



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 915-2007

**SUPPLY AND INSTALLATION OF ILLUMINATED TRANSIT SIGNAGE AND
TRANSIT PASSENGER SHELTERS –PHASE 2**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 SUPPLY AND INSTALLATION OF ILLUMINATED TRANSIT SIGNAGE AND TRANSIT PASSENGER SHELTERS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, January 18, 2008.

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

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

B3. 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 D3.1.

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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site 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 10 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 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 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 B15.

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.

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Form G1: Bid Bond and Agreement to Bond, or
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or
a certified cheque or draft;
- 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 shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Branch
185 King Street, Main Floor
Winnipeg MB R3B 1J1

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 12 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, 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 shall be printed below such signatures.
- B8.4.2 All signatures should be witnessed, except where a corporate seal has been affixed.
- 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.
- B9.2 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.

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 Branch internet site at <http://www.winnipeg.ca/matmgt>).
- 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 three (3) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt.>)

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. BID SECURITY

B11.1 The Bidder shall provide bid security in the form of:

- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
- (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
- (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.

B11.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B11.1.2 All signatures on bid securities shall be original, and shall be witnessed or sealed as required.

B11.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B11.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B11.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B11.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B11.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B12. OPENING OF BIDS AND RELEASE OF INFORMATION

B12.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.

B12.1.1 Bidders or their representatives may attend.

B12.1.2 Bids determined by the Manager of Materials, or his designate, to not include the bid security specified in B11 will not be read out.

B12.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B12.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B12.4 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.

B13. IRREVOCABLE BID

B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.

B13.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B14. WITHDRAWAL OF BIDS

B14.1 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.

B14.1.1 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.

B14.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B14.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B14.1.3(b), declare the Bid withdrawn.

B14.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B13.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B15. EVALUATION OF BIDS

B15.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B6.

B15.2 Further to B15.1(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.

B15.3 Further to B15.1(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.

B15.4 Further to B15.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices adjusted, if necessary, as follows:

- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price; or
- (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting item(s) (i) through (vii) in the order listed, until a Total Bid Price within the budgetary provision is achieved.
 - (i) Item 2 a) Supply and install heated passenger shelters 8'x15' – 9 units;
 - (ii) Item 2 b) Supply and install heated passenger shelters 8'x20' – 4 units;
 - (iii) Item 3 Supply and install automatic door openers for existing shelters;
 - (iv) Item 4 Supply and install unheated 5'x11' shelters – 12 units;
 - (v) Item 5 a) Relocation of existing shelters 5'x11' – 12 units;
 - (vi) Item 5 b) Relocation of existing shelters 8'x15' – 9 units; and
 - (vii) Item 5 c) Relocation of existing shelters 8'x20' – 4 units.

B15.4.1 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.

B16. AWARD OF CONTRACT

B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B16.2 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.

- B16.2.1 Without limiting the generality of B16.2, 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.
- B16.3 Subject to B16.2, where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.
- B16.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of the supply and installation of transit illuminated signage and transit passenger shelters (various sizes, heated and non-heated) including coordination of all electrical reconnections, and the removal and relocation of existing shelters.

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

- (a) the furnishings of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things necessary for the manufacture of transit illuminated signage and transit passenger shelters;
- (b) supply and installation of automatic door openers on existing shelters.
- (c) removal and disposal of existing illuminated signage and transit passenger shelters with the salvage of items as directed.
- (d) relocation of existing transit passenger shelters including all labour and materials.

D2.3 Further to C7, if at any time during the 15-month period following the award of the Contract, the City requires additional quantities of the Items, the City may request the Contractor to supply, up to 200% additional quantities as Extra Work at the unit prices set out on Form B: Prices. The Contractor may decline to supply the additional quantities without penalty.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is McGowan Russell Group Inc., represented by:

Ms. Jackie Wilkie
Senior Landscape Architect
200-120 Fort St. Winnipeg, R3C 1C7

Telephone No. (204) 956-0396

Facsimile No. (204) 956-1265

D3.2 At the pre-construction meeting, Ms. Wilkie will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4. CONTRACTOR'S SUPERVISOR

D4.1 At the pre-construction meeting, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5. NOTICES

D5.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:

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

D5.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

D6. FURNISHING OF DOCUMENTS

D6.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

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

D8. SAFE WORK PLAN

D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D8.2 The Safe Work Plan 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

D9. INSURANCE

D9.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability, broad form property damage cover and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract.

D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

D10. PERFORMANCE SECURITY

D10.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D10.2 If the bid security provided in his Bid was not a certified cheque or draft pursuant to B11.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D11. SUBCONTRACTOR LIST

D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

SCHEDULE OF WORK

D12. COMMENCEMENT

- D12.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D12.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10; and
 - (vi) the Subcontractor list specified in D11.
 - (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.
 - (c) the Contractor has submitted shop and design drawings, including all electrical work, for review and approval to the Contract Administrator.
- D12.3 The Contractor shall commence the Work within seven (7) Working Days of receipt of the letter of intent.
- D12.4 The City intends to award this Contract by February 15, 2008.

D13. CRITICAL STAGES

- D13.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:
- (a) Contractor is to supply break away assembly, anchor bolts and template to site works contractor by May 15, 2008.
 - (b) Heated shelters are to be installed first with all installations complete by July 31, 2008. Unheated shelters are to be installed immediately following heated shelter installation.

D14. SUBSTANTIAL PERFORMANCE

- D14.1 The Contractor shall achieve Substantial Performance by August 15, 2008.
- D14.2 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.
- D14.3 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.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance by August 29, 2008.

- D15.2 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.
- D15.3 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.

D16. LIQUIDATED DAMAGES

- D16.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundred dollars (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D17. JOB MEETINGS

- D17.1 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.
- D17.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D18. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D18.1 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

D19. PAYMENT

- D19.1 Further to C12, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D20. WARRANTY

- D20.1 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 C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

_____ day of _____, 20____, for:

BID OPPORTUNITY NO. 915-2007

SUPPLY AND INSTALLATION OF ILLUMINATED TRANSIT SIGNAGE AND TRANSIT PASSENGER SHELTERS

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

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

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

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

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

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

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

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 Branch internet site at <http://www.winnipeg.ca/matmgt>.
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
LS-1	Illuminated Sign
TS-1	General Design & Layout 5x11 Shelter
TS-2	General Design & Layout 8x15 & 8x20 Shelters
TS-3	General Design & Layout 8x 30 Shelter
TS-4	Electrical Connection Detail
TS-5	Bench Design Details
SC-1	Sign and Shelter Site Location Chart

E2. CO-ORDINATION WITH OTHERS

- E1.4 The Contractor is to ensure that all electrical work is coordinated with the electrical contractor hired under separate contract by the City of Winnipeg. This is to include, but is not limited to, disconnection of all signs, lights and heaters, securing of wiring, wiring of new shelters and signs, and connections for new shelters and signs. Refer to specific coordination requirements in E11 and E12.
- E1.5 The Contractor is to ensure that all site work is coordinated with the site work Contractor hired under separate contract by the City of Winnipeg. This is to include, but is not limited to, supply and installation of new concrete bases, removal of existing bases, and relocation of electrical conduit. Refer to specific coordination requirements in E11 and E12.

E2. TRUCK WEIGHT LIMITS

- E2.1 The City shall not pay for any portion of Material which results in the vehicle exceeding the maximum gross vehicle weight allowed under *The City of Winnipeg Traffic By-Law*, unless such vehicle is operating under special permit.

E3. ACCESS

- E3.1 Further to C5.2 of the General Conditions, the Contractor shall provide adequate safety protection for pedestrians and vehicular traffic exposed to the Work environment under this Contract.
- E3.2 All access is to be on City Streets and as directed by Contract Administrator.

- E3.3 Access to the Site as required by the Contractor shall be provided, maintained and restored (to as good as or better than existing condition) by the Contractor at his own expense and approved by the Contract Administrator.
- E3.4 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. The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while he is working near them. Any damage caused by the negligence of the Contractor or his Subcontractors to the adjacent works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract Administrator.
- E3.5 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, the City and the owners, 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.

E4. SAFETY PRECAUTIONS

- E4.1 Further to Section C5.2 of the General Conditions, the Contractor shall provide adequate safety protection for pedestrians and vehicular traffic exposed to the Work environment under this Contract.
- E4.2 The Contractor must maintain safe pedestrian access to the Site at all times during construction.
- E4.3 The Contractor must restrict vehicular access to the access lanes indicated on the plans and as directed on Site by the Contract Administrator.

E5. SITE CONDITIONS

- E5.1 The Contractor and all Subcontractors shall examine the Site and make themselves familiar with the existing conditions (both above and below grade) and nature of Work to be done.
- E5.2 Surface and sub-surface conditions shown on the Drawings and included herein are provided for general information and variations there from shall not affect the terms of the Contract.
- E5.3 The Contractor shall set all necessary control lines, benchmarks, survey, elevation stakes and layout in accordance with the individual Site conditions and in consultation with the Contract Administrator.

E6. EXISTING UNDERGROUND STRUCTURES

- E6.1 The Contractor's attention is drawn to the existing underground lines or services that may be located in the area of the Work.
- E6.2 The Contractor shall take all necessary precautions when performing the Work to ensure that no damage is done to these existing services.
- E6.3 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.

- E6.4 All costs in connection with this item including location of the existing service, repairs to any existing services damaged by the construction operation, etc. shall be included in the unit prices bid for supply and installation of the items included under this Contract.
- E6.5 The Contractor will be required to make his own arrangements in connection with the temporary use of lighting, power, or other utilities, and pay all costs in connection therewith.
- E6.6 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

E7. PRODUCT APPROVALS

- E7.1 The Contractor shall, following award, prepare a complete list of all material to be used on the project and submit the list to the Contract Administrator 72 hours prior to start of construction.
- E7.2 The Contractor shall only use material which has been approved by Specification CW3710-R1 or by the Contract Administrator. The list shall give the product, the manufacturer and the supplier.
- E7.3 Other than required to be done by the Contractor under the Work of this Contract, all necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing plant material, pavements, streets, roads, boulevard, 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 thereto in the performance of the Work, the Contractor shall upon instructions from the Contractor Administrator and to the satisfaction of the City, either replace or repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the City. All costs of replacement or repair shall be borne entirely by the Contractor. The Contractor shall also indemnify and safe harmless the City from all claims made directly or indirectly against it in respect to any such damage.
- E7.4 All workmanship and materials furnished and supplied under this Specification are subject to close and systematic inspection and testing by the Contract Administrator. The Contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of the Specifications.
- E7.5 The Contractor shall wholly be responsible for the supply, safe storage, and handling of all materials set forth in this specification, and the control of all operations incidental thereto notwithstanding any inspection or approval that may have been previously given.

E8. DAMAGE TO STREETS AND STRUCTURES

- E8.1 The Contractor's attention is drawn to the following existing Site features to be retained and protected to the City of Winnipeg Standards:

- | | | |
|------------------|-------------------|----------------------------------------------------------|
| a) trees, shrubs | e) light standard | i) hydro towers and poles |
| b) curbs | f) fire hydrants | j) catch basins |
| c) sidewalk | g) street signs | k) curb inlets |
| d) sod | h) signal poles | m) underground services including
land drainage sewer |

E9. PERMITS, NOTICES, LICENCES, CERTIFICATIONS, LAWS AND RULES

- E9.1 The Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E9.2 The Contractor shall comply with all laws, ordinances, rules, and regulations that would relate to the Works.

E10. REMOVALS

E10.1 This Specification shall cover the removal and/or relocation of existing:

- (a) illuminated signs and structures;
- (b) unheated shelters; and
- (c) heated shelters.

E10.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work hereinafter specified.

Equipment

E10.3 All equipment shall be of a type approved by the Contract Administrator and shall be kept in good working order.

Construction Methods

E10.4 The Contractor shall restrict his activities strictly to within the limits of the Works, unless receiving prior written approval from the Contract Administrator.

E10.5 The Contractor shall coordinate with the electrical contractor to ensure that the existing infrastructure is not damaged during removal of the illuminated signage structures or shelters and that all power is disconnected by a licensed electrician prior to removal of sign or shelter.

E10.6 The Contractor shall coordinate with the site works contractor to ensure that all concrete bases at the existing locations and relocation locations for shelters are the correct size prior to removal of the existing shelter.

E10.7 The Contractor shall relocate existing shelters, including heaters and benches, to new locations as indicated on the Drawings.

- (a) Disassemble existing shelters and load, transport, and off-load to a storage site to be determined by the Contractor as per item E13.1.
- (b) Procedures for disassembly, loading, transportation and off-loading must not damage any element or impede the re-use of the salvaged shelter in a new location.
- (c) Contractor to re-install salvaged shelters at new locations within the City of Winnipeg to be determined by the Contract Administrator.

E10.8 Any existing fixtures remaining in the concrete base must be removed and the concrete repaired in a manner approved by the Contract Administrator;

E10.9 The Contractor shall remove and dispose of shelters as directed by the Contract Administrator. Removal and disposal of existing shelters is incidental to the unit prices bid under this Contract. No separate measurement or payment will be made for these items.

E10.10 The Contractor shall remove, salvage and deliver to Winnipeg Transit two 8x15 shelters at Westbound Portage nearside Garry and Westbound Portage nearside Donald as part of the shelter relocations. If the new locations for the shelters are available prior to the date of Total performance the Contractor shall install the shelters in the new location at no additional cost.

E10.11 The Contractor is to remove, salvage and deliver to Winnipeg Transit at 421 Osborne Street, the following items from all shelters to be removed and disposed of:

- (a) all glazing;
- (b) all stainless steel benches;
- (c) all heaters;
- (d) all lights; and

(e) all doors.

- E10.12 Contact Brian Newton, ph. 986-5812 prior to removal and delivery to coordinate location for drop off and timing.
- E10.13 If Winnipeg Transit determines that any or all of these items are not salvageable the Contractor will dispose of them in a legal manner at no additional cost.
- E10.14 Removal and salvage of these items is incidental to the unit prices bid under this Contract. No separate measurement or payment will be made for these items.

Method of Measurement

- E10.15 Relocation of existing shelters shall be measured on a unit basis. The number to be paid for shall be the total number of units relocated in accordance with this Specification and the Construction Drawings, as determined by the Contract Administrator.

Basis of Payment

- E10.16 Relocation of existing shelters shall be paid for at the contract unit price per item measured as specified herein, which shall be payment in full for performing all operations herein described and for all other items incidental to the Work included in this specification.

E11. ILLUMINATED SIGN STRUCTURES AND SIGN BOXES

Description

- E11.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the illuminated signs and related Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:
- (a) Supply and installation of illuminated signs including structures as per design Drawings.
 - (b) Supply, fabrication and installation of two (2) two-sided illuminated stop identification displays per structure as per design Drawings.
 - (c) Supply of breakaway bolt assembly, anchor bolts and bolt template.
 - (d) Coordination with electrical contractor for disconnect of existing sign and reconnect of new signs.
 - (e) Supply of break away bolt assembly and coordination with site works contractor.

Design / Shop Drawings

- E11.2 The Contractor shall submit dimensioned detailed design drawings within five (5) Business Days when called by the Contract Administrator. The drawings shall show all details of construction, fastenings, lighting, materials and colours.
- E11.3 The Contractor shall submit stamped structural Engineer's drawings for review and approval within 5 Business Days of Contract Award. Structural Engineer's drawings shall show all details of construction and fastenings for erections and shall be as specified or approved in accordance with B6.
- E11.4 The Contractor shall submit full colour design drawings of sign faces and sign boxes including materials, lighting components, connections and fastenings for review and approval within 5 Business Days of Contract Award for review and approval by Winnipeg Transit prior to start of manufacture.

General

Materials

- E11.5 The Illuminated Transit Structures to be aluminium 6061-T6 structural tubing with architectural 6063-T5 cast aluminium arc forms.
- E11.6 All fastenings and hardware to be stainless steel 304 or better non-rusting in winter corrosive environment, tamper-proof and flush to exposed surface
- E11.7 All plates to be aluminum 6061-T6. All anchor bolts and breakaway base assemblies to be galvanized steel. Galvanizing to be a zinc coating with sufficient thickness to prevent galvanic corrosion between steel and aluminium.
- E11.8 All paint to be powder paint. Silver colour to be PM211S11 (sparkle silver) by Protech. Blue colour to be 5005 38/40010 by Tiger Drylac.
- E11.9 Provide a detailed parts list to Winnipeg Transit including product number, product description, colour and options for all components of the signs and structures.
- E11.10 Illuminated sign boxes:
- (a) Materials shall be free from defects impairing strength, durability or appearance, and be of best commercial quality for use intended.
 - (b) Materials and methods used to assemble Work of this section shall be of such properties and construction to safely sustain the loads normally imposed thereon, as would be required of this type of installation.
 - (c) All exposed fastenings shall be of the same material, colour and finish as the metals to which these are supplied, unless otherwise specified or called for on the Drawings.
 - (d) All metal shall be free from scale, buckles, pits and other defects.
 - (e) Sign components and construction shall be as shown on the Drawings and as approved by the Contract Administrator.
 - (f) Identification signs to be constructed of 20 ga. sheet metal with 12.5 mm F-Section vinyl retainers. Cabinet to be painted to match sign structure. Paint – PM211S11 (sparkle silver) by Protech.
 - (g) Lamps to be T5 bright white fluorescent tubes. Contractor to provide lighting schematic including ballast on shop drawings. Lamps and ballasts to be high output. Light levels to meet or exceed existing illuminated structures on Graham Avenue.
 - (h) Acrylic to be SG (sign grade).
 - (i) Polycarbonate face to be 4.6 mm (3/16") clear Lexan.
 - (j) Background to be blue to match Tiger Drylac 5005 38/40010 paint colour.
 - (k) Copy to be 50 - 125 mm high Frutiger Bold as per the design Drawings.
 - (l) All graphics to be screen printed on 3M day/night film.
 - (m) All Work, materials and final sign box to be CSA compliant.

Workmanship

- E11.11 Proportion items to meet the National Building Code and Manitoba Building Code. Items shall support loads recommended by the Code and local standards for wind and snow loading unless specific loads are indicated on the Drawings.
- E11.12 Fabricate work to shape and size with sharp lines, even curves and smooth surfaces. Connections shall be securely welded, bolted or riveted. Bolted and riveted connections are not permitted in exposed areas of the sign. Welds shall be dressed smooth on exposed surfaces. Welds/joins shall not be visible upon completion of painting operations. Rabbets, lugs and brackets shall be provided so that the Work can be assembled in a neat substantial manner. Thickness of metal and design of assembly and support shall give ample strength and stiffness.
- E11.13 Exposed ends and edges of metal shall be smooth. Joints exposed to the weather shall be formed to exclude water or to drain.

- E11.14 Fit and shop assemble structure as one piece and deliver to the Site. Sign boxes can be delivered separately for installation on site.
- E11.15 Prior to proceeding with shop fabrication, take all necessary field measurements to verify dimensions or calculations from Drawings.
- E11.16 Fabricate Work in strict accordance with shop drawings, and in general to details, sizes, materials shown on Drawings and specified herein.
- E11.17 Assembly: Material intended for use in the various assemblies shall be straight, clean, sharply defined profiles, assembled in such a way that no disfigurements will show in the finished work, or impair the strength.
- E11.18 Welding: All welding shall conform to the requirements of the current CSA Standard W.59 and the fabricator shall be fully approved by the Canadian Welding Bureau, in conformance with the requirements of the current CSA Standard W.47. Welding shall be done by currently licensed welders only and certified to design welds.
- E11.19 Manufacturer shall be a member of the Canadian Welding Bureau, or governing body where manufacture is in another country, and certified to design welds
- E11.20 Welding splatter and other fabrication burrs where exposed shall be ground or filed smooth and left ready for subsequent operations.
- E11.21 Finish: Fabricated material Work shall be delivered with e-coating, shop coat primer and paint, or other finish as specified.
- E11.22 Following installation, apply a touch up coat of shop primer and powder paint to match finish to all surfaces where finish has been removed and to installation devices such as bolts, screws, welds and the like. Application of touch up primer and paint must follow approved method of field repair acceptable to Contract Administrator.

Quality Control

- E11.23 All workmanship and all material furnished and supplied under this Section are subject to close and systematic inspection and testing by the Contract Administrator including all operations from the selection and production of materials through to final acceptance of the Work. The Contractor shall be wholly responsible for the control of all operations, incidental thereto notwithstanding any inspection or approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of this Section.

Fabrication

- E11.24 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.
- E11.25 Curved angle portions of sign structure are to be one piece custom cast aluminium.
- E11.26 All joints in structure are to be filled and sanded prior to cleaning for paint preparation.
- E11.27 Vinyl graphics to be applied to second surface of Lexan background.
- E11.28 The workmanship shall meet established practice in modern shops.
- E11.29 If damage occurs during fabrication, the Contract Administrator shall be notified to facilitate the implementation of remedial measures. Remedial repair measures will be subject to the approval of the Contract Administrator. Their cost will be paid by the Contractor.
- E11.30 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.

- E11.31 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.
- E11.32 All portions of the Work shall be neatly finished. Shearing, cutting, chipping and machining shall be done neatly and accurately. Finished members shall be true to line, free from twists, bends open joints, sharp corners and edges.

Painting

- E11.33 Clean all metal thoroughly and apply recommended primer.
- E11.34 All aluminium to be sanded prior to powder painting.
- E11.35 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E11.36 All coats must be thoroughly dry before applying succeeding coats.
- E11.37 All Work where a coat of material has been applied must be inspected and approved by the Contract Administrator before the application of the succeeding specified coat, otherwise no credit for the coat applied will be given, and the Contractor shall then assume the responsibility and recoat the Work in question. Report each coat applied to the Contract Administrator when completed for inspection and approved to comply with the above. Where manufacture is not in Winnipeg the Contractor is to supply digital photos via email of each step for review and approval prior to proceeding to next step.

Samples / Prototypes

- E11.38 A prototype is to be manufactured for each sign structure and sign box within twenty (20) Working Days from Award of Contract. The prototypes are to be delivered to Winnipeg Transit at 421 Osborne Street for review and approval prior to manufacture of signs. Cost of prototype is to be incidental to the unit prices bid on this project. The prototype shall be the minimum acceptable standard for all materials, workmanship and finishes. If prototype is approved it may be used as a unit to fulfil the Contract quantities.

Installation and Co-ordination with Others

- E11.39 The Contractor is advised of the following:
- (a) All signs to be installed on concrete pile and pile cap. Contractor to use existing bolt assemblies where possible. Where pile cap is new, the Contractor is to supply break away assembly, anchor bolts and template to site works contractor. Where the anchor bolts have been damaged the Contractor is to breakout existing pile cap, and supply and install new pile cap with anchor bolts.
 - (b) Contractor to remove from Site and dispose of existing signs and structures in a legal manner as per E10.
 - (c) Contractor to ensure final electrical connections can be made by electrical contractor to electrical source at sign base. All electrical work to be done by a certified journeyman electrician.
 - (d) The Contractor will notify the Contract Administrator of installation date with a minimum of three (3) working days notice. Contractor is to have a listing of all completed and pending work prepared for each site meeting.
 - (e) Any damage to the illuminated structure or signs, incurred during fabrication, delivery, installation etc., is to be repaired to the satisfaction of the Contract Administrator within three (3) working days of installation.
 - (f) Contractor to supply a field repair kit including primer, paint, custom fastenings and hardware for each sign to Winnipeg Transit at time of installation.

Method of Measurement

E11.40 Supply and installation of illuminated signs shall be measured on a per item basis as specified herein and as measured and accepted by the contract administrator.

Basis of Payment

E11.41 Supply and installation of illuminated signs will be paid for at the contract unit price for 'Supply and install illuminated sign structures and sign boxes' measured and specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this specification.

E12. TRANSIT PASSENGER SHELTERS

Description

E12.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the transit passenger shelters and related Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and installation of heated shelters as per design Drawings.
- (b) Supply and installation of unheated shelters as per design Drawings.
- (c) Coordination with electrical contractor for disconnect of existing shelters and reconnect of new shelters.
- (d) Coordination with site works contractor.

General

E12.2 The fabrication and installation of shelters as specified in this Section shall include the following:

- (a) Contractor to examine existing concrete base prior to removal of existing shelter and determine if size of base is adequate for new shelter installation;
- (b) Any existing fixtures remaining in the concrete base must be removed and the concrete repaired in a manner approved by the Contract Administrator;
- (c) Drill existing concrete base and install all columns, glazing, doors, roof structures, and lighting units; and
- (d) Provide electrical wiring, diagrams for wiring and access for lighting and heaters to electrical contractor. All wiring runs must be hidden from view within the shelter structure and must be vandalism proof.
- (e) Provide a detailed parts list to Winnipeg Transit including product number, product description, colour and options for all components of the shelters.

E12.3 Prior to proceeding with shop fabrication, take all necessary field measurements to verify dimensions or calculations from Drawings.

Design / Shop Drawings

E12.4 The Contractor shall submit stamped engineer's drawings for record within five (5) Business Days when called by the Contract Administrator. Engineer's drawings shall show all details of construction and fastenings for erections and shall be as specified or approved.

E12.5 The Contractor must provide a complete set of shelter assembly instructions for each shelter with a Section in English within five (5) Business Days when called by the Contract Administrator.

Materials

E12.6 The shelters must include fully transparent walls using glazing panels with a minimum of structure between glazing panels as shown on the Drawings.

- E12.7 Glazing is to be tempered glass, minimum 3/8" (in) thickness, designed for outdoor glazing use. A full width horizontal blue safety line at approximately the middle of the glazing, minimum 1" (inch) in height, must be included on all sheets. **"No Smoking"** logo should be incorporated into the glazing on all walls.
- E12.8 The shelters are to be equipped with translucent barrel vaulted roofs of 1/4" (in) gray tint polycarbonate.
- E12.9 The shelters structural components must be aluminium, with columns to be 1/4" (in) thick aluminium 6061-T6 structural tubing, cut sheet plates to be aluminium 6061-T6, and torsion bars to be aluminium 6360-T6. Diameter of posts and torsion bars as per shelter size.
- E12.10 All fasteners and all mounting hardware use to fasten the shelter to the concrete base at ground level must be stainless steel or approved equal in accordance with B6.
- E12.11 Convection heaters are to be DBS Sloped Aluminum Draft Barrier 1500 watt 240 volt model number DBS18152 CA for clear anodized, and 1000 watt 240 volt model number DBS12102 CA for clear anodized, manufactured by Stelpro. Each heater to have a DBS24202CA-DSBT1212 – 2000 watt, 240 volt clear anodized Stelpro C/A anti-vandal thermostat.
- E12.12 Benches for heated shelters are to be stainless steel 304 or better with mounting brackets for heaters as per the Drawings. Contractor to provide shop drawings for all components.
- E12.13 Benches for unheated shelters are to be 48" long x 16" wide x 18" high stainless steel frames with grey recycled plastic seat slats as per the Drawings. Contractor to provide shop drawings for all components.
- E12.14 Door closures shall be Hager 5100MLTx14 ALM hydraulic type door closure with pull side mount and aluminium finish or approved equal in accordance with B6. Contact Robert Hood at Hager (403) 238-9950 for more information.
- E12.15 8' x 30' passenger shelters:
- The Contractor shall provide all 6" diameter columns, glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of 8' x 30' shelter on site on concrete bases.
 - The 8' x 30' dimensions are nominal outside roof dimensions, the actual length and width dimensions may vary by ± 9 inches. Minimum headroom within shelter and at entrances must be 84 inches.
 - The enclosed area for shelters will be approx. 8' x 20' (2.4x6.1m), with an open canopy area of approx. 8' x 10' (2.4x3.05m).
 - The shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles. Door handles are to be jug handle type on inside to allow for pulling the door open and flat plate type on outside to allow for pushing the door open. Door configuration for each location to be as specified on the Drawings or as directed by the Contract Administrator. Doors may be on any wall, shelter design is to be flexible in adjusting for Site conditions. Doors to be hinged, on pivot type hinges, to open inwards, with door closures. Safety stops are to be provided at the top and bottom of the door attached to the shelter frame and / or mounted to the concrete base to prevent damage to walls during opening and closing. Doors are to be equipped with door fibre brush sweeps on bottom. Doors to be 36 3/8" wide x minimum 82 7/8" tall.
 - 8'x30' shelters with canopy to have two benches and two heaters.
- E12.16 8' x 20' passenger shelters:
- The Contractor shall provide all 6" diameter columns, glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of 8' x 20' shelter on site on concrete bases.

- (a) The 8' x 20' dimensions are nominal outside roof dimensions, the actual length and width dimensions may vary by ± 9 inches. Minimum headroom within shelter and at entrances must be 84 inches.
- (b) The shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles. Door handles are to be jug handle type on inside to allow for pulling the door open and flat plate type on outside to allow for pushing the door open. Door configuration for each location to be as specified on the Drawings or as directed by the Contract Administrator. Doors may be on any wall, shelter design is to be flexible in adjusting for Site conditions. Doors to be hinged, on pivot type hinges, to open inwards, with door closures. Safety stops are to be provided at the top and bottom of the door attached to the shelter frame and / or mounted to the concrete base to prevent damage to walls during opening and closing. Doors are to be equipped with door fibre brush sweeps on bottom. Doors to be $36 \frac{3}{8}$ " wide x minimum $82 \frac{7}{8}$ " tall.
- (c) 8'x20' shelters to have two benches and two heaters.

E12.17 8' x 15' passenger shelters:

- (a) The Contractor shall provide all 6" diameter columns, glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of shelters on site on concrete bases.
- (a) The 8' x 15' dimensions are nominal outside roof dimensions the actual length and width dimensions may vary by ± 9 " inches. Minimum headroom within shelter and at entrances must be 84 inches.
- (b) The shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles. Door handles are to be jug handle type on inside to allow for pulling the door open and flat plate type on outside to allow for pushing the door open. Door configuration for each location to be as specified on the Drawings or as directed by the Contract Administrator. Doors may be on any wall, shelter design is to be flexible in adjusting for Site conditions. Doors to be hinged, on pivot type hinges, to open inwards, with door closures. Safety stops are to be provided at the top and bottom of the door attached to the shelter frame and / or mounted to the concrete base to prevent damage to walls during opening and closing. Doors are to be equipped with door fibre brush sweeps on bottom. Doors to be $36 \frac{3}{8}$ " wide x minimum $82 \frac{7}{8}$ " tall.
- (c) 8'x15' shelters to have one bench and one heater.

E12.18 5' x 11' passenger shelters:

- (a) The Contractor shall provide all 4" diameter columns, glazing, roof structures (including torsion bars and fins), fasteners and supplies necessary for the installation of shelters on site on concrete bases.
- (b) The 5' x 11' dimensions are nominal outside dimensions the actual length and width dimensions may vary by ± 2 inches. Minimum headroom within shelters and at entrances must be 80 inches.
- (n) The shelters must include a 30" (in) to 40" (in) wide doorway opening on one 11' (ft) side. Doors are **NOT** to be included. The passenger shelter design must allow for simple conversion from a left side door opening to a right side door opening.
- (o) The 5' x 11' shelters are **NOT** required to have electric lighting fixtures.
- (p) Shelters to have 1 bench installed per shelter located along the back wall with surface mount tamper proof fastenings into the concrete base.

Clean Material

- E12.19 All aluminium and steel components shall be free of oil, mill scale, rust, pits and other surface defects. All weld splatter and burrs must be ground smooth.

Workmanship

- E12.20 Proportion items to meet the National Building Code, the Manitoba Building Code and local conditions specifically relating to wind and snow loading. Items shall support loads recommended by the Code unless specific loads are indicated on the Drawings.
- E12.21 Fabricate all Work to shape and size with sharp lines, angles and smooth surfaces as defined in the Drawings. Connections shall be securely welded, bolted or riveted. Welds shall be dressed smooth on exposed surfaces. Rabbets, lugs and brackets shall be provided so that the Work can be assembled in a neat substantial manner. Thickness of metal and design of assembly and support shall give ample strength and stiffness.
- E12.22 All portions of the Work shall be neatly finished. Exposed ends and edges of metal shall be smooth. The shelters wall, roof and joints exposed to the weather shall be formed to exclude water or to drain.
- E12.23 Insofar as possible, the Work is to be fitted and assembled in the Contractor's shop and delivered to the Site in largest practical sections.
- E12.24 Fabricate Work in strict accordance with shop drawings. Shop Drawings are to be based on details, sizes, materials shown on Drawings and specified herein.
- E12.25 Welding: All welding shall conform to the requirements of the current CSA Standard W.59 and the fabricator shall be fully approved by the Canadian Welding Bureau, in conformance with the requirements of the current CSA Standard W.47. Welding shall be done by currently licensed welders only and certified to design welds.
- E12.26 Manufacturer shall be a member of the Canadian Welding Bureau, or governing body where manufacture is in another country, and certified to design welds
- E12.27 Welding splatter and other fabrication burrs where exposed shall be ground or filed smooth and left ready for subsequent operations.
- E12.28 Assembly: Material intended for use in the various assemblies shall be straight, clean, sharply defined profiles, assembled in such a way that no disfigurements will show in the finished work, or impair the strength.
- E12.29 Finish: Fabricated material Work shall be delivered with shop coat primer paint or E coated and other paint finish as specified. Following installation, apply a touch up coat of shop primer or galvanizing and paint to match finish to all surfaces where finish has been removed and to installation devices such as bolts, screws, welds and the like.

Quality Control

- E12.30 All workmanship and all material furnished and supplied under this Section are subject to close and systematic inspection and testing by the Contract Administrator including all operations from the selection and production of materials through to final acceptance of the Work. The Contractor shall be wholly responsible for the control of all operations, incidental thereto notwithstanding any inspection or approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of this Section.

Fabrication

- E12.31 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.
- E12.32 The shelters must be designed to stand without any glazing.
- E12.33 The shelter must be constructed to resist damage from vandalism and must be simple to maintain and clean.

- E12.34 The shelters must be designed for easy assembly and must not require any drilling, thread tapping, welding, or painting of structural members or glazing support fixtures.
- E12.35 Fasteners used in accessible locations must be of tamper proof design.
- E12.36 Connection plates between shelter roof and columns must be easily accessible and not enclosed.
- E12.37 The Shelter end caps of the roof are to be aluminium big fin assemblies.
- E12.38 Roofs must be shipped fully assembled and sealed.
- E12.39 The shelter legs must include a base plate with adjustable stainless steel bolts and rods for levelling to accommodate installations on poured concrete pads with imperfections or the slope of the pad surface. Adjustment capabilities must be a minimum of 6" (in). Shelter mounting to the concrete base must meet all applicable codes and regulations governing structures in the public right-of-way.
- E12.40 The entire bottom perimeter of the heated shelters must have aluminium skirting between the glass and the concrete shelter pads to prevent the entry of wind. The bottom perimeter skirting must be designed with sufficient opening to allow water to drain out of the low side of the shelter. The skirting must allow for easy removal with simple hand tools to allow the quick replacement of glass panels.
- E12.41 Heated shelters have electric lighting fixtures; self-ballasted mini-spiral Lamp 13W 120V 60Hz 225mA housed inside a light cabinet that follows the curvature of the roof line or approved equal. All lighting materials and fixtures installed in the shelters shall be CSA compliant and installed in a manner that meets all Canadian electrical codes.

Painting

- E12.42 Shelters and components, except for glazing and polycarbonate, must be powder painted as all units will be installed in a corrosive environment., Colour to be PM211S11 (sparkle silver) by Protech.
- E12.43 Clean all metal thoroughly and apply recommended primer.
- E12.44 All aluminium shall be sanded prior to powder painting.
- E12.45 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E12.46 All coats must be thoroughly dry before applying succeeding coats.
- E12.47 All Work where a coat of material has been applied must be inspected and approved by the Contract Administrator before the application of the succeeding specified coat, otherwise no credit for the coat applied will be given, and the Contractor shall then assume the responsibility and recoat the Work in question. Report each coat applied to the Contract Administrator when completed for inspection and approved to comply with the above. Where manufacture is not in Winnipeg the Contractor is to supply digital photos via email of each step for review and approval prior to proceeding to next step.

Installation and Co-ordination with Others

- E12.48 The Contractor is advised of the following:
 - (a) The Contract Administrator will notify the Contract Administrator of installation date of each location with a minimum of three (3) working days prior to installation. Contractor is to have a listing of all completed and pending work prepared for each site meeting.
 - (b) Contractor to coordinate with electrical contractor and site contractor for removal or relocation of existing shelter and installation of new shelters.

- (c) All new shelters to be installed on existing bases. Salvage existing bolt assemblies for reuse.
- (d) Contractor to coordinate electrical connection for heaters, including all necessary coring, trenching, conduit, wiring, and backfill and surface repair as per the Drawings.
- (e) Any damage to the shelters, incurred during fabrication, delivery, installation etc., is to be repaired to the satisfaction of the Contract Administrator within three (3) working days of installation at the Contractors cost.
- (f) The Contractor is to work cooperatively with any other City crews or Contractors working in the same area(s).
- (g) Contractor not to undertake Work in bus stop areas during the rush hour time periods between 06:00-09:00 and 15:00 -18:00.
- (h) Contractor to supply a field repair kit including primer, paint, custom fastenings, and hardware to Winnipeg Transit for each shelter installed.

Method of Measurement

- E2.7 Supply and installation of heated shelters shall be measured on a per item basis as specified herein and as measured and accepted by the Contract Administrator.
- E2.8 Supply and installation of unheated 5'x11' shelters shall be measured on a per item basis as specified herein and as measured and accepted by the Contract Administrator.

Basis of Payment

- E2.9 Supply and installation of heated shelters will be paid for at the contract unit price for 'Supply and install heated shelters' measured and specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this specification.
- E2.10 Supply and installation of unheated 5'x11' shelters will be paid for at the contract unit price for 'Supply and install unheated 5'x11' shelters' measured and specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this specification.

E13. AUTOMATIC DOOR OPENERS

Description

- E13.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required for the supply and installation of automatic door openers on existing shelters.

Delivery and Storage

- E13.2 Store units in a protected location, immediately upon arrival on the Site.
- E13.3 Remove from Site any units which have been damaged during transportation and replace.

Products

- E13.4 Automatic door openers shall be a Horton Automatics series 4100LE handicap swing door operator with parallel arm, Clear anodized aluminium housing with 2 – CM-42-BSU-CLR 42" Bollard Prepped for 6" push plates, 2- CM-42 –IG In-ground Mounting Base for Bollards, 2- CE-605 6" X 6" Stainless Steel Finish Push Button Activators with Handicap Logo & Push To Open and CM-170/2 Key Switch On/Off Hold open as supplied by:

Ambassador Sales 1986 Ltd.
Unit #1 30 Durand Road
Winnipeg, Manitoba
Contact: Allan R Randall T (204) 253-7170

Installation

- E13.5 Install one door opener, complete with bollards, on each existing shelter at; Westbound Graham Avenue nearside Vaughan; Westbound Dafoe at University of Manitoba terminal; Westbound Portage nearside Donald and at all three shelters at Osborne Junction.
- E13.6 Ensure all electrical wiring follows existing lines within shelter legs and roof frames. There is to be no visible wiring on shelters. All electrical work to be done by licensed electrician under separate contract. Contractor is to prepare site and install armature to manufacturer's specifications and prepare site for electrician.
- E13.7 Clean up all debris from site following installation.

Method of Measurement

- E13.8 Automatic door openers will be measured on a unit basis. The number of each item to be paid for will be the total number placed in accordance with this Specification and accepted by the Contract Administrator, as computed by the Contract Administrator.

Basis of Payment

- E13.9 Automatic door openers will be paid for at the Contract Unit Price for each item, which price shall be payment in full for supply of all materials and performing all operations herein described and for all other items incidental to the Work included in this Specification

E14. DELIVERY AND STORAGE LOCATION

- E14.1 The Contractor shall be responsible for the storage of all illuminated structures and boxes and heated and unheated shelters in a protected site immediately upon arrival in Winnipeg. The location of this protective storage site is to be determined by and is the responsibility of the Contractor. The Transit Base and Yard will **NOT** be available for storage.
- E14.2 Contractor to store existing shelters that have been removed and salvaged for reinstallation in same location as new shelters.
- E14.3 The Contractor shall remove any units which have been damaged during transportation and replace them.