

Tender for Construction

Tender Description: Construction of Civil Work
for AVM Deployment at
Various Metrolinx Locations

Tender Number: PT-2016-CST-133



LIST OF CONTENTS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 1 OF 2

| TITLE | Addendum No. 2 NO OF PAGES |
|--|-------------------------------|
| List of Contents | 2 |
| Any Addenda Issued Hereto..... | 1 |
| Introduction | 1 |
| Definitions | 1 |
| Instructions To Bidders..... | 21 |
| Form of Tender | 12 |
| Appendix "A" - List of Tender Documents..... | 2 |
| Appendix "B" – Contract Prices..... | 1 |
| Appendix "C" – Bidder’s Qualifications..... | 1 |
| Appendix "D" – Agreement to Bond | 1 |
| Appendix "E" – Conflict of Interest..... | 1 |
| Appendix "F" – Mandatory Technical/Personnel Requirements..... | 1 |
| Appendix "G – Bidder’s Submission Checklist | 1 |
| Supplementary Agreement Between Owner and Contractor | 2 |
| Form of Agreement | 1 |
| Supplementary Definitions of the Contract | 3 |
| Definitions of the Contract | 1 |
| Supplementary General Conditions of the Contract..... | 33 |
| General Conditions of the Contract | 1 |

| SECTION NO. | TITLE | NO. OF PAGES |
|-------------|-------|--------------|
|-------------|-------|--------------|

GENERAL REQUIREMENTS

| | | |
|-------|---|----|
| 01000 | General Instructions..... | 7 |
| 01200 | Mobilization and Demobilization | 3 |
| 01300 | Shop Drawings and Other Submittals..... | 1 |
| 01400 | Quality Control | 3 |
| 01500 | Temporary Facilities | 1 |
| 01545 | Railway Safety Requirements | 5 |
| 01560 | Environmental Protection..... | 2 |
| 01600 | Safety Requirements..... | 10 |
| 01700 | Material and Equipment..... | 3 |

LIST OF CONTENTS

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

PAGE 2 OF 2

| | |
|-------|------------------------|
| | Addendum No. 2 |
| 01710 | Cleaning.....1 |
| 01800 | Project Closeout.....3 |

SPECIFICATIONS

| | |
|---------------------------------------|----|
| Scope of Work | 12 |
| Wiring and Conduits Design Guidelines | 7 |

DRAWINGS

| | |
|--|---|
| AVM – GO Standard Drawings – E001-E002 | 2 |
| TVM – GO Standard Drawings – TVM-001-003 | 3 |
| PRESTO – GO Standard Drawings – PRES-001-003 | 3 |

ATTACHMENTS

| | | |
|----------------|--|----|
| Attachment # 1 | Contract Performance Appraisal | 1 |
| Attachment # 2 | Metrolinx Safety Guidelines for Contractors, Consultants and Project Coordinators | 75 |
| Attachment # 3 | GO System Map | 1 |
| | Bidder Q and A Template | 1 |
| | Sample Letter of Credit | 1 |
| | Parental Guarantee | 1 |
| | Sample Reference Check Questionnaire | 3 |
| | Metrolinx Merx Portal General Information | 1 |

END OF SECTION

INTRODUCTION

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 1 OF 1

Addendum No. 2

1.0 General

- 1.1 Metrolinx is issuing this call for Tenders to retain the services of a Contractor to provide the goods and/or services described herein. Metrolinx intends to award a Contract through an open, fair and competitive process.
- 1.2 You are invited to send your Submission for PT-2016-CST-133, as more particularly described in this Tender Document as required by Metrolinx, which Work relates to Construction of Civil Work for AVM Deployment at Various Metrolinx Locations.
- 1.3 The Work includes, but shall not be limited to: all detailed civil works design, construction, construction supervision, field administration and related management services for one-hundred and seventy five (175) AVM (Add Value Machine) devices at the Work Locations as described in the Drawings and Documents that define the Contract Documents.

DEFINITIONS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 1 OF 4

Addendum No. 2

- 1.0 In this Tender Document,
- 1.1 **"Addenda"** is the formal release of additions, deletions, revisions, clarifications to this Tender Document that form a part of the Contract.
 - 1.2 **"Bidder"** means the legal entity that sends a Submission in response to this Tender Document and who if selected for award shall execute the Contract with Metrolinx for provision of the Work.
 - 1.3 **"CCDC"** means Canadian Construction Documents Committee
 - 1.4 **"Closing"** means, the deadline for Metrolinx to receive Submissions as specified in Section 1.4 of Instructions to Bidders.
 - 1.5 **"Conflict of Interest"** means:
 - 1.5.1 in relation to this Tender Process, the Bidder has an unfair advantage or engages in conduct, directly or indirectly, that may give it an unfair advantage, including but not limited to (i) having, or having access to, confidential information of Metrolinx in the preparation of its Submission that is not available to other Bidders, (ii) communicating with any person with a view to influencing preferred treatment in this Tender Process (including but not limited to the lobbying of decision makers involved in this Tender Process), or (iii) engaging in conduct that compromises, or could be seen to compromise, the integrity of this Tender Process; or
 - 1.5.2 in relation to the performance of its contractual obligations contemplated in the Contract that is the subject of this procurement, the Bidder's other commitments, relationships or financial interests (i) could, or could be seen to, exercise an improper influence over the objective, unbiased and impartial exercise of its independent judgement, or (ii) could, or could be seen to, compromise, impair or be incompatible with the effective performance of its contractual obligations.
 - 1.6 **"Consultant"** is TBD and shall have the same meaning ascribed in Supplementary Definitions of the Contract.
 - 1.7 **"Contract"** shall have the same meaning ascribed in Definitions of the Contract.
 - 1.8 **"Contract Documents"** shall have the same meaning ascribed in Definitions of the Contract.

DEFINITIONS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 2 OF 4

Addendum No. 2

- 1.9 **"Contractor"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.10 **"Drawings"** shall have the meaning ascribed in Definitions of the Contract.
- 1.11 **"EBS"** means Electronic Bid Submission.
- 1.12 **"E-Bid Authorized Signer"** is the designated individual in the Bidder's organization who has the authority to bind the Bidder to each and every term, condition, article and obligation of the Tender Document and any resultant Contract.
- 1.13 **"E-Bid Confirmation Number"** is the receipt received by a Bidder from MERX indicating that the Submission was uploaded successfully.
- 1.14 **"FIPPA"** shall have the same meaning ascribed in Section 27.0 of Instructions to Bidders.
- 1.15 **"Joint Venture"** means a business arrangement of two or more parties proposed for this Tender Process further described in Section 22.0 of Instructions to Bidders.
- 1.16 **"Metrolinx"** is a provincial crown agency continued under the *Metrolinx Act*, S.O. 2006, Chapter 16, and its successors and assigns and shall have the same meaning ascribed to "Owner" in Definitions of the Contract.
- 1.17 **"Option"** means a component of the Work that is to be exercised at the sole discretion of Metrolinx.
- 1.18 **"Owner"** shall have the same meaning ascribed in the Definition of the Contract and is also known as Metrolinx.
- 1.19 **"PDF"** means Portable Document Format.
- 1.20 **"Participant in Charge"** shall have the same meaning ascribed in Section 22.3 of Instructions to Bidders.
- 1.21 **"Place of the Work"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.22 **"Procurement Office"** means the Metrolinx Procurement Services office located at 277 Front Street West, 4th Floor, Toronto, Ontario, M5V 2X4.
- 1.23 **"Procurement Representative"** means the following individual in the Procurement Services Department:

| |
|---|
| Nicole Latimer, Procurement Officer – Construction Division |
|---|

DEFINITIONS

Addendum No. 2

| | |
|------------------|------------------------------|
| Telephone number | (416) 202-5630 |
| Email | Nicole.Latimer@metrolinx.com |

- 1.24 **"Project"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.25 **"Submission"** means all documentation and other materials and information submitted (sent) by the Bidder in response to this Tender Document or in respect of this Tender Process.
- 1.26 **"Subcontractor"** shall have the same meaning ascribed in Definition of the Contract.
- 1.27 **"Substantial Performance of the Work"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.28 **"Supplier"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.29 **"Specifications"** shall have the same meaning ascribed in Definitions of the Contract.
- 1.30 **"Tender Document"** means this Tender document comprised of sections listed in the List of Contents, issued by Metrolinx for the Work to be provided, and any Addenda thereto.
- 1.31 **"Tender Document Forms"** means any sections of this Tender Document which require completion and must be included with the Submission.
- 1.32 **"Tender Process"** means the Tender procurement process set out in the Tender Document herein.
- 1.33 **"Total Contract Price"** shall have the same meaning ascribed to "Contract Price" in Definitions of the Contract.
- 1.34 **"Total Performance of the Work"** shall have the same meaning ascribed in Supplementary Definitions of the Contract.
- 1.35 **"Work"** means all detailed civil works design, construction, construction supervision, field administration and related management services for one-hundred and seventy five (175) AVM devices at the Work Locations as described in the drawings and documents that define the contract documents.

DEFINITIONS

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

PAGE 4 OF 4

Addendum No. 2

- 1.36 **“Working Day”** shall have the same meaning ascribed in Definitions of the Contract.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 1 OF 21

Addendum No. 2

1.0 General

1.1 *****NOTE: ELECTRONIC BID SUBMISSION**

Your Submission for this opportunity must be sent to Metrolinx through the use of **MerolinxMERX EBS**. Bidders shall be solely responsible for the delivery of their Submission using MetrolinxMERX EBS by the Closing, in accordance with these Instructions to Bidders.

1.2 Your Submission is to be firm and irrevocable for one hundred and twenty (120) calendar days from the Closing.

1.3 Your Submission will be evaluated in accordance with Section 20 – Submission Evaluation of Instructions to Bidders.

1.4 Tender Timetable

| Milestone | Date |
|---|---|
| Issuance of Tender Documents | March 16, 2017 |
| Deadline to Submit Request for Alternate Products and Materials | March 28, 2017 |
| Deadline to Submit Questions | April 6, 2017 |
| Last day for issuance of Addenda | April 10, 2017 |
| Closing | April 13, 2017 @ 3:00 p.m. Toronto time |
| Commencement Date of Work | June, 2017 (Estimated) |

Metrolinx may, without liability, cost or penalty and in its sole discretion amend the Tender Timetable.

2.0 Tender Enquiries

2.1 All written enquiries and other communications prior to full Contract execution are to be directed solely to the Procurement Representative.

2.2 Information received from any other sources shall be considered informal and Metrolinx shall not be bound by any information given in such a manner.

2.3 Any questions concerning the Tender Documents, the contents herein, or the Work contemplated herein are to be directed, in writing, to the Procurement

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 2 OF 21

Addendum No. 2

Representative prior to the deadline for submitting questions. No questions or requests for clarifications, changes or amendments of Tender Documents shall be entertained after this time regardless of the reason.

- 2.4 All questions/requests for clarification related to the Tender Documents are to be submitted via e-mail to the attention of the Procurement Representative as specified in Section 1.23 of Definitions using the question and answer template which is a Word file attached separately as:

2.4.1 Q and A Template_TENDER-PT-2016-CST-133.xlsx

Indicate the document section related to each question being submitted as well as page, drawing, section number and details of the specific question/clarification requested. For each set of questions submitted by the Bidder, a new copy of the above referenced Q and A Template should be submitted.

- 2.5 When necessary, revisions to, or clarifications of the Tender Documents will be incorporated into a written addendum issued by the Procurement Representative identified herein. Information regarding the Tender Documents or the Work, whether provided by the Procurement Representative identified herein, or from any other source, whether verbally or in writing, shall be considered informal and Metrolinx shall not be bound by, or liable for, any such information unless incorporated into a written addendum.

3.0 Mandatory Site / Information Meeting

- 3.1 Not Applicable.

4.0 Addenda / Changes to the Tender Documents

- 4.1 In the event that Metrolinx determines in its sole discretion, that clarifications of, or revisions to the Tender Documents are required, all Bidders who received copies of the Tender Documents shall be advised of such clarifications or revisions during the tendering period by written Addenda. Such Addenda shall become part of the Tender Documents and the contents thereof shall be allowed for in the prices bid for the Work.
- 4.2 It is the Bidder's responsibility to ensure that they have received copies of all Addenda, and to ensure that the Addenda have been considered in their Submission. Addenda, if applicable, will be issued through MERX. Information concerning the number of Addenda issued and the date of issue of the most recent Addendum can be found at www.merx.com for this Tender Process. Bidders are urged to select automatic notification of Addenda issuance when registering on MERX.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 3 OF 21

Addendum No. 2

- 4.3 The Bidder, when ascertaining if copies of all Addenda issued have been received, shall be responsible for allowing sufficient time prior to the Closing to receive any missing Addenda and to review and allow for the contents thereof in the Submission.
- 4.4 The Bidder shall remit the Submission using the most current revised Tender Document Forms as issued via Addenda. Failure to use the most current pages of the Tender Document Forms may result in the Bidder's Submission being found non-responsive resulting in disqualification from the Tender Process.

5.0 Tender Submission

- 5.1 Submissions shall only be accepted electronically via the Metrolinx MERX Portal. Submissions submitted in any other manner shall be found non-compliant and disqualified.
- 5.2 It is the Bidders sole responsibility when submitting a Submission to Metrolinx to exercise extreme care when completing and submitting all required documents and/or information. Failure of the Bidder to include all required documents and/or information may result in the Bidder's Submission being found non-compliant and disqualified.
- 5.3 Bidders shall examine carefully the whole of the Tender Document and any data referred to therein. They shall make the necessary investigations to inform themselves thoroughly as to the character and magnitude of the Work.
- 5.4 The Bidder shall not claim at any time after the Closing and/or after notification of acceptance of its Submission that there was any misunderstanding or uncertainty in regard to the Tender Document or any of the contents therein. No plea of ignorance of conditions which exist, or any conditions or difficulties that may be encountered, shall be accepted as a reason for failure to complete the Contract or as a basis for claims for additional compensation or extension of time.
- 5.5 Submissions should be completed fully in a clear and comprehensible manner.
- 5.6 The Submission shall be submitted on the most current Tender Document Forms issued by Metrolinx and except for designated sections where the Bidder is to enter information, the Tender Document and Tender Document Forms shall not be altered in any way including, but not limited to, write-ins, strike-outs of the pre-printed provisions or any other conditional or qualifying statements.
- 5.7 Any Submission which contains such conditional and/or qualifying statements may be found non-compliant and disqualified unless such conditional and/or qualifying statements are withdrawn in writing by the Bidder, upon request by Metrolinx.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 4 OF 21

Addendum No. 2

- 5.8 If during the preparation of their Submission, the Bidder desires to make a change which requires correction, alteration or erasure to any information previously entered in a designated section of the Submission by the Bidder, documents that have been uploaded to the Metrolinx MERX Portal may be added, removed and/or re-submitted as often as required at any time, prior to Closing.
- 5.9 All prices shall be firm and quoted in Canadian funds. The prices quoted in the Submission shall represent full payment for all such Work as is necessary for the proper completion of the Contract
- 5.10 For assistance with registration and login credentials, subscription information, fees, and general use of the Metrolinx MERX Portal, please watch the online Electronic Bid Submission tutorial at: <https://www.youtube.com/watch?v=To0fqSccw3M>. Alternatively, you can contact MERX directly at 1-800-964-MERX (6379). For additional Metrolinx MERX Portal guidelines, refer to the document entitled "Metrolinx MERX Portal - General Information" under "Attachments" in this Tender Document.
- 5.11 Information contained in the most recent Submission submitted via the Metrolinx MERX Portal and received prior to the Closing will take precedence over the information contained in previously received Submissions from the Bidder.
- 5.12 The Bidder may withdraw a Submission at any time prior to the Closing specified by Metrolinx by logging into www.metrolinx.merx.com.
- 5.12.1 Submission Deadline
- (a) Submissions must be electronically uploaded via the Metrolinx MERX Portal by the Closing. Any Submission or portions thereof received after the Closing (as confirmed by MERX Audit Report if submitted via the Metrolinx MERX Portal) shall be found non-compliant and the entire Submission shall be disqualified regardless of the reason for lateness. The Bidder shall submit the Submission within sufficient time to ensure its arrival before the Closing.
- (b) If the Bidder attempts to submit their Submission, or portions thereof, after the Closing, such documents shall not be accepted by the MERX system.
- (c) In the event that the MERX system allows late Submissions, this will not supersede any stipulations herein regarding late submissions.
- (d) Upon successful completion of the electronic submission process, the Bidder shall be provided with an E-bid Confirmation Number indicating that the Submission was uploaded successfully.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 5 OF 21

Addendum No. 2

- (e) Metrolinx reserves the right to postpone the Closing at which time all potential Bidders shall be advised of the new Closing by way of Addenda.
- (f) After the Closing has occurred, all Submission received will be opened by Metrolinx staff. There shall be no public access to this opening. Results of the opening of Submissions will be made public within approximately 24 hours on the Metrolinx MERX Portal (search the Tender Number and select "Bid Results").
- (g) Upon execution of the final Contract, all Bidders that have submitted a Submission shall be notified in writing of the results of the award to the successful Bidder. Results of the award to the successful Bidder shall also be posted on the Metrolinx MERX Portal. (search the Tender Number and select "Awards").

6.0 Clarification of Submissions

- 6.1 Metrolinx reserves the right, within one hundred and twenty (120) calendar days following the Closing, to request that any Bidder clarify its Submission and such Bidders shall submit responses to such request within five (5) Working Days following receipt of such request or within such shorter time as Metrolinx may require. Metrolinx may, in its sole discretion, choose to meet with some or all of the Bidders to discuss aspects to their Submission. Metrolinx may require Bidders to submit information clarifying any matters contained in their Submission or Metrolinx may prepare a written interpretation of any aspect of a Submission and seek the respective Bidder's acknowledgement of that interpretation.
- 6.2 Such information accepted by Metrolinx, for purposes of clarification, and written interpretations which have been acknowledged by the relevant Bidder shall be considered to form part of the Submission of those Bidders.
- 6.3 After the Closing, only information specifically requested by Metrolinx for purposes of clarification shall be considered as additions to a Bidders Submission.
- 6.4 Metrolinx is not obliged to seek clarification of any aspect of a Submission.

7.0 Bidder Qualifications

- 7.1 Only qualified Bidders will be considered for award of this Contract. In order to be considered qualified, the Bidder shall demonstrate to the satisfaction of Metrolinx it has:
 - 7.1.1 COR™ "Certified" Status with IHSA; and

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 6 OF 21

Addendum No. 2

- 7.1.2 satisfactorily completed in the sole opinion of Metrolinx, three (3) contracts for work similar in scope and nature as "the Work of this Contract".
- 7.2 With respect to the experience requirements set out in Subsection 7.1.2 above, each Bidder is solely responsible to provide, in Appendix "C" of the Form of Tender:
- 7.2.1 a detailed description of the completed relevant work, starting with the most recent, that the Bidder has performed and that the Bidder is representing to Metrolinx it meets the requirements of Subsection 7.1.2 herein; and
- 7.2.2 the names and coordinates of an owner's representative and a consultant's representative (for each project) that are prepared to speak to Metrolinx with respect to the Bidder's performance on each project described in Appendix "C".
- 7.3 In respect of the owner and consultant representatives provided by Bidders in Appendix "C", Metrolinx may, in its sole discretion, decline to contact the owner and/or consultant representatives provided by any Bidder and rely on the detailed descriptions provided by the Bidder in Appendix "C".
- 7.4 The Bidder is permitted to list work completed under a Metrolinx contract to meet the requirements of Subsection 7.1.2 herein and, if it does so, Metrolinx will contact the owner and consultant representatives named in accordance with Subsection 7.3 herein in the same manner as it would for projects listed in Appendix "C" that are completed or carried out for a third party.
- 7.5 In its determination of whether a Bidder meets the requirements of Section 7.1 herein, Metrolinx may, in its sole discretion:
- 7.5.1 take into account the experience of Metrolinx itself in dealing with the Bidder in circumstances where the Bidder has carried out (or is carrying out) a project for Metrolinx (whether or not the Bidder has listed such a project in Appendix "C"); and
- 7.5.2 make general inquiries of third parties with respect to the qualifications of a Bidder and take the results of these general inquiries into account (whether or not the Bidder has listed the third party or the applicable project in Appendix "C").
- 7.6 Before any Submission is accepted, any Bidder may be required to demonstrate to the satisfaction of Metrolinx, that it is capable of performing the Work. Metrolinx reserves the right to inspect the equipment to be used, and/or the facilities where the proposed Work is to be carried, of any and all Bidders and nominated Subcontractors, and make any and all further investigations it deems,

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 7 OF 21

Addendum No. 2

in its sole opinion, necessary, prior to the acceptance of any Submission, to determine if a Bidder is qualified to perform the Work.

- 7.7 In the event the Bidder does not demonstrate to the satisfaction of Metrolinx that it possesses the necessary qualifications and experience to be considered for award of the Contract its Submission shall be found non-responsive and disqualified.

8.0 Insurance

- 8.1 As a condition of award of this Contract, in accordance with and subject to the provisions of GC11.1 Insurance of Supplementary General Conditions of the Contract, the Bidder shall provide to Metrolinx certificates for the following types of insurance in the amounts specified within five (5) business days of notification of acceptance of its Submission.

8.1.1 General Liability Insurance

The policy shall be in an amount of not less than \$5,000,000.00 per occurrence.

8.1.2 Automobile Liability Insurance

The policy shall be in an amount of not less than \$5,000,000.00 per occurrence.

8.1.3 Aircraft and Watercraft Liability Insurance

Not Applicable.

8.1.4 All Risks Property Insurance

The policy shall be in an amount of not less than the Contract Price of the Contract with a deductible in an amount of not more than \$10,000.00.

8.1.5 Boiler and Machinery Insurance

Not Applicable.

8.1.6 Equipment Insurance

The policy shall be in an amount of not less than the replacement value of the equipment insured.

- 8.2 Certificates of Insurance shall include:

8.2.1 The Contract name and number;

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 8 OF 21

Addendum No. 2

- 8.2.2 Additional insureds as identified in GC 11.1.4 of Supplementary General Conditions of the Contract; and
- 8.2.3 Confirmation that the policy includes a waiver of subrogation against Metrolinx as required in GC 11.1.1.1 and GC 11.1.1.4 (1) and (2) of Supplementary General Conditions of the Contract.
- 8.3 All Certificates of Insurance shall include a provision requiring the insurer to give Metrolinx thirty (30) days prior written notice of any changes to, or cancellation of, the required insurance policies.
- 8.4 Failure by the Bidder to comply with these requirements shall result in the award of the Contract being declared void and forfeiture of the Bidder's Bid Deposit to Metrolinx.

9.0 Workplace Safety and Insurance Clearance Certificate

- 9.1 The Bidder shall send as part of its Submission a valid Workplace Safety and Insurance Clearance Certificate for the premium rate class, subclass or group as appropriate for the Work of this Contract, as issued by the Workplace Safety and Insurance Board. Failure to comply with this requirement may cause the Submission to be deemed non-responsive and disqualified.
- 9.2 In addition, the Bidder to whom this Contract is awarded shall furnish a valid Workplace Safety and Insurance Clearance Certificate for the premium rate class, subclass or group as appropriate for the Work of this Contract, as issued by the Workplace Safety and Insurance Board, within five (5) business days of notification of acceptance of its Submission by Metrolinx. Failure by the Bidder to comply with this requirement shall result in the Contract award being declared VOID and forfeiture of the Bidder's Bid Deposit to Metrolinx.

10.0 Parent Company Indemnity

- 10.1 If requested by Metrolinx, as a condition of award of Contract, a subsidiary company shall be required to submit a 'Guarantee' from its parent company, included in the Attachments – Parental Guarantee, or in a form satisfactory to Metrolinx and agrees to provide all the necessary financial and technical support for the proper completion of the said Contract and shall guarantee the performance of the said Contract in accordance with the terms and conditions, including timely completion thereof, and agrees to guarantee the Work for the warranty period(s) stipulated therein.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 9 OF 21

Addendum No. 2

11.0 Bid Deposit

- 11.1 Each Submission shall include a PDF copy of a bid bond from a recognized Canadian Surety or a PDF copy of either a certified cheque, bank draft or letter of credit drawn upon a recognized Canadian Financial institution, payable to "Metrolinx" in the amount of **\$500,000.00** (the "Bid Deposit"). The bid bond shall be duly executed and sealed by the Surety and executed by the Bidder. Certified Cheques, Bank Drafts or Letters of Credit shall be duly executed and sealed by the financial institution. All signatures and seals shall be originals.
- 11.2 After the Closing, Metrolinx shall notify the three (3) lowest Bidders in writing requesting that the original Bid Deposits be submitted within seventy-two (72) hours or sooner, as required by Metrolinx, to the Procurement Representative. Failure by a notified Bidder to submit their original Bid Deposit within the requested deadline, shall result in the Bidder's Submission to be found non-responsive and disqualified and shall also result in the Bidder's bidding rights being suspended by Metrolinx for a period of twelve (12) months
- 11.3 Bid bonds and letters of credit shall include the Contract name and number.
- 11.4 Failure by the Bidder to submit the required PDF copy of the Bid Deposit with their Submission shall cause the Bidder's Submission to be found non-responsive and disqualified.
- 11.5 Certified cheques and bank drafts shall not be deposited and interest shall therefore not be paid.
- 11.6 The original Bid Deposit will be retained until all Submissions received have been reviewed and evaluated. The Bid Deposits, with the exception of the two (2) lowest, responsive Submissions received, may be returned to unsuccessful Bidders, upon request, ten (10) Working Days after the Closing. Otherwise the Bid Deposits shall be returned after award of Contract.
- 11.7 The Bidder acknowledges and agrees that its Bid Deposit will be forfeited to Metrolinx as liquidated damages on the occurrence of any of the following events:
 - 11.7.1 Withdrawal of the Submission by the Bidder after the Closing; or
 - 11.7.2 Failure by the Bidder to execute the Contract; or
 - 11.7.3 Failure by the Bidder to provide any of the documents required by the Tender Documents as a condition of entering into the Contract, including, but not necessarily limited to, the Contract Security, Insurance Certificates or Workplace Safety and Insurance Clearance Certificate within the times specified in the Tender Documents.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 10 OF 21

Addendum No. 2

12.0 Contract Security

12.1 The Bidder shall send as part of its Submission a PDF copy of a completed Agreement to Bond from a recognized Canadian Surety, for a Performance Bond and a Labour and Materials Payment Bond in favour of "Metrolinx" each equal to fifty percent (50%) of the Contract Price. The Agreement to Bond shall be duly executed and sealed by the Surety and the Bidder (if required by the form) and include the Contract name and number. All signatures and seals on the original Agreement to Bond shall be originals.

12.2 In lieu of a PDF copy of an Agreement to Bond the Bidder may send with its Submission a PDF copy of one of the following specified alternative forms of Contract Security from a recognized Canadian financial institution in the amount of twenty-five percent (25%) of the Contract Price.

12.2.1 Letter of Credit

- (a) A PDF copy of a written surety statement from a recognized Canadian financial institution, stating that a Letter of Credit shall be available upon award of Contract, must be submitted with the Submission. The surety statement shall be duly executed by the financial institution and sealed if required.
- (b) The Letter of Credit to be provided by the Bidder to Metrolinx upon award of Contract shall expressly state that it may be drawn upon by Metrolinx on the delivery of a certificate from the President and CEO of Metrolinx confirming that the Bidder has defaulted in the performance of its obligations under the Contract. No other documentary evidence is required to be provided by Metrolinx.
- (c) The Letter of Credit must indicate that "Metrolinx" is the named beneficiary and include the Contract name and number.

12.2.2 Certified Cheque/Bank Draft

- (a) If a Certified Cheque or Bank Draft is used in lieu of a Performance Bond and Labour and Material Bond, it must be submitted as a PDF copy with the Submission.
- (b) Certified Cheques and Bank Drafts shall be made payable to "Metrolinx" and shall be duly sealed and executed by the financial institution

12.3 All original specified alternative forms of Contract Security submitted shall have original signatures and original seals where required.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 11 OF 21

Addendum No. 2

- 12.4 Failure by the Bidder to send a PDF copy of the required Agreement to Bond, or specified alternative, with its Submission shall cause the Bidder's Submission to be found non-responsive and disqualified.
- 12.5 After the Closing, Metrolinx shall notify the three (3) lowest Bidders in writing requesting that their original Contract Security in the form of an Agreement to Bond or one of the specified alternatives be submitted within seventy-two (72) hours or sooner, as determined by Metrolinx, to the Procurement Representative. Failure by a notified Bidders to submit their original Contract Security within the requested deadline shall result in the Bidder's Submission to be found non-responsive and disqualified and shall also result in the Bidder's bidding rights being suspended by Metrolinx for a period of twelve (12) months.
- 12.6 The recommended Bidder shall deliver the Performance Bond and Labour and Materials Payment Bond, or specified alternative, to Metrolinx within five (5) business days of notification of acceptance of its Submission by Metrolinx. The Performance Bond and the Labour and Material Bond shall include the Contract name and number. Failure of the Bidder to fulfill this requirement shall result in the award of the Contract being cancelled and forfeiture of the Bidder's Bid Deposit.

13.0 Alternate Products and Materials

- 13.1 Bidders wishing to propose alternate products or materials, other than those specified in the Tender Documents, for use in the Work shall, no later than specified in the Tender Timetable, submit a request in writing to the Procurement Representative seeking approval for the proposed alternate. The request must include supporting documentation to establish the proposed alternate's equivalence to the product or material specified.
- 13.2 Metrolinx shall, within five (5) business days or receipt of such requests, respond as follows:
 - 13.2.1 Should Metrolinx, in its sole discretion, approve the proposed alternate, it shall issue an addendum, in accordance with Section 4 of these Instructions to Bidders, identifying the alternate and stating it is approved for use as part of the Work; or
 - 13.2.2 Should Metrolinx, in its sole discretion, not approve the proposed alternate, it shall only inform the Bidder who proposed the alternate of its decision.
- 13.3 Metrolinx is under no obligation to accept or reject any proposed alternate. Metrolinx shall accept or reject any proposed alternate at its sole discretion. Metrolinx is under no obligation to disclose the reason, or reasons, to any Bidder for the acceptance or rejection of any proposed alternate.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 12 OF 21

Addendum No. 2

14.0 Mandatory Requirements

- 14.1 Bidders must meet all mandatory requirements in order for their Submission to be considered further. Failure of a Bidder to meet all of the mandatory requirements listed below shall result in the Bidder's Submission to be deemed non-compliant and shall not be considered further.
- 14.2 The mandatory requirements for this Tender Document are as follows:
- 14.2.1 The Form of Tender must be submitted by the E-Bid Authorized Signer.
- 14.2.2 Pricing information must be completed and submitted on the Tender Document Forms provided.
- 14.2.3 Bidders shall attend a mandatory site/information meeting per the instructions outlined in Instructions to Bidders. Failure of a Bidder to attend the mandatory site/information meeting, be registered and be present for the entire meeting from the time the meeting is called to order until the meeting is adjourned shall automatically result in suspension of their eligibility to issue a Submission for the Work. Submissions remitted by such Bidders shall be found non responsive and disqualified.
- 14.2.4 Bidders shall submit the required WSIB Certificate as per Section 9.0 of Instructions to Bidders, with the Submission.
- 14.2.5 Bidders shall submit the required PDF copy of the Bid Deposit , as per Section 11.0 of Instructions to Bidders, with the Submission.
- 14.2.6 Bidders shall submit a PDF copy of the required Agreement to Bond, or specified alternative, as per Section 12.0 of Instructions to Bidders, with the Submission.
- 14.2.7 Bidders shall declare any conflicts of interest in Appendix "E" of Form of Tender. If Appendix "E" is left blank the provisions of Section 1.2 of Appendix "E" shall apply.
- 14.2.8 The Bidder shall provide a completed Appendix "F" – Mandatory Technical Requirements of Form of Tender with the Submission.

15.0 Rights of Metrolinx

- 15.1 Metrolinx has the right, in its sole discretion:
- 15.1.1 to cancel this call for Tenders and any acceptance of a Submission for any reason and at any time before the Agreement Between Owner and

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 13 OF 21

Addendum No. 2

Contractor has been executed and delivered by both parties, without any obligation whatsoever to a Bidder, except the obligation to return the Bid Deposit;

- 15.1.2 to reject any or all Submissions. The Submission with the lowest price will not necessarily be accepted. Metrolinx's selection shall be based on which Bidder has provided a Submission which Metrolinx determines, in its sole discretion, to provide the greatest value based on quality, service and price and determined on the evaluation criteria contained in this Tender Document;
- 15.1.3 to disqualify any Submission which contains misrepresentations or any other inaccurate or misleading information;
- 15.1.4 to waive any requirement of the Tender Documents or request amendment where, in the sole opinion of Metrolinx, there is an irregularity or omission in the information provided that is not material to the Submission unless a specific consequence has been identified herein for the commission of such an irregularity or omission;
- 15.1.5 to waive the requirement to check references;
- 15.1.6 to not respond to a Bidder's questions;
- 15.1.7 to use its own experiences, and the experiences of any other third party, with the Bidder in previous contracts in order to evaluate the Bidder's performance. Specifically to,
 - (a) take into account the experience of Metrolinx itself in dealing with the Bidder in circumstances where the Bidder has carried out (or is carrying out) a project for Metrolinx (whether or not the Bidder has listed such project on Appendix "C" of Form of Tender; and
 - (b) make general inquiries of third parties with respect to the qualifications of a Bidder and take the results of these general inquiries into account (whether or not the Bidder has listed the third party or the applicable project in Appendix "C" of Form of Tender.
- 15.1.8 to award or not award based on submitted references and/or references independently obtained by Metrolinx;
- 15.1.9 to award or not award based on the Bidder's experiences with Metrolinx or other departments or agencies within the Ontario government, if the Bidder:

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 14 OF 21

Addendum No. 2

- (a) was previously given a "Notification of Award" of contract by a department or agency within the Ontario government and defaulted in proceeding with the work of the contract;
 - (b) failed or refused to comply with any applicable federal, provincial or municipal law governing a bid or a prior contract with a department or agency within the Ontario government;
 - (c) had a previous contract with a department or agency within the Ontario government that was terminated for default in the past year; or
 - (d) is an affiliate of or successor to any corporation described in Sections 15.1.9(a) through (c) above, including any firm that is controlled within the meaning of the Ontario Business Corporations Act by the same person or group of persons who so controlled any corporation described in Sections 15.1.9(a) through (c) above.
- 15.1.10 to request a listing of all projects, regardless of scope, complexity or estimated value, completed for or terminated by Metrolinx within the past three (3) years or currently active;
- 15.1.11 to distribute via Addenda, copies of any Bidder's questions received and responses provided by Metrolinx, to all Bidders who received the Tender Documents;
- 15.1.12 to postpone the Closing, at which time all Bidders who received Tender Documents shall be advised of the new Closing via written Addenda;
- 15.1.13 within ninety (90) days following the Closing, to request that any Bidder clarify its Submission and such Bidders shall submit responses to such request within five (5) Working Days following receipt of such request or within such shorter time as Metrolinx may require;
- 15.1.14 to prepare a written interpretation of any aspect of a Submission and require the relevant Bidder's acknowledgement of the accuracy of that interpretation;
- 15.1.15 to request that a Bidder voluntarily withdraw its Submission without penalty where in the opinion of Metrolinx the Submission is substantially below internal budget estimates and therefore the Work would not be satisfactorily completed;
- 15.1.16 to correct arithmetical errors in any or all Submissions where such errors affect the Contract Price. Arithmetical corrections will only be

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 15 OF 21

Addendum No. 2

made based upon the unit prices submitted by the Bidder. Corrections to extensions, sums, differences or other arithmetical operations based on the unit prices submitted will be identified on the Tender Document by Metrolinx and acknowledged in each instance by the initials of the Bidder's and Metrolinx's authorized signatories. Such corrections will become part of the Bidder's Submission. Failure of the Bidder to acknowledge such corrections will result in its Submission being deemed non-responsive and disqualified.

15.1.17 to, upon failure of the Bidder whose Submission was accepted to fulfil the conditions of Section 16.2 herein, cancel award of Contract and consistent with industry practice award to another qualified Bidder.

16.0 Contract To Be Executed

- 16.1 Metrolinx shall notify the Bidder in writing of acceptance of its Submission by Metrolinx. Metrolinx will prepare the Form of Agreement and bind it into the Contract Documents. Three (3) sets of Contract Documents will be forwarded to the Bidder for review and execution.
- 16.2 The Form of Agreement shall be executed by the Bidder and delivered to Metrolinx within five (5) business days of notification to the Bidder that Metrolinx has accepted its Submission. Failure by the Bidder to execute and deliver the Form of Agreement and Contract Documents with the required Insurance Certificates and Workplace Safety and Insurance Clearance Certificate and the Performance and Labour and Materials Payment Bonds, or specified alternatives, shall result in the cancellation of the Contract award and forfeiture of the Bidder's Bid Deposit.
- 16.3 Upon failure of the Bidder, whose Submission was accepted, to fulfil the conditions of Section 16.2 herein, Metrolinx may, at its sole discretion, cancel award the Contract. Consistent with industry practice, Metrolinx may notify another Bidder who was determined to be qualified in accordance with the evaluation criteria stated herein and who submitted a responsive Submission that its Submission has been accepted and, subsequent to the fulfillment of the conditions of Section 16.2 herein, that Bidder shall be deemed to be the successful Bidder and the Bidder to whom the Contract is awarded.
- 16.4 There is no binding contract for the supply of the Work unless and until Metrolinx and the Bidder whose Submission has been accepted have executed the written agreements contemplated in the Tender Document.
- 16.5 The Bidder shall not start the Work before the Contract Documents have been executed by the Bidder and Metrolinx and all documents required by the Tender Document, as a condition of award of the Contract, have been delivered to Metrolinx.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 16 OF 21

Addendum No. 2

17.0 Commencement and Completion

- 17.1 The dates for commencement and completion of the Work are set out in the Form of Agreement.

18.0 Subcontractors and Suppliers

- 18.1 The successful Bidder shall complete and submit a list of Subcontractors and Suppliers five (5) Working Days after execution of the Contract, in accordance with the requirements of Section 01000 – General Instructions.
- 18.2 Bidders shall be responsible for the distribution of all the Instruments of Contract and Addenda thereto to all Subcontractors or Suppliers.
- 18.3 Metrolinx, its Consultant, or their representatives shall have no obligation whatsoever to supply any Subcontractor or Supplier with all or part of the Contract Documents and Addenda thereto, and they shall not be liable for any damages suffered by any Bidder, Subcontractor or Supplier who does not receive or review the Contract Documents or Addenda. No claims for payment or for a change order will be entertained because of the failure of any Subcontractor or Supplier to receive or review the Contract Documents or Addenda which have been supplied to the Bidders up to the Closing.

19.0 Allowances

- 19.1 The Contract Price bid must include any and all Cash and/or Contingency Allowances as stated in Appendix "B" of Form of Tender.

20.0 Submission Evaluation

- 20.1 Subject always to the "Rights of Metrolinx" set out herein and without creating any obligations whatsoever to any Bidder, Metrolinx advises that it shall evaluate Submissions using the following criteria:
- 20.1.1 Contract Price;
 - 20.1.2 Bidder's Qualifications;
 - 20.1.3 Proper Completion of Tender Documents and Appendices;
 - 20.1.4 Compliance to Tender Document Requirements;
 - 20.1.5 Submission of all Mandatory Requirements; and
 - 20.1.6 Attendance at Mandatory Site Visit, if any.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 17 OF 21

Addendum No. 2

- 20.2 Metrolinx's selection of the successful Submission will be based on which Bidder has provided a Submission which Metrolinx determines in its sole discretion, to be most beneficial to Metrolinx.

21.0 Conflict of Interest

- 21.1 For the purposes of this section, "Conflict of Interest" shall have the meaning ascribed to it in Appendix "E" of Form of Tender.
- 21.2 Each Bidder shall disclose to Metrolinx any actual or potential Conflict of Interest that may be relevant to this Tender Process and provide a declaration, in the Form of Tender that, except as disclosed, the Bidder is free of any actual or potential Conflict of Interest. Conflicts of Interest arise when the Bidder is in a position that could affect the integrity of this Tender Process or the performance of the Work. Examples of Conflict of Interest include but are not limited to:
- 21.2.1 any director, officer, or employee or advisor of Metrolinx has any connection or relationship with, or any pecuniary interest in the Bidder or any Subcontractor thereof;
- 21.2.2 the Bidder or any Subcontractor thereof is in possession of confidential information relating to the Work; and
- 21.2.3 any director, officer or employee or advisor of Metrolinx who has knowledge of the Work has assisted the Bidder in the preparation of its Submission.
- 21.3 The Conflict of Interest declaration included in the Form of Tender shall be completed and provided with the Submission.
- 21.4 If, at the determination of Metrolinx in its sole discretion, a Bidder is found to be in a Conflict of Interest that cannot be resolved or the Bidder fails to disclose any actual or potential Conflict of Interest, Metrolinx may, at its sole discretion, disqualify the Bidder from the Tender Process or terminate any agreement entered into with the Bidder pursuant to this Tender Process.

22.0 Joint Ventures

- 22.1 If a Joint Venture is proposed, the Bidder shall state in its Submission the Joint Venture arrangements that form the basis on which the Joint Venture plans to carry out its obligations.
- 22.2 The Joint Venture shall not change its Joint Venture arrangement without the prior written approval of Metrolinx in its sole discretion.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 18 OF 21

Addendum No. 2

- 22.3 One of the Joint Venture participants shall be nominated as being in charge during this Tender Process and, in the event of a successful Submission during finalization of the Contract (the "Participant in Charge"). The Participant in Charge shall be authorized by the other joint venture participants to incur liabilities and receive instructions for and on behalf of any and all participants of the joint venture.
- 22.4 Each Joint Venture participant shall demonstrate its authorization of the Participant in Charge by submitting with their Submissions a power of attorney, or similar document, signed by a legally authorized representative of the Joint Venture participant.
- 22.5 All participants of the Joint Venture shall be legally liable, jointly and severally, during this Tender Process and during the Contract for carrying out the obligations pursuant to the Contract.

23.0 Prohibited Contacts and Lobbying Prohibition

- 23.1 A Bidder and all of the Bidder's respective Subcontractors, advisors, employees and representatives are prohibited from engaging in any form of political or other lobbying, of any kind whatsoever, to influence the outcome of this Tender Process.
- 23.2 Without limiting the generality of Section 23.1, neither Bidders or any of their respective Subcontractors, advisors, employees or representatives shall contact or attempt to contact, either directly or indirectly, at any time during the Tender Process, any directors, officers, employees and advisors of Metrolinx, other than the Procurement Representative.

24.0 Media Releases, Public Disclosures and Public Announcements

- 24.1 A Bidder shall not, and shall ensure that its advisors, employees or representatives do not, issue or disseminate any media release, public announcement or public disclosure (whether for publication in the press on the radio, television, internet, or any other medium) that relates to this Tender Process, this Submission or any matters related thereto, without the prior written consent of Metrolinx.
- 24.2 A Bidder and all of the Bidder's respective advisors, employees and representatives shall not make any public comment, respond to questions in a public forum, or carry out any activities to either criticize another Bidder or Submission or to publicly promote or advertise its own qualifications, interest in or participation in the Tender Process without the prior written consent of Metrolinx, which may be withheld in the sole discretion of Metrolinx. Notwithstanding this item, the Bidder, Bidder's team members and all of the

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 19 OF 21

Addendum No. 2

Bidder's respective advisors, employees and representatives are permitted to state publicly that it/they are participating in the Tender Process.

- 24.3 For greater clarity, this section does not prohibit disclosures necessary to permit the Bidder to discuss the Tender Document with prospective Subcontractors' participation in this Tender Process.

25.0 Restriction on Communications Between Bidders – No Collusion

- 25.1 A Bidder shall not discuss or communicate, directly or indirectly, with any other Bidder, any information whatsoever regarding the preparation of its own Submission or the Submissions of other Bidders. Bidders shall prepare and submit Submissions independently and without any connection, knowledge, comparison of information or arrangements, direct or indirect, with any other Bidder. This obligation extends to all team members of a Bidder and all of the Bidder's respective advisors, employees and representatives.

26.0 Disclosure of Information

- 26.1 The Bidder hereby agrees that any information provided in its Submission, even where it is identified as being supplied in confidence, may be disclosed by Metrolinx where required by law, order of a court, or tribunal.
- 26.2 The Bidder hereby consents to the disclosure, on a confidential basis, of its Submission by Metrolinx to Metrolinx's advisors retained for the purpose of evaluating or participating in the evaluation of the Submissions.

27.0 Freedom of Information and Protection of Privacy Act ("FIPPA")

- 27.1 Bidders are advised that Metrolinx may be required to disclose all, a part, or parts of a Bidder's Submission and a part or parts of any Submission pursuant to FIPPA.
- 27.2 Under Ontario's Open Data Directive, Metrolinx is required to publish certain procurement information. Accordingly, the Proponent acknowledges that, subject to any applicable FIPPA exemptions, Metrolinx may publish procurement data including but not limited to the names of the Proponents and the winning bid in accordance with Ontario's Open Data Directive. For more information, see: www.ontario.ca/page/ontarios-open-data-directive.

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 20 OF 21

Addendum No. 2

28.0 Submission to Be Retained by Metrolinx

Metrolinx shall not return a Submission or any accompanying documentation, with the exception of a Bid Deposit and/or Contract Security, submitted by a Bidder.

29.0 Confidential Information of Metrolinx

29.1 All information provided by or obtained from Metrolinx in any form in connection with the Submission process;

29.1.1 is the sole property of Metrolinx and shall be treated as confidential;

29.1.2 shall not be used for any purpose other than replying to the Tender Document and the performance of any subsequent agreement; and

29.1.3 shall not be disclosed without prior written authorization from Metrolinx.

30.0 Bidders Shall Bear Their Own Costs

The Bidder shall bear all costs associated with or incurred in connection with its participation in this Tender Process, including, but not limited to, preparation of its Submission.

31.0 Vendor Performance Management Program

31.1 Vendor Performance Management (VPM) Program means the Metrolinx policy for monitoring, evaluating and recording vendor performance, as same may be amended or replaced from time to time. The Vendor Performance Management Program establishes a standard methodology for the incorporation of a vendor's past performance as a criterion in assessing that vendor's bids or tenders for future work with Metrolinx.

31.2 Pursuant to Metrolinx's VPM Program, Metrolinx may consider a Bidder's past performance under contracts with Metrolinx in evaluating Submissions received in response to this Tender Document. The Vendor Performance Rating ("VPR") is the average of a vendor's performance evaluation scores (as assessed by or on behalf of Metrolinx) for a thirty-six (36) month period preceding the Closing. If a Bidder has not completed any work for Metrolinx in the three (3) years preceding the Closing, for the purpose of evaluating the Submission, the Bidder will be assigned a VPR which is the straight average of all the VPRs of all vendors who have performed services for Metrolinx during the prior fiscal year.

31.3 If the VPR is being applied as a component of the award evaluation for this Tender Process, the legal name of the Bidder stated on the Form of Tender will

INSTRUCTIONS TO BIDDERS

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 21 OF 21

Addendum No. 2

be used. It is the responsibility of the Bidder to ensure that its proper legal name has been stated on the Form of Tender. Metrolinx will not accept any requests from the Bidder to change the legal name provided after the Closing.

- 31.4 In case of a Joint Venture where multiple parties will sign the Contract, the VPR of each participant will be added and the average will be applied.
- 31.5 For the purposes of this Tender Process, the application of the VPR is set out in Attachment # 1 – Vendor Performance Appraisal.

END OF SECTION

The "Agreement Between Owner and Contractor" of CCDC 4 2011 Unit Price Contract, is hereby amended as follows:

1.0 Article A-1 The Work

Paragraph 1.3 is amended as follows:

- 1.3 Add the words ", and attain *Total Performance of the Work* by the 26th day of April in the year 2019" after the words "in the year 2019" in the third line of paragraph 1.3.

2.0 Article A-3 Contract Documents

Paragraph 3.1 is amended as follows:

- 3.1 Add the words "Supplementary Agreement Between Owner and Contractor
Supplementary Definitions of the *Contract*
Supplementary General Conditions of the *Contract*"
to the list of *Contract Documents* in paragraph 3.1.

3.0 Article A-6 Receipt Of And Addresses For Notices In Writing

Paragraph 6.1 is amended as follows:

- 6.1 Delete the words "or other form of electronic communication" from the second line of paragraph 6.1.

Delete the words "or other form of electronic communication" from the seventh line of paragraph 6.1.

Delete the words "email address" from the signature lines for the Owner, Contractor and Consultant in paragraph 6.1.

4.0 Article A-9 Severability

Add new Article A-9 as follows:

"ARTICLE A-9 SEVERABILITY

- 9.1 If any provision of this *Contract* is found to be invalid or unenforceable in any circumstances, the remainder of this *Contract*, and the application of such provision in any other circumstances, shall not be affected."

5.0 **Article A-10 Time Of Essence**

Add new Article A-10 as follows:

"ARTICLE A-10 TIME OF ESSENCE

10.1 Time shall be of the essence of the *Contract* and under all *Contract Documents*."

END OF SECTION

FORM OF AGREEMENT

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 1 OF 1

Addendum No. 2

1.0 Form of Agreement

The "Agreement Between Owner and Contractor" in CCDC 4 2011 Unit Price Contract is referred to herein as the Form of Agreement and shall constitute the form of agreement of this Contract in its entirety. CCDC 4 2011 is available for purchase at www.ccdc.org.

The Owner is: Metrolinx
277 Front Street West, 4th Floor, Toronto, Ontario
M5V 2X4

The Consultant is:

The Work is: Construction of Civil Work for AVM Deployment
Various Metrolinx Locations

Contract No. PT-2016-CST-133

Article A-1: Date of Commencement of Work: Estimated June 5, 2017
Date of Substantial Performance of the Work: Estimated March 29, 2019
Date of Total Performance of the Work: Estimated April 26, 2019

Article A-2: Contract Documents:

This list of Contract Documents are the documents as listed in Appendix "A" of the Form of Tender, as completed and submitted by the Contractor, including any Addenda, and as accepted by Metrolinx.

END OF SECTION

SUPPLEMENTARY DEFINITIONS OF THE CONTRACT

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 1 OF 3

Addendum No. 2

The "Definitions" of CCDC 4 2011 Unit Price Contract, are hereby amended as follows:

1.0 Consultant

1.1 Consultant is amended as follows:

1.1.1 Consultant is hereby deleted in its entirety and replaced as follows:

Consultant

The Consultant is the entity identified as the Consultant in the Agreement Between Owner and Contractor and may be either the Owner or a third party engaged by the Owner. The term Consultant shall mean Metrolinx.

2.0 Contract Documents

2.1 Contract Documents is amended as follows:

2.1.1 Add the words "in writing" after the word "upon" in the second line of paragraph 6.

3.0 Contract Time

3.1 Contract Time is amended as follows:

3.1.1 Delete the word "*Substantial*" and substitute the word "*Total*" in the second line.

4.0 Submittals

4.1 Add new definition, Submittals, as follows:

"Submittals

Submittals are documents or items required by the *Contract Documents* to be provided by the *Contractor*, such as:

- *Shop Drawings*, samples, models, mock-ups to indicate details or characteristics, before the portion of the *Work* that they represent can be incorporated into the *Work*; and
- Record drawings and manuals to provide instructions for the operation and maintenance of the *Work*."

SUPPLEMENTARY DEFINITIONS OF THE CONTRACT

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 2 OF 3

Addendum No. 2

5.0 Total Performance of the Work

5.1 Add new definition, Total Performance of the Work, as follows:

"Total Performance of the Work

Total Performance of the Work means when the entire *Work*, except for those items arising from GC 12.3 – WARRANTY, has been performed in accordance with the requirements of the *Contract Documents* and is so certified by the *Consultant*."

6.0 Toxic and Hazardous Substances

6.1 Add new definition, Toxic and Hazardous Substances, as follows:

"Toxic and Hazardous Substances

Toxic and Hazardous Substances means, collectively, any contaminant, waste, subject waste, pollutant, toxic substance, dangerous goods, asbestos, petroleum, its derivatives, by-products or other hydrocarbons, as defined in or pursuant to any applicable laws, regulations, by-laws, guidelines or orders rendered by any governmental authority having jurisdiction or any other substance or material which, when released to, or present in, the natural environment, is likely to cause in some immediate or foreseeable future time, material harm or degradation of the natural environment or material risk to human health."

7.0 Railway

7.1 Add new definition, Railway, as follows:

"Railway

Railway or *Railways* means one or more of the Canadian National Railway Company, Canadian Pacific Railway Company, or The Toronto Terminals Railway Company Limited, owning or operating the *Railway Right-of-Way* on which all or part of the *Work* may be performed."

8.0 Paragraph 31 – Railway's Engineer

8.1 Add new definition, Railway's Engineer, as follows:

"Railway's Engineer

Railway's Engineer means the person designated as such by the applicable *Railway* or the *Owner*."

SUPPLEMENTARY DEFINITIONS OF THE CONTRACT

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 3 OF 3

Addendum No. 2

9.0 Railway Flag Person

9.1 Add new definition, Railway Flag Person, as follows:

“Railway Flag Person

Railway Flag Person means the person designated as such by the applicable *Railway* or the *Owner* to provide flagging services.”

10.0 Railway Right-of-Way

10.1 Add new definition, Railway Right-of-Way, as follows:

“Railway Right-of-Way

Railway Right-of-Way means the land, property, trackage, equipment and facilities of the *Railway*, including main tracks, side tracks, branch lines, yards and terminals owned or controlled by the *Railway* or the *Owner*.”

END OF SECTION

DEFINITIONS OF THE CONTRACT

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

PAGE 1 OF 1

Addendum No. 2

1.0 Definitions of the Contract

- 1.1 The "Definitions" of CCDC 4 2011 Unit Price Contract shall constitute the Definitions of the Contract in their entirety as amended by the Supplementary Definitions herein. CCDC 4 2011 can be purchased at www.ccdc.org.

END OF SECTION

The "General Conditions of the CCDC 4 2011 - Unit Price Contract, are hereby amended as follows:

1.0 GC 1.1 - Contract Documents

1.1 Paragraph 1.1.7.1 is amended as follows:

Add the words "- Supplementary Agreement Between Owner and Contractor" at the beginning of the order of priority of documents in paragraph 1.1.7.1.

Add the words "- Supplementary Definitions of the Contract" above the words "the Definitions" in the order of priority of documents in paragraph 1.1.7.1.

1.2 Paragraph 1.1.7.5, add new paragraph as follows:

"1.1.7.5 In case of discrepancies, noted materials and annotations shall take precedence over graphic indications in the *Contract Documents*."

1.3 Paragraph 1.1.11, add new paragraph as follows:

"1.1.11 Subject to paragraph 1.1.9, all surveys, reports, drawings, calculations, designs, plan, specifications and other data, information, materials, collected, compiled, drawn or produced, including computer printouts, pursuant to the *Contract* are the property of the *Owner*. The *Contractor* shall transfer the copyright, including an express waiver and release of all moral rights, of all *Drawings*, plans, *Specifications*, models, photos, and other written or graphic materials produced under the *Contract* to the *Owner* which will be free to use them as it sees fit. Any waiver or release obtained under this clause may include a reasonable exclusion of liability regarding the use of materials for other projects. In the event of any dispute or disagreement pertaining to the *Work* between the *Owner* and the *Contractor*, the *Owner* will have the unqualified right and license to use the design as it may have evolved from time to time and any *Drawings*, *Specifications*, documents, materials of any nature and kind which may now or hereafter exist and which the *Contractor* may have any right, title, interest or copyright for the purpose of completing the design and construction of the *Work* for which they were prepared."

1.4 Paragraph 1.1.13, add new paragraph as follows:

"1.1.13 Wherever in the *Contract Documents* items are noted as "N.I.C." ("Not In Contract") the *Owner* will provide such items either

during or after the *Contract Time*. The *Contractor* shall accommodate the entry of such items into the *Work* when N.I.C. items are delivered to the *Place of the Work*."

2.0 GC 1.2 - Law Of The Contract

2.1 Delete paragraph 1.2.1 in its entirety and replace with new paragraph 1.2.1 as follows:

"1.2.1 This *Contract* shall be governed by the laws of the Province of Ontario."

3.0 GC 1.3 – Rights and Remedies

3.1 Add new paragraph 1.3.3 as follows:

"1.3.3 Notwithstanding paragraph 1.3.1, the *Owner* shall not be liable, whether in contract, tort or any other theory of law, for any claim arising from any prior negotiation, representation, or agreement, whether written or oral, which is superseded by the *Contract* under Article A-2 of the Agreement – Agreements and Amendments."

4.0 GC 1.5 – Advertising and Public Notices

4.1 Add new GC 1.5 – Advertising and Public Notices as follows:

"GC 1.5 – ADVERTISING AND PUBLIC NOTICES

1.5.1 The *Contractor* will obtain the *Owner's* prior written approval for any public advertising, written public sales promotions, press release or other general publicity matter, in which the name or trademarks of the *Owner* or any *Railway* are mentioned or used or in which words are used from which any connection with the *Owner* or any *Railway* or their trademarks may be inferred. The *Contractor* will not allow or permit any public ceremony in connection with the *Work* without the prior written permission of the *Owner*. The *Contractor* will not erect or permit the erection of any sign or advertising without the prior written approval of the *Owner*."

5.0 GC 1.6 – Confidential Information

5.1 Add new GC 1.6 - CONFIDENTIAL INFORMATION as follows:

"GC 1.6 – CONFIDENTIAL INFORMATION

- 1.6.1 The *Contractor* shall not disclose or provide any technical, business, financial, operational, scientific, or any other information or data obtained by the *Contractor* during the course of the *Work* to third parties who do not require that information or data to complete any portion of the *Work* and who are not authorized by the *Owner* to receive, or have access to, such confidential information."

6.0 GC 1.7 - Maintenance Of Records And Audit Rights

- 6.1 Add new GC 1.7 - MAINTENANCE OF RECORDS AND AUDIT RIGHTS as follows:

"GC 1.7 - MAINTENANCE OF RECORDS AND AUDIT RIGHTS

- 1.7.1 The Contractor shall maintain complete and accurate books, records, accounts and invoices in relation to the Contract and shall grant the Owner, full audit rights in respect of all said books, records, accounts and invoices relating to the performance of the Work."

7.0 GC 1.8 – Further Assurances

- 7.1 Add a new GC 1.8 - FURTHER ASSURANCES as follows:

"GC 1.8 - FURTHER ASSURANCES

- 1.8.1 Each party agrees that it shall at any time and from time to time, at its own expense, execute and deliver such further documents and do such further acts and things as the other party may reasonably request for the purpose of giving effect to the *Contract* or carrying out the intention of facilitating the performance of the *Contract*.
- 1.8.2 Without limiting the generality of paragraph 1.8.1 and notwithstanding any other provisions of the *Contract*, the *Contractor* acknowledges that it may, from time to time during the *Contract Time*, be requested to provide its agreement to indemnify, or to directly indemnify third parties for any liability, damages or claims which may arise in connection with the performance of the *Work* and as a result of the acts or omissions of the *Contractor* or those persons or entities for who it is responsible at law, and the *Contractor* shall reasonably cooperate with the *Owner* and shall execute and deliver such documents and agreements as may be required and requested by the *Owner*."

8.0 GC 2.2 – Role of the Consultant

- 8.1 Paragraph 2.2.6 is amended as follows:

SUPPLEMENTARY GENERAL CONDITIONS OF THE CONTRACT

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 4 OF 35

Addendum No. 2

- 2.1.1 Add the words "schedules" after the word "techniques," in the second line of paragraph 2.2.6.
- 8.2 Paragraph 2.2.7 is amended as follows:
 - 2.1.2 Delete the words "Except with respect to GC 5.1 – FINANCING INFORMATION REQUIRED FOR THE OWNER, the" and substitute the word "The" at the beginning of the paragraph 2.2.7.
- 8.3 Paragraph 2.2.14 is amended as follows:
 - 2.1.3 Delete the word "submittals," and substitute the words "*Submittals* which are provided" after the word "*Contractor's*" in the first line of paragraph 2.2.14.
- 8.4 Add new paragraph 2.2.19 as follows:
 - "2.2.19 The *Consultant* will conduct reviews of the *Work* to determine the date of *Total Performance of the Work*."

9.0 GC 2.3 – Review and Inspection of the Work

- 9.1 Add new paragraph 2.3.8 as follows:
 - "2.3.8 The *Contractor* shall immediately inform the *Owner* and the *Consultant* of any notices, warnings or asserted violations issued by any regulatory or government agencies having jurisdiction relating to the *Work*."
- 9.2 Add new paragraph 2.3.9 as follows:
 - "2.3.9 No review of the *Work* by the *Owner* or the *Consultant* shall relieve the *Contractor* from its responsibility to perform the *Work* in accordance with the *Contract Documents*."
- 9.3 Add new paragraph 2.3.10 as follows:
 - "2.3.10 Where standards of performance are specified in the *Contract Documents* and the *Work* does not comply with the performance specified, such deficiency shall be corrected as directed by the *Consultant*. Any testing of work identified as defective in accordance with GC 2.4, including retesting required by the *Owner* to verify performance, shall be done at the *Contractor's* expense."

10.0 GC 2.4 - Defective Work

- 10.1 Paragraph 2.4.1 is amended as follows:

“2.4.1 Add the words “If the said defective work was in any way identified as a result of, or during the course of, an inspection by the Owner, the Contractor shall reimburse the Owner in full for any costs or expenses incurred by the Owner in respect of, or as a result of, the inspection.”

10.2 Paragraph 2.4.3 is amended as follows:

2.4.3 Delete the words “the difference in value between the work as performed and that called for by” and substitute the words “the value of such work as is necessary to correct any non-compliance with” in the second and third lines of paragraph 2.4.3.

11.0 GC 3.1 - Control Of The Work

11.1 Paragraph 3.1.2 is amended as follows:

2.1.4 Add the word “schedules” after the word “techniques” in the first line of paragraph 3.1.2.

11.2 Add new paragraph 3.1.3 as follows:

“3.1.3 Notwithstanding paragraphs 3.1.1 and 3.1.2, the Contractor agrees that it shall fully comply with all policies and procedures of the Owner which are relevant to any activity of the Contractor to be performed under the Contract. The Contractor further agrees that it will use reasonable efforts to inquire from the Owner if such policies or procedures exist which are relevant to any activity of the Contractor to be performed under the Contract. The Owner agrees that it will use reasonable efforts to communicate to the Contractor all policies or procedures it may have which are relevant to any such activity.”

11.3 Add new paragraph 3.1.4 as follows:

“3.1.4 Prior to commencing individual procurement, fabrication and construction activities, the Contractor shall verify, at the Place of the Work, all relevant measurements and levels necessary for proper and complete fabrication, assembly and installation of the Work and shall further carefully compare such field measurements and conditions with the requirements of the Contract Documents. Where dimensions are not included or exact locations are not apparent, the Contractor shall immediately notify the Consultant in writing and obtain written instructions from the Consultant before proceeding with any part of the affected work.”

12.0 GC 3.4 - Document Review

12.1 Paragraph 3.4.1 is amended as follows:

“3.4.1 Delete the words “be to the best of the Contractor’s knowledge, information and belief and in making such review” and substitute the words “comply with the standard of care described in paragraph 3.15.1 of the Contract. Except for its obligation to make such review and report the result,” in the second and third lines of paragraph 3.4.1.

Delete the word “review” and substitute the words “Contract Documents” in the fourth line of paragraph 3.4.1.

Delete the words “did not discover” and substitute the words “could not reasonably have discovered” in the fifth line of paragraph 3.4.1.

12.2 Add new paragraph 3.4.2 as follows:

“3.4.2 If the Contractor finds discrepancies in or omissions from the Contract Documents or has any doubt as to the meaning or intent of any part thereof, the Contractor shall immediately notify the Consultant, who will provide written instructions or explanations. Neither the Owner nor the Consultant will be responsible for oral instructions.”

13.0 GC 3.5 – Construction Schedule

13.1 Paragraph 3.5.1.1 is amended as follows:

3.5.1.1 Delete the words “prior to the first application for payment” and substitute the words “within five (5) *Working Days* of the date that the Agreement between the *Owner* and the *Contractor* has been fully executed by the *Owner*.” in the first line of paragraph 3.5.1.1.

13.2 Add new paragraph 3.5.2 as follows:

“3.5.2 If the *Contract Price* is greater than \$500,000.00, the schedule shall be prepared using the critical path method and the *Contractor* shall submit with the schedule a Gantt Chart (a list of tasks and related information, including duration, with a bar type chart showing tasks and durations over time) and a PERT Chart (a network diagram showing all tasks and task dependencies).”

14.0 GC 3.6 – Supervisor

14.1 Add new paragraph 3.6.3 as follows:

"3.6.3 The *Contractor* shall provide the *Owner* and the *Consultant* with the name, address, and telephone number of the representative referred to in paragraph 3.6.1 and other responsible persons who may be contacted for emergency and other reasons during non-working hours throughout the course of the *Work*."

14.2 Add new paragraph 3.6.4 as follows:

"3.6.4 The *Owner* may, at any time, for reasonable cause, object to the representative referred to in paragraph 3.6.1 and require the *Contractor* to dismiss and replace the said representative."

15.0 **GC 3.7 – Subcontracts and Suppliers**

15.1 Add new paragraph 3.7.1.4 as follows:

"3.7.1.4 ensure that the *Contractor*, all *Subcontractors* and *Suppliers*, and anyone employed or engaged by them directly or indirectly, have the qualifications, technical skills, levels of experience and knowledge required, and all applicable permits, licences and approvals necessary, to discharge the work to be performed by them in accordance with the terms of the *Contract*."

15.2 Add new paragraph 3.7.7 as follows:

"3.7.7 Subcontracting shall be conducted in a manner consistent with the principles of open, fair and transparent procurement."

15.3 Add new paragraph 3.7.8 as follows:

"3.7.8 In the event that the *Contractor* reasonably wishes to change any of the *Subcontractors* or *Suppliers*, the *Contractor* shall advise the *Owner* in writing, giving the *Contractor's* reasons for the change. No change of *Subcontractors* or *Suppliers* may be made without the prior written approval of the *Owner*."

15.4 Add new paragraph 3.7.9 as follows:

"3.7.9 The *Contractor* shall not be entitled to compensation by the *Owner* or any extension to the *Contract Time* arising out of, or in any way relating to, any breach of contract or failure to perform work by any *Subcontractor* or *Supplier* for any reason, including but not limited to, the insolvency or bankruptcy of the *Subcontractor* or *Supplier*, even though the *Subcontractor* or *Supplier* may have been designated or pre-qualified by the *Owner* or the *Consultant*."

16.0 GC 3.8 - Labour And Products

16.1 Paragraph 3.8.3 is amended as follows:

3.8.3 Add the words "and qualified" after the word "skilled" in the first line of paragraph 3.8.3.

16.2 Add new paragraphs 3.8.4 as follows:

"3.8.4 The *Owner* may at any time, for reasonable cause, require the *Contractor* to promptly remove from the *Place of the Work* any employee of the *Contractor* as well as any *Subcontractor* or employee of any *Subcontractor*."

16.3 Add new paragraphs 3.8.5 as follows:

"3.8.5 The *Contractor* is responsible for the safe on-site storage of *Products* and their protection (including *Products* supplied by the *Owner* and other contractors to be installed under the *Contract*) in such ways as to avoid dangerous conditions or contamination to the *Products* or other persons or property and in locations at the *Place of the Work* to the satisfaction of the *Owner* and the *Consultant*. The *Owner* shall provide all relevant information to the *Contractor* in relation to the *Products* to be supplied by the *Owner*."

16.4 Add new paragraph 3.8.6 as follows:

"3.8.6 The *Contractor* shall ensure that all *Products* are of good quality, fit for their intended purpose and maintained in a safe, serviceable condition in accordance with this *Contract* and good industry practice."

17.0 GC 3.10 - Shop Drawings and Other Submittals

17.1 Add the words "And Other Submittals" to the end of the heading for GC 3.10 – SHOP DRAWINGS

17.2 Paragraphs 3.10.1, 3.10.2, 3.10.3, 3.10.4, 3.10.7, 3.10.8, 3.10.9, 3.10.10 and 3.10.11 are amended as follows:

Add the words "and *Submittals*" after the words "*Shop Drawings*" in paragraphs 3.10.1, 3.10.2, 3.10.3, 3.10.4, 3.10.7, 3.10.8, 3.10.9, 3.10.10 and 3.10.11.

17.3 Paragraph 3.10.8.2 is amended as follows:

Add the words "and *Submittal*" after the words "*Shop Drawing*" in the first line of paragraph 3.10.8.2.

18.0 **GC 3.11 - Use Of The Work**

18.1 Paragraph 3.11.1 is amended as follows:

Add the words "the *Owner's* reasonable instructions," after the word "permits," in the second line of paragraph 3.11.1.

18.2 Add new paragraph 3.11.3 as follows:

"3.11.3 Subject to paragraph 9.4.6 of GC 9.4 - CONSTRUCTION SAFETY, The *Owner* shall have the right to enter and occupy the *Place of the Work* in whole or in part for the purpose of placing materials, fittings, and equipment, or for any other use at any time before completion of the *Contract* if, in the reasonable opinion of the *Consultant*, such entry and occupation does not prevent or interfere with the *Contractor* in achieving *Substantial Performance of the Work* within the *Contract Time* stipulated in the *Contract*."

18.3 Add new paragraph 3.11.4 as follows:

"3.11.4 No entry or occupation by the *Owner* as referenced in paragraph 3.11.3 shall constitute or be considered as acceptance of the *Work* in whole or in part, or in any way relieve the *Contractor* of its responsibility to complete the *Contract*."

19.0 **GC 3.14 – Interference**

19.1 Add new GC 3.14 - INTERFERENCE as follows:

"GC 3.14 - INTERFERENCE

3.14.1 If the *Work*, in whole or in part, involves the renovation of, or addition to, existing and occupied premises:

.1 the *Contractor* shall maintain normal business operations and traffic flow, with a minimum of inconvenience to the tenants and occupants of the *Place of the Work*;

.2 subject to the provisions of the *Contract Documents*, the *Contractor* shall ensure that no essential services such as electric power, water supply or other public utilities are interrupted;

.3 in every case where an interruption to existing services or utilities is to occur during execution of the *Work*, the *Contractor* shall give the *Owner* five (5) working days prior written notice.

The *Contractor* shall reschedule any such interruption if requested to do so in writing by the *Owner*, and

.4 any work by the *Contractor* that generates excessive noise shall be subject to the restrictions set out elsewhere in the *Contract Documents*."

20.0 GC 3.15 – Performance by Contractor

20.1 Add new GC 3.15 – PERFORMANCE BY CONTRACTOR as follows:

"GC 3.15 – Performance by Contractor

3.15.1 In performing its services and obligations under the *Contract*, the *Contractor* shall exercise a standard of care, skill and diligence that would normally be provided by an experienced and prudent contractor supplying similar services for similar projects. The *Contractor* acknowledges and agrees that throughout the *Contract*, the *Contractor's* obligations, duties and responsibilities shall be interpreted in accordance with this standard. The *Contractor* shall exercise the same standard of due care and diligence in respect of any *Products*, personnel, or procedures which it may recommend to the *Owner*.

3.15.2 The *Contractor* further represents, covenants and warrants to the *Owner* that:

- .1 the personnel it assigns are appropriately experienced and qualified;
- .2 it has a sufficient staff of qualified and competent personnel to replace its designated supervisor and project manager, subject the *Owner's* approval, in the event of death, incapacity, removal or resignation; and
- .3 there are no pending, threatened, or anticipated claims that would have a material effect on the financial ability of the *Contractor* to perform its work under the *Contract*."

21.0 PART 4 – ALLOWANCES AND PROVISION ITEMS

21.1 Add the words "AND PROVISIONAL ITEMS" to the end of the heading for PART 4 – ALLOWANCES.

22.0 GC. 4.1 CASH ALLOWANCE

22.1 GC 4.1.3

Delete GC 4.1.3 in its entirety and replace with following:

"4.1.3 Cash allowances shall be used and expended solely for purposes specified and at the sole discretion of Owner, and work under a cash allowance is not guaranteed. Cash allowance items shall be administered and authorized as follows:

- .1 The Owner, via the Consultant, shall notify the Contractor a request to proceed with a cash allowance item.
- .2 Upon receipt of such request from the Consultant, the Contractor shall, in respect of the identified cash allowance item provide to the Owner a response setting out: the schedule for the Work and expected milestones and completion date; the personnel and subcontractors which the Contractor proposes to perform the Work and the costs of such Work, with up to three (3) quotations for any or all of the Work if requested by the Owner; and any other information requested by the Owner.
- .3 Upon receipt and review of such response, the Owner, via the Consultant, shall approve such cash allowance item in writing. No amounts shall be payable in respect of any cash allowance items unless and until the Owner has approved such expenditure in writing."

22.2 GC 4.1.4

Delete "the Contract Documents" from GC 4.1.4 and replace with "GC 6.1.3".

23.0 GC 4.3 – Provisional Items

23.1 Add new GC 4.3 – PROVISIONAL ITEMS as follows:

"GC 4.3 PROVISIONAL ITEMS

- 4.3.1 The Contract Price includes the Provisional Items, if any, stated in the Contract Documents.

Addendum No. 2

- 4.3.2 The Provisional Items shall be authorized individually in writing by the Owner through the Consultant. The Contractor shall not proceed with any Provisional Item without such prior written authorization.
- 4.3.3 The prices stated for any and all items identified as "Provisional Items" in Appendix "C" of Form of Tender shall be for the completed Work "in place" and shall be inclusive of all costs related thereto including, but not necessarily limited to, all overhead, profit and applicable taxes, except Harmonized Sales Tax, unless otherwise specified by the Owner.
- 4.3.4 Provisional Items are options to be exercised at the sole discretion of the Owner. In the event the Owner decides, in its sole discretion, to:
- .1 not proceed with any or all of the identified Provisional Items; or
 - .2 proceed with any or all of the identified Provisional Items but increases or reduces the quantity of such Provisional Items;

the Contract Price shall be adjusted proportionally based on the Extended Price stated for such Provisional Items in Appendix "C"– Provisional Items of Form of Tender. The Extended Price shall form the basis of all adjustments without any additional compensation or markup. For greater certainty, the markups provided in GC 6.1.3 and GC 6.7.4 are not applicable to Provisional Items."

24.0 GC 5.1 - Financing Information Required Of The Owner

- 24.1 Delete paragraphs 5.1.1 and 5.1.2 in their entirety.

25.0 GC 5.2 - Applications For Progress Payment

- 25.1 Add new Paragraph 5.2.8 as follows:

"5.2.8 The *Contractor* shall submit, with each application for progress payment after the first, a Statutory Declaration, on an original form of CCDC Document 9A-2001 Statutory Declaration of Progress Payment Distribution by Contractor, stating that payments in connection with the *Work*, as noted in the Statutory Declaration, have been made to the end of the period immediately preceding that covered by the current

application and, if requested by the *Owner*, a Statutory Declaration from any *Subcontractor*, as may be identified by the *Owner*, on an original form of CCDC Document 9B-2001 Statutory Declaration of Progress Payment Distribution by Subcontractor. The Statutory Declarations shall be dated the same date as the *Contractor's* application for payment."

25.2 Add new paragraph 5.2.9 as follows:

"5.2.9 The *Contractor* shall prepare and maintain current as-built drawings which shall consist of the *Drawings* and *Specifications* revised by the *Contractor* during the *Work*, showing changes to the *Drawings* and *Specifications*, including but not limited to architectural, structural, mechanical, electrical, cabling, *Shop Drawings*, single-line diagrams and any other graphical representations, and shall be maintained by the *Contractor* and made available to the *Consultant* for review with each application for progress payment."

26.0 GC 5.3 - Progress Payment

26.1 Delete paragraph 5.3.1.3 in its entirety and replace with new paragraph 5.3.1.3 as follows:

"5.3.1.3 the *Owner* shall make payment to the *Contractor* on account as provided in Article A-5 of the Agreement – Payment no later than fifteen (15) days after the date of issuance by the *Consultant* of a certificate for payment."

26.2 Add new paragraph 5.3.2 as follows:

"5.3.2 Certificates for payment may provide for retention of amounts as determined by the *Consultant* to ensure correction or replacement of deficient work done or unacceptable product provided."

27.0 GC 5.5 - Payment Of Holdback Upon Substantial Performance Of The Work

27.1 Paragraph 5.5.1.2 is amended as follows:

5.5.1.2 Add the words "and, if requested by the *Owner*, as Statutory Declaration from any *Subcontractor*, as may be identified by the *Owner*, on an original form of CCDC Document 9B – 2001 Statutory Declaration of Progress Payment Distribution by Subcontractor."

27.2 Paragraph 5.5.3 is deleted in its entirety.

28.0 **GC 5.7 – Final Payment**

28.1 Paragraph 5.7.1 is amended as follows:

28.1.1 Delete the words "is completed" and substitute the words "has been totally performed" in the first line of paragraph 5.7.1.

28.1.2 Add the words ", together with a written application for review by the *Consultant* to establish *Total Performance of the Work*." After the word "payment" at the end of paragraph 5.7.1.

28.2 Paragraph 5.7.2 is amended as follows:

28.2.1 Delete the words "and advise the *Contractor* in writing that the application is valid or give reasons why it is not valid" and substitute the words "and:

- .1 advise the *Contractor* in writing that the *Work* is not totally performed and give reasons why, or
- .2 state the date of *Total Performance of the Work* in a certificate and issue a copy of that certificate to each of the *Owner* and the *Contractor*."

at the end of paragraph 5.7.2.

28.3 Paragraph 5.7.3 is amended as follows:

Delete the words "finds the *Contractor's* application for final payment valid" and substitute the words "issues the certificate of *Total Performance of the Work*" in the first line of paragraph 5.7.3.

28.4 Paragraph 5.7.4 is amended as follows:

Delete the number "5" and substitute "fifteen (15)" in the second line of paragraph 5.7.4.

28.5 Add new paragraph 5.7.6 as follows:

"5.7.6 The *Contractor* shall submit to the *Consultant*, with the application for final payment, the following documentation:

- .1 all closeout documentation required by the *Contract Documents*, including but not limited to, warranties, manuals, guarantees, as-built drawings and all other relevant literature from *Suppliers* and manufacturers including, but not limited to:
 - (a) equipment, maintenance and operations manuals;

Addendum No. 2

- (b) equipment specifications, data sheets and brochures, parts lists and assembly drawings, performance curves and other related data;
 - (c) line drawings, value charts and control sequences with description of the sequence of operations;
 - (d) warranty documents;
 - (e) service and maintenance reports as applicable;
 - (f) specifications; and
 - (g) HVAC balance reports.
- .2 a Statutory Declaration, on an original form of CCDC Document 9A – 2001, stating that payments in connection with the *Work*, as noted in the statutory declaration, have been made to the end of the period immediately preceding that covered by the application for final payment and, if requested by the *Owner*, as Statutory Declaration from any *Subcontractor*, as may be identified by the *Owner*, on an original form of CCDC Document 9B – 2001 Statutory Declaration of Progress Payment Distribution by Subcontractor.”

29.0 GC 5.10 - Claims For Lien

29.1 Add new GC 5.10 - CLAIMS FOR LIEN as follows:

“GC 5.10 – Claims for Lien

5.10.1 The *Contractor* shall cause any and all construction liens and certificates of action relating to the *Work* registered or preserved by any *Subcontractor*, *Supplier*, *Contractor’s* employees, or any other party to whom the *Contractor* is or may be responsible at law, to be discharged or vacated by the *Contractor* with seven (7) *Working Days* of the date of registration or reservation, all at the *Contractor’s* sole expense. The *Contractor* shall not be entitled to receive any payment from the *Owner* until all such claims for lien and certificates of action have been vacated or discharged.

5.10.2 The *Contractor* shall cause any and all written notices of lien relating to the *Work* given to any person, including, but not limited to, the *Owner* by any *Subcontractor*, sub-subcontractor, *Supplier*, *Contractor’s* employees, or any party to whom the *Contractor* is or may be responsible at law, to be withdrawn, and the *Contractor* shall do so within seven (7) *Working*

Days of the written notice of lien having been given, all at the Contractor's sole expense.

5.10.3 If the *Contractor* fails to discharge or vacate any such lien or certificate of action, or to have any such written notice of lien withdrawn, then the *Owner* may, at its sole option, do so and set off and deduct from any amount owing to the *Contractor*, all costs and expenses of so doing, and of defending any related action, including without limitation, the costs of borrowing the appropriate cash, letter of credit or bond as security, and legal fees and disbursements on a full indemnity basis. If there is no amount owing by the *Owner* to the *Contractor*, then the *Contractor* shall reimburse the *Owner* for all of the said costs and expenses of so doing."

30.0 GC 5.11 – Records and Audit

30.1 Add new paragraph 5.11 – RECORDS AND AUDIT as follows:

"GC 5.11 – Records and Audit

5.11.1 The *Owner* may inspect and audit the books, payrolls, accounts and records for the *Contractor* at any time as deemed necessary by the *Owner* prior to the date of Final Certificate for Payment and thereafter for a period of two (2) years to verify the *Contractor's* estimates and valuation of changes in the *Work* and claims, and the *Contractor* shall supply certified copies of books, payrolls, accounts and other records to the *Owner* or access to same as required by the *Owner*.

5.11.2 If the *Contractor* fails to keep adequate records to document the estimate or valuation of a change in the *Work* or claim or fails to provide certified copies or access to such records when requested, the *Contractor* shall forfeit all right to payment for the change in the *Work* or claim which it may otherwise have had. Any amount already paid by the *Owner* in respect of such change in *Work*, or claim, shall become immediately repayable to the *Owner* on demand for same."

31.0 GC 6.1 - Owner's Right To Make Changes

31.1 Add new paragraph 6.1.3 as follows:

"6.1.3 For the purpose of valuing cash allowances pursuant to paragraph 4.1.4, contingency allowances pursuant to paragraph 4.2.2, changes which result in an increase in the *Contract Price*, and any other items under the *Contract Documents* which provide for payment to the *Contractor* of overhead and profit, allowances for overhead and profit shall be included as follows:

Addendum No. 2

.1 *Contractor's* mark-up on work and services completed by its own forces shall be 10% overhead and 10% profit, and on work and services completed by its *Subcontractors* shall be 5% for combined overhead and profit.

.2 *Subcontractors* mark-up on work and services completed by their own forces shall be 10% overhead and 10% profit and on work and services completed by their subcontractors shall be 5% for combined overhead and profit."

32.0 GC 6.2 – Change Order

32.1 Paragraph 6.2.1 is amended as follows:

Delete the words "promptly present," and substitute the words ", within five (5) *Working Days* of receiving the written description, present" in the second line of paragraph 6.2.1.

32.2 Add new paragraph 6.2.4 as follows:

"6.2.4 When the *Contractor* submits an invoice from a *Subcontractor* or *Supplier* as part of its detailed breakdown of the cost of a change, as may be required by GC 6.2 CHANGE ORDER or GC 6.3 CHANGE DIRECTIVE, the *Contractor* is deemed to represent and warrant to the *Owner* that the amount shown on the invoice is the amount that the *Contractor* is liable to pay for the services and materials described in the invoice, net of all discounts, unless the *Contractor* indicates otherwise when submitting its detailed breakdown. When the *Contractor* submits an estimate or quotation from a *Subcontractor* or *Supplier* as part of its detailed breakdown of the estimated cost of a change, the *Contractor* is deemed to represent and warrant to the *Owner* that, subject to any qualifications on the face of the estimate or quotation and any qualifications made by the *Contractor* within the detailed breakdown, that the amount set out in the estimate or quotation is the amount the *Contractor* has agreed to pay should the *Contractor* be authorized to proceed with the change, net of all discounts. Notwithstanding the foregoing, the *Contractor* shall be entitled to take a commercially reasonable early payment discount (if offered) when the *Contractor* pays its *Subcontractor* or *Supplier* prior to receiving payment from the *Owner*."

33.0 GC 6.4 - Concealed Or Unknown Conditions

33.1 Add new paragraph 6.4.5 as follows:

“6.4.5 The *Contractor* confirms that, prior to bidding, it carefully investigated the character of the *Work*, the *Place of the Work*, and all local conditions which might affect its obligations and that it has satisfied itself as to the nature and extent of the *Work*, the *Contract Documents* and the *Contract* and as to the facilities and difficulties in attending and completing the execution of the *Work*. The *Owner* shall, upon written request, co-operate with, and provide reasonable assistance to, the *Contractor* during such investigations. The *Contractor* confirms that it has applied to its investigations as aforesaid the degree of care and skill described in paragraph 3.15.1, given the amount of time provided between the issuance of the bid documents and the actual closing of bids, and the degree of access provided to the *Contractor* prior to submission of bids. The *Contractor* is not entitled to compensation or to an extension of the *Contract Time* for conditions which could reasonably have been ascertained by the *Contractor* by such careful investigation undertaken prior to the submission of its bid.”

33.2 Add new paragraph 6.4.6 as follows:

“6.4.6 To the extent the *Contractor* has not investigated as referenced in paragraph 6.4.5, the *Contractor* willingly assumes responsibility for all losses, damages, costs, expenses (including all legal costs on a full indemnity basis), liabilities, claims, actions, and demands, whether arising under statute, contract or at common law, which such investigations might have avoided or reduced and shall indemnify and save harmless the *Owner* from all risk which might make it more onerous and more expensive to fulfill or perform the *Work* than was contemplated or known when the *Contract* was signed, and for any and all liability, responsibility and obligations which the *Owner* may have to any third parties resulting from any failure to investigate.”

33.3 Add new paragraph 6.4.7 as follows:

“6.4.7 If the finding made pursuant to paragraph 6.4.2 is that the subsurface or otherwise concealed physical conditions differ materially and this would cause an increase or decrease in the *Contractor's* cost or time to perform the *Work*, and if the said conditions were otherwise discoverable by the *Contractor* in the proper performance of its duties and obligations under the *Contract*, all costs and expenses resulting from any delay (excluding, for clarity, the direct cost of remediating the said conditions) in the completion of the *Work* that is caused, or contributed to, as a result of the said conditions, will be borne by the *Contractor*.”

SUPPLEMENTARY GENERAL CONDITIONS OF THE CONTRACT

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 19 OF 35

Addendum No. 2

34.0 GC 6.5 - Delays

34.1 Paragraph 6.5.1 is amended as follows:

Add the words "but excluding any consequential, incidental, indirect or special damages including, without limitation, loss of profits, loss of opportunity or loss of productivity resulting from such delay" after the word "delay" at the end of paragraph 6.5.1.

34.2 Add new paragraph 6.5.6 as follows:

"6.5.6 If the *Contractor* is delayed in the performance of the *Work* by an act or omission of the *Contractor*, any *Subcontractor*, or anyone employed or engaged by them, directly or indirectly, or by any cause within the *Contractor's* control, the *Contractor* shall devote such additional resources and take all steps necessary (all at the *Contractor's* own cost and expense), to ensure that the date for attaining *Substantial Performance of the Work* and *Total Performance of the Work* under the *Contract*, as may have been amended in accordance with the provisions of Part 6 of the General Conditions – Changes in the Work, is met."

35.0 GC 6.7 – Quantity Variations

35.1 Paragraph 6.7.2 is amended as follows:

Delete the words "or falls short of" in the second line of paragraph 6.7.2.

35.2 Delete paragraph 6.7.4 in its entirety and replace with new paragraph 6.7.4 as follows:

"6.7.4 In the case where the actual quantity is less than the estimated quantity by more than 15% the *Contractor* shall be compensated for the actual Work performed based on the original Contract Unit Price for that item. The *Contractor* will be entitled to a combined allowance equal to 20% of the Contract Unit Price, which shall be comprised of an allowance of 10% for profit and an allowance of 10% for overhead, on the amount of the underrun in excess of 15% of the estimated quantity. The underrun shall be defined as the difference between the estimated quantity and the actual work performed."

36.0 GC 7.1 - Owner's Right To Perform The Work, Suspend the Work, Terminate The Contractor's Right To Continue With The Work Or Terminate The Contract

36.1 Add the words "Suspend" after the word "Work" in the first line of the heading for GC 7.1.

36.2 Add new paragraph 7.1.7 as follows:

“7.1.7 The *Owner* may, if conditions arise which make it necessary for reasons other than as provided in paragraphs 7.1.1 and 7.1.4, suspend performance of the *Work*, terminate the *Contractor’s* right to continue with the *Work* or terminate the *Contract*, in whole or in part, by giving *Notice in Writing* to that effect to the *Contractor*. Such suspension or termination shall be effective in the manner specified in said notice and shall be without prejudice to any claims which either party may have against the other. The *Owner’s* entitlement to so terminate or suspend shall be absolute and unconditional and exercisable by the *Owner* in its sole discretion.”

36.3 Add new paragraph 7.1.8 as follows:

“7.1.8 The *Contractor* upon receiving notice of suspension or termination from the *Owner* shall suspend all operations as soon as reasonably possible except for work which, in the *Contractor’s* opinion, is necessary for the safety of personnel and for the care and preservation of the *Work*, the materials and plant. Subject to any directions in the notice of suspension or termination, the *Contractor* shall discontinue ordering materials, facilities, and supplies and make every reasonable effort to delay delivery of existing orders and, in the event of termination, to cancel existing orders on the best terms available.”

36.4 Add new paragraph 7.1.9 as follows:

“7.1.9 During any period of suspension, the *Contractor* shall not remove from the site any part of the *Work*, or any *Product* or materials without the consent of the *Owner*.”

36.5 Add new paragraph 7.1.10 as follows:

“7.1.10 If the *Work* should be suspended for a period of sixty (60) consecutive calendar days or less, the *Contractor*, upon the expiration of the period of suspension, shall resume the performance of the *Work* in accordance with the *Contract Documents*. If the suspension was not due to an act or omission of the *Contractor*, the *Contract Price* and *Contract Time* shall be adjusted as provided in paragraph 6.5.1 of GC 6.5 - Delays.”

36.6 Add new paragraph 7.1.11 as follows:

“7.1.11 If after sixty (60) consecutive calendar days from the date of notice of suspension of the *Work*, the *Owner* and the *Contractor* agree to continue with and complete the *Work*, the *Contractor* shall resume operations and complete the *Work* in accordance with any terms and conditions agreed upon by the *Owner* and the *Contractor*. Failing such

an agreement, the provisions of paragraph 7.2.2 shall become applicable.”

36.7 Add new paragraph 7.1.12 as follows:

“7.1.12 If the *Owner* terminates the *Contract* pursuant to paragraph 7.1.7, the *Contractor* shall only be entitled to receive payment for all work performed up to the date of termination as certified by the *Consultant* and the direct costs associated with the termination incurred by the *Contractor*, including the costs of the demobilization, losses sustained on *Products* and *Construction Equipment* and *Subcontractor* and sub-subcontractor cancellation costs (which costs shall not include loss of profit claims) reasonably incurred by the *Contractor*. The *Contractor* shall not be entitled to any additional reimbursement on account of the termination including, without limitation, indirect, incidental, special, consequential or other damages, including loss of profits, notwithstanding any other provision of the *Contract Documents*.”

37.0 GC 7.2 - Contractor’s Right To Suspend The Work Or Terminate The Contract

37.1 Paragraph 7.2.2 is amended as follows:

Delete the words “*20 Working Days*” and substitute the words “sixty (60) consecutive calendar days” in the first line of paragraph 7.2.2.

37.2 Delete paragraph 7.2.3.1 in its entirety.

37.3 Paragraph 7.2.3.3 is amended as follows:

Add the words “, except where the *Owner* has a claim against the *Contractor* for set-off,” after the word *Consultant*” in paragraph 7.2.3.3.

37.4 Paragraph 7.2.3.4 is amended as follows:

Delete the words “, except for GC 5.1 – FINANCING INFORMATION REQUIRED OF THE OWNER,” from the first and second lines of paragraph 7.2.3.4.

37.5 Paragraph 7.2.5:

Delete paragraph 7.2.5 in its entirety and replace with new paragraph 7.2.5 as follows:

“7.2.5 If the *Contractor* terminates the *Contract* under the conditions set out above, the *Contractor* shall be entitled to be paid for all work performed to the date of termination. The *Contractor* shall also be entitled to recover the direct costs associated with termination, including the costs

of demobilization, and losses sustained on *Products* and *Construction Equipment*. The Contractor shall not be entitled to any additional reimbursement on account of any such termination including, without limitation, indirect, incidental, special, consequential or other damages, including loss of profits, notwithstanding any other provision of the *Contract Documents*.”

37.6 Paragraph 7.2.6:

Add new paragraph 7.2.6 as follows:

“7.2.6 The *Owner’s* withholding of a progress payment, holdback payment or final payment due to the *Contractor’s* failure to pay a *Subcontractor* or *Supplier*, to protect the *Owner’s* interest in the event of the registration of a lien or receipt of notice of lien, or otherwise pursuant to the terms of the *Contract*, shall not constitute a default under paragraph 7.2.3 which would permit the *Contractor* to stop the *Work* or terminate the *Contract*. In such circumstances, the *Contractor* shall continue with the *Work*.”

37.7 Paragraph 7.2.7:

Add new paragraph 7.2.7 as follows:

“7.2.7 If the *Contractor* stops the *Work* or terminates the *Contract* in accordance with this GC 7.2 – Contractor’s Right To Suspend The Work Or Terminate The Contract, the *Contractor* shall leave the *Place of the Work* and the *Work* in a secure condition.”

38.0 **GC 9.1 - Protection Of Work And Property**

38.1 Paragraph 9.1.1 is amended as follows:

38.1.1 Add the words “shall be responsible for security at the *Place of the Work* and will take such other security measures as may be necessary in respect of the *Work* and the *Place of the Work*, as may be determined by the *Owner* in its sole discretion, and” after the word “*Contractor*” in the first line of paragraph 9.1.1.

38.1.2 Add the words “, *Railway* property,” after the words “protect the *Work*” in the first line of paragraph 9.1.1.

38.2 Paragraph 9.1.1.1 is amended as follows:

Add the words "which the *Contractor* could not have discovered applying the standard of care described in paragraph 3.15.1" after the word "*Documents*" at the end of paragraph 9.1.1.1.

38.3 Paragraph 9.1.3 is amended as follows:

Add the words "*Railway property,*" after the word "*Work,*" in the first line of paragraph 9.1.3.

38.4 Paragraph 9.1.4 is amended as follows:

Add the words, "*Railway's property,*" after the word "*Work*" in the first line of paragraph 9.1.4 and add the words "and *Railway's property*" after the word "property" in the second line of paragraph 9.1.4.

39.0 GC 9.2 - Toxic And Hazardous Substances

39.1 Paragraphs 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5, 9.2.6, 9.2.7 and 9.2.8 are amended as follows:

Delete the words "toxic and hazardous substances" from paragraphs 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5, 9.2.6, 9.2.7 and substitute the words "*Toxic and Hazardous Substances*" in their place.

39.2 Delete paragraph 9.2.7.4 in its entirety.

39.3 Paragraph 9.2.8.2 is amended as follows:

Add the words "*Railway's property,*" after the words "damage to the *Work,*" in the first line of paragraph 9.2.8.2.

40.0 GC 9.4 - Construction Safety

40.1 Paragraph 9.4.1 is amended as follows:

Delete the words "Subject to paragraph 3.2.2.2 of GC 3.2 – Construction By Owner Or Other Contractors, the" and substitute the word "The" at the beginning of paragraph 9.4.1.

40.2 Add new paragraph 9.4.2 as follows:

"9.4.2 The *Contractor* shall assume the role of contractor, constructor, prime contractor, or principal contractor as may apply in accordance with applicable Occupational Health and Safety Legislation at the *Place of the Work* and provide to the *Owner* copies of the related Health and Safety notices and documents."

40.3 Add new paragraph 9.4.3 as follows:

"9.4.3 The *Contractor* represents and warrants that it is familiar with the obligations imposed on an "employer" as defined in the *Occupational Health and Safety Act (Ontario)*, and that it has in place a health and safety program to ensure the health and safety of all workers for which it has responsibility under the said *Act*."

40.4 Add new paragraph 9.4.4 as follows:

"9.4.4 The *Contractor* shall comply in all respects with the requirements of the *Occupational Health and Safety Act (Ontario)* and its own health and safety program to take all steps reasonable in the circumstances to ensure the health and safety of all workers for which it has responsibility under the said *Act*. The *Contractor* shall maintain and strictly enforce its health and safety program. The *Contractor* shall also provide such information within such timeframes as may be required in order to allow the *Owner* to fulfill its obligations pursuant to the *Occupational Health and Safety Act (Ontario)*, including, without limitation, the obligation to notify the Director under such *Act* in the event of an accident causing personal injury."

40.5 Add new paragraph 9.4.5 as follows:

"9.4.5 The *Contractor* shall comply with all requirements of the Workplace Hazardous Materials System (WHMIS) regarding the use, handling and storage of controlled products."

40.6 Add new paragraph 9.4.6 as follows:

"9.4.6 Prior to commencing the *Work* the *Contractor* shall:

- .1 ensure that all prescribed posting requirements are posted on site for all workers to view;
- .2 provide a copy of the *Contractor's* Health & Safety Policy to the *Owner*;
- .3 prepare and submit to the *Owner* a Site Specific Safety Plan (Job Safety Analysis);
- .4 review and comply with facility specific hazard, safety and orientation requirements as applicable; and
- .5 prepare and submit site-specific hazardous assessment plans as applicable pertaining to but not limited to: live power work, lock out/tag out/shut down/switch covers, confined space entry,

cranes and crane lifts, and other hazardous assessment plans as required.”

40.7 Add new paragraph 9.4.7 as follows:

“9.4.7 The *Contractor* shall indemnify and save harmless the *Owner*, its agents, officers, directors, employees, consultants, successors and assigns from and against the consequences of any and all safety infractions committed by the *Contractor* or any of its *Subcontractors* or their subcontractors under the construction health and safety legislation applicable to the *Place of the Work*, including but not limited to, payment of legal fees and disbursements on a full indemnity basis.”

41.0 **GC 9.5 - Mould**

41.1 Paragraph 9.5.2.2 is amended as follows:

Add the words “*Railway’s* property,” after the words “damage to the *Work*,” in the first line of paragraph 9.5.2.2.

41.2 Delete paragraph 9.5.3.4 in its entirety.

42.0 **GC 10.2 - Laws, Notices, Permits And Fees**

42.1 Paragraph 10.2.3 is amended as follows:

Add the words “The *Contractor* shall provide the *Owner* with copies of all such permits, licenses, inspections and certificates.” at the end of paragraph 10.2.3.

42.2 Paragraph 10.2.4 is amended as follows:

Delete the words “or codes” and substitute the words “codes, and industry best practices and guidelines” after the word “regulations,” in the first line of paragraph 10.2.4.

Add the words “to the environment,” after the words “relate to the *Work*,” in the second line of paragraph 10.2.4.

Add the words “The *Contractor* shall provide the *Owner* with copies of all such required notices and related health and safety documents.” at the end of paragraph 10.2.4.

42.3 Paragraph 10.2.5 is amended as follows:

Delete the word “The” and substitute the words “Subject to paragraph 3.4.1, the” at the beginning of paragraph 10.2.5.

43.0 **GC 10.4 – Worker’s Compensation**

43.1 Paragraph 10.4.1 is amended as follows:

Add the words “with each application for progress payment,” after the word “*Work*,” in the first line of paragraph 10.4.1.

Add the words “the Certificate of Clearance and” after the word “provide” in the third line of paragraph 10.4.1.

44.0 **GC 11.1 – Insurance**

Delete GC 11.1 – Insurance in its entirety and replace with the following:

“11.1 – Insurance

11.1.1 Without restricting the generality of GC 12.1 - INDEMNIFICATION, and unless the *Owner* and the *Contractor* agree to obtain project-specific insurance, or higher insurance limits, the Contractor shall provide, maintain, and pay for the minimum insurance coverages specified in GC 11.1 - INSURANCE.

.1 General Liability Insurance:

The policy shall be in the joint names of the Contractor, the Owner and the Consultant with limits of not less than five million dollars (\$5,000,000) per occurrence and with a property damage deductible of not more than five thousand dollars (\$5,000). The insurance coverage shall not be less than the insurance required by IBC Forms 2100 and 2320, or their equivalent replacement. Umbrella or excess liability insurance may be used to achieve the desired limit. Where the Contractor maintains a single, blanket policy, the addition of the *Owner* is limited to liability arising out of the *Work* and all operations necessary or incidental thereto. Completed Operations Liability coverage shall be maintained continuously from the commencement of the *Construction* until two (2) years after the date of *Substantial Performance of the Work*. The policy shall include a waiver of subrogation against Owner.

.2 Automobile Liability Insurance:

The policy covers for bodily injury, death, and damage to property with respect to all licensed vehicles owned or leased by the *Contractor*. The policy shall have limits of not less than five million dollars (\$5,000,000) inclusive per occurrence. If the policy

Addendum No. 2

is issued pursuant to a government-operated automobile insurance system, the Contractor shall provide the *Owner* with confirmation of automobile insurance coverage for all automobiles registered in the name of the Contractor.

.3 Aircraft and Watercraft Liability Insurance:

Not Applicable.

.4 Property and Boiler and Machinery Insurance:

.1 All Risks Property Insurance

All Risks Property Insurance shall be in the joint names of the Contractor, the Owner, the Consultant and all Subcontractors. The insurance coverage shall not be less than the insurance required by IBC Forms 4042 and 4047, or their equivalent replacement. The insurance provided shall have limits of not less than the sum of the amount of the Contract Price, the applicable Value Added Taxes, and the full value of products provided by the Owner for incorporation into the Work as specified in the Contract Documents. The policy shall have a deductible of not more than ten thousand dollars (\$10,000). The policy shall include a waiver of subrogation against the Owner.

.2 Boiler and Machinery Insurance

Not Applicable.

.3 The policy/policies shall allow for partial or total use or occupancy of the Work. If because of such use or occupancy the Contractor is unable to provide coverage, the Contractor shall notify the Owner in writing. Prior to such use or occupancy, the Owner shall provide, maintain, and pay for all risk property insurance in the amounts described in sub-paragraph (1), including coverage for such use or occupancy and shall provide the Contractor with proof of such insurance. The policies shall be amended to include permission for completion of Construction and shall include all insureds as specified in subparagraph (1). The Contractor shall refund to the Owner the unearned premiums applicable to the Contractor's policies upon termination of coverage.

.4 The policy/policies shall provide that, in the case of a loss or damage, payment shall be made to the Owner and the

Addendum No. 2

Contractor as their respective interests may appear. The Contractor shall act on behalf of the Owner for the purpose of adjusting the amount of such loss or damage payment with the insurers. When the extent of the loss or damage is determined, the Contractor shall proceed to restore the Work. Loss or damage shall not affect the rights and obligations of either party under the Contract except that the Contractor shall be entitled to a reasonable extension of Contract Time.

.5 The Contractor shall be entitled to receive from the Owner, in addition to the amount due under the Contract, the amount at which the Owner's interest in restoration of the Work has been appraised, such amount to be paid as the restoration of the Work proceeds and as provided in GC 5.2 - APPLICATIONS FOR PROGRESS PAYMENT and GC 5.3 - PROGRESS PAYMENT. In addition the Contractor shall be entitled to receive from the payments made by the insurer the amount of the Contractor's interest in the restoration of the Work.

.6 In the case of loss or damage to the Work arising from the work of another contractor, or Owner's own forces, the Owner, in accordance with the Owner's obligations under paragraph 3.2.2.4 of GC 3.2 - CONSTRUCTION BY OWNER OR OTHER CONTRACTORS, shall pay the Contractor the cost of restoring the Work as the restoration of the Work proceeds and as provided in GC 5.2 - APPLICATIONS FOR PROGRESS PAYMENT and GC 5.3 - PROGRESS PAYMENT.

.5 Equipment Insurance:

The policy covers construction machinery and equipment used by the Contractor for the performance of the Work, including boiler insurance on temporary boilers and pressure vessels. The policy shall be in a form acceptable to the Owner and shall not allow subrogation claims by the insurer against the Owner. Subject to satisfactory proof of financial capability by the Contractor for self-insurance, the Owner agrees to waive the equipment insurance requirement.

11.1.2 Unless otherwise stipulated, the duration of each insurance policy shall be from the date of commencement of the Work until the date of the final certificate for payment.

11.1.3 The Contractor shall be responsible for deductible amounts under the policies except where otherwise provided in GC 11.1 - INSURANCE or

where such amounts may be excluded from the Contractor's responsibility by the terms of GC 9.1 - PROTECTION OF WORK AND PROPERTY and GC 9.2 - DAMAGES AND MUTUAL RESPONSIBILITY.

11.1.4 Proof of Insurance Coverage:

- .1 Prior to commencement of the Work and upon the placement, renewal, amendment, or extension of all or any part of the insurance, the Contractor shall promptly provide the Owner with confirmation of coverage and, if required, a certified true copy of the policies certified by an authorized representative of the insurer together with copies of any amending endorsements.
- .2 Certificates for General Liability Insurance shall include, in addition to the Contractor, Owner, and Consultant, the following as additional insureds:
 - (1) Ministry of Transportation
- .3 Certificates of All Risks Property Insurance and Boiler and Machinery Insurance shall include the Contractor, Owner, Consultant and all Subcontractors as additional insureds.
- .4 All Certificates of Insurance shall also include the Contract name and number.

11.1.5 Where the full insurable value of the Work is substantially less than the Contract Price, the Owner may reduce the amount of insurance required or waive one or more of the types of insurance requirement.

11.1.6 If the Contractor fails to provide or maintain insurance as required by the Contract Documents, then the Owner shall have the right to provide and maintain such insurance and give evidence to the Contractor and the Consultant. The Contractor shall pay the cost thereof to the Owner on demand or the Owner may deduct the amount which is due or may become due to the Contractor.

11.1.7 All required insurance policies shall be placed with insurers licensed to underwrite insurance in the jurisdiction of the Place of the Work.

11.1.8 All required insurance policies shall be endorsed to provide the Owner with not less than thirty (30) days notice in writing in advance of any cancellation and material amendment or change restricting coverage.

11.1.9 All insureds shall cooperate with the Contractor to comply with any reporting requirements of the insurance policies in order to maintain the

policies in good standing, to give notice in writing of any incidents which may result in a claim or loss covered by the policies and to provide documentation necessary in the defence or settlement of claims.”

45.0 GC 12.1 - Indemnification

45.1 Paragraph 12.1.1:

Delete paragraph 12.1.1 in its entirety and replace with new paragraph 12.1.1 as follows:

“12.1.1 Without restricting the *Contractor's* obligation to indemnify as described in paragraph 12.1.4, the *Contractor* shall indemnify and hold harmless the *Owner* from and against all claims, demands, losses, costs, damages, actions, suits or proceedings whether in respect to losses suffered by the *Owner* or in respect to claims by third parties that arise out of, or are attributable in any respect to the *Contractor's* involvement as a party to this *Contract*, provided such claims are:

- .1 caused by:
 - .1 the negligent acts or omissions of the *Contractor* or anyone for whose acts or omissions the *Contractor* is liable, or
 - .2 a failure of the *Contractor* to fulfil the terms or conditions of the *Contract*; and
- .2 made by *Notice in Writing* within a period of six years from the date of *Substantial Performance of the Work* as set out in the certificate of *Substantial Performance of the Work* issued pursuant to paragraph 5.4.2.2 of GC 5.4 – SUBSTANTIAL PERFORMANCE THE WORK or within such shorter period as may be prescribed by any limitation statute of the Province of Ontario.

The Owner expressly waives the right to indemnity for claims other than those provided for in this *Contract*.”

45.2 Delete the paragraph 12.1.12 in its entirety.

45.3 Paragraph 12.1.3 is amended as follows:

Delete the words “either party to indemnify the other” and substitute the words “the *Contractor* to indemnify the *Owner*” in the first line of paragraph 12.1.3.

45.4 Paragraph 12.1.4 is amended as follows:

Delete the words "The *Owner* and the *Contractor* shall indemnify and hold harmless the other" and substitute the words "The *Contractor* shall indemnify and hold harmless the *Owner*" in the first line of paragraph 12.1.4.

Delete the word "their" and substitute the words "the *Contractor's*" in the second line of paragraph 12.1.4.

45.5 Delete paragraph 12.1.5 in its entirety.

45.6 Paragraph 12.1.6 is amended as follows:

Delete words "or the *Contractor*" from the first line of paragraph 12.1.6.

45.7 Delete paragraph 12.1.6.2 in its entirety and replace with new paragraph 12.1.6.2 as follows:

"12.1.6.2 Should the *Contractor* be required as a result of its obligation to indemnify the *Owner* to pay or satisfy a final order, judgment or award made against the *Owner*, then the *Contractor* upon assuming all liability for any costs that might result shall have the right to appeal in the name of the *Owner* until such rights of appeal have been exhausted."

45.8 Add new paragraph 12.1.7 as follows:

"12.1.7 Notwithstanding anything contained in the *Contract Documents* to the contrary, the *Owner* shall have the right to set-off the amount of any claims for which *Notice in Writing* has been given by the *Owner* to the *Contractor* in accordance with GC 6.6 CLAIMS FOR A CHANGE TO CONTRACT PRICE or GC 12.1 INDEMNIFICATION against any amounts which may be otherwise owing or payable to the *Contractor* pursuant to the terms of the *Contract*."

46.0 GC 12.2 – Waiver of Claims

46.1 Delete paragraph 12.2.1.2 in its entirety.

46.2 Delete paragraph 12.2.1.3 in its entirety.

46.3 Paragraph 12.2.2 is amended as follows:

Delete the words "those referred in paragraphs 12.2.1.2 and 12.2.1.3 and" from paragraph 12.2.2.

47.0 **GC 12.3 - Warranty**

47.1 Paragraph 12.3.1 is amended as follows:

Delete the words "one year" and substitute the words "two years" in the first line of paragraph 12.3.1.

Add the words "The warranty on replaced or rectified parts and workmanship shall be extended for a period of two (2) years from the date of acceptance by the *Owner* of the replacement or rectification of the parts and workmanship" at the end of paragraph 12.3.1.

47.2 Paragraph 12.3.2 is amended as follows:

Delete the word "The" and substitute the words "Subject to paragraph 3.4.1, the" at the beginning of paragraph 12.3.2.

47.3 Paragraph 12.3.4 is amended as follows:

Delete the words "one year" from the second line of paragraph 12.3.4.

47.4 Paragraph 12.3.6 is amended as follows:

Add the words "in a form acceptable to the *Consultant*, and to submit said warranties to the *Consultant* upon *Substantial Performance of the Work* or at such earlier date as may be required by the *Consultant*, acting reasonably" after the words "from the warrantor" in the fourth line of paragraph 12.3.6.

48.0 **French Language Services**

48.1 ADD new GC 13 – French Language Services, as follows:

"13.1 GC 13 - French Language Services

13.1.1 Definitions

13.1.1.1 "French Language Services Act" means the French Language Services Act, R.S.O. 1990, c.F. 32, as amended.

13.1.1.2 "French-designated Area" means an area designated from time to time in the Schedule to the French Language Services Act (Ontario). A map and complete listing of French-designated areas is available at <http://www.ofa.gov.on.ca/en/flsa-mapdesig.html>.

13.1.2 French Language Services

Addendum No. 2

- 13.1.2.1 Insofar as this Contract relates to the provision of Services directly to the public on behalf of Metrolinx, the French Language Services Act, R.S.O. 1990, c. F. 32 and any amendments thereto (hereinafter referred to as "the FLSA") shall be applicable.
- 13.1.2.2 A person has the right in accordance with the FLSA to communicate in French with, and to receive available services in French where the Consultant's work is located in or serves an area designated in the FLSA Schedule. It shall be the Consultant's responsibility to provide translation services to any person making such a request as per R.S.O. 1990, c. F.32, s. 5(1).
- 13.1.2.3 A service refers to any service or procedure provided to the public, including communications.
- 13.1.2.4 Services being provided in French must be equivalent to those offered in English, available within the same timeframe and of the same quality.
- 13.1.2.5 Services and communications in designated areas include, but are not limited to:
- 13.1.2.5.1 Consultations/Public Meetings
 - 13.1.2.5.2 Presentation materials, displays, comment cards/feedback mechanism or other materials are available in French. Consultant has at least one bilingual staff or interpreter on hand able to answer questions and discuss technical drawings/documents in French. When relevant, the consultant will compile and analyze the views of Francophones separately, because they may have different concerns.
 - 13.1.2.5.3 Signage

Construction contracts may from time to time involve erecting temporary signage to redirect or warn the public of hazards. Such signage will be bilingual.
 - 13.1.2.5.4 Communications

Communication plans, customer impact documents, information bulletins, notices of

service disruption and public relations information will be bilingual.

13.1.2.5.5 Marketing/Advertising

Advertising, promotion, publicity will be undertaken in English and French. A list of Francophone media is available at:
<http://www.ofa.gov.on.ca/en/franco-media.html>.

13.1.2.5.5 Contractor's Team

The Contractor will have a bilingual staff available to attend consultations or public meetings.

13.1.2.5.6 Translation Services

The Contractor will have a staff or procure the services of a professional translator or interpreter, accredited by the Association of Translators and Interpreters of Ontario.
<http://www.atio.on.ca/>

49.0 GC 14 – Contractor Work Performance Rating

49.1 Add New GC 14 – Contractor Work Performance Rating, as follows:

GC 14 – Contractor Work Performance Rating

14.1 Metrolinx shall during the term of the Contract, maintain a record of the performance of the Contractor completing Work for Metrolinx. This information shall be used to complete a "Contract Performance Appraisal" report, a copy of which will be forwarded to the Contractor upon completion of Total Performance of the Work. Refer to Attachments for a sample Contractor Performance Review report. Interim "Contract Performance Appraisal" reports may be issued, as deemed appropriate by the Owner's Representative, at any time during the term of the Contract.

14.2 The overall history of the Contractor in performing work for Metrolinx will be considered in the evaluation of future bids from the Contractor.

14.3 Metrolinx reserves the right in future tenders to reject any bid submitted by a company with an unsatisfactory performance history with the Owner.

- 14.4 Non-compliance with Contract requirements will be identified to the Contractor.
- 14.5 The information contained in the "Contract Performance Appraisal" may be provided to the Ministry of Transportation and other government agencies, and such performance reviews may be relied upon to disqualify a company from providing a bid on future tenders.

GENERAL CONDITIONS OF THE CONTRACT

VARIOUS METROLINX LOCATIONS CIVIL WORK FOR AVM DEPLOYMENT CONTRACT NO. PT-2016-CST-133

PAGE 1 OF 1

Addendum No. 2

1.0 General Conditions of the Contract

- 1.1 The "General Conditions of the Unit Price Contract" of CCDC 4 2011 Unit Price Contract are herein called the General Conditions of the Contract and shall constitute the General Conditions of this Contract in their entirety as amended by the Supplementary General Conditions of the Contract herein. CCDC 4 2011 is available for purchase on www.ccdc.org.

END OF SECTION

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01000
PAGE 1 OF 6**

Addendum No. 2

1.0 Documents Required

- 1.1 Maintain at the Place of Work, one (1) copy of following:
 - 1.1.1 Contract Drawings;
 - 1.1.2 Specifications;
 - 1.1.3 addenda;
 - 1.1.4 reviewed Shop Drawings;
 - 1.1.5 Change Orders;
 - 1.1.6 other modifications to Contract;
 - 1.1.7 field test reports; and
 - 1.1.8 Contractor's Occupational Health and Safety Policy, the program to implement the Occupational Health and Safety Policy and the Site Specific Safety Plan.

2.0 Work Schedule

- 2.1 Interim reviews of Work progress based on schedule submitted by the Contractor will be conducted. Update Contractor's schedule and cash flow chart when requested by Consultant.

3.0 Hours of Work

- 3.1 The Contractor's hours of work for this Contract are 9 a.m. to 4 p.m., Monday to Friday, statutory holidays excluded. (non-peak. Station Ops to confirm)

4.0 Subcontractors and Suppliers

- 4.1 The Contractor shall submit within five (5) Working Days of execution of the Contract a complete list of Subcontractors and Suppliers that shall include the names of all Subcontractors and Suppliers that will be employed to perform or supply the following Divisions or Sections of the Work:
 - 4.1.1 Excavation
 - 4.1.2 Concrete

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01000
PAGE 2 OF 6**

Addendum No. 2

- 4.1.3 Plastics
- 4.1.4 Electrical
- 4.2 Pre-qualified Subcontractors and Suppliers
 - 4.2.1 Contractors shall note that for some Sections or Divisions of the Work specific Subcontractors or Suppliers may be named in the Contract Documents as having been pre-qualified to perform or supply that Section or Division of Work. In such instances only those Subcontractors or Suppliers are to be named as performing or supplying, and shall perform or supply, those Sections or Divisions of the Work. The Contractor shall not use "Own Forces" for such Sections or Divisions of the Work unless the Contractor is named in the Contract Documents as having been pre-qualified for the Section or Division of the Work.
 - 4.2.2 Where more than one Subcontractor or Supplier is named as having been pre-qualified to supply a Section or Division of the Work, the Contractor shall select one of its own choice from those so named.
- 4.3 The Contractor shall not change the identified Subcontractors or Suppliers listed without written consent of Owner.

5.0 Certificate of Recognition

- 5.1 Metrolinx has implemented a phased-in approach for the Certificate of Recognition (COR™) safety program for its construction projects. Throughout the Term of the Contract, the Contractor must achieve the following milestones related to COR™ certification:
 - 5.1.1 COR™ "Certified" status with IHSA as of the date of Closing for any construction procurements with an estimated value of \$10 million and over, issued on or after October 1, 2016.
 - 5.1.2 COR™ "Registered" status with IHSA as of the date of Closing for any construction procurements with an estimated value under \$10 million, issued on or after October 1, 2016.
 - 5.1.3 COR™ "Certified" status with IHSA as of the date of Closing for any construction procurements with an estimated value of \$5 million and over, issued on or after January 1, 2017.
 - 5.1.4 COR™ "Certified" status with IHSA as of the date of Closing for any construction procurements regardless of estimated project value, issued on or after January 1, 2018.

GENERAL REQUIREMENTS GENERAL INSTRUCTIONS

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01000
PAGE 3 OF 6**

Addendum No. 2

- 5.2 At each of the dates specified above, based on the Total Contract Price, the Contractor shall provide Metrolinx with documentation to substantiate that the above statuses have been achieved.
- 5.3 For more information about COR™ and the registration/certification process, please contact:
- 5.4 Centre for Health and Safety Innovation (CHSI)
5110 Creekbank Road, Suite 400
Mississauga, Ontario
L4W 0A1
Email: cor@ihsa.ca
Website: www.ihsa.ca/cor
Telephone: 1-800-263-5024.

6.0 Contractor's Use of Site

- 6.1 Perform Work in a manner that will interfere as little as possible with the Owner's operations.
- 6.2 Storage of materials and equipment and Contractor's temporary office must be contained within designated Contractor's area(s).
- 6.3 Schedule deliveries to interfere as little as possible with the Owner's operations.
- 6.4 Park on site only within the designated Contractor's area.

7.0 Codes and Standards

- 7.1 Perform Work in accordance with Ontario Building Code, Ontario Hydro Electrical Safety Code and applicable acts administered by other authorities having jurisdiction.
- 7.2 Work to meet or exceed requirements of specified standards, codes and referenced documents.
- 7.3 Codes, specification standards, manuals and installation, application and maintenance instructions, referred to in the Contract Documents shall be of latest published editions at date of closing of Tender.

8.0 Project Meetings

- 8.1 Hold project meetings at times and locations approved by Consultant.

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01000
PAGE 4 OF 6**

Addendum No. 2

8.2 Notify parties concerned of meetings, to ensure proper co-ordination of Work.

8.3 Designated parties shall take required action on decisions made at meeting. Consultant will record minutes of meetings and distribute to parties prior to next meeting.

9.0 Sublet of Work

9.1 Administration, supply and installation of Work specified is the sole responsibility of Contractor.

10.0 Examination

10.1 Examine site of Work, and investigate all matters relating to nature of Work to be undertaken.

10.2 Examine areas to receive specific Work and ensure that conditions are satisfactory to receive subsequent Work. Do not proceed with subsequent work, until unsatisfactory conditions are corrected.

11.0 Setting Out of Work

11.1 Setting out of Work is sole responsibility of the Contractor.

11.2 Lay out Work in accordance with Contract Drawings.

11.3 Verify all grades, lines, and levels and dimensions indicated, and report errors or inconsistencies to the Consultant before commencing Work or as soon as discovered.

12.0 Location of Equipment and Fixtures

12.1 Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate. Final actual placement location within a reasonable distance from that shown on Drawings shall be carried out at no additional cost to the Owner.

12.2 Locate equipment, fixtures and outlets to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.

12.3 Obtain manufacturer's literature for roughing in and hook-up of equipment and fixtures.

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01000
PAGE 5 OF 6**

Addendum No. 2

- 12.4 Inform the Consultant of impending installation and obtain his approval for final actual location.
- 12.5 Submit field drawings to indicate relative position of various services and equipment when requested by Consultant.

13.0 Concealment

- 13.1 Conceal wiring in wall and ceiling construction of finished areas except where indicated otherwise.

14.0 Cutting, Fitting and Patching

- 14.1 Execute cutting, fitting and patching required to make Work fit properly together.
- 14.2 Where new Work connects with existing and where existing Work is altered, cut, patch and make good to match existing Work.
- 14.3 Obtain Consultant's approval before cutting, boring or sleeving load-bearing members.
- 14.4 Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.

15.0 Existing Services

- 15.1 Before commencing Work, establish location and extent of service lines in area of Work and notify the Owner of findings.
- 15.2 Where unknown services are encountered, immediately advise authorities having jurisdiction and Consultant and confirm findings in writing.
- 15.3 Record locations of maintained, re-routed and abandoned service lines.

16.0 Protection

- 16.1 Contractor is cautioned to use appropriate construction methods in order to fully protect existing building(s) or plant from any damage. These facilities shall be inspected prior to construction and existing defects noted in a written report, witnessed by Consultant. Repair or restore defects resulting from construction under this Contract to the satisfaction of the Owner, at no additional expense to the Owner.

**GENERAL REQUIREMENTS
GENERAL INSTRUCTIONS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01000
PAGE 6 OF 6**

Addendum No. 2

17.0 Trades Qualification

- 17.1 The Contractor shall ensure that persons (trades workers) performing work that the *Trades Qualification and Apprenticeship Act* (TQAA) sets out certification requirements for, are properly qualified under the TQAA.
- 17.2 The Contractor shall further ensure these trades workers can, upon request, provide written proof of TQAA trades qualification, such as a certificate of qualification or apprenticeship contract, to the Owner, the Consultant or other authority having jurisdiction.

18.0 Additional Drawings

- 18.1 Consultant may furnish additional Drawings to assist proper execution of Work. These Drawings will be issued for clarification only. Such Drawings shall have the same meaning and intent as if they were included with Contract Documents referred to in Article A-3 of the Articles of Agreement.

END OF SECTION

**GENERAL REQUIREMENTS
MOBILIZATION AND DEMOBILIZATION**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01200
PAGE 1 OF 3**

Addendum No. 2

1.0 General

- 1.1 Be responsible for familiarization with the Place of the Work, the location of the Work and any limitations and constraints.
- 1.2 Before commencing Mobilization, where required by the Contract Documents, obtain all required Access Permits before entering onto land impacted by the Work.
- 1.3 Commence Mobilization at the Notice to Proceed date unless otherwise required by the Contract Documents and directed by Consultant.
- 1.4 Transport personnel, equipment and supplies and materials to the Place of the Work, including Contractor's offices, buildings, and other necessary facilities, Consultant's Work Trailer and portable toilet for the Consultant's use at the Place of Work.
- 1.5 Be responsible for all required permits for transportation of the Contractor's equipment.
- 1.6 Check on any roadway and bridge loading and restricted height clearances.
- 1.7 Equipment and materials shall be mobilized and demobilized in accordance with all local, provincial and federal regulations and acts related to transportation and safety.
- 1.8 Mobilize and demobilize equipment by means of access routes shown on the Drawings.
- 1.9 Upon completion of the Work, restore all access areas to the same condition as prior to the start of the Work.
- 1.10 Be responsible for security of Contractor's equipment and materials at the place of the Work.

2.0 Definitions

- 2.1 **Mobilization and Demobilization:** means the mobilization and demobilization of the Contractor's forces and equipment, supplies, appurtenances and the like, manned and ready for prosecuting the Work required under the Contract, and the subsequent demobilization and removal from the Place of the Work of said equipment, materials appurtenances and the like upon completion of the Work. Mobilization will not be considered as work in fulfilling the Contract requirements for commencement of the Work.

**GENERAL REQUIREMENTS
MOBILIZATION AND DEMOBILIZATION**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01200
PAGE 2 OF 3**

Addendum No. 2

3.0 Mobilization

- 3.1 Mobilization is deemed to include the provision of the following:
 - 3.1.1 Construction permits not obtained by the Owner;
 - 3.1.2 Initial Construction Schedule;
 - 3.1.3 Initial Work Block Schedule;
 - 3.1.4 Initial Shop Drawings and other submittal Schedules;
 - 3.1.5 Initial Contractor's Cash Flow Schedule; and
 - 3.1.6 Site Specific Safety Plan.
- 3.2 Mobilization includes assembly and delivery to the Place of the Work plant equipment, materials and supplies, necessary for the prosecution of the Work that are not intended to be incorporated into the Work; the clearing of and preparation of the Contractor's work area; the complete assembly, in working order, of all equipment necessary to perform the required work; personnel services, and all other preparatory work required to allow commencement of the actual Work on the construction items for which payment is provided under the Contract.
- 3.3 Mobilization is deemed not to include the provision of the following, which are deemed to be elements of the Contractor's overhead, profit and contract administration costs included and incidental to the Work and included in and incidental to the Unit Prices and Lump Sum Prices as quoted in the Schedule of Contract Prices for each Work Item:
 - 3.3.1 Overhead and Profit;
 - 3.3.2 Bond and insurances; and
 - 3.3.3 Labour and costs.

4.0 Demobilization

- 4.1 Demobilization includes all activities and costs for transportation of personnel, equipment and supplies and materials not used in the Contract, including disassembly, removal from the Place of the Work, the Contractor's offices, buildings, and other facilities including the Consultant's Work Trailer and portable toilet for the Consultant's use, removal and site cleanup of any offices, buildings or other facilities assembled at the Place of Work for the Contract.

**GENERAL REQUIREMENTS
MOBILIZATION AND DEMOBILIZATION**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01200
PAGE 3 OF 3**

Addendum No. 2

- 4.2 Demobilization included submission and acceptance of final documentation required to meet the requirements of the Contract.

5.0 Changes to the Work

- 5.1 If additional mobilization and demobilization are required during the performance of the Contract because of changes to the Work, deleted or added items of Work, the Contractor is entitled to an adjustment in the Contract Price, compensation for such costs will be included in the Price of the approved Change Order or Orders for the item or items of Work changed or added.

6.0 Management and Disposal of Mobilization and Demobilization Materials

- 6.1 Dispose of materials resulting from Mobilization and Demobilization activities from the Place of the Work within forty-eight (48) hours of Total Performance of the Work.

END OF SECTION

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01300
PAGE 1 OF 4**

Addendum No. 2

1.0 General

- 1.1 Submit to Consultant for review, product data specified.
- 1.2 Conform to General Condition No. GC 3.10 Shop Drawings.
- 1.3 Until submission is reviewed, work involving relevant product may not proceed.

2.0 Product Data

- 2.1 Manufacturer's standard schematic drawings, catalogue sheets, diagrams, schedules, performance charts, illustrations and other standard descriptive data will only be accepted in lieu of Shop Drawings when authorized by Consultant.
- 2.2 Above will only be accepted if it conforms to the following:
 - 2.2.1 delete information which is not applicable to project;
 - 2.2.2 supplement standard information to provide additional information applicable to project;
 - 2.2.3 show dimensions and clearances required;
 - 2.2.4 show performance characteristics and capacities; and
 - 2.2.5 show wiring diagrams and controls.

3.0 Shop Drawings

- 3.1 Within five (5) Working Days of execution of the Contract, submit for review by the Consultant, a schedule of Shop Drawings indicating dates, review dates, fabrication and lead times.
- 3.2 Drawings to be originals prepared by Contractor, Subcontractor, Supplier or Distributor, which illustrate appropriate portion of Work, showing fabrication, layout, setting or erection details as specified in appropriate Sections.
- 3.3 Identify details by reference to sheet and detail numbers shown on Contract Drawings.
- 3.4 Maximum sheet size 48" x 36" (1220mm x 915mm).

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01300
PAGE 2 OF 4**

Addendum No. 2

- 3.5 All Shop Drawings of structural components shall show all pieces, dimensions, materials, weld types and sizes, material treatments and finish to a large scale (metric) suitable to the Product.

4.0 Samples & Mock-Ups

- 4.1 Submit samples in sizes and quantities specified.
- 4.2 Where specified, shown or considered necessary, submit duplicate samples for Consultant's approval.
- 4.3 Where colour, pattern or texture is criterion, submit full range of samples.
- 4.4 Samples must correspond in every aspect to materials supplied for the project.
- 4.5 Construct field samples and mock-ups at locations acceptable to Consultant.
- 4.6 Construct each sample of mock-up completely, including work of all trades required to finish.
- 4.7 Do not proceed with fabrication or delivery of materials until samples are approved.
- 4.8 Reviewed samples or mock-ups will become standards of workmanship and material against which installed work will be checked on project.
- 4.9 Approval of samples does not imply acceptance of finished work.

5.0 Coordination of Submissions

- 5.1 Review Shop Drawings, Product data and samples prior to submission. Any Shop Drawing not bearing evidence of having been checked by the Contractor will not be accepted by the Consultant.
- 5.2 Indicate on Shop Drawings that they have been checked by applying stamp "checked and certified for construction", including date and Contractor's signature.
- 5.3 No claim for delay will be considered as a result of time lost for Drawings returned because the Contractor has failed to check the Drawings as stated above.
- 5.4 Check Shop Drawings and Product data sheets before submission as follows:

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01300
PAGE 3 OF 4**

Addendum No. 2

- 5.4.1 Against Contract Documents and other applicable Shop Drawings to ensure that work adjacent to and affecting other work is accurately detailed.
- 5.4.2 To ensure work conforms to requirements of Contract Documents.
- 5.4.3 Verify field measurements, field construction criteria, catalogue number and similar data.
- 5.5 Coordinate each submission with requirements of Work and Contract Documents. Individual Shop Drawings will not be reviewed until all related drawings are available.
- 5.6 Consultant's review of Shop Drawings and data sheets pertain to general design only. Errors in dimensions, quantities or interference will be marked if noticed, but this will not in any way relieve the Contractor from his responsibility to complete the Work as shown and specified.
- 5.7 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by the Consultant's review of submission, unless Consultant gives written acceptance of specified deviations.
- 5.8 Notify Consultant, in writing at time of submission, of deviations from requirements of Contract Documents.
- 5.9 Do not proceed with Work covered by Shop Drawings and data sheets until reviewed by Consultant. Any such installation will not be considered for payment until Shop Drawings are approved.
- 5.10 After Consultant's review, distribute copies to all trades affected.

6.0 Submission Requirements

- 6.1 Schedule submissions at least ten (10) Working Days before dates reviewed submissions will be needed.
- 6.2 Submissions shall be as follows:
 - 6.2.1 Four (4) white prints of Shop Drawings and Product data bearing the review stamp of the Contractor, three (3) of which will be retained by the Consultant;
 - 6.2.2 The fourth set will be returned to the Contractor, who is responsible for preparing all additional copies for distribution, and distributing to all required parties; and

**GENERAL REQUIREMENTS
SHOP DRAWINGS AND OTHER SUBMITTALS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01300
PAGE 4 OF 4**

Addendum No. 2

- 6.2.3 Submit final Shop Drawings as noted in Section 01800 Project Closeout.
- 6.3 Additional copies of Shop Drawings, Product data, reports, procedures, plans and certificates shall be required for distribution by the Contractor.

END OF SECTION

GENERAL REQUIREMENTS QUALITY CONTROL

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01400
PAGE 1 OF 3

Addendum No. 2

1.0 Inspection

- 1.1 Refer to GC 2.3 – REVIEW AND INSPECTION OF THE WORK.
- 1.2 The materials furnished by the Contractor shall be inspected by the Consultant at the time of delivery and at such other times as the Consultant may elect.
- 1.3 The Owner and the Consultant shall have access to the work. If parts of the work are in preparation at locations other than the Place of the Work, access shall be given to such work whenever it is in progress.
- 1.4 The Consultant may order any part of the work to be examined if such work is suspected to be not in accordance with the Contract. If, upon examination such work is found not in accordance with the Contract, correct such work and pay the cost of examination and correction. If such Work is found in accordance with the Contract, the Owner will pay the cost of examination and replacement.
- 1.5 The review of the information covering materials and equipment by the Consultant shall in no release the Contractor from his responsibility for the proper design, installation and performance of any material, equipment or arrangement or from the liability to replace same should it prove defective or deficient.

2.0 Independent Inspection Agencies

- 2.1 Independent Inspection/Testing Agencies will be engaged by the Consultant for inspecting and/or testing portions of work.
- 2.2 Cost of such services will be borne by the Contractor under the appropriate Cash Allowance item in the Form of Tender.
- 2.3 Provide samples and/or assistance required for inspection and testing by the appointed agencies.
- 2.4 Employment of Inspection/Testing Agencies does not remove the responsibility to perform Work in accordance with the Contract Documents.
- 2.5 If defects are revealed during inspection and/or testing, the appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defects and irregularities as advised by the Consultant at no cost to the Owner. Pay costs for retesting and re-inspection.

GENERAL REQUIREMENTS QUALITY CONTROL

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01400
PAGE 2 OF 3

Addendum No. 2

3.0 Procedures

- 3.1 Notify the appropriate agency and Consultant a minimum of two (2) working days in advance of the requirement for tests, in order that arrangements can be made with the testing company.
- 3.2 Submit samples and/or materials required for testing, as specifically requested in Specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in the Work.
- 3.3 Provide labour and equipment to obtain and handle samples and materials on site.

4.0 Rejected Work

- 4.1 Refer to GC 2.4 – DEFECTIVE WORK.
- 4.2 If, in the opinion of the Consultant, it is not expedient to correct defective work, or work not performed in accordance with the Contract Documents, the Owner may deduct from the Contract Price the difference in value between the work performed and that called for by the Contract Documents, the amount of which shall be determined by the Consultant.

5.0 Reports

- 5.1 Reports on materials testing as arranged by the Consultant shall contain the following information:
 - 5.1.1 Date and time of inspection or test.
 - 5.1.2 Weather conditions and ambient air temperatures during the inspection.
 - 5.1.3 Testing method employed by proper standard reference and specific paragraph or other detailed information as applicable.
 - 5.1.4 Inspection description and detailed and other relevant information.
 - 5.1.5 Test results in detail, complete with applicable graphs and other clarifying documents and information.
 - 5.1.6 Printed name and signature of person having conducted inspection or test, and name, title and signature of Supervisor having verified the report.

**GENERAL REQUIREMENTS
QUALITY CONTROL**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01400
PAGE 3 OF 3**

Addendum No. 2

- 5.2 Inspection and Testing Agency shall provide a written report for each inspection and test made, three copies to the Consultant; three copies to the Contractor direct, who shall forward one copy to the Subcontractor, supplier or manufacturer concerned.

END OF SECTION

GENERAL REQUIREMENTS

TEMPORARY FACILITIES

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01500
PAGE 1 OF 1**

Addendum No. 2

1.0 Access

- 1.1 Contractor shall be limited to using access onto the site as further directed.

2.0 Sanitary Facilities

- 2.1 Contractor shall provide a portable toilet/washroom for use by Contractor and his work force. The Owner's existing staff and public washrooms in existing building(s) will be off limits to Contractor, his staff and subcontractors and their staff.

3.0 Power

- 3.1 Contractor may connect into the Owner's electrical power supply in the existing building for power for construction requirements. All such connections shall be first approved by the Owner.
- 3.2 The Contractor shall be responsible for all claims and damages resulting from unauthorized or misuse of the Owner's electrical power supply. Verify all circuit and circuit protection capacities with the Owner's Manager of Station Operations of the respective region before making any connections.

END OF SECTION

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01545
PAGE 1 OF 5**

Addendum No. 2

1.0 Contractor Safety Plan & Railway Safety Orientation

1.1 The Contractor shall submit to and have reviewed by the Owner, the Contractor Safety Program and those of any subcontractors as detailed in Section 01600 before they begin any construction activity on the site. Authority to commence construction will be authorized only after this is completed.

1.2 The Contractor shall designate a full time safety officer responsible for enforcing the safety program at the site for the duration of the work and shall indicate to the Owner in writing the name of that person as well as his/her alternate.

1.3 The Contractor shall ensure that all employees granted access to Metrolinx right-of-way are trained and current in one of the following railway safety training courses:

1.3.1 GO-Safe Railway Orientation (available at www.gotransitcontractor.com);

(a) Effective July 2, 2014 the Owner will continue to allow access to Contractors previously trained in CN Contractor Orientation or CN eRail Safe prior to July 1, 2014. All personnel whose CN training expires after July 2, 2014 must take the GO-Safe Railway Orientation to maintain access to Metrolinx rail corridors.

or

1.3.2 Canadian Railway Operating Rules and GO-Safe Railway Orientation

(a) The addition of GO-Safe Railway Orientation to Canadian Railway Operating Rules takes effect November 1, 2014

1.4 The Contractor shall ensure that all its employees and its Subcontractors and their employees working within the railway right-of-way have taken, and are registered as having successfully completed, the course "GO-Safe Railway Orientation" or "Contractor Orientation/Security Awareness Course". The Contractor shall maintain an up-to-date list of all such trained employees on site and ensure all such trained employees wear the sticker, issued upon successful completion of the course on a readily visible location on their hardhats, or carry the wallet card issued upon successful completion of the course, at all times when within the railway right-of-way. Authority to commence construction will only be given when this requirement has been fulfilled.

1.5 Observe and enforce all construction safety measures as set out in Section 01600 of this document.

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01545
PAGE 2 OF 5**

Addendum No. 2

- 1.6 The Contractor shall ensure that appropriate railway entry permits are completed and on site prior to starting Work.

2.0 Emergency Procedures

- 2.1 At the work site, provide and maintain readily accessible first aid equipment and installations required by the *Workplace Safety and Insurance Act*, and all safety and lifesaving equipment appropriate to the nature of the work.
- 2.2 The Contractor shall prepare emergency procedures and evacuation plan for the work to be carried out at the site prior to commencing work.
- 2.3 The Contractor shall post this plan in a conspicuous place and ensure that all persons having access to the job site are familiar with the plan prior to having access to the site.
- 2.4 The emergency procedure and evacuation plan shall include, but not be limited to, the following information:
- 2.4.1 Emergency phone numbers for police, fire, ambulance, hospital and utility companies.
 - 2.4.2 Emergency phone number for CN, CPR, TTR, PNR, A&B and Metrolinx as applicable.
 - 2.4.3 Phone numbers of the Contractor's Project Manager/Superintendent, Site Supervisor/Foreman and Safety Officer.
 - 2.4.4 Phone numbers of the Consultant and/or his Site Representative and CN, CPR, TTR, PNR, A&B and Metrolinx Site Supervisor as applicable.
 - 2.4.5 Map showing the route and location of the nearest hospital.
 - 2.4.6 List of on site first aid attendants.
 - 2.4.7 All material safety data sheets for materials used on site.
 - 2.4.8 Phone number of Contractor's twenty-four (24) hour emergency contact person.

3.0 Rail Traffic Protection

- 3.1 Note that part of the Work shall be carried out under and adjacent to the Railway's operating tracks.

GENERAL REQUIREMENTS RAILWAY SAFETY REQUIREMENTS

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01545
PAGE 3 OF 5**

Addendum No. 2

- 3.2 Flag persons/flag persons in training will be furnished by the relevant third party authority at no cost to the Contractor, up to the date specified for the Total Performance of the Work. After this date, the Contractor will be required to pay all additional flagging costs, which will be automatically deducted from the amounts due to the Contractor in the progress payments.
- 3.3 The Contractor will be responsible for ensuring that construction operations are carried out without interfering with the continued safe movement of rail traffic. The Contractor will be liable for the cost of train delays and for the cost of repairs to any rail, ties and ballast required as a result of damage caused by his/her operation.
- 3.4 Give the Third Party's Site Supervisor at least five (5) working days notice of the hours within which work is to be carried out in order that protection may be provided. Time wasted unnecessarily by Third Party personnel due to the Contractor will be charged against the Contractor.
- 3.5 Ensure that a responsible person is present at all times to whom the Railway personnel will issue orders regarding work near the tracks. Comply immediately with such orders and instructions.
- 3.6 Red colour shall not be used for safety helmets, safety vests or survey markers on railway right-of-way in order to avoid conflict with Railway Operational Practice. Other highly visible colours such as orange are acceptable.
- 3.7 At no time shall idling equipment be left unattended by the operator.
- 3.8 Ensure that both rails of the same track are never connected with any conductor of electricity such as steel measuring tapes or metal traction equipment.

4.0 Track Protection

- 4.1 At all locations where there is a possibility of trees, rocks or other debris falling on the tracks, provide track protection such as timber mats or an approved equivalent in order to prevent possible damage to rail, ties and ballast.
- 4.2 Prevent excavated material from fouling ballast and sub-ballast.

5.0 Restrictions on Construction Operations

- 5.1 In order to ensure the continued safe movement of rail traffic, certain restrictions shall be imposed on the construction operations. Without in any way limiting the generality of the foregoing statement, the following are some of the limitations or restrictions that shall be imposed.

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01545
PAGE 4 OF 5**

Addendum No. 2

- 5.2 When mucking, clearing or other operations are being carried out which may endanger the existing track or impede the safe passage of trains, perform such work only during such times as there is a block on the mainline rail traffic.
- 5.3 Confine all work activities to daylight hours, except where noted otherwise, or as directed by the Consultant, and do not exceed twelve (12) hours per day unless authorized by the Consultant.
- 5.4 All men and equipment within ten (10) metres or thirty (30) feet from the nearest rail must stop working on the approach of a train and remain stopped until permission has been given to resume work by the flag person.
- 5.5 Do not work closer than four (4) metres or thirteen (13) feet from the nearest rail without the prior consent of the Consultant and only during such times as there is rail traffic protection provided by the Railway.

6.0 Crossing Tracks

- 6.1 Do not cross tracks of the Railway Company with scrapers, bulldozers, trucks, barrows or other mechanical equipment at grade nor place crossing planks except by authority of the Consultant, at locations designated by him. Ensure that both rails of the same tracks are never connected with any conductor of electricity such as steel measuring tapes or metal traction equipment.
- 6.2 If necessary, CN, CPR, TTR, PNR, or A&B will install and remove temporary construction crossings. The Contractor shall supply the required 7" x 10" planking of length to suit their needs (7 planks per track), shim stock and filter fabric. The Contractor shall be responsible for constructing and maintaining the approaches to the crossing to a standard acceptable to the Railway. **Crossings constructed shall only be used by equipment when flagging protection has been provided by Third Party Rail personnel.**
- 6.3 The crossing shall:
 - 6.3.1 have a level gradient on either side for a distance of eight (8) metres or not less than the maximum length of vehicle using it.
 - 6.3.2 have approach grades not greater than five percent (5%).
- 6.4 To minimize fouling the ballast, install filter fabric over the entire ballast section under the crossing planks and approaches.
- 6.5 Each rail of the track shall be protected by use of rubber mats or tires, before any crawler mounted equipment is allowed to cross the track affected.

**GENERAL REQUIREMENTS
RAILWAY SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01545
PAGE 5 OF 5**

Addendum No. 2

- 6.6 Upon completion of all construction requiring use of the temporary crossings, the Contractor shall remove the approaches and restore the track ballast section, all to the satisfaction of the Consultant.
- 6.7 Install temporary gates, approved by the Consultant, to prevent use of the crossings by unauthorized personnel and keep gates locked when crossings are not in use.

7.0 Site Material Storage

- 7.1 Due to the area of the work and the possibility of vandalism, all materials must be physically removed from the site or placed in secure bins or areas on a daily basis. No loose material will be allowed on site.
- 7.2 The Contractor shall be held accountable for all damages to Owner operations or property, railway operations or property, and all persons or their property, that is found to be a result of improper materials storage practices by the Contractor or their Subcontractors.

END OF SECTION

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01560
PAGE 1 OF 2**

Addendum No. 2

1.0 Fires

1.1 Fire and burnings of rubbish at the Place of Work will not be permitted.

2.0 Disposal of Wastes

2.1 Do not bury rubbish and waste materials on site.

2.2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

2.3 Except as indicated otherwise, surplus materials shall become the property of the Contractor and shall be removed from the premises promptly as they become surplus, at the cost of the Contractor.

3.0 Drainage

3.1 Divert surface drainage water away from excavation.

3.2 Provide temporary drainage and pumping as necessary to keep excavations and site free from water from whatever source until backfill operations are completed.

3.3 Do not pump water containing suspended materials into waterways, sewer or drainage systems.

3.4 Provide pumping units of sufficient number to comply with the above requirements and keep a minimum of one (1) unit in operating condition as a spare on site.

4.0 Pollution Control

4.1 Operations generating smoke, fumes, gases, dusts, vapours and odours shall be exhausted at source in a manner approved by the Consultant.

4.2 Take precautions necessary to keep dust, smoke, fumes, dirt and vibration to an acceptable level as determined by the Consultant.

4.3 Prevent extraneous materials from contaminating the environment immediately to and beyond the application area, by providing temporary enclosures or other appropriate preventative measures.

**GENERAL REQUIREMENTS
ENVIRONMENTAL PROTECTION**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01560
PAGE 2 OF 2**

Addendum No. 2

5.0 Noise

5.1 Prevent excessive noise which will be disturbing to the occupant of building. Machine tools which are set up in fixed locations shall be so located to minimize noise and suitable sound deflectors shall be used if directed by the Consultant.

5.2 Use air compressors and pneumatic hammers only with the expressed authorization of the Consultant.

6.0 Spills

6.1 The Contractor shall provide the Owner with a written program for spills response and reporting. Copies of training records shall also be provided.

6.2 All spills shall immediately be reported to the Rail Operations Control Centre, (416) 601-2174, or as directed by the Consultant.

7.0 Dust Control

7.1 The Contractor shall take any and all steps necessary to prevent a dust nuisance occurring as a result of his performance of the Work.

7.2 Where the Work requires the sawing or grinding of concrete, wet type blades and grinders shall be used together with sufficient water to prevent the occurrence of dust. Cost of all such preventative measures shall be borne by the Contractor.

END OF SECTION

GENERAL REQUIREMENTS SAFETY REQUIREMENTS

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01600
PAGE 1 OF 12

Addendum No. 2

1.0 Construction Safety Measures

- 1.1 For the purposes of the Contract, the term "Constructor", as defined in the *Occupational Health and Safety Act*, (OHSA), and Regulations for Construction shall mean the entity that shall be responsible for ensuring that the provisions of the statutes, regulations and by-laws pertaining to the safe performance of the Work are to be observed. The "Constructor" shall submit the Notice of Project.
- 1.2 The Contractor's representative shall be responsible for ensuring that the provisions of statutes, regulations and by-laws pertaining to safe performance of the work and the work of other contractors/subcontractors at the Place of Work are observed and that the methods of performing the work do not endanger the personnel employed thereon, the general public, and are in accordance with best safety practices and the latest edition of the OHSA and applicable Regulations. The Contractor shall include representatives of other contractors/subcontractors working on site on the Joint Health and Safety Committee (JHSC) as required.
- 1.3 Prior to the Contractor's representative being absent from the Place of Work, the Contractor's representative will name another person, in writing to the Consultant, who is competent to assume these responsibilities as the Contractor's representative.

2.0 Project Responsibilities

- 2.1 The Contractor and the Contractor's representative shall ensure that:
 - 2.1.1 All measures and procedures prescribed by the following Acts and Regulations (applicable Provincial) are carried out at the Place of Work;
 - (a) The *Occupational Health and Safety Act*;
 - (b) The Regulations for Industrial Establishments;
 - (c) The Regulations for Construction Projects;
 - (d) The Canada Labour Code Part II;
 - (e) The *Rail Safety Act*;
 - (f) The *Environmental Protection Act* and Regulations;
 - (g) WHMIS Regulations;
 - (h) *Smoke-Free Ontario Act*;

GENERAL REQUIREMENTS SAFETY REQUIREMENTS

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 2 OF 12**

Addendum No. 2

- (i) All other legislation, regulations and standards as applicable; and
 - (j) Metrolinx's "Safety Guidelines For Contractors, Consultants and Project Coordinators";
- 2.2 Every employer and every worker performing work at the Place of Work complies with all of the requirements referred to in Section 2.1 above; and
- 2.3 The health and safety of workers and the general public are protected in relation to the work performed on site. In addition to compliance with all occupational health and safety legislation, every employer and every worker performing Work at the Place of Work is required to demonstrate a willingness to participate in occupational health and safety program(s).
- 2.4 The Contractor shall perform a hazard and risk analysis of the work and list the top five (5) most hazardous health and safety concerns (i.e., confined space entry, shoring and demolition work, form work, working from heights, etc.).

3.0 Deliverables

- 3.1 The Contractor shall, in accordance with paragraph 9.4.4 of the Supplementary General Conditions, within five (5) Working Days of the date of final execution of the Agreement Between Owner and Contractor, submit the following to the Owner for its review and acceptance:
- 3.1.1 A copy of the Contractor's Occupational Health and Safety Policy, and a copy of the Contractor's program to implement its Occupational Health and Safety Policy, which in each case shall comply with all the requirements of the Regulations for Construction Projects, Ontario Regulation 213/91, *Occupational Health and Safety Act*, as amended from time to time; and
 - 3.1.2 A copy of the Contractor's Site Specific Safety Plan that includes site-specific hazard and risk assessment plans that will effectively prevent and control incidents and/or accidents.
 - 3.1.3 Work shall not commence at Place of Work until the Owner has reviewed and accepted the above referenced documents. The Owner shall not entertain any claim on the part of the Contractor for any extension to the Contract Time or the Contract Price as a result of the Contractor's failure to submit an Occupational Health and Safety and/or program and Site Specific Safety Plan that are acceptable to the Owner.
- 3.2 The Contractor shall, within five (5) Working Days of the date of final execution of the Agreement Between Owner and Contractor, deliver to the Owner copies of

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 3 OF 12**

Addendum No. 2

all training records for Occupational Health and Safety related courses taken by a "competent person" as defined by the *Occupational Health and Safety Act*, paragraph 1(i) and designated as the Supervisor as per Part III(2)(c). Relevant course subjects may, without limitation, include or be similar to the following:

- 3.2.1 Certified Joint Health and Safety Committee Management Member Training;
 - 3.2.2 Basics of Supervising;
 - 3.2.3 Construction Health and Safety Representative;
 - 3.2.4 *Occupational Health and Safety Act*;
 - 3.2.5 Accident Investigation and Reporting; and
 - 3.2.6 Any other courses that relate directly to the *Occupational Health and Safety Act*.
- 3.3 The Contractor shall deliver to the Consultant as required:
- 3.3.1 A copy of all inspection reports made by the Contractor in compliance with the employer's responsibility under the *Occupational Health and Safety Act*.
 - 3.3.2 A copy of all safety information pertaining to the Contract made and furnished by the Contractor's own "Safety Officer" or outside consultants/advisers engaged for the purpose of inspecting the workplace for occupational health and safety.
 - 3.3.3 A verification that all workers in the employ of the Contractor on Site, have had WHMIS training or refresher course within the last twelve (12) months.
 - 3.3.4 A verification that all workers in the employ of the Contractor have had "Explosive Activated Tool Training" on the type of tools being used.
 - 3.3.5 A verification that the instruction manuals are on Site for all tools and equipment being used.
 - 3.3.6 A copy of the most recent workers compensation experience rating account, i.e., CAD-7, NEER, and/or an insurance carrier's experience rating account.
 - 3.3.7 Copies of all injury and accident reports for occurrences on site. This shall include copies of all remedial measures taken to prevent recurrence.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 4 OF 12**

Addendum No. 2

- 3.3.8 Copies of all weekly safety talks shall be maintained on file for review by the Owner upon request.
- 3.3.9 Statistical information for the purpose of determining injury frequency and severity rates (hours worked, first-aid injuries, medical aid/reportable injuries, lost time injuries, restricted workday injuries, incident/accident and significant occurrence data), in a timely manner on a monthly basis or as required by the Owner.
- 3.3.10 The immediate reporting to the Consultant of all instances that are defined in the *Occupational Health and Safety Act* as "Notices of Injuries" and "Occurrences" under Sections 51, 52 and 53, and any occasion that a worker exercises their "Right to Refuse Unsafe Work".
- 3.3.11 The Owner reserves the right to require additional or amended deliverables pertaining to safety during the duration of the Work at no additional cost to the Owner.

4.0 Due Diligence

- 4.1 The Contractor acknowledges that it has read and understands the measures and procedures relating to occupational health and safety as prescribed in Article 2 above. The Contractor acknowledges and understands its duties as therein set out and hereby expressly undertakes and agrees to comply with all such requirements and standards in their entirety and at the Contractor's expense.
- 4.2 The Contractor further agrees to fully cooperate with all health and safety requirements, rules, regulations, standards and criteria set out in the Contract Documents, which agreement is in furtherance of the Contractor's duties and responsibilities under occupational health and safety legislation.
- 4.3 The Contractor agrees that if, in the opinion of the Owner, the health and safety of a person or persons is endangered or the effective operation of the system put in place to ensure the health and safety of workers on the Place of Work is not being implemented, the Owner may take such action as it deems necessary and appropriate in the circumstances, including, without limitation, the following:
 - 4.3.1 Require the Contractor to correct the condition forthwith at no expense to the Owner;
 - 4.3.2 Require that the Place of Work be shut down in whole or in part until such time as the condition has been corrected. The Owner will not reimburse the Contractor for any costs caused by such a delay nor will the Owner extend the time to complete the Work of the Contract because of such a delay;

GENERAL REQUIREMENTS SAFETY REQUIREMENTS

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01600
PAGE 5 OF 12

Addendum No. 2

- 4.3.3 Correct the problem and deduct the cost thereof from any payment then or thereafter due the Contractor; and/or
- 4.3.4 Terminate the Contract in whole or in part.

5.0 Joint Health and Safety Committee and/or Representative

- 5.1 The Contractor shall be responsible for the establishment and operation of the JHSC as required or the selection of a safety representative as required by the *Occupational Health and Safety Act* or the Canada Labour Code, Part II as applicable to the operations of the Contractor.
- 5.2 The Contractor shall provide its plan of compliance with the *Occupational Health and Safety Act*, Part II, Administration, to the Owner at the pre-construction meeting for all projects where:
 - 5.2.1 The number of workers employed at the Place of Work regularly exceeds five (5); or
 - 5.2.2 The duration of the Work is three (3) months or longer.
- 5.3 A site file shall be maintained of all information specific to the Joint Health and Safety Committee for the Project. This file shall be made available to the Consultant for review upon request.

6.0 Alcohol and Drug Abuse Prevention

- 6.1 The following rules shall apply to all persons while at the Place of Work and/or on the Owner's property:
 - 6.1.1 The use, possession, distribution and/or sale of illegal drugs or drug paraphernalia is prohibited;
 - 6.1.2 The use, possession, distribution and/or sale of any any form of alcohol, including alcoholic beverages;
 - 6.1.3 Workers must know and understand the possible effects of drugs, medication or mood altering agents, including those prescribed by a doctor, which will adversely affect, in any way and to any extent, their ability to work safely;
 - 6.1.4 Individuals shall ensure that prescribed or over-the-counter medications are used responsibly and in accordance with the applicable instructions.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 6 OF 12**

Addendum No. 2

- Persons taking prescription drugs shall advise their supervisor if there is potential for performance to be negatively affected;
- 6.1.5 No distribution, offering or sale of prescription medications is permitted; and
 - 6.1.6 Individuals must report for duty, free of the negative effects of alcohol and other drugs, including the effects of such use, and remain so during the entire period of duty.
- 6.2 Where a worker is suspected of being intoxicated, the following procedures must be followed:
- 6.2.1 The worker will be escorted to a safe location away from the work area, and asked to remain there pending further action;
 - 6.2.2 The worker's supervision, worker health and safety representative (if applicable), union steward (if applicable) and the designated Owner Contract representative will be requested to attend;
 - 6.2.3 The group present will determine an appropriate course of action and a means of transport to a suitable safe location;
 - 6.2.4 Where there are differences of opinion with respect to the worker's fitness for duty, the dispute will be resolved with a view to ensuring safety, and the worker will be transported home, or required to remain in a safe location until this can be arranged; and
 - 6.2.5 The local police may be called if the worker was operating any motorized vehicle requiring a valid driver's license.
- 6.3 The Owner will maintain a position of zero tolerance to any violations of these rules. At the sole discretion of the Owner, rule contraventions may result in:
- 6.3.1 Verbal and written reporting to the person's supervisor/employer;
 - 6.3.2 Issuance of a written warning, and recording of same;
 - 6.3.3 Reporting to the appropriate police department for investigation and subject to criminal prosecution;
 - 6.3.4 An order to leave the project site temporarily or permanently; or
 - 6.3.5 Remedies as may be specified in the Contract Documents.

GENERAL REQUIREMENTS SAFETY REQUIREMENTS

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01600
PAGE 7 OF 12

Addendum No. 2

7.0 Smoking in the Workplace

- 7.1 The Contractor shall comply with, and enforce, all the provisions of the *Smoke Free Ontario Act* at all times while on the Owner's property.
- 7.2 A designated smoking area may be created at the Place of Work providing Metrolinx and the Contractor can mutually agree that one can be provided within the provisions of the *Smoke Free Ontario Act*. The Contractor shall be responsible for providing any and all signage required for the designated smoking area in the event a designated smoking area is created.

8.0 Barricades

- 8.1 Observe all necessary precautions and provide, erect and maintain suitable signs, barricades and lights to protect all persons from injury and all vehicles from damage during the progress of the work, all to the approval of the Consultant or any authority having jurisdiction at this location.
- 8.2 Provide all means necessary to prevent the entrance of unauthorized personnel onto the work site and from using access roads.
- 8.3 Protect the work in conformity with the Contract.

9.0 Vehicle Traffic Protection

- 9.1 Provide qualified signal persons to protect vehicular and pedestrian traffic during the operations, at any time when workers or equipment could endanger such traffic, all to the complete satisfaction of the Consultant and any other authority having jurisdiction at this location.
- 9.2 Accept responsibility for any damage to vehicles and damage and injury to pedestrians or occupants of vehicles resulting from the operations or the operating of equipment by others. Provide adequate protection to the satisfaction of the Consultant.
- 9.3 Wherever the Place of Work is intersected by public or private roads, provide convenient openings to pass and maintain all crossings in a condition so they can be used safely and without any just grounds for complaint during the progress of the work; all to the satisfaction of the Consultant and respective Road Authority.
- 9.4 Shall submit any permits as requested by the Consultant or Road Authority.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 8 OF 12**

Addendum No. 2

10.0 Working at Heights

10.1 Scaffolding

10.1.1 Scaffolding shall comply with the provisions of Sections 126 – 142, "Scaffolds and Work Platforms", of the Regulations for Construction Projects, O. Reg. 213/91, *Occupational Health and Safety Act*, as amended from time to time, as well as any more restrictive directive issued by Metrolinx.

10.1.2 The Contractor shall comply with the following instructions for scaffold installations:

- (a) Obtain authorization from the Owner before erecting scaffolds on existing Owner's structures or new structures under construction.
- (b) Scaffolds must be positioned so that minimum clearance for road or other traffic including operating construction equipment is always provided.

10.2 Fall Protection

10.2.1 Fall Protection systems and equipment shall comply with the provisions of Section 26 of the Regulations for Construction Projects, O. Reg. 213/91, *Occupational Health and Safety Act*, as amended from time to time, as well as any more restrictive directive issued by the Owner.

10.2.2 All horizontal lifelines used for fall protection shall be designed and installed in accordance with the following CSA Standards:

- (a) CAN/CSA Z259.13-04 Flexible horizontal lifeline systems
- (b) CAN/CSA Z259.16-04 Design of active fall protection systems

10.2.3 The Contractor shall comply with the following instructions for fall protection system installations:

- (a) Obtain written authorization from the Owner before suspending, attaching or erecting fall protection devices on existing Owner structures or new Owner structures under construction.
- (b) Components attached to structures must be placed on neoprene pads to prevent damage to the structures as directed by the Owner.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 9 OF 12**

Addendum No. 2

- (c) Fall protection systems shall be positioned so that minimum clearance for road and other traffic including operating construction equipment is always provided.

10.2.4 All employees shall be adequately trained on the fall protection equipment, systems and specific work procedures they will be required to use during the course of their duties.

10.3 Rescue Equipment and Training

10.3.1 Before considering the Fire Department (911) as a primary means for rescuing an employee, the Contractor shall:

- (a) Ensure a complete risk assessment of the fall protection system, or confined space, has been carried out by a competent person; and
- (b) Ensure the risk assessment and rescue plan have been reviewed and signed off by the appropriate municipal authority indicating they have:
 - (i) An appropriate response time; and
 - (ii) The necessary rescue equipment; and
 - (iii) The specialized rescue training required.
- (c) Ensure all documentation has been submitted to the Owner, System Safety, for final review and approval prior to project start-up.

10.3.2 If it has been determined that the Fire Department (911) cannot adequately respond to the emergency, and specialty rescue equipment and/or training is required, the Contractor shall ensure that:

- (a) Specific rescue equipment for Confined Space Rescue or Fall Protection Rescue is on site as required and in readiness at all times; and
- (b) A sufficient number of employees are fully qualified as "rescuers" and are on site in order to carry out an efficient and effective rescue of a co-worker.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 10 OF 12**

Addendum No. 2

11.0 Hot Work Permit

- 11.1 The Contractor shall not undertake any Hot Work or otherwise cause a source of ignition to be created at the Place of Work without being issued a Hot Work Permit by the Owner and ensuring all measures have been implemented to prevent a fire from starting.
- 11.2 The Owner issued Hot Work Permit may be supplemented by the Contractor's own Hot Work Program with the prior written permission of the Owner. Such permission is conditional upon the Contractor's Hot Work Program being reviewed and accepted by the Owner.
- 11.3 The Contractor shall provide the Owner the Hot Work Program documentation and training records for all workers, whether its own employees or a subcontractor's, engaged in the performance of the Hot Work for the Owner's review and approval prior to being issued a Hot Work Permit.
- 11.4 The Owner may at any time, at its sole discretion, revoke the Hot Work Permit. The Contractor shall be responsible for all additional costs incurred as a result of the revocation of the Hot Work Permit including, but not limited to, required changes to work methods or delays. The Owner shall not entertain any claims for additional payment or extension of time as a result of such revocation.
- 11.5 The Contractor shall solely be responsible for any and all damages incurred as the result of any fire or the initiation of any emergency procedures found to be caused by the Contractor's Hot Work methods.

12.0 Workplace Hazardous Materials Information System (WHMIS)

- 12.1 Be familiar with and comply to WHMIS Regulations:
- 12.2 Properly label controlled products.
- 12.3 Provide proper warning labels and training at the site.
- 12.4 Provide copies of the material safety data sheets (MSDS) for any controlled product at the Place of Work before the product is delivered to the site.
- 12.5 Be responsible for all applicable requirements of the regulations.
- 12.6 Before commencing any work at the Place of Work, attend a pre-construction meeting in a location to be determined by the Consultant and provide a proposal as to how hazardous materials will be stored and dispensed at the Place of Work. Also, present a proposal as to how hazardous and contaminated materials will be

GENERAL REQUIREMENTS SAFETY REQUIREMENTS

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01600
PAGE 11 OF 12

Addendum No. 2

removed from the Place of Work. The disposal of hazardous materials shall comply with all legislative and municipal requirements.

- 12.7 Provide a list and proper handling procedures for all hazardous materials.

13.0 Metrolinx Construction Safety Manual

- 13.1 The Owner will issue an appropriate number of copies of its "Safety Guidelines For Contractors, Consultants and Project Coordinators" to the Contractor at the pre-construction meeting.
- 13.2 Contractors are responsible for familiarizing themselves and their employees with the contents of this manual.
- 13.3 Contractors shall distribute copies of this manual to their subcontractors and shall ensure that they, and their employees, are familiar with its content.
- 13.4 Contractors shall ensure that all persons given a copy of the "Safety Guidelines For Contractors" complete the acknowledgement on the second page of the manual and return it to the Consultant.
- 13.5 The requirements of this manual shall apply to the Work and the Place of the Work.

14.0 Site Safety Personnel

- 14.1 In the event the Owner deems it necessary, because of the Work and/or Safety Performance, the Contractor shall assign to the Place of Work a full time "Safety Officer" to assist the Contractor's representative in the discharging of safety responsibility on site, at no additional costs.
- 14.2 The Safety Officer shall have the training, experience and credentials to ensure compliance to the *Occupational Health and Safety Act* at the Place of Work.

15.0 Site Security

- 15.1 The Contractor shall ensure all personnel employed at the Place of Work, whether its own employees or a subcontractor's, wear an identification badge. At Owner locations where access is restricted the Owner shall supply the identification badges. At all other locations it shall be the Contractor's responsibility to provide the identification badges.

**GENERAL REQUIREMENTS
SAFETY REQUIREMENTS**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01600
PAGE 12 OF 12**

Addendum No. 2

- 15.2 A daily site log shall be maintained of all persons granted access to the "Place of Work" under the control and custody of the Contractor.
- 15.3 The Contractor shall ensure that all required documentation is available upon request by the Consultant.
- 15.4 The Contractor shall not allow "Unauthorized" persons to access the "Place of Work".

END OF SECTION

GENERAL REQUIREMENTS MATERIALS AND EQUIPMENT

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01700
PAGE 1 OF 3

Addendum No. 2

1.0 General

- 1.1 Provide material and equipment of specified design and quality, performing to published ratings and for which replacement parts are readily available.
- 1.2 Use products of one manufacturer for equipment or material of same type or classification unless otherwise specified.

2.0 Manufacturer's Instructions

- 2.1 Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation methods.
- 2.2 Notify the Owner in writing of any conflict between these Specifications and manufacturer's instructions. The Owner will designate which document is to be followed.

3.0 Fastenings

- 3.1 Provide metal fastenings and accessories in same texture, colour and finish as base metal in which they occur. Prevent electrolytic action between dissimilar metals. Use non-corrosive fasteners, anchors and spacers for securing exterior work.
- 3.2 Space anchors within limits of load bearing or shear capacity and ensure that they provide positive permanent anchorage. Wood plugs are not acceptable.
- 3.3 Keep exposed fastenings to minimum, space evenly and lay out neatly.
- 3.4 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.
- 3.5 Do not use explosive actuated fastening devices.

4.0 Fastening Equipment

- 4.1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- 4.2 Use heavy hexagon heads, semi-finished unless otherwise specified.
- 4.3 Bolts may not project more than one diameter beyond nuts.

GENERAL REQUIREMENTS MATERIALS AND EQUIPMENT

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01700
PAGE 2 OF 3**

Addendum No. 2

- 4.4 Use plain type washers on equipment, sheet metal and shaft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

5.0 Delivery and Storage

- 5.1 Deliver, store and maintain packaged material and equipment with manufacturer's seals and labels intact.
- 5.2 Prevent damage, adulteration and soiling of material and equipment during delivery, handling and storage. Immediately remove rejected material and equipment from the site.
- 5.3 Store material and equipment in accordance with suppliers' instructions.
- 5.4 Touch-up damaged factory finished surfaces to the Owner's satisfaction. Use primer or enamel to match original. Do not paint over name plates.

6.0 Origin of Materials

- 6.1 Materials, plant and equipment supplied for Work shall be as far as possible and unless otherwise specified, of Canadian manufacture.

7.0 Ownership of Materials

- 7.1 Unless otherwise specified, materials existing on site at time of signing Contract shall remain the property of Owner.
- 7.2 Equipment and materials delivered on site to form part of Work shall be property of the Owner but the Owner shall not be liable for any loss or damage from any cause.
- 7.3 Contractor shall remove surplus or rejected materials off site when notified by Consultant as required by site conditions.

8.0 Specified Material and Equipment

- 8.1 Materials and equipment shall be as specified.

9.0 Substitutions After Award of Contract

- 9.1 Request for substitutions of specified materials and equipment other than alternatives accepted prior to award of contract will not be considered unless

**GENERAL REQUIREMENTS
MATERIALS AND EQUIPMENT**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01700
PAGE 3 OF 3**

Addendum No. 2

request is accompanied by a written statement from Contractor giving reasons why specified item cannot or should not be used, evidence of quality of substitution and amount of change in Contract Amount.

- 9.2 Written statement shall include full details, stating clearly name of manufacturer or supplier, together with a detailed description of substitutions, and stating reduction from or addition to contract price, if any for the use of alternative material or equipment.
- 9.3 The Consultant reserves right to accept or reject substitution as he sees fit and also to claim for the Owner financial benefit of substitution if accepted. Rejection by Consultant of proposed alternative material or equipment is final and does not become obligated to give any reason for his action.
- 9.4 Approved equipment substitutions must not exceed space requirements allocated on Drawings. Be responsible for additional cost resulting from acceptance of a substitute piece of equipment for this Division of Work.
- 9.5 Substitutions shall not be considered accepted unless authorized in writing by the Consultant.

10.0 Date-Related Compliance

- 10.1 All materials, equipment, systems and components thereof used in connection with the provision of the Work, individually or in combination as the case may be, shall accurately and automatically process any and all date and date-related data including, but not limited to calculating, comparing and sequencing when used in accordance with the documentation provided by the Contractor.

END OF SECTION

GENERAL REQUIREMENTS CLEANING

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01710
PAGE 1 OF 1

Addendum No. 2

1.0 General

- 1.1 Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
- 1.2 Store volatile wastes in covered metal containers, and remove from premises daily.
- 1.3 Prevent accumulation of wastes which create hazardous conditions.
- 1.4 Provide adequate ventilation during use of volatile or noxious substances.

2.0 Products

- 2.1 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.

3.0 Execution

- 3.1 Cleaning During Construction
 - 3.1.1 Ensure that the work site is kept clean and tidy at all times throughout the construction period. Remove all rubbish and debris promptly as it accumulates. Ensure that all sub-trades conform similarly.
 - 3.1.2 Promptly remove from site and dispose of surplus materials.
 - 3.1.3 Do not accumulate scrap piles at any time. Fires will not be permitted on the site.
 - 3.1.4 Provide on-site containers for collection of waste materials, and rubbish.
 - 3.1.5 Vacuum clean interior work areas when ready to receive finish painting, and continue vacuum cleaning on an as-needed basis until work area is ready for substantial completion or occupancy.
 - 3.1.6 Schedule cleaning operations so that resulting dust and other contaminants will not fall on wet, newly painted surfaces.

END OF SECTION

GENERAL REQUIREMENTS PROJECT CLOSEOUT

VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133

SECTION 01800
PAGE 1 OF 3

Addendum No. 2

1.0 Final Cleaning

- 1.1 Remove dust and soil from all surfaces affected by Work by vacuuming, damp mopping, washing or scrubbing, as required.
- 1.2 Clean all equipment and accessories.
- 1.3 Remove all temporary labels, protective coatings, markings and tags, and thoroughly clean adhesive off surfaces.
- 1.4 Avoid contamination of surrounding surfaces with cleaning fluids. Install temporary protection, if required, and remove same immediately upon completion of cleaning operation involved.
- 1.5 Methods of cleaning shall be in accordance with Manufacturer's recommendations of the finishes involved.
- 1.6 Soaps, detergents, waxes, and other cleaning materials and methods shall be as recommended by Manufacturer of finish surface material involved.
- 1.7 Use a heavy duty type industrial machine for all vacuum cleaning.
- 1.8 Exercise extreme care with abrasive and chemical cleaning agents and verify their compatibility with finish and material to be cleaned.

2.0 Systems Demonstration

- 2.1 Prior to final inspection, demonstrate operation of each system to the Owner.
- 2.2 Instruct personnel in operation, adjustment, and maintenance of equipment and systems, using provided operation and maintenance data as basis for instruction.

3.0 Project Record Drawings

- 3.1 The Consultant will provide one set of white prints for each major trade section of this Contract for recording "as constructed" information.
- 3.2 The Contractor shall co-ordinate and maintain project "as-constructed" record drawings and record accurately significant deviations from Contract Documents caused by site conditions and changes ordered by Consultant and approved by the Owner.
- 3.3 Record following information:

**GENERAL REQUIREMENTS
PROJECT CLOSEOUT**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01800
PAGE 2 OF 3**

Addendum No. 2

- 3.3.1 field changes of dimension and detail; and
- 3.3.2 changes made by Change Order or Field Instructions.
- 3.4 At each project meeting "as-constructed" record drawings shall be reviewed for completeness.
- 3.5 At completion of project and prior to final inspection, submit "as-constructed" drawings to Consultant.

4.0 Operations and Maintenance Data

- 4.1 On completion of project, submit to Consultant four (4) copies of Operations Data and Maintenance Manual, made up as follows:
 - 4.1.1 bind data in vinyl, hard covered, three ring, loose leaf binder for 215 x 280mm sized paper;
 - 4.1.2 enclose title sheet, labelled "Operation Data and Maintenance Manual", project name, date and list of contents; and
 - 4.1.3 organize contents into applicable sections of work. Mark each section by labelled tabs protected with celluloid covers fastened to hard paper dividing sheets.
- 4.2 Include following information plus data specified:
 - 4.2.1 description operation and maintenance instructions for equipment and systems, including a complete list of equipment and parts list. Indicate nameplate information such as make, size, capacity, serial number;
 - 4.2.2 names, addresses and phone numbers of subcontractors and suppliers;
 - 4.2.3 guarantees, warranties and bonds showing:
 - (a) name and address of projects;
 - (b) guarantee commencement date (date of Final Certificate of Completion);
 - (c) duration of guarantee;
 - (d) clear indication of what is being guaranteed and what remedial action will be taken under guarantee; and
 - (e) signature and seal of Contractor; and

**GENERAL REQUIREMENTS
PROJECT CLOSEOUT**

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

**SECTION 01800
PAGE 3 OF 3**

Addendum No. 2

- 4.2.4 additional material used in project listed under various sections showing name of manufacturer and source supply.
- 4.3 Neatly type lists and notes. Use clear Drawings, diagrams or manufacturer's literature.
- 4.4 Include four complete sets of final Shop Drawings, bound separately, indicating corrections and changes made during fabrication and installation.
- 5.0 **Inspection/Takeover Procedures**
 - 5.1 Procedures for Substantial and Total Performance of Work and completion takeover procedures shall be according to OAA/OGCA Document No. 100, December 12, 2007.
- 6.0 **Date-Related Compliance**
 - 6.1 The Owner may, at no additional cost to itself, require the Contractor to demonstrate Date-Related Compliance as specified by Article 10 of Section 01700 - Material and Equipment and/or compliance techniques and test procedures the Contractor followed in order to comply with these requirements.

END OF SECTION

SPECIFICATIONS

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

PAGE 1 OF 1

Addendum No. 2

The Specifications listed in Appendix "A" of Form of Tender are provided as separate electronic files and form part of the Specifications of this Tender Document.

DRAWINGS

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

PAGE 1 OF 1

Addendum No. 2

The Drawings listed in Appendix "A" of Form of Tender are provided as separate electronic files and form part of the Drawings of this Tender Document.

ATTACHMENTS

**VARIOUS METROLINX LOCATIONS
CIVIL WORK FOR AVM DEPLOYMENT
CONTRACT NO. PT-2016-CST-133**

PAGE I OF 1

Addendum No. 2

The Attachments listed in Appendix A of Form of Tender are attached as separate electronic files and form part of this Tender Document.