) Exempted is nursery stock damaged by accidental causes or vandalism, which stock shall be replaced at the cost of the City.
- (b) All required replacements shall be by plants of at least the same size and species as specified, and shall be supplied and planted in accordance with the original drawings and Specifications, and the replaced material shall carry an additional one-year guarantee period. All plants must be in a healthy condition for a full one year before the warranty on the year will be considered fulfilled.