



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 839-2012**

**CONSTRUCTION OF THE BRADY ROAD RESOURCE MANAGEMENT FACILITY  
LEAF AND YARD WASTE AND PILOT BIOSOLIDS COMPOSTING FACILITY**

## TABLE OF CONTENTS

### PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

### PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Addenda	1
B6. Substitutes	2
B7. Bid Components	3
B8. Bid	3
B9. Prices	4
B10. Qualification	4
B11. Opening of Bids and Release of Information	5
B12. Irrevocable Bid	6
B13. Withdrawal of Bids	6
B14. Evaluation of Bids	6
B15. Award of Contract	7

### PART C - GENERAL CONDITIONS

C0. General Conditions	1
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### PART D - SUPPLEMENTAL CONDITIONS

#### General

D1. General Conditions	1
D2. Scope of Work	1
D3. Definitions	3
D4. Contract Administrator	4
D5. Contractor's Supervisor	4
D6. Ownership of Information, Confidentiality and Non Disclosure	4
D7. Notices	4

#### Submissions

D8. Authority to Carry on Business	5
D9. Safe Work Plan	5
D10. Insurance	5
D11. Performance Security	6
D12. Subcontractor List	6

#### Schedule of Work

D13. Commencement	6
D14. Critical Stages	7
D15. Substantial Performance	7
D16. Total Performance	7
D17. Liquidated Damages	7

#### Control of Work

D18. Job Meetings	8
D19. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	8

#### Measurement and Payment

D20. Invoices	8
D21. Payment	9

#### Warranty

D22. Warranty	9
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Form H1: Performance Bond	10
Form H2: Irrevocable Standby Letter of Credit	12
Form J: Subcontractor List	14

**PART E - SPECIFICATIONS**

**General**

E1. Applicable Specifications and Drawings	1
E2. Soils Investigation Report	4
E3. Hazardous Materials	5

**APPENDIX A – GEOTECHNICAL REPORT**

## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 CONSTRUCTION OF THE BRADY ROAD RESOURCE MANAGEMENT FACILITY LEAF AND YARD WASTE AND PILOT BIOSOLIDS COMPOSTING FACILITY

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, March 1, 2013.

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

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

### **B3. SITE INVESTIGATION**

B3.1 Further to C3.1, a Site meeting will be held at 9:30am at Brady Road Landfill on February 20, 2013 to provide Bidders access to the Site. Meet at the administration building south of the main entrance.

B3.2 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

### **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 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.

B4.3 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.

B4.4 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.

B4.5 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 two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days 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/bidopplasp>

B5.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

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 five (5) 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 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.

B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.

B6.6 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.

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/she 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/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.

- 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 B7.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

**B7. BID COMPONENTS**

- 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 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.5 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
- B7.5.1 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.
- B7.6 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.7 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 B14.1(a).
- B7.8 If the Bid Submission 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.
- B7.8.2 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/her own name, his/her name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;

- (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
- (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

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/her own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B8.4.2 All signatures shall be original.

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 C12.2.3(c), prices on Form B: Prices shall not include the 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 Payments to Non-Resident Contractors are subject to 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; 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 Further to B10.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
  - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>)
- B10.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B10.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

## **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/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B13.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B13.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 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/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

## **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 there from (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/her Bid or in other information required to be submitted, that he/she is responsible and qualified.
- B14.4 Further to B14.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- 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.

## **B15. AWARD OF CONTRACT**

B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:

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

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

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

B15.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

B15.5 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](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 Work associated with constructing a Leaf and Yard Waste (L&YW) Composting Facility and the Work associated with constructing a Biosolids Composting Facility at the Brady Road Resource Management Facility.

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

(a) General

- (i) Supply and installation of tagging, labelling and identification of all new equipment.
- (ii) Project documentation.
- (iii) Testing, commissioning, operating training and start-up services.
- (iv) Mobilization and demobilization including supply and installation of temporary culverts and access ways from the built-up pad and clay borrow areas to the biosolids pad.

(b) Leaf and Yard Waste - Civil

- (i) Installation of geotextile fabric (supplied by City) on the L&YW pad.
- (ii) Surveying and staking for the applicable work area.
- (iii) Supply, installation and compaction of granular for L&YW pad.
- (iv) Supply and installation of L&YW Pond inlet and outlet rip rap.
- (v) Supply and installation of traffic and informational signage and mounting hardware.
- (vi) Re-grading of ditches 1, 2, 3, 4 and 5 (only if affected during the course of performing the work of this contract).
- (vii) Supply and installation of depth gauge in the L&YW pond.

(c) Leaf and Yard Waste - Structural

- (i) Supply and installation of concrete jersey barriers to delineate access road from pad working surface and material storage areas on east and west sides of the pad.

(d) Leaf and Yard Waste - Mechanical

- (i) Supply and installation irrigation water supply lines with associated fittings and valves along the south-east and north edges of the L&YW pad.

(e) Leaf and Yard Waste - Electrical

- (i) Supply and installation of exterior lighting and associated poles along the south and east sides of the L&YW pad.

(f) Biosolids - Civil

- (i) Surveying and staking out the applicable work areas.
- (ii) Pad subgrade preparation including general excavation, silt excavation and hauling and excavation, hauling, placement and compaction of clay fill for sub-grade. Clay is to be obtained from an on-site designated clay borrow area.
- (iii) Dewatering on pad after silt removal (as required should precipitation result in water accumulation in the pocket(s)).
- (iv) Excavation, hauling, placement and compaction of clay for pad liner (Compacted Clay Liner (CCL)). Clay is to be obtained from an on-site designated clay borrow area.

- (v) Supply and installation of leachate collection catch basin.
  - (vi) Supply and installation of underground fiberglass leachate storage tank complete with associated tie-down straps, anchors, fittings, manholes risers, manhole lids, and accessories.
  - (vii) Supply and installation of all bedding material, backfill and compaction for the installation of buried feed and vent lines to and from the leachate tank.
  - (viii) Supply and installation of geotextile fabric.
  - (ix) Supply, installation and compaction of granular for pad.
  - (x) Preparation of asphalt pad and ramp sub-grade and supply and installation of asphalt pad and ramp.
  - (xi) Supply and installation of inlet and outlet rip rap for the two existing ponds.
  - (xii) Excavation for the construction of the biosolids pond.
  - (xiii) Excavation, hauling, placement and compaction of clay for biosolids pond liner (Compacted Clay Liner (CCL)). Clay is to be obtained from an on-site designated clay borrow area.
  - (xiv) Supply and installation of biosolids pond inlet and outlet rip rap.
  - (xv) Supply and installation of biosolids pond depth gauge.
  - (xvi) Supply and placement of biofilter media (woodchips).
  - (xvii) Supply and installation of traffic and informational signage and mounting hardware.
- (g) Biosolids - Structural/Architectural
- (i) Arrange, obtain and pay for building permits and inspections.
  - (ii) Aerated Static Pile (ASP) bunkers
  - (iii) Supply and installation of reinforced concrete foundation for ASP bunkers.
  - (iv) Supply and installation of ASP interlocking concrete block walls.
  - (v) Supply and installation of reinforced concrete foundation and perimeter concrete wall for mixing and receiving building.
  - (vi) Supply and installation of mixing and receiving building complete with overhead doors, man-doors, louvers, door hardware, and supports for mechanical and electrical equipment.
  - (vii) Supply and installation of reinforced concrete foundation and mud mat for biofilter.
  - (viii) Supply and installation of interlocking concrete block walls for biofilter.
  - (ix) Supply and installation of reinforced concrete equipment pads for miscellaneous mechanical and electrical equipment and piping support pads.
  - (x) Supply and installation of bollards by the building openings and near the leachate tank manholes.
  - (xi) Supply and installation of a reinforced concrete tank pad for the underground leachate tank.
  - (xii) Supply and installation of interlocking concrete block walls for mixed feed bunker.
  - (xiii) Supply and installation of concrete jersey barriers to delineate access road allowance on the west side of the biosolids pad.
  - (xiv) Supply and installation of interlocking blocks to delineate working area within in the mixing and receiving building.
  - (xv) Supply and installation of jersey barriers around the transformer.
  - (xvi) Supply and installation of jersey barriers around the leachate tank manholes.
- (h) Biosolids - Process Mechanical
- (i) Supply and installation of mixing and receiving building sump cover (floor plate) and removable basket.
  - (ii) Supply and installation of catch basin removal basket and catch basin interior framing for basket installation.

- (iii) Supply and installation of four compost fans and drives suitable for variable speed control.
- (iv) Supply and installation of one biofilter fan with a constant speed drive.
- (v) Supply and installation of a vertical auger mixer and two discharge conveyors complete with all accessories.
- (vi) Supply and installation of HDPE aeration piping and accessories (including metal aeration floor diffuser grate assemblies and cast-in-place metal cleanout frames and covers) cast into the ASP bunker foundation slabs.
- (vii) Supply and installation of HDPE aeration piping and accessories cast into the biofilter foundation slab (including cast-in-place metal cleanout frames and covers).
- (viii) Supply and installation of compost and biofilter fan intakes and discharge piping, complete with fittings, accessories, and valves (dampers).
- (ix) Supply and installation of irrigation water pump, and aboveground water supply lines with associated fittings and valves along the east edge of the biosolids pad and tying into the L&YW water supply line.
- (x) Supply and installation of irrigation hose reel.
- (xi) Supply and installation of HDPE leachate gravity lines to the leachate tank.
- (xii) Supply and installation of the leachate tank vent.
- (xiii) Supply and installation of the biofilter irrigation system including water storage tank, sprinkler irrigation pump station, sprinklers, and associated piping, valves and fittings.
- (xiv) Supply and installation of piping supports systems.
- (xv) Supply and installation of aluminum ventilation ducting and intake louvers and all associated fittings and accessories in the mixing and receiving building.
- (xvi) Supply and installation of mixing and receiving building sump drainage piping.
- (i) Electrical
  - (i) Arrange, obtain and pay for electrical permits and inspections.
  - (ii) Supply and installation of building and exterior lighting.
  - (iii) Supply and installation of Customer Service Termination Enclosure (CSTE).
  - (iv) Supply and installation of MCC as per drawings including (but not limited to):42 circuit distribution panel, 30 KVA Lighting Transformer, irrigation pump soft start and VFD's for the compost fans.
  - (v) Power and control wiring as required for all equipment and instruments.
  - (vi) Trenching, backfilling and supply and installation for all exterior wiring.
  - (vii) Installation of soft starter for the compost mixer (supplied by mechanical with vertical auger mixer).
  - (viii) Supply and installation of mast for remote monitoring antenna (antenna and cable supply and installation by City).
- (j) Instrumentation and Control
  - (i) Supply and installation of plant control system including: plant PLC panel, HMI computer, all associated software.
  - (ii) Supply and installation of instruments and associated accessories.
  - (iii) Integration of the Plant PLC/HMI with the City's SCADA system. Alarms and equipment status to be monitored and relayed via a secure radio link.

### **D3. DEFINITIONS**

D3.1 When used in this Bid Opportunity:

- (a) "L&YW" means Leaf and Yard Waste;
- (b) "M&R" means Mixing and Receiving;

- (c) "Adverse weather day" means a day when the magnitude of weather parameters (precipitation or temperature) creates conditions that inhibit the ability of the Contractor to work productively on the Work as determined by the Contract Administrator.;
- (d) "Adverse ground conditions" means ground conditions created by adverse weather that inhibit the ability of the Contractor to work productively and may cause damage to the sub-grade or liner as determined by the Contract Administrator.

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

D4.1 The Contract Administrator is CH2M HILL Canada Limited, represented by:

Barry Williamson, P. Eng.  
Project Manager

Telephone No. 204-488-2214 x 73059  
Facsimile No. 204-488-2245

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

D4.3 Bids Submissions must be submitted to the address in B7.5

#### **D5. CONTRACTOR'S SUPERVISOR**

D5.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

#### **D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE**

D6.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractor's own use, or for the use of any third party.

D6.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

D6.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
- (b) the Contract, all deliverables produced or developed; and
- (c) any statement of fact or opinion regarding any aspect of the Contract.

D6.4 A Contractor who violates any provision of D6 may be determined to be in breach of Contract.

#### **D7. NOTICES**

D7.1 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 facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D7.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D7.3, D7.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D4.1.

D7.3 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 facsimile number:

The City of Winnipeg  
Chief Financial Officer

Facsimile No.: 204 949-1174

- D7.4 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 facsimile number:

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

Facsimile No.: 204 947-9155

## **SUBMISSIONS**

### **D8. AUTHORITY TO CARRY ON BUSINESS**

- D8.1 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.

### **D9. SAFE WORK PLAN**

- D9.1 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.
- D9.2 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>

### **D10. INSURANCE**

- D10.1 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) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
  - (c) 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.
- D10.2 Deductibles shall be borne by the Contractor.
- D10.3 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.

D10.4 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.

#### **D11. PERFORMANCE SECURITY**

D11.1 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.

D11.1.1 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.

D11.2 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.

#### **D12. SUBCONTRACTOR LIST**

D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at 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.

### **SCHEDULE OF WORK**

#### **D13. COMMENCEMENT**

D13.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

D13.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
  - (i) evidence that the Contractor is 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;
  - (ii) evidence of the workers compensation coverage specified in C6.15;
  - (iii) the Safe Work Plan specified in D9;
  - (iv) evidence of the insurance specified in D10;
  - (v) the performance security specified in D11; and
  - (vi) the Subcontractor list specified in D12.

- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D13.3 The Contractor shall not commence the L&YW Work on the Site before August 1, 2013.

D13.4 The City intends to award this Contract by March 20, 2013.

D13.4.1 If the actual date of award is later than the intended date, the dates specified for Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

#### **D14. CRITICAL STAGES**

D14.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

(a) L&YW Critical Stages:

- (i) Completion of L&YW Granular Pad and Accesses within Thirty Five (35) Working Days of the Commencement of the Work specified in D13.
- (ii) Completion of L&YW Exterior Lighting within Thirty Five (35) Working Days of the Commencement of the Work specified in D13.
- (iii) Completion of L&YW Concrete Barriers and Signage within Forty Five (45) Working Days of the Commencement of the Work specified in D13.

(b) Work to be performed by Manitoba Hydro will be complete by April 30, 2013.

#### **D15. SUBSTANTIAL PERFORMANCE**

D15.1 The Contractor shall achieve Substantial Performance within one hundred and sixty (160) consecutive Working Days of the commencement of the Work as specified in D13.

D15.2 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.

D15.3 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.

#### **D16. TOTAL PERFORMANCE**

D16.1 The Contractor shall achieve Total Performance within one hundred and ninety (190) consecutive Working Days of the commencement of the Work as specified in D13.

D16.2 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.

D16.3 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.

#### **D17. LIQUIDATED DAMAGES**

D17.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City one

thousand two hundred dollars (\$1200) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.

- D17.2 The amount specified for liquidated damages in D17.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D17.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

## **CONTROL OF WORK**

### **D18. JOB MEETINGS**

- D18.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

### **D19. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

- D19.1 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**

### **D20. INVOICES**

- D20.1 Further to C12, the Contractor shall submit an invoice for each portion of Work performed. 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 delivery;
  - (c) delivery address;
  - (d) type and quantity of work performed;
  - (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.
- D20.4 Bids Submissions must be submitted to the address in B7.5.

**D21. PAYMENT**

D21.1 Further to C12, 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 one (1) year thereafter, except where longer warranty periods are specified in the respective Specification sections, unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D22.1.1 For the purpose of Performance Security, the warranty period shall be one (1) year.

D22.2 Notwithstanding C13.2, 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 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.

D22.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

**FORM H1: PERFORMANCE BOND**  
(See D11)

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. 839-2012

CONSTRUCTION OF THE BRADY ROAD RESOURCE MANAGEMENT FACILITY LEAF AND YARD  
WASTE AND PILOT BIOSOLIDS COMPOSTING FACILITY

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 D11)

\_\_\_\_\_  
(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 839-2012

CONSTRUCTION OF THE BRADY ROAD RESOURCE MANAGEMENT FACILITY LEAF AND  
YARD WASTE AND PILOT BIOSOLIDS COMPOSTING FACILITY

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>Specification No.</u>	<u>Specification Title</u>
	Table of Contents
CW 2030	Excavation Bedding and Backfill
CW 2130	Gravity Sewers
CW 3110	Sub-Grade, Sub-base and Base Course Construction
CW 3130	Supply and Installation of Geotextile Fabrics
CW 3170	Earthwork and Grading
CW 3410	Asphaltic Concrete Pavement Works
CW 3610	Installation of Culverts
CW 3615	Riprap
SD-001	Standard Pipe Bedding Classes
SD-002	Standard Trench and Excavation Backfill Classes
SD-025	Standard Pre-Cast Concrete Catch Basin in Boulevard

#### DIVISION 1—GENERAL REQUIREMENTS

01010	Summary of Work
01040	Coordination
01060	Regulatory Requirements
01200	Project Meetings
01300	Submittals
01310	Progress Schedules and Methodology
01400	Quality Control
01430	Operation and Maintenance Data
01500	Construction Facilities and Temporary Controls
01510	Construction Sequencing
01600	Material and Equipment
01640	Manufacturer's Contract
01780	Close Out Services
01810	Equipment Testing and Facility Start-up

#### DIVISION 2—SITE WORK

02201	Biofilter Media
02240	Dewatering
02260	Compacted Clay Liner

### DIVISION 3—CONCRETE

03100	Concrete Formwork
03210	Reinforcing Steel
03251	Concrete Joints
03300	Cast-in-Place Concrete
03345	Concrete Curing and Finishing
03400	Precast Concrete
03600	Grout and Miscellaneous Concrete Work
03740	Concrete Repair Crack Injection

### DIVISION 5—METALS

05500	Metal Fabrications and Castings
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### DIVISION 7—THERMAL AND MOISTURE PROTECTION

07900	Joint Sealants
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### DIVISION 8—DOORS AND WINDOWS

08110	Steel Doors and Frames
08380	Traffic Doors
08710	Door Hardware

### DIVISION 9—FINISHES

09900	Painting
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### DIVISION 10—SPECIALTIES

10140	Signage
10200	Louvers
10520	Portable Fire and Safety Equipment
10999	Manufactured Specialties

### DIVISION 11—EQUIPMENT

11260	Biofilter Irrigation System
11270	Irrigation Pump
11500	Water Hose Reel
11800	Irrigation Hose and Fittings

### DIVISION 13—SPECIAL CONSTRUCTION

13122	Framed Fabric Structures
13207	Underground Fiberglass Reinforced Storage Tank
13390	Package Control Systems

### DIVISION 14—CONVEYING SYSTEMS

14551	Belt Conveyor System
14554	Mixer Systems

### DIVISION 15—MECHANICAL

15060	Piping Support Systems
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15200	Process Piping
15410	Metal Ductwork and Accessories
15830	Fans
15850	Air Outlets and Inlets
15955	Process Piping Leakage Testing

#### DIVISION 16—ELECTRICAL

16030	Electrical Testing
16050	Basic Electrical Materials
16120	Wiring
16220	AC Inductions Motors
16440	Low Voltage Motor Control
16450	Grounding Systems
16442	Panelboards
16481	Variable Frequency Drives
16900	Instrument and Control
16991	Control Panels

#### Drawing No.

#### Drawing Name/Title

#### GENERAL (D)

1-0400B-D0001-001	Cover Sheet
1-0400B-D0002-001	Drawing List and Miscellaneous Symbols

#### CIVIL (C)

1-0400B-C0001-001	Site Plan & Layout
1-0400B-C0002-001	Phase 1 L&YW Composting Pad Layout
1-0400B-C0003-001	Biosolids Composting Area Layout Plan
1-0400B-C0004-001	Biosolids Area Asphalt Pad Sub-grading
1-0400B-C0005-001	Biosolids Asphalt / Concrete Pad Layout
1-0400B-C0006-001	Biosolids Pond & L&YW Pond Plan
1-0400B-C0007-001	Biosolids Pond & L&YW Pond Sections
1-0400B-C0008-001	L&YW Pad Cross Sections Sheet 1 of 2
1-0400B-C0008-002	L&YW Pad Cross Sections Sheet 2 of 2
1-0400B-C0009-001	Drainage Ditch Profiles Sheet 1 of 2
1-0400B-C0009-002	Drainage Ditch Profiles Sheet 2 of 2
1-0400B-C0010-001	Entrance Plan, Section & Details
1-0400B-C0011-001	Miscellaneous Details

#### STRUCTURAL (S)

1-0400B-S0001-001	General Structural Notes
1-0400B-S0002-001	ASP Bunkers General Arrangement
1-0400B-S0003-001	ASP Bunkers Sections & Details
1-0400B-S0004-001	M&R Building General Arrangement
1-0400B-S0005-001	M&R Building Sections and Details
1-0400B-S0006-001	Biofilter General Arrangement

1-0400B-S0007-001	Biofilter Sections & Details
1-0400B-S0008-001	Concrete Equipment Pad Layout
1-0400B-S0009-001	Standard Details Sheet 1 of 2
1-0400B-S0009-002	Standard Details Sheet 2 of 2

#### INSTRUMENTATION AND CONTROL (A)

1-0400B-A0001-001	Biosolids Composting Operation
1-0400B-A0002-001	Odour Control
1-0400B-A0003-001	Main Panel and Field Wiring

#### PROCESS (P)

1-0400B-P0001-001	Overall Plan
1-0400B-P0002-001	ASP Aerations System Plan and Isometric
1-0400B-P0003-001	Biofilter Plan and Details
1-0400B-P0004-001	M&R Building Plan and Sections
1-0400B-P0005-001	Sections
1-0400B-P0006-001	Leachate Tank Details
1-0400B-P0007-001	Miscellaneous Details

#### ELECTRICAL (E)

1-0400B-E0001-001	Legend Sheet 1 of 3
1-0400B-E0001-002	Legend Sheet 2 of 3
1-0400B-E0001-003	Legend Sheet 3 of 3
1-0400B-E0002-001	Biosolids Composting Site Plan
1-0400B-E0003-001	M&R Building Lighting Plan
1-0400B-E0004-001	Yard Lighting Plan
1-0400B-E0005-001	M&R Building Single Line Diagram
1-0400B-E0006-001	M&R Building 208/120V Panel Schedule
1-0400B-E0007-001	Miscellaneous Details Sheet 1 of 2
1-0400B-E0007-002	Miscellaneous Details Sheet 2 of 2

## **E2. SOILS INVESTIGATION REPORT**

- E2.1 A geotechnical soils investigation has been carried out by Trek Geotechnical Inc. (refer to geotechnical report "Brady Road Leaf and Yard Waste and Pilot Biosolids Composting, Final Report", dated September 19, 2012) in the vicinity of the proposed works to determine the character of the subsurface soil to facilitate the design of the Work. Information is considered accurate at the locations indicated and at the time of the investigation, however fluctuations in the ground water level can be expected seasonally. A copy of the geotechnical report is included in Appendix A at the end of these specifications for the convenience of Bidders.
- E2.2 Bidders are responsible for any interpretation they place on the supplied information and are expected to make such additional investigation of the soil as they feel necessary to satisfy themselves.

E2.3 Any test borings made by the bidder shall be done in accordance with the requirements of the appropriate authority of the City of Winnipeg. Bidders shall notify the Contract Administrator prior to starting any soil boring operation.

**E3. HAZARDOUS MATERIALS**

E3.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.