

TENDER FOR:

BRIDGE REPLACEMENTS ON THE RICHMOND HILL LINE, M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION

TENDER NO: IT-2017-BS-003

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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INTRODUCTION

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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 IT-2017-BS-003, as more particularly described in this Tender Document as required by Metrolinx, which Work relates to the Bridge Replacements on the Richmond Hill Line.
- 1.3 The Work includes, but shall not be limited to providing equipment, labour, materials, environmental control measures, railway flagging protection and means of access to:
 - 1.3.1 Site access,
 - 1.3.2 Supply of flagging subcontractor,
 - 1.3.3 Supply of signal and fibre optic support subcontractors,
 - 1.3.4 Removal and disposal of all items shown on the Contract Drawings,
 - 1.3.5 Environmental controls,
 - 1.3.6 Span replacement at M. 8.50 and M. 8.80,
 - 1.3.7 Full bridge replacement at M. 8.60,
 - 1.3.8 Supply and installation of steel H-piles,
 - 1.3.9 Supply and installation of precast concrete elements,
 - 1.3.10 Supply and installation of cast-in-place concrete pier caps
 - 1.3.11 Supply and installation of sub-drains,
 - 1.3.12 Painting and coating exposed piles and bracing at M.8.50 and M. 8.60,
 - 1.3.13 Damp Proofing and Water Proofing,
 - 1.3.14 Supply and installation of structural steel components,
 - 1.3.15 Track replacement including track shift, ballasting, surfacing, lining, tamping and destressing guardrails
 - 1.3.16 Rail replacement,

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DEFINITIONS

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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 AECOM Canada Ltd. 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.
- 1.9 **"Contractor"** shall have the same meaning ascribed in Definitions of the Contract.

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- 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 St. W., 4th Floor, Toronto, Ontario, Canada M5V 2X4.
- 1.23 **"Procurement Representative"** means the following individual in the Procurement Services Department:

Kim Seto, Procurement Officer, Construction Division

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Telephone number	(416) 202-5540
Email	Kim.Seto@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 to carry out substructure rehabilitation and span replacement as indicated in the Contract Documents.
- 1.36 **"Working Day"** shall have the same meaning ascribed in Definitions of the Contract.

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1.0 General

1.1 ***NOTE: ELECTRONIC BID SUBMISSION

Your Submission for this opportunity must be sent to Metrolinx through the use of **MetrolinxMERX 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	November 23, 2017
Mandatory Site Meeting (further instructions below)	December 4, 2017
Deadline to Submit Request for Alternate Products and Materials	December 18, 2017
Deadline to Submit Questions	December 18, 2017
Last day for issuance of Addenda	January 5, 2018
Closing	January 12, 2018 @ 3:00 p.m. Toronto time
Commencement Date of Work	April 5, 2018.

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.

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- 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 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 Bidder Q and A Template_TENDER-IT-2017-BS-003.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 Bidders shall attend a mandatory site/information meeting as follows:

Date	December 4, 2017
Time	11:00 a.m. Toronto Time
Location	Entrance to East Don Trail off of Wynford Heights Crescent.
Directions	From the Don Valley Parkway (northbound or southbound) exit at Eglinton Ave. Travel north on Wynford Drive and turn right on the second (north) leg of Wynford Heights Crescent. The meeting place will be at the intersection of the East Don Trail and Wynford Heights Crescent.
Instructions	Bidders are to meet at the meeting location and report with the Metrolinx representative dressed in full PPE including steel toe boots, reflective vest, hard hat and protective eyewear to

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sign in prior to the meeting being called to order

Upon completion of Bidder sign-in, the meeting will be called to order and everyone will proceed to the Site Location.



3.2 Meeting location:

- 3.3 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 the Bidder's eligibility to submit a Submission for the Work. Submissions by such Bidders shall be non-compliant and disqualified.
 - 3.3.1 If the Bidder is a Joint Venture any Joint Venture participant may attend the mandatory site/information meeting.
- 3.4 The scope and nature of the Work will be reviewed and a formal tour of the Site shall be conducted as appropriate.
- 3.5 All Bidders, their employees, agents, Subcontractors and Suppliers, shall wear appropriate safety wear at all times while they are on the site including hardhats, reflective vests, steel toe boots and protective eyewear that might be required. Failure to comply shall result in exclusion from the site.
 - 3.5.1 Bidders shall supply their own safety wear. Metrolinx shall not supply any safety wear.

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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.
- 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.

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- 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.
- 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=ToOfqSccw3M. 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.

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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.

6.0 Submission Deadline

- 6.1 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.
 - (a) If the Bidder attempts to submit their Submission, or portions thereof, after the Closing, such documents shall not be accepted by the MERX system.
 - (b) In the event that the MERX system allows late Submissions, this will not supersede any stipulations herein regarding late submissions.
- 6.2 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.
- 6.3 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.
- 6.4 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").
- 6.5 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").

7.0 Clarification of Submissions

7.1 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.

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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.

- 7.2 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.
- 7.3 After the Closing, only information specifically requested by Metrolinx for purposes of clarification shall be considered as additions to a Bidders Submission.
- 7.4 Metrolinx is not obliged to seek clarification of any aspect of a Submission.

8.0 Bidder Qualifications

8.1 Only qualified Contractors will be considered for award of this Contract. In order to be considered qualified, the Contractor shall have been successfully pre-qualified under Metrolinx Prequalification No. SQ-2016-BS-012 Category "A" Rapid Span Bridge Replacement to submit a Tender for the Work of this Contract.

9.0 Insurance

9.1 The Bidder shall, in accordance with the Supplementary General Conditions of the Contract, provide a valid certificate of insurance in the types and amounts specified, within five (5) Business Days of notification of acceptance of its Submission by Metrolinx. This requirement is a pre-condition of execution of the Contract. Failure by the successful Bidder to comply with this requirement shall result in acceptance of the Bidder's Submission to be declared void and forfeiture of the Bidder's Bid Deposit to Metrolinx.

10.0 Workplace Safety and Insurance Clearance Certificate

- 10.1 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.
- 10.2 In addition, the Bidder to whom this Contract is awarded shall furnish a valid Workplace Safety and Insurance Clearance Certificate for the premium rate

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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.

11.0 Parent Company Indemnity

11.1 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, sample included in Attachments, 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.

12.0 Bid Deposit

- 12.1 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 <u>\$650,000.00</u> (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.
- 12.2 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
- 12.3 Bid bonds and letters of credit shall include the Contract name and number.
- 12.4 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.
- 12.5 Certified cheques and bank drafts shall not be deposited and interest shall therefore not be paid.

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- 12.6 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.
- 12.7 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:
 - 12.7.1 Withdrawal of the Submission by the Bidder after the Closing; or
 - 12.7.2 Failure by the Bidder to execute the Contract; or
 - 12.7.3 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.

13.0 Contract Security

- 13.1 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.
- 13.2 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.
 - 13.2.1 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

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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.
- 13.2.2 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
- 13.3 All original specified alternative forms of Contract Security submitted shall have original signatures and original seals where required.
- 13.4 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 disgualified.
- 13.5 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.
- 13.6 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.

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14.0 Alternate Products and Materials

- 14.1 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 Section 1.4 of 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.
- 14.2 Metrolinx shall, within five (5) business days or receipt of such requests, respond as follows:
 - 14.2.1 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
 - 14.2.2 Should Metrolinx, in its sole discretion, not approve the proposed alternate, it shall only inform the Bidder who proposed the alternate of its decision.
- 14.3 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.

15.0 Mandatory Requirements

- 15.1 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.
- 15.2 The mandatory requirements for this Tender Document are as follows:
 - 15.2.1 The Form of Tender must be submitted by the E-Bid Authorized Signer.
 - 15.2.2 Pricing information must be completed and submitted on the Tender Document Forms provided.
 - 15.2.3 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

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suspension of their eligibility to issue a Submission for the Work. Submissions remitted by such Bidders shall be found non responsive and disqualified.

- 15.2.4 Bidders shall submit the required PDF copy of the Bid Deposit , as per Section 12.0 of Instructions to Bidders, with the Submission.
- 15.2.5 Bidders shall submit a PDF copy of the required Agreement to Bond, or specified alternative, as per Section 13.0 of Instructions to Bidders, with the Submission.
- 15.2.6 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.
- 15.2.7 The Bidder shall provide a completed Appendix "F" Mandatory Technical Requirements of Form of Tender with the Submission.

16.0 Rights of Metrolinx

- 16.1 Metrolinx has the right, in its sole discretion:
 - 16.1.1 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 Contractor has been executed and delivered by both parties, without any obligation whatsoever to a Bidder, except the obligation to return the Bid Deposit;
 - 16.1.2 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;
 - 16.1.3 to disqualify any Submission which contains misrepresentations or any other inaccurate or misleading information;
 - 16.1.4 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;
 - 16.1.5 to waive the requirement to check references;

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16.1.6 to not respond to a Bidder's questions;

- 16.1.7 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.
- 16.1.8 to award or not award based on submitted references and/or references independently obtained by Metrolinx;
- 16.1.9 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:
 - (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 16.1.9(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 16.1.9(a) through (c) above.
- 16.1.10 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;

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- 16.1.11 to distribute via Addenda, copies of any Bidder's questions received and responses provided by Metrolinx, to all Bidders who received the Tender Documents;
- 16.1.12 to postpone the Closing, at which time all Bidders who received Tender Documents shall be advised of the new Closing via written Addenda;
- 16.1.13 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;
- 16.1.14 to prepare a written interpretation of any aspect of a Submission and require the relevant Bidder's acknowledgement of the accuracy of that interpretation;
- 16.1.15 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;
- 16.1.16 to correct arithmetical errors in any or all Submissions where such errors affect the Contract Price. Arithmetical corrections will only be 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.
- 16.1.17 to, upon failure of the Bidder whose Submission was accepted to fulfil the conditions of Section 17.2 herein, cancel award of Contract and consistent with industry practice award to another qualified Bidder.

17.0 Contract To Be Executed

17.1 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.

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- 17.2 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.
- 17.3 Upon failure of the Bidder, whose Submission was accepted, to fulfil the conditions of Section 17.2 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.
- 17.4 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.
- 17.5 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.

18.0 **Commencement and Completion**

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

19.0 Subcontractors and Suppliers

- 19.1 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.
- 19.2 Bidders shall be responsible for the distribution of all the Instruments of Contract and Addenda thereto to all Subcontractors or Suppliers.
- 19.3 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

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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.

20.0 Allowances

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

21.0 Submission Evaluation

- 21.1 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:
 - 21.1.1 Contract Price;
 - 21.1.2 Proper Completion of Tender Documents and Appendices;
 - 21.1.3 Compliance to Tender Document Requirements;
 - 21.1.4 Submission of all Mandatory Requirements; and
 - 21.1.5 Attendance at Mandatory Site Visit, if any.
- 21.2 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.

22.0 Conflict of Interest

- 22.1 For the purposes of this section, "Conflict of Interest" shall have the meaning ascribed to it in Appendix "E" of Form of Tender.
- 22.2 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:

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- 22.2.1 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;
- 22.2.2 the Bidder or any Subcontractor thereof is in possession of confidential information relating to the Work; and
- 22.2.3 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.
- 22.3 The Conflict of Interest declaration included in the Form of Tender shall be completed and provided with the Submission.
- 22.4 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.

23.0 Joint Ventures

- 23.1 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.
- 23.2 The Joint Venture shall not change its Joint Venture arrangement without the prior written approval of Metrolinx in its sole discretion.
- 23.3 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.
- 23.4 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.
- 23.5 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.

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24.0 Prohibited Contacts and Lobbying Prohibition

- 24.1 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.
- 24.2 Without limiting the generality of Section 24.1, 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.

25.0 Media Releases, Public Disclosures and Public Announcements

- 25.1 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.
- 25.2 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 Bidder's respective advisors, employees and representatives are permitted to state publicly that it/they are participating in the Tender Process.
- 25.3 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.

26.0 Restriction on Communications Between Bidders – No Collusion

26.1 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

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Bidder. This obligation extends to all team members of a Bidder and all of the Bidder's respective advisors, employees and representatives.

27.0 Disclosure of Information

- 27.1 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.
- 27.2 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.

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

- 28.1 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.
- 28.2 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.

29.0 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.

30.0 Confidential Information of Metrolinx

- 30.1 All information provided by or obtained from Metrolinx in any form in connection with the Submission process;
 - 30.1.1 is the sole property of Metrolinx and shall be treated as confidential;
 - 30.1.2 shall not be used for any purpose other than replying to the Tender Document and the performance of any subsequent agreement; and
 - 30.1.3 shall not be disclosed without prior written authorization from Metrolinx.

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31.0 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.

32.0 Vendor Performance Management Program

- 32.1 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.
- 32.2 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.
- 32.3 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 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.
- 32.4 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.
- 32.5 For the purposes of this Tender Process, the application of the VPR is set out in Attachment # 1 Contract Performance Appraisal.

END OF SECTION

FORM OF TENDER AND APPENDICES

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The Form of Tender comprised of the documents listed below, form part of the Tender Document and are included herein in Word fillable format, as applicable, with the exception of Appendix "B" which is attached as an Excel file entitled "Appendix B IT-2017-BS-003"

DOCUMENT TITLE

Agreement/ Declaration

Appendix "A" – List of Tender Documents

Appendix "B" – Contract Prices (Attached as separate Excel file)

Appendix "C" – Bidder's Qualifications

Appendix "D" – Agreement to Bond

Appendix "E" – Conflict of Interest

Appendix "F" - Mandatory Technical/Personnel Requirements

Appendix "G" – Bidder's Submission Checklist

FORM OF TENDER AGREEMENT/DECLARATION

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

PAGE 1 OF 4

CONTRACT NUMBER: IT-2017-BS-003 RICHMOND HILL LINE, M 8.5, 8.6 AND 8.8 BALA CONTRACT DESCRIPTION: SUBDIVISION BRIDGE REPLACEMENTS

Submission By:

Click here to enter text.

(Full Legal Name of Bidder)

1.0 Contact Information

1.1 Bidder's registered legal business name (or individual) and any other name under which it carries on business:

Click here to enter text.

1.1.1 If a Joint Venture, enter the registered legal business name of the Participant-in-Charge:

Click here to enter text.

1.1.2 If a Joint Venture, enter the registered legal business name of the other Joint Venture members:

Click here to enter text.

1.2 Bidder's (if Joint Venture, insert Participant-in-Charge information) address, telephone and facsimile numbers:

Click here to enter text.

1.3 Name, title, address, telephone, e-mail and facsimile numbers of the contact person(s) for the Bidder (if a Joint Venture, insert Participant-in-Charge information)

Click here to enter text.

1.4 Name of the person who is primarily responsible for the Submission:

FORM OF TENDER AGREEMENT/ DECLARATION

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

PAGE 2 OF 4

Click here to enter text.

2.0 Total Contract Price

The Bidder, by submitting this Submission, hereby offers to Metrolinx to furnish all goods and services necessary to execute the Work described by the Tender Documents, including Addenda, and to perform this Work for the Total Contract Price quoted in Appendix "B" – Contract Prices.
FORM OF TENDER AGREEMENT/ DECLARATION

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

The Contract Price bid in addition to all Unit Prices quoted in Appendix "B" – Contract Prices shall be firm and quoted in Canadian funds. The Contract Price includes all specified cash allowances, contingency allowances (if applicable) and all applicable taxes, except Harmonized Sales Tax (H.S.T.), in force at the date the Submission is sent.

This Form of Tender including all required Appendices is submitted in accordance with the terms and requirements of the Instructions to Bidders.

The Bidder has informed itself of the conditions relating to the Work to be performed and have inspected and is thoroughly familiar with the location of the Work and the plans, Specifications, Drawings and all terms, conditions and covenants of the Contract.

The Contract Price quoted shall represent full payment for all the Work necessary for the proper completion of the Contract.

The Contract Price includes customs duties, royalties, handling, transportation, overhead, profit and all other charges.

The Bidder acknowledges receipt of any and all Addenda issued hereto and that their Submission has been developed in consideration of the Addenda.

The Bidder acknowledges that it meets all mandatory requirements in order for their Submission to be considered further. Failure of a Bidder to meet all of the mandatory requirements shall result in the Bidder's Submission to be deemed non-compliant and shall not being considered further.

The Bidder acknowledges that their Submission includes the appropriate Tender Document Forms. Failure to comply may result in the Bidder's Submission being found non-responsive and disqualified at the sole discretion of Metrolinx.

All Addenda, the Form of Tender and Appendices, the Supplementary Agreement Between Owner and Contractor, the Form of Agreement, the Supplementary Definitions of the Contract, the Supplementary General Conditions of the Contract, the Definitions of the Contract, the General Conditions of the Contract, the General Requirements (Sections 01000 to 01800), Specifications, Drawings and Attachments set out in this Tender Document shall be included in and form part of the Contract. **Remitting a Submission constitutes acknowledgement that the Bidder has read and agrees to be bound by such conditions**.

This Form of Tender including all required Appendices is hereby submitted on the condition and with the full understanding that it is an irrevocable offer by the Bidder for a period of one hundred and twenty (120) calendar days from the Closing and the Bidder hereby covenants that it enter into the Contract with Metrolinx as contemplated by the Tender Documents by executing the CCDC 4, 2011 Unit Price Contract Agreement Between Owner and Contractor and will perform and execute the Work at the Contract Price if it is notified, in writing, by Metrolinx

FORM OF TENDER AGREEMENT/ DECLARATION

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

within one hundred and twenty (120) calendar days of the Closing that it is the successful Bidder.

The Bidder hereby declares that no Conflict of Interest exists in accordance with Appendix "E" – Conflict of Interest.

The Bidder hereby declares that no person, firm or corporation (including any agent of Metrolinx), other than the undersigned or Suppliers or Subcontractors identified herein or engaged in the ordinary course of business, has any interest in this call for Tenders or the proposed Contract for which the Submission is made.

The remitting of a Submission by a Bidder shall be considered prima facie evidence that the above requirements have been met. Failure to have complied with said requirements shall not relieve the Bidder of its obligation to enter into the Contract and to carry out the Work for the terms and conditions set forth in the Tender Documents.

The Bidder acknowledges that by way of the E-Bid Authorized Signer remitting a Submission, the Bidder is agreeing to be bound to each and every term, condition, article and obligation of the Tender Document and any resultant Contract.

The Bidder acknowledges that consistent with Section 17.2 of Instructions to Bidders, failure by the Bidder, whose Submission was accepted by Metrolinx, to execute and deliver the Form of Agreement and Contract Documents with the required Insurance Certificates, 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.

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

The following is the list and description of documents which form part of the Tender Document for the Work:

TITLE NO OF PAGES	<u>S</u>
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Introduction	
Definitions	
Instructions To Bidders20	
Form of Tender4	
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Appendix "B" – Contract Prices4	
Appendix "C" – Bidder's Qualifications1	
Appendix "D" – Agreement to Bond1	
Appendix "E" – Conflict of Interest2	
Appendix "F" – Mandatory Technical/Personnel Requirements1	
Appendix "G – Bidder's Submission Checklist1	
Supplementary Agreement Between Owner and Contractor	
Form of Agreement1	
Supplementary Definitions of the Contract5	
Definitions of the Contract1	
Supplementary General Conditions of the Contract	
General Conditions of the Contract1	

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01300	Shop Drawings and Other Submittals	4
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01500	Temporary Facilities	.5
01545	Railway Safety Requirements	.5
01560	Environmental Protection	13
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01700	Materials and Equipment	.3
01710	Cleaning	.1
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02140	Dewatering3
02225	Site Demolition and Removals4
02250	Temporary Support for Fiber Optic and Communication Cables5
02270	Erosion Control2
02311	Site Grading6
02315	Excavating, Trenching and Backfilling6
02362	Dust & Mud Control1
02372	Rip Rap and Armour Stone3
02383	Piling7
02620	Sub-drainage2
02701	Granular Materials4
02725	Track Closures6
02906	Planting of Trees, Shrubs and Ground Cover15
02911	Top Soil Placement and Grading5
02922	Hydraulic Seeding6
02930	Landscape Maintenance and Warranty4
02940	Wayside Signs2
02950	Railway Track Construction25
02951	Supply of Concrete Ties18
02952	Supply of Track Ballast8
02955	Railway Flagging Protection3

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03201	Concrete Reinforcement	4
03310	Concrete Work	7
03311	Precast Concrete Elements	3
03312	Precast Concrete L-walls and Blocks	4
05121	Structural Steel Fabrication	13
05122	Installation of Steel Spans	6
07110	Bearings	7
07111	Damp Proofing	2
07112	High Performance Waterproofing System	12
07113	Ballast Mat System	10
09900	Coating of Structural Steel	7
16000	Signals Summary of Work	3
16010	General Signal Requirements	8
16090	Signal Systems Testing	7
16120	Signal Track Appliances	2

DRAWINGS

04	Cover Sheet
05	Signature Sheet
06	List of Drawings
S-100A	Drawing Notes (1 of 2)
S-100B	Drawing Notes (2 of 2)
E-100A	Environmental Notes and Details
E-100B	Tree Restoration Notes and Details

Bridge M. 8.50 Bala Sub.

S-101	General Arrangement (1 of 2)
S-102	General Arrangement (2 of 2)
S-103	Pier Modification and Reconstruction
S-104	Precast Backwall Details
S-105	Precast Approach Slab Layout
S-106	L-Shaped Precast Concrete Details

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

S-107	Pony Bent Details	
S-108	5.87 m Beam Span Layout	
S-109	5.82 m Beam Span Layout	
S-110	Beam Span Connection and Pile Reinforcing Details	
S-111	26.2 m DPG Span Layout	
S-112	26.2 m DPG Span Details	
S-113	26.2 m DPG Span Bearing Details	
S-114	Pedestal Details (1 of 2)	
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S-116	Precast Concrete Deck Slab Layout	
S-117	Precast Concrete Deck Slab Details – Type A	
S-118	Precast Concrete Deck Slab Details – Type B	
S-119	Trainmen's Walkway and Handrail Layout	
S-120	Trainmen's Walkway and Handrail Details (1 of 3)	
S-121	Trainmen's Walkway and Handrail Details (2 of 3)	
S-122	Trainmen's Walkway and Handrail Details (3 of 3)	
S-123	Concrete Repair Details	
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E-101	Environmental Plan	
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Bridge M. 8.60 Bala Sub.		
S-201	General Arrangement (1 of 2)	
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S-203	Borehole Log	
S-204	Pile Layout	
0.005	Dila Daamid Talala	

S-205 Pile Record Table

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RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

S-206	Pier Modification and Reconstruction
S-207	Precast Abutment Cap Details
S-208	Backwall Details (1 of 2)
S-209	Backwall Details (2 of 2)
S-210	Precast Approach Slab Layout
S-211	L-Shaped Precast Concrete Details
S-212	Backwall Installation Details
S-213	CIP Pier Cap Details
S-214	Pedestal Details (Type 1)
S-215	Pedestal Details (Type 2)
S-216	4.54 m Beam Span Layout (Spans 2 and 4)
S-217	7.60 m Beam Span Layout (Spans 1 and 5)
S-218	Beam Span Bearing Details (1 of 2)
S-219	Beam Span Bearing Details (2 of 2)
S-220	26.40 m DPG Span Layout
S-221	26.40 m DPG Span Details
S-222	26.40 m DPG Span Bearing Details
S-223	Precast Concrete Deck Slab Layout
S-224	Precast Concrete Deck Slab Details
S-225	Trainmen's Walkway and Handrail Layout
S-226	Trainmen's Walkway and Handrail Details (1 of 2)
S-227	Trainmen's Walkway and Handrail Details (2 of 2)
S-228	Concrete Repair Details
S-229	Inspection Access
S-230	Miscellaneous Steel (1 of 2)
S-231	Miscellaneous Steel (2 of 2)
C-200	Construction Limits
C-201	Track Alignment Data
C-202	Track Plan and Profile
C-203	Track Typical Sections

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

C-204	Track Sections
E-201	Environmental Plan
E-202	Tree Inventory and Preservation Plan
E-203	Vegetation Management Plan
Bridge M. 8.80 Bala S	Sub.
S-301	General Arrangement
S-302	Pier Modification and Reconstruction (1 of 2)
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S-304	23.23 m DPG Span Layout
S-305	23.23 m DPG Span Details
S-306	23.23 m DPG Span Bearing Details
S-307	Precast Concrete Deck Slab Layout
S-308	Precast Concrete Deck Slab Details
S-309	Trainmen's Walkway and Handrail Layout
S-310	Trainmen's Walkway and Handrail Details (1 of 2)
S-311	Trainmen's Walkway and Handrail Details (2 of 2)
S-312	Concrete Repair Details
S-313	Inspection Access
S-314	Miscellaneous Steel
E-301	Environmental Plan
E-302	Tree Inventory and Preservation Plan
E-303	Vegetation Management Plan

ATTACHMENTS

Bidder Q and A Temp	plate	1
Sample Letter of Cree	dit	1
Parental Guarantee		1
Document # 1	Contract Performance Appraisal	1
Document # 2	SCP 1005 – Instruction to Excavators for the Protection of Underground S&C Cables	15
Document #3	Standard Drawing Location for Bridge Name Plate	

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

	No. TD-05 Lm (Use in place of version in Document #16)	1
Document #4	EXP - Geotechnical Report – Bala M. 8.60	79
Document #5	EXP - Pier Concrete Cores Report	29
Document #6	RWDI – Noise and Vibration Report	31
Document #7	Standard Drawings T-002 and T-004 - Concrete Tie &	
	Concrete Guard Rail Tie and Drawing by CXT Inc.	
	12 Tie Convergence Set, No. 419G-22B21, Sheet 2	3
Document #8	Wayside Sign Post for Aluminum Handrails,	
	Bridges M. 12.44 and M. 14.55 Bala Sub., SK-BAL-14.55	1
Document #9	Crushed Rock Track Ballast Specification	7
Document #10	Rail Corridors Infrastructure Handover Protocols	20
Document #11	Metrolinx Safety Guidelines for Contractors, Consultants	
	and Project Coordinators	75
Document #12	Original Drawings Mile 8.50	21
Document #13	Original Drawings Mile 8.60	18
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Document #15	Daily Report - Abrasive Blast Cleaning Enclosure Checks	1
Document #16	General Guidelines for Design of Railway Bridges and	
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Document #17	GO Transit Track Standards (RC-0506-02TRK) including four b	ulletins
		401
Document #18	CN Standard Plan, Signs, TS-720 Sheets 9 and 10, Signs	2
Document #19	CN Standard Plan, Guardrails, TS-1108	3

END OF SECTION

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

1.0 Contract Unit Prices

- 1.1 Contract Unit Prices are subject to the Form of Tender in addition to this Appendix "B" Contract Prices.
- 1.2 Payment for services rendered and goods supplied in accordance with the terms and conditions of the Contract shall be based on the requirements of the Tender Document Form Form of Tender in addition to the following:
 - 1.2.1 The Total Contract Price bid shall be firm and quoted in Canadian funds.
 - 1.2.2 The Total Contract Price includes all specified cash allowances, contingency allowances (if applicable) and all applicable taxes, except Harmonized Sales Tax (H.S.T.), in force at the date the Submission is submitted.
 - 1.2.3 The Total Contract Price quoted shall represent full payment for all the Work necessary for the proper completion of the Contract.
 - 1.2.4 The Total Contract Price includes all labour, superintendence, plant, tools, appliances, equipment, supplies and other accessories, services and facilities customs duties, royalties, handling, transportation, travel overhead, profit and all other charges.
 - 1.2.5 The quantities shown in the Schedule of Prices are estimated. The Contract Price shall be the final sum of the products of the actual quantities that are incorporated in, or made necessary by the Work, as confirmed by count and measurement, and the appropriate Contract Unit Prices, together with any adjustments that are made in accordance with the provisions of the Contract Documents.
 - 1.2.6 Deductions from the said Contract, if any, shall be made at the Unit Prices shown in this Appendix "B" Contract Prices of the Form of Tender.
 - 1.2.7 The Contract Price shall be the sum of the products of the estimated quantities and the appropriate Contract Unit Prices in the Schedule.

2.0 Provisional Items

2.1 The Provisional Items listed in the attached Excel file entitled *Appendix B*_IT-2017-BS-003.*x/sx*, shall be considered options to be exercised at the sole discretion of Metrolinx and shall be subject to the provisions of Supplementary

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

General Condition GC 4.3 – Provisional Items. The Contract Unit Prices as stated below shall be for completed Work "in place" and shall be inclusive of all costs related thereto, including all overhead, profit and applicable taxes, except Harmonized Sales Tax, unless otherwise specified by Metrolinx and shall form part of the Submission.

3.0 Allowances

- 3.1 Cash Allowances
 - 3.1.1 Cash Allowances are subject to GC 4.1 of General Conditions of the Contract.
 - 3.1.2 Descriptions of each Cash Allowance are listed below and amounts are specified in the attached Excel spreadsheet.
- 3.2 Description of Cash Allowances
 - 3.2.1 Cash Allowance Testing and Inspection
 - (a) This Cash Allowance is to be used solely for work pertaining to testing and inspection not currently covered under Quality Assurance, which become apparent during the course of the Work. Part or all of these funds shall be administered on a case by case basis as the requirement for testing and inspection arises for work pertaining to:
 - (i) Track Construction;
 - (ii) Track Materials;
 - (iii) Structure Rehabilitation;
 - (iv) Span Replacement.
 - 3.2.2 Cash Allowance Relocation of Bell360 Fibre Optic
 - (a) This Cash Allowance is to relocate the existing Bell360 fibre optic infrastructure to allow for the replacement of bridge spans described elsewhere in the Contract. This is a sole source item which shall be carried out by the Owner of the fibre optic cable infrastructure, Bell360. This item shall include detailed design, all labour, material (incl. cable, structures, etc.), equipment, environmental and traffic protection required to carry out the work. In addition to the above, testing and

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

commissioning of the relocated infrastructure shall be carried under this item.

- (b) Payment shall be made monthly on a percent complete basis. Full payment shall not be made until completion of the relocations including testing and commissioning.
- 3.2.3 Cash Allowance Relocation of CN Signal Cable
- (a) This Cash Allowance is to relocate the existing CN signal cable infrastructure to allow for the replacement of bridge spans described elsewhere in the Contract. This is a sole source item which shall be carried out by the Owner of the signal cable infrastructure, CN. This item shall include detailed design, all labour, material (incl. cable, structures, etc.), equipment, environmental and traffic protection required to carry out the work. In addition to the above, testing and commissioning of the relocated infrastructure shall be carried under this item.
- (b) Payment shall be made monthly on a percent complete basis. Full payment shall not be made until completion of the relocations including testing and commissioning.
- 3.3 Contingency Allowances
 - 3.3.1 If applicable, Contingency Allowances are subject to GC 4.2 of General Conditions of the Contract.

4.0 **Completion of Appendix B**

- 4.1 Bidders shall fully complete the Excel file entitled "Appendix B" and insert a Unit Price into each space provided under the Contract Unit Price column.
- 4.2 The file entitled "Appendices B", must be returned as a separate file preferably in Excel format and may not be retyped or recreated. Failure to follow the submission instructions or format requirements may result in the Submission being found non-responsive and disqualified.
- 4.3 It is Metrolinx preference that Bidders submit the pricing using the appended Excel file format to facilitate the Metrolinx pricing evaluation process.
- 4.4 The Excel spreadsheet pricing table is numbered, under the "Item No." column to correspond with the following stages of the Work:
 - (a) Part A: General

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

- (b) Part B: M. 8.50 Bala
- (c) Part C: M. 8.60 Bala
- (d) Part D: M. 8.80 Bala
- (e) Part E: M. 7.40 Bala
- (f) Part F: M. 12.44 Bala
- (g) Part G: M. 14.55 Bala
- (h) Part H: M. 8.94 Bala
- (i) Part I: Cash Allowances
- 4.5 If a "0" is entered in any of the spaces where price information is to be provided, it shall be interpreted as meaning the Contractor shall provide the specified service to Metrolinx at no charge.
- 4.6 If any space is left blank or an entry of "N/C" or "N/A" or "—" is entered where price information should be entered then the Submission may be found non-responsive and disqualified consistent with the provisions of the Instructions to Bidders.

FORM OF TENDER APPENDIX "C" – BIDDER'S QUALIFICATIONS

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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1.0 **Qualifications**

1.1 Not Applicable.

FORM OF TENDER APPENDIX "D" - AGREEMENT TO BOND

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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Name of Owner:	METROLINX

Description of Work:	Bridge Replacements
Description of work.	Dridge Replacements

Location: Richmond Hill Line M. 8.5, 8.6 and 8.8 Bala Subdivision

Contract No: **IT-2017-BS-003**

For good and valuable consideration, the undersigned surety (the "Bonding Company") hereby agrees to be bound as surety for

<u>Type in Full Legal Name of Bidder</u> (Full Legal Name of Bidder)

in a Performance Bond and a Labour and Materials Payment Bond each totalling Fifty Per Cent (50%) of the Contract Price (the "Bond Amount") pursuant to the Tender Documents to which this Agreement to Bond is attached, for the full and due performance of the Work (as defined herein), if the Tender for the Contract is accepted by Metrolinx.

It is a condition of the Tender Process that if the Bidder's Submissions is accepted, application for a Performance Bond and a Labour and Material Payment Bond by the Bidder must be completed with the undersigned within five (5) Working Days of acceptance of the Submission by Metrolinx. The undersigned acknowledges that failure to obtain a Performance Bond and a Labour and Materials Payment Bond equal to the Bond Amount within the time period stipulated herein may result in the immediate revocation of acceptance of the Bidder's Submission by Metrolinx and forfeiture of the Bidders' Bid Deposit.

In witness whereof the Bonding Company has executed this agreement this ____ day of_____, 20____.

(Name of Bonding Company)

(Signature of authorized person signing for Bonding Company)

(Position)

FORM OF TENDER APPENDIX "E" - CONFLICT OF INTEREST

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

1.0 Conflict of Interest

- 1.1 If the box below is left blank, the Bidder will be deemed to declare that (a) there was no Conflict of Interest in preparing its Submission; and (b) there is no foreseeable Conflict of Interest in performing the contractual obligations contemplated in the Tender Document. Otherwise, if the statement below applies, check ("X") the box.
 - □ The Bidder declares that there is an actual or potential Conflict of Interest relating to the preparation of its Submission, and/or the Bidder foresees an actual or potential Conflict of Interest in performing the contractual obligations contemplated in the Tender Document.
- 1.2 If the Bidder declares an actual or potential Conflict of Interest by marking the box above, the Bidder must set out below details of the actual or potential Conflict of Interest:

<u>Type detail conflict of interest</u> <u>Type detail conflict of interest</u>

1.3 The following individuals, as employees, advisers, or in any other capacity (a) participated in the preparation of our Submission (whether as employees, advisors, or in any other capacity); AND (b) were employees, advisors or consultants of Metrolinx at any time within the twelve (12) months prior to the Closing:

Name of Individual: <u>Type</u>
Job Classification: <u>Type</u>
Department: <u>Type</u>
Last Date of Employment with Metrolinx: <u>Type</u>
Name of Last Supervisor: <u>Type</u>
Brief Description of Individual's Job Functions:
Туре
Brief Description of Nature of Individual's Participation in the Preparation of
the Submission:
<u>Type</u>

1.4 (Repeat above for each identified individual)

FORM OF TENDER APPENDIX "E" - CONFLICT OF INTEREST

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

PAGE 2 OF 2

The Bidder agrees that, upon request, the Bidder shall provide Metrolinx with additional information from each individual identified above in the form prescribed by Metrolinx.

FORM OF TENDER APPENDIX "F" – MANDATORY TECHNICAL/PERSONNEL REQUIREMENTS

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

- 1.0 Bidders shall complete the mandatory technical/personnel requirements compliance checklist below, and send this Appendix "F" with your Submission. Failure of a Bidder to complete and submit this Appendix "F", may result in the Bidder's Submission being found non-responsive and disqualified.
- 2.0 Bidders must meet all mandatory requirements stated below 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 being considered nonresponsive. Non-responsive Submissions shall not be considered further and shall be disqualified.
- 3.0 Bidders shall provide supporting documentation to substantiate compliance to each of the listed mandatory requirements. Failure of a Bidder to provide information required to substantiate compliance to a mandatory requirement, may result in the Bidder's Submission being found non-responsive and disqualified.
- 4.0 Metrolinx has the right but not the obligation, to carry out further investigations to ensure the Bidder and/or designated Subcontractor can meet the mandatory technical/personnel requirements to the satisfaction of Metrolinx in its sole discretion.

Reference Section No.	Mandatory Technical/Personnel Requirements	Compliance (Check Yes or No)	Supporting Documentation Required to Substantiate Compliance
6.0 of Section 01000 – General Instructions	The Bidder has achieved COR™ "Certified" status with IHSA.	YES 🗆 NO 🗆	The Bidder shall provide a screen shot demonstrating "Certified" status with IHSA as it pertains to COR™.

FORM OF TENDER APPENDIX "G" –BIDDER'S SUBMISSION CHECKLIST

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

1.0 Submission Checklist

The following checklist provides the Bidder with a consolidated listing of the requirements for the Submission. Bidders should review the checklist prior to Submission to ensure compliance.

Requirement	Confirmation (left click with your mouse in the box to select)
The Submission has been remitted by the E-Bid Authorized Signer.	
Contact information for the individual responsible for the Submission has been included in the Form of Tender.	
The Bidder understands the requirements for Electronic Bid Submission and will comply with the Submission requirements.	
The Bidder's Submission has been prepared in accordance with the Instructions to Bidders (i.e. mandatory formats, templates and requirements) as outlined in the Tender Documents.	
The Bidder's Price Submission has been completed in full and included with the Submission.	
The Bidder has read through all the Tender Documents including any Addenda that have been issued and these have all been considered in your Submission.	
The Bidder has reviewed the mandatory criteria and acknowledges that it meets all mandatory requirements in order for their Submission to be considered further.	
The Bidder has reviewed the Tender Timetable and understands all the dates and timelines associated with the Tender Process	
The Bidder has attended the Mandatory Site / Information Meeting, if applicable.	
The Bidder has not included any qualifying statements in its Submission	
If a Joint Venture, attach a copy of the Joint Venture agreement electing the Participant-in-Charge.	

SUPPLEMENTARY AGREEMENT BETWEEN OWNER AND CONTRACTOR

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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 31st day of October 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

SUPPLEMENTARY AGREEMENT BETWEEN OWNER AND CONTRACTOR

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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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

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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, 4 th Floor Toronto, Ontario M5V 2X4
The Consultant is:	AECOM Canada Ltd. 5080 Commerce Blvd. Mississauga, ON L4W 4P2
	The name of the representative(s) who will be designated to represent the Consultant through construction will be advised after award.
The Work is:	Richmond Hill Line M. 8.5, 8.6 and 8.8
	Bala Subdivision
	Bridge Replacements

- Contract No. IT-2017-BS-003
- Article A-1: Estimated Date of Commencement of Work: April 5, 2018 Estimated Date of Substantial Performance of the Work: October 4, 2019 Estimated Date of Total Performance of the Work: October 31, 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

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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

1.0 Consultant

Delete the definition of "Consultant" in its entirety and replace it with the following:

"Consultant

The *Consultant* shall be the person or entity designated as the Consultant by the Owner, from time to time."

2.0 Contract Documents

Add the words "in writing" after the word "upon" in the second line of the definition of Contract Documents.

3.0 Contract Time

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

4.0 Working Days

Delete the definition of "Working Days" in its entirety and replace with the following:

"Working Days

Working Days means any day other than: (a) a Saturday or Sunday and (b) any other day on which Metrolinx is not open for business. Each *Working Day* will end at 4:00 p.m. on that day."

5.0 Applicable Law

Add new definition, "Applicable Law", as follows:

"Applicable Law

Applicable Law means all applicable laws, statutes, regulations, orders, by-laws, treaties, judgements, decrees and ordinances applicable from time to time and, whether or not having the force of law, all applicable approvals, standards, codes, requirements, requests, directives, rules, guidelines, instructions, circulars, manuals, and policies of any Governmental Authority having or purporting to have jurisdiction or authority over a party, property, transaction or event, including laws relating to workplace safety and insurance, occupational health and safety and employment standards."

6.0 <u>Act</u>

Add new definition, "Act", as follows:

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

"Act

Act means the Construction Lien Act (Ontario) as amended."

7.0 Confidential Information

Add new definition, "Confidential Information", as follows:

"Confidential Information

Confidential Information means all information of a confidential nature (as determined with reference to its treatment by the Owner) which is provided, disclosed or made available (orally, electronically or in writing or by any other media) by the Owner or the Consultant (or its representatives) to the Contractor (including to employees, contractors, or other representatives thereof). For greater certainty, Confidential Information also includes all construction documents, Personal Information and all of the Owner's materials provided by the Owner, which includes: (a) specifications, drawings, images, software, audio or video recordings, specifications, performance requirements, software development tools, technologies, content, data (including all information whether or not contained in or on any database or electronic information storage system or media owned by or in the custody or control of the Owner), (b) technical information, and any other recorded information, in any form and on any media, that are proprietary to, or controlled or licensed by, the Owner or the Consultant and provided to the Contractor; (c) all procurement documents issued by the Owner; (d) all documentation or source materials (including source code) related to any of the foregoing; and (e) all copies, translations, improvements, modifications, enhancements, adaptations, or derivations made to the aforementioned Owner's materials by the Owner or any third party not performing work under this Contract."

8.0 <u>FIPPA</u>

Add new definition, "FIPPA", as follows:

"FIPPA

FIPPA means the Freedom of Information and Protection of Privacy Act (Ontario) as amended."

9.0 FIPPA Records

Add new definition, "FIPPA Records" as follows:

"FIPPA Records

FIPPA Records means all information, data, records and materials, however recorded, in the custody or control of the Owner, including Confidential Information and Personal Information (as defined in FIPPA). For the purposes of this definition, documents held

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by the *Contractor* in connection with this *Contract* are considered to be in the control of the *Owner.*"

10.0 <u>GC</u>

Add new definition, "GC", as follows:

"GC

GC means the General Conditions of the Contract, as amended by the Supplementary General Conditions".

11.0 Governmental Authority

Add new definition, "Governmental Authority", as follows:

"Governmental Authority

Governmental Authority means any domestic government, including any federal, provincial, territorial, municipal, regional or other local government, and any government established court, agency, tribunal, commission or other authority exercising or purporting to exercise executive, legislative, judicial, regulatory or administrative functions respecting government; provided, however, "Governmental Authority" does not include Metrolinx."

12.0 <u>OHSA</u>

Add new definition, "OHSA", as follows:

"OHSA

OHSA means the Occupational Health and Safety Act (Ontario), as amended."

13.0 Personal Information

Add new definition, "Personal Information" as follows:

"Personal Information

Personal Information has the meaning as set out for the term in FIPPA.

14.0 Submittals

Add new definition, "Submittals", as follows:

"Submittals

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

Submittals are any or all documents or items required by the *Contract Documents* to be provided by the *Contractor* to the *Owner* or the *Consultant*, including but not limited to:

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

15.0 Standard of Care

Add new definition, "Standard of Care", as follows:

"Standard of Care

Standard of Care shall have the meaning set out in GC 3.15."

16.0 Total Performance of the Work

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.*"

17.0 Toxic and Hazardous Substances

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."

18.0 Railway

Add new definition, "Railway", as follows:

"Railway

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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

19.0 Railway's Engineer

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*."

20.0 Railway Flag Person

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."

21.0 Railway Right-of-Way

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*."

22.0 <u>WSIB</u>

Add new definition, "WSIB", as follows:

WSIB

WSIB means the Workplace Safety and Insurance Board."

23.0 Unit Price

Add the words "The Unit Price includes customs duties, royalties, handling, transportation, overhead, profit and all other charges." to the end of the definition of Unit Price.

DEFINITIONS OF THE CONTRACT

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

1. <u>GENERAL CONDITIONS OF THE CONTRACT</u>

Where a General Condition or paragraph of the General Conditions of the Contract is deleted in its entirety by these Supplementary General Conditions, it shall be noted as "Intentionally left blank". The numbering of the remaining General Conditions or paragraphs shall remain unchanged, and the numbering of the deleted item will be retained.

PART 1 GENERAL PROVISIONS

1.1 GC 1.1 CONTRACT DOCUMENTS

1.1.1 GC 1.1.7

Delete GC 1.1.7 in its entirety and replace with the following:

"1.1.7 If there is a conflict with the *Contract Documents*, it shall be resolved be in accordance with the order of priority set out in Article A-3 *Contract Documents* of the Agreement between the Owner and the Contractor."

1.1.2 **GC 1.1.8**

Delete GC 1.1.8 in its entirety and replace with the following:

"1.1.8 The *Owner* shall provide the *Contractor*, without charge, up to ten copies of the *Contract Documents*. If requested by the *Contractor*, the *Owner* shall provide additional copies, at the cost of the *Contractor*."

1.1.3 GC 1.1.11

Add GC 1.1.11 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

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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."

1.1.4 GC 1.1.13

Add GC 1.1.13 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*."

1.1.5 **GC 1.1.14**

Add GC 1.1.14 as follows:

"1.1.14 The Contractor shall be responsible for completing all Work required by the *Specifications*, whether or not such Work or *Specification* is identified in the Schedule of Unit Prices. For greater certainty, the Schedule of Prices shall represents all costs required to complete the Work.

1.2 GC 1.2 LAW OF THE CONTRACT

1.2.1 GC 1.2.1

Delete GC 1.2.1 in its entirety and replace with the following:

"1.2.1 The parties agree that the law of Ontario, Canada shall govern the interpretation of the *Contract* and irrevocably attorn to the exclusive jurisdiction of the courts of Ontario, Canada and all lawful courts to which decisions can be appealed therefrom."

1.3 GC 1.3 RIGHTS AND REMEDIES

1.3.1 GC 1.3.3

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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Add GC 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."

1.4 GC 1.4 ASSIGNMENT

1.4.1 GC 1.4.1

Delete GC 1.4.1 in its entirety and replace with the following:

"1.4.1 The *Contractor* shall not assign the *Contract*, either whole or in part, without the prior written consent of the *Owner*. The *Owner* may assign the Contract, either in whole or in part, with written notice to the *Contractor*."

1.5 GC 1.5 ADVERTISING AND PUBLIC NOTICES

1.5.1 Add 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*."

1.6 GC 1.6 CONFIDENTIAL INFORMATION AND PERSONAL INFORMATION

1.6.1 Add GC 1.6 - CONFIDENTIAL INFORMATION AND PERSONAL INFORMATION as follows:

"GC 1.6 – CONFIDENTIAL INFORMATION AND PERSONAL INFORMATION

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- 1.6.1 The *Contractor* shall not disclose or provide any Confidential Information 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.
- 1.6.2 The *Contractor* acknowledges that the *Owner* is a provincial crown agency subject to the *Freedom of Information and Protection of Privacy Act* (Ontario), and agrees that all *FIPPA Records* are subject to, and the collection, use, storage and treatment thereof, is governed by *FIPPA*. The *Contractor* agrees to keep all *FIPPA Records* secure and available, in accordance with the requirements of *FIPPA*. In the event of a conflict between the requirements of this Contract and the requirements of *FIPPA*, the requirements of *FIPPA* shall take precedence.
- 1.6.3 In the event that a request is made under FIPPA for the disclosure of any FIPPA Records, the Owner shall provide prompt written notice thereof to the Contractor and the Contractor shall provide any and all relevant FIPPA Records to the Owner on demand for the purposes of responding to an access request under FIPPA. In these circumstances, the Contractor shall provide all FIPPA Records requested to the Owner's Freedom of Information Coordinator (or equivalent) within seven (7) Working Days of receipt of the request from the Owner. Notwithstanding anything to the contrary in this Contract and subject to the Contractor's rights of appeal pursuant to Section 28(9) of FIPPA, the Owner shall determine what FIPPA Records will be disclosed in connection with any such request, in accordance with the requirements of FIPPA (including, without limitation, the requirements with respect to affected persons set out in Section 28 thereof).
- 1.6.4 For greater certainty, the *Contractor* shall advise its representatives and all *Subconsultants* of the requirements of this GC 1.6, and associated requirements set out elsewhere in this *Contract*, and take appropriate action to ensure compliance by such representatives with the terms of this GC 1.6. In addition to any other liabilities of the *Contractor* pursuant to this *Contract* or otherwise at law or in equity, the Contractor shall be liable for all claims arising from any non-compliance with this GC 1.6 by the *Contractor*, *Subconsultant* and their respective personnel."

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1.7 GC 1.7 RECORDS AND AUDIT

1.7.1 Add GC 1.7 - RECORDS AND AUDIT as follows:

"GC 1.7 - RECORDS AND AUDIT

- 1.7.1 The *Contractor* shall maintain complete and accurate books, payrolls, accounts, records 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.
- 1.7.2 The *Owner* may inspect and audit such books, payrolls, accounts records and invoices of 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, invoices and other records to the *Owner* or access to same as required by the *Owner*.
- 1.7.3 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."

1.8 GC 1.8 FURTHER ASSURANCES

1.8.1 Add 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 GC 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

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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*."

PART 2 ADMINISTRATION OF THE CONTRACT

1.9 GC 2.1 AUTHORITY OF THE CONSULTANT

1.9.1 GC 2.1

Delete GC 2.1 in its entirety and replace with the following:

"GC 2.1 AUTHORITY OF THE CONSULTANT

- 2.1.1 The *Consultant* shall be appointed by the *Owner* and shall be the *Owner*'s representative during construction and until the issuance by the *Consultant* of a certificate attesting to the Total Performance of the Work, or at a date specified by the *Owner*. All instructions to the *Contractor* including instructions from the Owner will be issued by the *Consultant*. The *Consultant* will have the authority to act on behalf of the *Owner* only to the extent provided in the *Contract Documents*.
- 2.1.2 The *Consultant* shall inspect the *Work* for its conformity with the plans and Specifications, and record the necessary data to establish payment quantities under the schedule of tender quantities and unit prices or to make an assessment of the value of the Work completed in the case of a lump sum price contract.
- 2.1.3 The *Consultant* will investigate all claims of a change in the *Work* made by the *Contractor* and issue appropriate instructions
- 2.1.4 In the case of non-compliance with the provisions of the *Contract* by the *Contractor*, the *Consultant*, after consultation with the *Owner*, will have the authority to suspend the *Work* for such reasonable time as may be necessary to remedy such non-compliance. The *Contractor* shall not be entitled to any compensation for suspension of the *Work* in these circumstances.

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- 2.1.5 The duties, responsibilities and limitations of authority of the *Consultant* as set forth in the *Contract Documents* may be modified or extended by the *Owner* in writing.
- 2.1.6 If the *Consultant's* employment is terminated, the *Owner* shall appoint a replacement *Consultant* whose status under the *Contract Documents* shall be that of the former *Consultant.*"

1.10 GC 2.2 ROLE OF THE CONSULTANT

1.10.1 GC 2.2.3

Delete the second sentence of GC 2.2.3.

1.10.2 GC 2.2.6

Add the word "schedules" after the word "techniques," in the second line of GC 2.2.6.

1.10.3 GC 2.2.7

Delete GC 2.2.7 in its entirety and replace with the following:

"2.2.7 The *Consultant* will be, in the first instance, the interpreter of the requirements of the *Contract Document.*"

1.10.3 GC 2.2.14

Delete the word "submittals," and replace with the words "*Submittals* which are provided" after the word "*Contractor's*" in the first line of GC 2.2.14.

1.10.4 GC 2.2.16

Delete GC 2.2.16 in its entirety and replace with the following:

"2.2.16 The Consultant will conduct reviews of the Work to determine the dates of *Substantial Performance of the Work* and *Total Performance of the Work*.

1.11 GC 2.3 REVIEW AND INSPECTION OF THE WORK

1.11.1 GC 2.3.8

Add 2.3.8 as follows:

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- "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."*
- 1.11.2 GC 2.3.9

Add GC 2.3.9 as follows:

- "2.3.9 No review of the *Work* or *Submittals* by the *Owner* or the *Consultant* shall relieve the *Contractor* from its responsibility to perform the *Work* in accordance with the *Contract Documents* or create any liability against the *Owner* or the *Consultant*. "
- 1.11.3 GC 2.3.10

Add GC 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."

1.12 GC 2.4 DEFECTIVE WORK

1.12.1 GC 2.4.1

Delete GC 2.4.1 in its entirety and replace with the following:

- "2.4.1 The *Contractor* shall promptly correct defective work that has been rejected by the *Consultant* as failing to conform to the *Contract Documents* whether or not the defective work has been incorporated into the *Work* and whether or not the defect is the result of poor workmanship, use of defective products or damage through carelessness or other act or omission of the *Contractor* at no additional cost to the *Owner*. 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.
 - .1 The *Contractor* shall rectify, in a manner acceptable to the *Owner* and the *Consultant*, all defective *Work* and
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deficiencies throughout the *Work*, whether or not they are specifically identified by the *Consultant*.

.2 The *Contractor* shall prioritize the correction of any defective *Work* which, in the sole discretion of the *Owner*, adversely affects the day to day operations of the *Owner*."

1.12.2 GC 2.4.3

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

PART 3 EXECUTION OF THE WORK

1.13 GC 3.1 CONTROL OF THE WORK

1.13.1 GC 3.1.2

Add the word "schedules" after the word "techniques" in the first line of GC 3.1.2.

1.13.2 GC 3.1.3

Add GC 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."

1.13.3 GC 3.1.4

Add GC 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

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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."

1.14 GC 3.2 CONSTRUCTION BY OWNER OR OTHER CONTRACTORS

1.14.1 GC 3.2.2

Delete GC 3.2.2 in its entirety.

1.15 GC 3.4 DOCUMENT REVIEW

1.15.1 GC 3.4.1

Delete GC 3.4.1 in its entirety and replace with the following:

- The *Contractor* shall review the *Contract Documents* and shall "3.4.1 report promptly to the Consultant any error, inconsistency or omission the Contractor may discover. Such review by the Contractor shall comply with the standard of care described in GC 3.15 STANDARD OF CARE. Except for its obligation to make such review and report the result, the *Contractor* does not assume any responsibility to the Owner or to the Consultant for the accuracy of the Contract Documents. The Contractor shall not be liable for damage or costs resulting from such errors, inconsistencies, or omissions in the Contract Documents, which the Contractor could not reasonably have discovered. If the Contractor does discover any error, inconsistency or omission in the Contract Documents, the *Contractor* shall not proceed with the *Work* affected until the Contractor has received corrected or missing information from the Consultant."
- 1.15.2 GC 3.4.2

Add GC 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."

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1.16 GC 3.5 CONSTRUCTION SCHEDULE

1.16.1 GC 3.5.1

Delete GC 3.5.1 in its entirety and replace with the following:

- "3.5.1 The Contractor shall submit to the Owner and Consultant within five (5) *Working Days* of the date that the Agreement between the *Owner* and the *Contractor* has been fully executed by the *Owner*, and thereafter from time to time in accordance with GC 3.5.2, a construction schedule in computerized form in accordance with the following requirements:
 - .1 takes into account the sequence of construction and completion dates;
 - .2 demonstrates and indicates the logic and timing of major activities of the Work with sufficient detail of critical events and their inter-relationship to demonstrate the Work will be performed in conformity with the Contract Time;
 - .3 indicates proposed start dates and estimated duration for activities; and
 - .4 with sufficient detail to identify the Contractor and each specific Subcontractor and their respective parts of the Work and specific location thereof."

1.16.2 GC 3.5.2

Add GC 3.5.2 as follows:

"3.5.2 The Contractor shall monitor the progress of the Work relative to the construction schedule and provide an updated schedule on a monthly basis or as requested by the Owner. The Contractor shall submit such updated schedule with every application for progress payment in accordance with GC 5.2.8."

1.16.3 GC 3.5.3

Add GC 3.5.3 as follows:

"3.5.3 The Contractor shall immediately advise the Consultant of any revisions required to the schedule as the result of extensions of the Contract Time as provided in Part 6 of the General Conditions – CHANGES IN THE WORK."

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1.16.4 GC 3.5.4

Add GC 3.5.4 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)."

1.17 GC 3.6 SUPERVISION

1.17.1 GC 3.6.1

Add the words "with the prior consent of the Owner" at the end of GC 3.6.1.

1.17.2 GC 3.6.3

Add GC 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 GC 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*."
- 1.17.3 GC 3.6.4

Add GC 3.6.4 as follows:

"3.6.4 The *Owner* may, at any time, object to any representative or employee of the Contractor, Subcontractors or Suppliers and require the *Contractor* to remove, dismiss or replace, or cause to be removed, dismissed or replaced, the said representative or employee."

1.18 GC 3.7 SUBCONTRACTS AND SUPPLIERS

1.18.1 GC 3.7.1.4

Add GC 3.7.1.4 as follows:

".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

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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*."

1.18.2 GC 3.7.3

Delete GC 3.7.3 in its entirety and replace with the following:

"3.7.3 The Contractor may subcontract any part of the Work, subject to these General Conditions and the terms set out in the Contract Documents."

1.18.3 GC 3.7.4

Delete GC 3.7.4 in its entirety and replace with the following:

"3.7.4 The Contractor shall notify the Consultant, in writing, of its intention to subcontract. Such notification shall identify the part or parts of the Work and the Subcontractor with whom it is proposing to subcontract."

1.18.4 GC 3.7.5

Delete GC 3.7.5 in its entirety and replace with the following:

"3.7.5 The Contractor shall not, without the written consent of the Owner, and whose consent shall not be unreasonably withheld, change a Subcontractor who has been engaged in accordance with this General Condition. The *Contractor* shall advise the *Owner* in writing, giving the *Contractor's* reasons for the change."

1.18.5 GC 3.7.7

Add GC 3.7.7 as follows:

"3.7.7 The Contractor shall preserve and protect the rights of the Owner with respect to that part of the Work to be performed under subcontract and shall enter into agreements with the intended Subcontractors to require them to perform their Work in accordance with the Contract Documents and shall be as fully responsible to the Owner for acts and omissions of the Contractor's Subcontractors and of persons directly and indirectly employed by them as for acts and omissions of persons employed directly by the Contractor."

1.18.6 GC 3.7.8

Add GC 3.7.8 as follows:

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"3.7.8 The *Owner's* consent to subcontracting by the *Contractor* shall not be construed as relieving the *Contractor* from any obligation under the *Contract* and shall not impose any liability on the *Owner*. Nothing contained in the *Contract Documents* shall create a contractual relationship between a *Subcontractor* and the *Owner*."

1.18.7 GC 3.7.9

Add GC 3.7.9 as follows:

"3.7.9 Subcontracting shall be conducted in a manner consistent with the principles of open, fair and transparent procurement, and the Contractor shall keep records demonstrating compliance with this requirement in accordance with GC 1.7 RECORDS AND AUDIT."

1.18.8 GC 3.7.10

Add GC 3.7.10 as follows:

"3.7.10 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.*"

1.19 GC 3.8 LABOUR AND PRODUCTS

1.19.1 GC 3.8.2

Add the following sentence to the end of GC 3.8.2:

"The *Contractor* shall not change the source of supply of any *Product* without the written authorization of the *Consultant*."

1.19.2 GC 3.8.3

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

1.19.3 GC 3.8.4

Add GC 3.8.4 as follows:

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- "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*."
- 1.19.4 GC 3.8.5

Add GC 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*."

1.19.5 GC 3.8.6

Add GC 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."

1.20 GC 3.10 SHOP DRAWINGS AND OTHER SUBMITTALS

1.20.1 GC 3.10

Add the words "AND OTHER SUBMITTALS" to the end of the heading for GC 3.10 – SHOP DRAWINGS

1.20.2 GC 3.10.1, GC 3.10.2, GC 3.10.3, GC 3.10.4, GC 3.10.7, GC 3.10.8, GC 3.10.9, GC 3.10.10 and GC 3.10.11

Add the words "and *Submittals*" after the words "*Shop Drawings*" in GC's 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.

1.20.3 GC 3.10.1

Add the following to the end of GC 3.10.1:

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"All Shop Drawings and Submittals, shall be submitted electronically on a FTP site supplied by the *Contractor*, and shall be kept up-to-date during the *Contract.*"

1.20.4 GC 3.10.8.2

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

1.21 GC 3.11 USE OF THE WORK

1.21.1 GC 3.11.1

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

1.21.2 GC 3.11.2

Add the words ", individuals and the areas adjacent to the work." to the end of GC 3.11.2.

1.21.3 GC 3.11.3

Add GC 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."*

1.21.4 GC 3.11.4

Add GC 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.*"

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1.22 GC 3.13 CLEANUP

1.22.1 GC 3.13.2

Add the words "all to the satisfaction of the *Consultant* and the *Owner*, acting reasonably." to the end of GC 3.13.2.

1.22.2 GC 3.13.4

Add GC 3.13.4 as follows:

"3.13.4 The *Owner* shall have the right to back charge the cost of cleaning and removal if such cleaning and removal is not completed within twenty-four (24) hours of written notice to clean or remove. The *Owner* shall also have the right to back charge the cost of damage to the *Place of the Work* caused by the *Contractor's*, *Subcontractor's* or *Supplier's* transportation in and out of the *Place of the Work* if not repaired within five (5) *Working Days* of written notice to repair or before final payment, whichever is earlier."

1.23 GC 3.14 INTERFERENCE

1.23.1 GC 3.14

Add 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

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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.*"

1.24 GC 3.15 – PERFORMANCE BY CONTRACTOR AND STANDARD OF CARE

1.24.1 GC 3.15

Add GC 3.15 PERFORMANCE BY CONTRACTOR AND STANDARD OF CARE as follows:

"GC 3.15 PERFORMANCE BY CONTRACTOR AND STANDARD OF CARE

- 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 ("**Standard of Care**"). 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.*"

1.25 GC 3.16 – RISK OF LOSS AND TITLE

1.25.1 Add GC 3.16 RISK OF LOSS AND TITLE as follows:

"3.16 RISK OF LOSS AND TITLE

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- 3.16.1 Title to portions of the *Work* completed or in the process of being completed and title to all *Product* and material produced and received by the *Contractor* shall pass to the *Owner* on the earlier of payment by the *Owner* or the delivery of any such portion of the Work and materials to the Owner; provided that the Owner is then in compliance with its payment obligations under the *Contract* and that the total value of such portion of the *Work*, *Products* and materials is not greater than the amount of money paid by the *Owner* at that time, to the *Contractor* under this *Contract*.
- 3.16.2 Risk of loss or damage to any part of the *Work* or *Products* shall remain with the *Contractor* until issuance of the *Consultant*'s certificate of *Total Performance of the Work*.
- 3.16.3 The *Contractor* shall take reasonable and proper care of all property, title to which is vested in the *Owner*, while the same is in, on or about the plant and premises of the *Contractor* or otherwise in his possession or subject to his control and shall be responsible for any loss or damage resulting from his failure to do so other than loss or damage caused by ordinary wear and tear."

PART 4 ALLOWANCES AND PROVISIONAL ITEMS

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1.26 PART 4 ALLOWANCES AND PROVISION ITEMS

1.26.1 Part 4

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

1.27 GC 4.1 CASH ALLOWANCE

1.27.1 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."

1.27.2 GC 4.1.4

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

1.28 GC 4.3 PROVISIONAL ITEMS

1.28.1 GC 4.3

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Add 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*.
- 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 "B" 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 "B"– 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."

PART 5 PAYMENT

1.29 GC 5.1 FINANCING INFORMATION REQUIRED OF THE OWNER

1.29.1 GC 5.1.1

Delete GC 5.1.1 in its entirety.

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1.29.2 GC 5.1.2

Delete GC 5.1.2 in its entirety.

1.30 GC 5.2 APPLICATIONS FOR PROGRESS PAYMENT

1.30.1 GC 5.2.4

Delete the words "calendar days" and replace with "*Working Days*" in the first line of GC 5.2.4.

1.30.2 GC 5.2.7

Add the following sentence to the end of GC 5.2.7:

"Any *Products* delivered to the *Place of the Work* but not yet incorporated into the *Work* shall remain at the risk of the Contractor notwithstanding that title has passed to the Owner pursuant to GC 3.16 RISK OF LOSS AND TITLE."

1.30.3 GC 5.2.8

Add GC 5.2.8 as follows:

"5.2.8 The *Contractor* shall submit, with each application for progress payment after the first, a *WSIB* clearance certificate, an updated schedule in accordance with GC 3.5 CONSTRUCTION SCHEDULE, and 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."

1.30.4 GC 5.2.9

Add GC 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

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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."

1.30.5 GC 5.2.10

Add GC 5.2.10 as follows:

"5.2.10 Payment for bonds and insurance will be paid one hundred percent (100%) on the first progress payment, provided that respective invoices are submitted as proof of payment."

1.31 GC 5.3 PROGRESS PAYMENT

1.31.1 GC 5.3.1.2

Add the following sentence to the end of GC 5.3.1.2:

"For clarity, the 10 calendar day period referenced herein shall not commence until such time as the *Consultant* has determined that he has received from the Contractor all required documents supporting the invoice and evidencing the Work being invoiced, all to the *Consultant*'s satisfaction."

1.31.2 GC 5.3.1.3

Delete GC 5.3.1.3 in its entirety and replace with following:

".3 the *Owner* shall make payment to the *Contractor* on account as provided in Article A-5 of the Agreement – Payment no later than twenty (20) calendar days after the date of issuance by the *Consultant* of a certificate for payment."

1.31.3 GC 5.3.3

Add GC 5.3.3 as follows:

"5.3.3 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."

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1.32 GC 5.4 SUBSTANTIAL PERFORMANCE OF THE WORK

1.32.1 GC 5.4.3

Delete GC 5.4.3 in its entirety and replace with the following:

"5.4.3 Immediately prior to the issuance of the certificate of *Substantial Performance* of the *Work*, the *Contractor*, in consultation with the *Consultant*, shall establish a schedule for completion of the *Work* and correcting deficiencies in the *Work*, and the construction schedule shall be deemed to be amended to include this completion schedule."

1.32.2 GC 5.4.4

Add GC 5.4.4 as follows:

- "5.4.4 Prior to submitting its written application for *Substantial Performance of the Work*, the *Contractor* shall submit to the *Consultant* all:
 - .1 guarantees;
 - .2 warranties, completed as per GC 12.3.6;
 - .3 certificates;
 - .4 testing and balancing reports;
 - .5 distribution system diagrams;
 - .6 spare parts;
 - .7 maintenance/operation manuals;
 - .8 training manuals;
 - .9 samples;
 - .10 reports and correspondence from authorities having jurisdiction in the Place of the Work;
 - .11 Shop Drawings, and marked up Drawings;
 - .12 completed as-built drawings in the latest edition of a Computer Assisted Design Drawing software program;
 - .13 inspection certificates;

and other materials or documentation required to be submitted under the *Contract*, together with written proof acceptable to the Owner and the *Consultant* that the *Work* has been substantially performed in conformance with the requirements of municipal, governmental and utility authorities having jurisdiction in the *Place of the Work*."

1.33 <u>GC 5.5 PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE</u> WORK

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1.33.1 GC 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." to the end of GC 5.5.1.2.

1.33.2 GC 5.5.2

Delete the words "the statement" and replace with the words "the documents" in the first line of GC 5.5.2.

1.33.3 GC 5.5.3

Delete GC 5.5.3 in its entirety.

1.33.4 GC 5.5.4

Delete GC 5.5.4 in its entirety and replace with the following:

"5.5.4 This Contract shall be subject to the *Construction Lien Act (Ontario)* (the "Act"). In accordance with the Act, the Owner may retain out of the holdback amount any sums required by law to satisfy any liens against the *Work* and, the *Owner* acting reasonably, may retain any amounts in respect of claims of third parties made to the *Owner* in respect of the *Contract* or the *Work*, and in respect of any claims the *Owner* may have against the *Contractor.*"

1.33.5 GC 5.5.5

Delete GC 5.5.5 in its entirety.

1.34 GC 5.6 PROGRESSIVE RELEASE OF HOLDBACK

1.34.1 GC 5.6.1

Delete 5.6.1 in its entirety and replace with following:

"5.6.1 Where the work of a Subcontractor or Supplier has been performed prior to Substantial Performance of the Work and is certified as completed in accordance with the Act and evidence of such is submitted by the Contractor, along with a clearance certificate or letter from the Workplace Safety and Insurance Board relating to the subcontract, to the satisfaction of the

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Consultant, the Owner shall pay the Contractor the holdback amount retained for such subcontract work, or the Products supplied by such Supplier, on the first calendar day following the expiration of the holdback period for such work stipulated in the Act. The Owner may retain out of the holdback amount any sums required by law to satisfy any liens against the Work and any amounts in respect of claims of third parties made to the Owner in respect of the Contract or the Work."

1.35 GC 5.7 FINAL PAYMENT

1.35.1 GC 5.7.1

Delete GC 5.7.1 in its entirety and replace with the following:

"5.7.1 When the *Contractor* considers that the Work has been totally performed, the Contractor shall submit an application for final payment, together with a written application for review by the Consultant to establish Total Performance of the Work, and any other documents or materials not yet delivered pursuant to GC 5.4.4 and as listed in GC 5.7.5. The Work shall not be deemed to have been performed until all of the aforementioned documents and materials have been delivered, and the Owner may withhold payment in respect of the delivery of any documents or materials in an amount determined by the Consultant in accordance with the provisions of GC 5.8 WITHHOLDING OF PAYMENT and GC 12.1 INDEMNIFICATION. The Consultant shall advise the Contractor upon receipt of an application for final payment if additional documents or materials are required pursuant to this GC 5.7.1 and the Contractor shall respond promptly with such documents or materials."

1.35.2 GC 5.7.2

Delete GC 5.7.2 in its entirety and replace with following:

- "5.7.2 The Consultant will, no later than 10 calendar days after the receipt of an application from the Contractor for final payment, review the Work to verify the validity of the application 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.*"

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The above time period for response shall not commence until all documents and materials required pursuant to GC 5.7.1 have been received by the Consultant."

1.35.3 GC 5.7.3

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 GC 5.7.3.

1.35.3 GC 5.7.4

Delete the number "5" and replace with "15" in the second line of GC 5.7.4.

1.35.4 GC 5.7.5

Add GC 5.7.5 as follows:

- "5.7.5 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, asbuilt drawings and all other relevant literature from *Suppliers* and manufacturers including, but not limited to:
 - (a) equipment, maintenance and operations manuals;
 - (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;
 - (g) shop drawings;
 - (h) testing results;

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- (i) commissioning and quality assurance documentation, and
- (j) HVAC balance reports.
- 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."

1.36 GC 5.8 WITHHOLDING OF PAYMENT

1.36.1 GC 5.8

Add "Subject to GC 12.1 INDEMNIFICATION," at the beginning of GC 5.8.1.

1.37 GC 5.10 CLAIMS FOR LIEN

1.37.1 GC 5.10

Add 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, or cause to be discharged or vacated, immediately but in any case no later than five (5) *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 immediately but in any case no later

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than five (5) *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, within five (5) days, 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."

PART 6 CHANGES IN THE WORK

1.38 GC 6.1 OWNER'S RIGHT TO MAKE CHANGES

1.38.1 GC 6.1.3

Add GC 6.1.3 as follows:

- "6.1.3 For the purpose of valuing cash allowances pursuant to GC 4.1.4, contingency allowances pursuant to GC 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:
 - .1 *Contractor's* combined mark-up for overhead and profit shall be fifteen percent (15%) on work and services completed by its own forces, and five percent (5%) on work and services completed by its *Subcontractors*.
 - .2 *Subcontractors'* combined mark-up for overhead and profit shall be fifteen percent (15%) on work and services completed by their own forces, and five percent (5%) on work and services completed by their subcontractors."

1.38.2 GC 6.1.4

Add GC 6.1.4 as follows:

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- "6.1.4 The mark-ups provided for in GC 6.1.3 shall constitute the only compensation the Contractor shall be entitled to for any and all overhead and profit related to the change, cash allowance or contingency allowance."
- 1.38.3 GC 6.1.5

Add GC 6.1.5 as follows:

The Contractor's and Subcontractor's overhead as set out in GC "6.1.5 6.1.3 shall be deemed to include direct and indirect costs arising from: preparation of change order, change directive, supplemental instruction; obtaining quotations and preparation and submission of any documentation or materials; computer services; cleaning and cleaning services; any increase in the cost of obtaining or maintaining all bonds and insurance policies; any increase in performance, labour and materials payment bonds values and durations; any increase in insurance and workplace safety insurance values and durations; any increase in warranty or guaranty values or durations; estimating, costing, accounting, payroll administration; office administration, processing correspondence, timekeeping, material consumed in the construction contract administration and management process; reproduction, office, shop drawing review and preparation; permits and statutory fees; plant and equipment including operators and equipment rentals; vehicles; place of work office and head office overheads; place of work site contractor and subcontractor superintendence, supervisors and assistants; material re-handling; safety equipment, safety wear and first aid; security; technical staff; telephone, mobile phone, and facsimile services and charges; temporary heat, light and power; temporary protection; temporary place of work offices, trailers and storage compounds; timekeeping and the like."

1.39 GC 6.2 CHANGE ORDER

1.39.1 GC 6.2.1

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 GC 6.2.1.

1.39.2 GC 6.2.4

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Add GC 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 guotation 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."

1.39.3 GC 6.2.5

Add GC 6.2.5 as follows:

"6.2.5 In the event any of the change in the Work, contains items or parts that, in the opinion of the *Consultant*, are the same or equivalent to items for which the Contractor submitted Unit Prices in the tender submitted by the Contractor, then the Unit Prices in the tender shall be the prices paid by the Owner for that work or parts of the Work in respect of any such change in the Work."

1.39.4 GC 6.2.6

Add GC 6.2.6 as follows:

"6.2.6 No compensation for any change in the Work shall be allowed unless such change is first ordered in writing by the Consultant and authorized by the Owner."

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1.40 GC 6.3 CHANGE DIRECTIVE

1.40.1 GC 6.3.7

Delete GC 6.3.7.1 in its entirety and replace with following:

- ".1 salaries, wages and benefits paid to personnel in the direct employ of the Contractor, applying the labour rates set out in the wage schedule in the Contract Documents or as otherwise agreed between the Owner and Contractor for personnel,
 - (1) carrying out the Work on-site at the *Place of the Work*, including necessary supervisory services;
 - (2) engaged in expediting the production or transportation of material or equipment, at shops or on the road;
 - (3) engaged in the preparation of Shop Drawings, fabrication drawings, coordination drawings and *Contract* as-built drawings, or,
 - (4) carrying out clerical work to process changes in the *Work*."

1.40.2 GC 6.3.8

Add the words "except for GC 6.3.14" after the word "Contract" in the first line.

1.40.3 GC 6.3.14

Add GC 6.3.14 as follows:

- "6.3.14 For greater certainty, any adjustment of the *Contract Price* for the Work attributable to the *Change Directive* shall not include, and no payment shall be made for:
 - .1 head office salaries and benefits and all other overhead or general expenses, except only for the salaries, wages and benefits of personnel described in paragraph 6.3.7.1 and the contributions, assessments or taxes referred to in paragraphs 6.3.7.2;
 - .2 capital expenses and interest on capital;
 - .3 general clean-up, except where the performance of the Work in the Change Directive causes specific additional clean-up requirements;

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- .4 wages paid for project managers, superintendents, assistants, watch persons and administrative personnel, provided the Change Directive does not result in an extension of Contract Time;
- .5 wages, salaries, rentals, or other expenses that exceed the rates that are standard in the locality of the Place of the Work that are otherwise deemed unreasonable by the *Consultant*;
- .6 any costs or expenses attributable to the negligence, improper Work, deficiencies, or breaches of Contract by the *Contractor* or *Subcontractor*;
- .7 any cost of quality assurance, such as inspection and testing services, charges levied by authorities, and any legal fees unless any such costs or fees are pre-approved in writing by the *Owner*."

1.41 GC 6.4 CONCEALED OR UNKNOWN CONDITIONS

1.41.1 GC 6.4.5

Add GC 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."

1.41.2 GC 6.4.6

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Add GC 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."

1.41.3 GC 6.4.7

Add GC 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*."

1.42 GC 6.5 DELAYS

1.42.1 GC 6.5.1 and GC 6.5.2

Add after the phrase "as the result of such delay" at the end of GC 6.5.1 and GC 6.5.2, respectively, the following:

", as determined by the *Consultant*, subject to GC 6.5.9 and the the following:

.1 the Contractor shall not be reimbursed for any consequential, incidental, indirect or special damages including, without limitation, loss of profits, loss of

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opportunity or loss of productivity resulting from such delay; and

.2 the Contractor shall not be reimbursed for any costs which, regardless of the delay, would be expected to have been incurred in the regular course of business, including but not limited to the costs of the Contractor's head office personnel during or in relation to such delay; and

1.42.2 GC 6.5.6

Add GC 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. The *Owner* shall be reimbursed by the *Contractor* for all reasonable costs incurred by the Owner as a result of such delay, as determined by the *Consultant.*"
- 1.42.3 **GC 6.5.7**

Add GC 6.5.7 as follows:

"6.5.7 The *Contractor* shall be responsible for the care, maintenance and protection of the *Work* in the event of any suspension of construction as a result of the delay described in paragraphs 6.5.1, 6.5.2 or 6.5.3. In the event of such suspension, the *Contractor* shall be reimbursed by the *Owner* for the reasonable costs incurred by the *Contractor* for such care, maintenance and protection. The *Contractor*'s entitlement to costs pursuant to this paragraph 6.5.7, if any, shall be in addition to amounts, if any, to which the *Contractor* is entitled pursuant to paragraphs 6.5.1, 6.5.2 or 6.5.3."

1.42.4 GC 6.5.8

Add GC 6.5.8 as follows:

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"6.5.8 Without limiting the obligations of the Contractor described in GC 3.2 – CONSTRUCTION BY OWNER OR OTHER CONTRACTORS and GC 9.4 – CONSTRUCTION SAFETY, the Owner may, by Notice in Writing, direct the Contractor to stop the Work where the Owner determines that there is an imminent risk to the safety of persons or property at the Place of the Work. In the event that the Contractor receives such notice, it shall immediately stop the Work and secure the Project site. The Contractor shall not be entitled to an extension of the Contract Time or to an increase in the Contract Price unless the resulting delay, if any, would entitle the Contractor to an extension of the Contract Time or the reimbursement of the Contractor's costs as provided in GC 6.5.1, 6.5.2 or 6.5.3."

1.42.5 **GC 6.5.9**

Add GC 6.5.9 as follows:

- "6.5.9 Regardless of the reason or cause of delay, the *Contractor* shall:
 - .1 have a duty to mitigate the expenses or costs which may be incurred as a result of any delay, which mitigation measures shall include, but not be limited to, reducing the number of the *Contractor*'s and *Subcontractor*'s personnel at the *Place of the Work*, reducing the amount of supplies or the use of *Equipment*, and there shall be no reimbursement for any costs or expenses that could reasonably have been mitigated; and
 - .2 keep such records and documentation as may be necessary to support any claim for reimbursement for expenses or costs which may be incurred as a result of any delay, including any records or documentation which demonstrates compliance with GC 6.5.9.1, and there shall be no reimbursement for any costs that are not sufficiently supported by such necessary records and documentation, as determined by the *Consultant*."

1.42.6 GC 6.5.10

Add GC 6.5.10 as follows:

"6.5.10 Any finding or recommendation of the Consultant under GC 6.5 not accepted by either party shall be settled in accordance with Part 8 of the General Conditions – DISPUTE RESOLUTION."

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1.43 GC 6.7 QUANTITY VARIATIONS

1.43.1 GC 6.7.2

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

1.43.2 GC 6.7.4

Delete GC 6.7.4 in its entirety and replace with following:

- "6.7.4 Where Work has been performed for a Unit Price Item, and the actual quantity of such Work performed is less than the estimated quantity by more than 15%, the *Contractor* shall be compensated for such Work performed based on the original Contract Unit Price for that item. The Contractor will be entitled to a combined markup of 15% for profit and 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.
 - .1 Where no Work has been performed for a Unit Price item, the Owner shall be entitled to a credit to the Contract Price based on the original Contract Unit Price for that item. The Contractor shall not be entitled to any compensation or payment on account of such deletion of Work."

PART 7 DEFAULT NOTICE

1.44 <u>GC 7.1 OWNER'S RIGHT TO PERFORM THE WORK, SUSPEND THE WORK,</u> <u>TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK OR</u> <u>TERMINATE THE CONTRACT</u>

1.44.1 GC 7.1

Add the words "suspend the work" after the words "perform the work" in the first line of the heading for GC 7.1.

1.44.2 GC 7.1.5.5

Add GC 7.1.5.5 as follows:

".5 charge the Contractor for any damages the Owner may have sustained as a result of the default."

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1.44.3 GC 7.1.7

Add GC 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."

1.44.4 GC 7.1.8

Add GC 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."

1.44.5 GC 7.1.9

Add GC 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*."

1.44.6 GC 7.1.10

Add GC 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

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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."

1.44.7 GC 7.1.11

Add GC 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."

1.44.8 GC 7.1.12

Add GC 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*."

1.45 <u>GC 7.2 CONTRACTOR'S RIGHT TO SUSPEND THE WORK OR TERMINATE THE</u> <u>CONTRACT</u>

1.45.1 GC 7.2.1

Delete GC 7.2.1 in its entirety.

1.45.2 GC 7.2.2

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

1.45.3 GC 7.2.3.1

Delete GC 7.2.3.1 in its entirety.

1.45.4 GC 7.2.3.3

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

1.45.5 GC 7.2.3.4

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

1.45.6 GC 7.2.4

Add the following sentence to the end of GC 7.2.4:

"If the default cannot be corrected within the 5 Working Days specified herein, the Owner shall be deemed to have cured the default if it

- .1 commences the correction of the default within the specified time; and
- .2 provides the Contractor with an acceptable schedule for such correction; and
- .3 completes the correction in accordance with such schedule."

1.45.7 GC 7.2.5

Delete GC 7.2.5 in its entirety and replace with following:

"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."*

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1.45.8 GC 7.2.6

Add GC 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*."

1.45.9 GC 7.2.7

Add GC 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."

PART 9 – PROTECTION OF PERSONS AND PROPERTY

1.46 GC 9.1 PROTECTION OF WORK AND PROPERTY

1.46.1 GC 9.1.1

Delete GC 9.1.1 in its entirety and replace with following:

- "9.1.1 The Contractor 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 shall protect the *Work*, the *Railway Property*, and the Owner's property and property adjacent to the *Place of the Work* and the *Railway Property* from damage which may arise as the result of the Contractor's operations under the *Contract*, and shall be responsible for such damage, except damage which occurs as the result of:
 - .1 errors in the *Contract Documents* which the Contractor could not have discovered applying the Standard of Care;

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.2 acts or omissions by the Owner, the Consultant, other contractors, and their agents and employees.

1.46.2 GC 9.1.3

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

1.46.3 GC 9.1.4

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 GC 9.1.4.

1.47 GC 9.2 TOXIC AND HAZARDOUS SUBSTANCES

1.47.1 GC 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

Delete the words "toxic and hazardous substances" from GC 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.

1.47.2 GC 9.2.7.4

Delete GC 9.2.7.4 in its entirety.

1.47.3 GC 9.2.8.2

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

1.48 GC 9.4 CONSTRUCTION SAFETY

- 1.48.1 Delete 9.4.1 in its entirety and replace with the following:
 - "9.4.1 The Contractor shall be solely responsible for construction safety at the Place of the Work and for compliance with the rules, regulations and practices required by the applicable construction health and safety legislation and shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Work."

1.48.2 GC 9.4.2

Add GC 9.4.2 as follows:

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"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."

1.48.3 GC 9.4.3

Add GC 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.*"

1.48.4 GC 9.4.4

Add GC 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."

1.48.5 GC 9.4.5

Add GC 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."

1.48.6 GC 9.4.6

Add GC 9.4.6 as follows:

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

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.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."

1.48.7 GC 9.4.7

Add GC 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."

1.49 <u>GC 9.5 MOULD</u>

1.49.1 GC 9.5.2.2

Add the words "*Railway's* property," after the words "damage to the *Work*," in the first line of GC 9.5.2.2.

1.49.2 GC 9.5.3.4

Delete paragraph 9.5.3.4 in its entirety.

PART 10 GOVERNING REGULATIONS
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1.50 GC 10.1 TAXES AND DUTIES

1.50.1 GC 10.1.2

Add the following sentence to the end of GC 10.1.2:

"For greater certainty, the Contractor shall not be entitled to any mark-up for overhead or profit on any increase in such taxes and duties."

1.50.2 GC 10.1.3

Add GC 10.1.3 as follows:

"10.1.3 Where the Owner is entitled to an exemption or a recovery of sales taxes, customs duties, excise taxes or Value Added Taxes (including Harmonized Sales Tax) applicable to the Contract, the Contractor shall, at the request of the Owner or the Owner's representative, assist with the application for any exemption, recovery or refund of all such taxes and duties and all amounts recovered or exemptions obtained shall be for the sole benefit of the Owner. The Contractor agrees to endorse over to the Owner any cheques received from the federal or provincial governments, or any other taxing authority, as may be required to give effect to this section."

1.50.3 GC 10.1.4

Add GC 10.1.4 as follows:

"10.1.4 The Contractor shall maintain accurate records of Construction Equipment, Product and component costs reflecting the taxes, customs duties, excise taxes and Value Added Taxes paid."

1.50.4 GC 10.1.5

Add GC 10.1.5 as follows:

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"10.1.5 Any refund of taxes, including, without limitation, any government sales tax, customs duty, excise tax or Value Added Tax, whether or not paid, which is found to be inapplicable or for which exemption may be obtained, is the sole and exclusive property of the Owner. The Contractor agrees to cooperate with the Owner and to obtain from all Subcontractors and Suppliers cooperation with the Owner in the application for any refund of any taxes, which cooperation shall include but not be limited to, making or concurring in the making of an application for any such refund or exemption, and providing to the Owner copies, or where required, originals of records, invoices, purchase orders and other documentation necessary to support such applications or exemptions or refunds. All such refunds shall either be paid to the Owner, or shall be a credit to the Owner against the Contract Price, in the Owner's discretion. The Contractor agrees to enable, assist with and submit to any reasonable audit requested by the Owner with respect the potential refunds under this section."

1.50.5 GC 10.1.6

Add 10.1.6 as follows:

"10.1.6 Customs duties penalties, or any other penalty, fine or assessment levied against the Contractor, shall not be treated as a tax or customs duty for the purpose of this GC 10.1."

1.51 GC 10.2 LAWS, NOTICES, PERMITS AND FEES

1.51.1 GC 10.2.1

Add the following sentence to the end of GC 10.2.1:

"The Contractor shall comply with all Applicable Law."

1.51.2 GC 10.2.3

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

1.51.2 GC 10.2.4

Delete the word "laws" and substitute the words "Applicable Laws" in the first line of GC 10.2.4.

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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 GC 10.2.4.

Add the words "to the environment," after the words "relate to the *Work*," in the second line of GC 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 GC 10.2.4.

1.51.3 GC 10.2.5

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

Delete the words "applicable laws" and substitute the words "Applicable Laws" in the third line of GC 10.2.5.

1.51.4 GC 10.2.6

Delete GC 10.2.6 in its entirety and replace with the following:

"10.2.6 If the Contractor fails to notify the Owner and the Consultant in writing, fails to obtain direction as required in GC 10.2.5, and/or performs work that it knows or ought to have known that contravenes Applicable Laws, ordinances, guidelines, standards, permits, statutes, by-laws, rules, regulations, or codes, the Contractor shall be responsible for and shall correct the violations thereof, and shall bear the costs, expenses, and damages attributable to the failure to comply with the provisions of such laws, ordinances, guidelines, standards, permits, statutes, by-laws, rules, regulations, or codes, and, notwithstanding any limitations described in paragraph 12.1.1, shall indemnify and hold harmless the Owner and the Consultant from and against any claims, demands, losses, costs, damages, actions, suits or proceedings resulting from such failure or breach of law."

1.51.5 GC 10.2.8

Add GC 10.2.8 as follows:

"10.2.8 Without limiting the generality of any other provision in the *Contract Documents*, the Contractor shall cause all certificates to be furnished that are required by or given by the appropriate governmental or quasi-governmental authorities as evidence that

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the Work as installed conforms with Applicable Laws and regulations of any authorities having jurisdiction over the Place of the Work, including, without limitation, certificates of compliance for the Owner's occupancy or partial occupancy. The certificates are to be final certificates giving complete clearance of the Work, in the event that such governmental or quasi- governmental authorities furnish such certificates."

1.52 GC 10.4 WORKER'S COMPENSATION

1.52.1 GC 10.4.1

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

Add the words "the Certificate of Clearance and" after the word "provide" in the third line of GC 10.4.1.

PART 11 INSURANCE AND CONTRACT SECURITY

1.53 GC 11.1 INSURANCE

1.53.1 GC 11.1

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

"GC 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 projectspecific insurance, or higher insurance limits, the Contractor shall provide, maintain, and pay for the minimum insurance coverages specified in GC 11.1 - INSURANCE.

.1 Wrap-Up Liability Insurance (Owner Provided):

The Owner shall, at its own expense, obtain and maintain project-specific Wrap-Up General Liability Insurance (the "Policy") with a combined single limit of liability of not less than One Hundred Million (\$100,000,000.00) dollars per occurrence and in the aggregate with respect to Products and Completed Operations Liability, against claims for bodily injury (including death), personal injury, property damage (including loss of use), and Products and Completed Operations for a period of not less than twenty-four (24) months from the date

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of Substantial Performance of the Work. Such policy shall include as additional insureds the Contractor and Subcontractors of any tier and including Suppliers who perform the Work at the Place of Work and also includes Consultants, Sub-consultants, engineers and architects (but not for Professional Liability purposes). The policy is subject to special limits, endorsements, extensions, restrictions and exclusions which shall include but not necessarily be limited to:

- a) Products and Completed Operations liability for a period of twenty-four (24) months from the date of Substantial Performance of the Work;
- b) Owners and Contractors Liability;
- c) Contingent Employer's Liability;
- d) Non-owned Automobile Liability including Legal Liability for Damage to Hired Autos (SEF #94) \$50,000 Limit, \$1,000 deductible;
- e) Cross Liability/Severability of Interests;
- f) No XCU Exclusion (explosion, collapse and underground);
- g) Contingent Medical Malpractice;
- h) Broad Form Property Damage;
- Property Damage to Metrolinx' existing property (but not any property which is subject to coverage under a Course of Construction/Builder's Risk Policy);
- j) Silent on Terrorism;
- k) Sudden & Accidental Pollution;
- I) Tenants Legal Liability \$5,000,000;
- m) Medical Payments \$50,000 per person, \$100,000 each accident;

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- n) Employees as Additional Insured;
- o) Defence Costs in Addition to Limits of Liability;
- p) Asbestos Exclusion;
- q) Employment Practices Exclusions;
- r) Automobile Exclusion;
- s) Security Firm Exclusion;
- t) Nuclear Exclusion;
- u) Fungus, Mildew and Mould Exclusion;
- v) Excludes Errors and Omissions (Professional Services);
- w) Excludes property damage to Contractor's and Subcontractor's plant and equipment;
- x) Excludes US Employers Liability;
- y) Excludes damage to property either forming part of, or to form part of the Work; and
- z) If any Named Insured or other Insured under this insurance policy has any other insurance against loss covered by this Policy, except for insurance which is written specifically to cover in respect of the Project insured, this Policy shall be primary insurance and such other insurance shall be excess of the limits stated in this Policy. Where any Named Insured or other Insured has or places buy down insurance and/or any other insurance specifically covering work in respect of the Project insured or to provide coverage for the deductibles under this Policy, such insurance shall be primary and the insurance provided by this policy shall be excess of the limits stated in such purchased Policy.

.2 Wrap-Up Liability Deductible:

The Policy carries a deductible of One Hundred Thousand (\$100,000.00) dollars per occurrence inclusive of all legal fees

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and associated expenses incurred in the investigation, defence, settlement, arbitration or litigation of claims.

.3 Contractor's Responsibility for Wrap-Up Liability Deductible:

The Contractor shall, at its own expense, be responsible and liable for one hundred percent (100%) of the deductibles under the policy on each and every claim. Deductibles are inclusive of all legal fees, and associated expenses incurred in the investigation, defense, settlement arbitration or litigation of Claims.

Upon notification of a claim being made, the Owner shall, at its sole direction, be entitled to retain the amount of the deductible in whole or in part from payment to the Contractor. Such amount will be applied by the Owner in satisfaction of that claim and excess amounts, if any, will be paid to the Contractor in the event and at such time as the claim is settled, dismissed or withdrawn. Notwithstanding the foregoing, the Owner may, at its sole discretion, issue an invoice to the Contractor for the actual amount of the claim settlement up to the amount of the deductible, and if the invoice is not paid within thirty (30) days, The Owner shall deduct such amount from a future payment due to the Contractor.

4. **Cooperation with Wrap-Up Insurer's Consultant**:

If an insurer or an insurer's appointed consultant, for underwriting purposes or as a term of the Wrap-Up Liability Policy, needs to review any part of the performance of this Contract, then the Contractor shall, cooperate with the insurer and its consultant, including providing them with such information and documentation as they may reasonably require.

5. Claims Reporting:

The Contractor shall provide the Owner with written notice and all reasonable particulars and documents related to any damages, losses, incidents, claims and potential claims relating to the Policy as soon as possible after the damage, loss, incident or claim has been discovered. The Contractor

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shall also cooperate with the Owner's insurers in their investigation of any claim which is in excess of the deductible.

6. Wrap-Up Liability Policy Term:

The Owner provided wrap-up liability insurance policy shall be effective from the date of the Commencement of the Work until the date of Substantial Performance of the Work as certified by the Consultant.

7. "All Risk" Property/Course of Construction Insurance (Owner Provided):

The Owner shall, at its own expense, obtain and maintain "All Risks" Property/Course of Construction Insurance covering the Work for direct physical loss or damage to property in course of construction whilst at the location of the Work and forming part of or to form part of the Work. The limit shall be equal to the replacement value of the Work, or at the discretion of the Owner, a limit of loss equal to the estimated Maximum Foreseeable Loss calculation as promulgated by insurers or brokerage consultants. Such policy is subject to aggregates, sub-limits, endorsements, extensions, restrictions and exclusions, including but not necessarily limited to the following:

- a) personal property excluded;
- b) construction tools, equipment and machinery excluded;
- c) asbestos contamination excluded;
- d) terrorism excluded;
- e) delay in start-up & soft costs excluded;
- f) faulty material, workmanship and design excluded;
- g) electronic data excluded,
- h) mold excluded;
- i) debris removal \$2,500,000 maximum 25% of the amount of loss;

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	j)	off site storage at an unnamed location \$2,000,000;
	k)	inland transit \$2,000,000;
	I)	ingress/egress \$5,000,000; - maximum 30 days;
	m)	DE4 approved;
		testing & commissioning – 4 weeks – restricted to new uipment only;
	o)	fire fighting charges \$2,000,000;
	p)	pollution clean-up \$250,000;
	q)	arson/crime reward \$50,000;
	r)	dewatering \$2,500,000;
	s)	professional fees (excluding public adjuster) and
	t) equ	testing & commissioning – 4 weeks – restricted to new uipment only;
"All Risk" Property/Course of Construction Insurance Deductible:		
	The Contractor shall, at its own expense be responsible and liable for one hundred percent (100%) of the following deductibles under this policy for each and every loss:	
	а	. \$50,000 all losses except
	b	. \$100,000 Flood
	С	 \$250,000 collapse and subsidence to construction of tunnels and sub-surface structures and installations
	d	. 3% of Total Insurable Values (Subject to a minimum of \$100,000 per occurrence) Earthquake

- e. 48 Hours Waiting Period Off Premises Service
- e. 48 Hours Waiting Period Off Premises Service Interruption – property damage

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Upon notification of a claim being made the Owner shall, at its sole direction, be entitled to retain the amount of the deductible in whole or in part from payment to the Contractor. Such amount will be applied by the Owner in satisfaction of that claim and excess amounts, if any, will be paid to the Contractor in the event and at such time as the claim is settled, dismissed or withdrawn. Notwithstanding the foregoing, the Owner may, at its sole discretion, issue an invoice to the Contractor for the actual amount of the claim settlement up to the amount of the deductible, and if the invoice is not paid within thirty (30) days, The Owner shall deduct such amount from a future payment due to the Contractor.

9. Cooperation with "All Risk" Course of Construction Consultant:

If an insurer or an insurer's appointed consultant, for underwriting purposes or as a term of the Builders' "All Risk" Course of Construction Policy, needs to review any part of the performance of this Contract, then the Contractor shall, cooperate with the insurer and its consultant, including providing them with such information and documentation as they may reasonably require.

10. Claims Reporting:

The Contractor shall provide the Owner with written notice and all reasonable particulars and documents related to any damages, losses, incidents, claims and potential claims relating to the Policy as soon as possible after the damage, loss, incident or claim has been discovered. The Contractor shall also cooperate with the Owner's insurers in their investigation of any claim which is in excess of the deductible.

11. "All Risk" Property/Course of Construction Policy Term:

The Owner provided Builders' "All Risk" Course of Construction insurance policy shall be effective from the date of the Commencement of the Work until the date of Substantial Performance of the Work as certified by the Consultant.

12. Contractors' Pollution Liability (Owner Provided):

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The Owner shall, at its own expense, obtain and maintain project-specific Contractors' Pollution Liability Insurance with a limit of liability of not less than ten million (\$10,000,000) per pollution condition and in the aggregate, including 24 months completed operations coverage, against claims for on-site clean-up of new pollutant conditions, third party claims for onsite bodily injury and property damage, and off-site clean up caused by a pollution or contamination incident resulting from covered operations. Emergency remediation expense limit five hundred thousand (\$500,000) and in the aggregate. Such policy is subject to aggregates, sub-limits, endorsements, extensions, restrictions and exclusions.

13. **Contractors' Pollution Liability Insurance Deductible:**

The Contractor shall, at its own expense be responsible and liable for one hundred percent (100%) of the One Hundred Thousand (\$100,000) dollar deductible under this policy for each and every loss.

Upon notification of a claim being made the Owner shall, at its sole direction, be entitled to retain the amount of the deductible in whole or in part from payment to the Contractor. Such amount will be applied by the Owner in satisfaction of that claim and excess amounts, if any, will be paid to the Contractor in the event and at such time as the claim is settled, dismissed or withdrawn. Notwithstanding the foregoing, the Owner may, at its sole discretion, issue an invoice to the Contractor for the actual amount of the claim settlement up to the amount of the deductible, and if the invoice is not paid within thirty (30) days, The Owner shall deduct such amount from a future payment due to the Contractor.

14. Cooperation with Contractors' Pollution Liability Insurance Consultant:

If an insurer or an insurer's appointed consultant, for underwriting purposes or as a term of the Contractors' Pollution Liability Policy, needs to review any part of the performance of this Contract, then the Contractor shall, cooperate with the insurer and its consultant, including providing them with such information and documentation as they may reasonably require.

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15. Claims Reporting:

The Contractor shall provide the Owner with written notice and all reasonable particulars and documents related to any damages, losses, incidents, claims and potential claims relating to the Policy as soon as possible after the damage, loss, incident or claim has been discovered. The Contractor shall also cooperate with the Owner's insurers in their investigation of any claim which is in excess of the deductible.

16. **Contractors' Pollution Liability Policy Term:**

The Owner provided Contractors' Pollution Liability insurance policy shall be effective from the date of the Commencement of the Work until the date of Substantial Performance of the Work as certified by the Consultant.

17. General Liability Insurance (Contractor Provided):

The Contractor shall, at its own expense, obtain and maintain General Liability Insurance for all off-site activities from commencement of the contract and any on-site activities following substantial completion when such on-site activities are not covered under the Owners Wrap-Up Liability completed operations. Such General Liability Insurance shall have a combined single liability limit of not less than Five Million (\$5,000,000) dollars per occurrence and in the aggregate, against claims for bodily injury (including death), personal injury, property damage (including loss of use), and Products and Completed Operations. Such policy shall be endorsed to include Metrolinx as an Additional Insured. The policy shall include but not necessarily be limited to:

- a) Extended products and completed operations liability for a period of not less than 24 months beyond the Owner Wrap-Up Liability completed operations expiry date;
- b) Blanket written contractual liability;
- c) Contingent Employer's Liability;
- d) Employer's liability (as applicable);
- e) Non-owned Automobile Liability including Legal Liability for Damage to Hired Autos (SEF #94);

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- f) Contractual Liability (SEF #96);
- g) Cross Liability/Severability of Interests;
- h) No XCU Exclusion (explosion, collapse and underground);
- i) Incidental Medical Malpractice;
- j) Broad Form Property Damage;
- k) Sudden & Accidental Pollution subject to a minimum scope equal to IBC 2313, Time Element Pollution;
- I) Tenants Legal Liability;
- m) Medical Payments;
- n) Employees as Insureds;
- o) Defence Costs in Addition to Limits of Liability
- p) Waiver of Subrogation in favour of Owner;

18. Automobile Liability Insurance (Contractor Provided):

The Contractor shall, at its own expense, obtain and maintain at all times during the term of the contract insurance covering for bodily injury, death, damage to property and statutory accident benefits coverage with respect to all vehicles owned, licensed or leased by the Contractor. The policy shall have limits of not less than Five Million (\$5,000,000) dollars inclusive per occurrence. If the policy 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.

19. Equipment Insurance (Contractor Provided):

The Contractor shall, at its own expense, obtain and maintain at all times during the term of the contract insurance covering 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.

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Subject to satisfactory proof of financial capability by the Contractor for self-insurance, the Owner agrees to waive the equipment insurance requirement. In so doing, the Contractor waives all right of claim against the Owner in respect to loss or damage to such equipment as if it was otherwise insured and subject to a Waiver of Subrogation rights from the insurer.

- 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) Canadian National Railways Limited.
- (2) VIA Rail Canada Inc.
- (3) City of Toronto
- (4) PNR Railworks Inc.
- (5) Bombardier Transportation Canada Inc.

.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

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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."

1.54 GC 11.2 CONTRACT SECURITY

1.54.1 GC 11.2.1

Add the following to the end of GC 11.2.1:

"The *Contracto*r shall provide and maintain the following Contract security:

Performance Bond and Labour and Materials Payment Bond in favour of "Metrolinx" each equal to fifty percent (50%) of the Contract Price"

1.54.2 GC 11.2.3

Add GC 11.2.3 as follows:

"11.2.3 The premiums for the bonds required by the *Contract Documents* are included in the *Contract Price*. Prior to commencement of the Work and upon the placement, renewal, amendment, or extension of all or any part of the *Contract* security, or upon request by the *Owner* from time to time, the

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Contractor shall promptly provide the Owner with confirmation and evidence of the up-to-date Contract security. "

PART 12 INDEMNIFICATION, WAIVER OF CLAIMS AND WARRANTY

1.55 GC 12.1 INDEMNIFICATION

1.55.1 GC 12.1.1

Delete paragraph 12.1.1 in its entirety and replace with the following:

- "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 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
 - .3 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.*"

1.55.2 GC 12.1.12

Delete GC 12.1.12 in its entirety.

1.55.3 GC 12.1.3

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Delete the words "either party to indemnify the other" and substitute the words "the *Contractor* to indemnify the *Owner*" in the first line of GC 12.1.3.

1.55.4 GC 12.1.4

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 GC 12.1.4.

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

1.55.5 GC 12.1.5

Delete GC 12.1.5 in its entirety.

1.55.6 GC 12.1.6

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

1.55.7 GC 12.1.6.2

Delete GC 12.1.6.2 in its entirety and replace with the following:

"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."

1.55.8 GC 12.1.7

Add GC 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.*"

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1.56 GC 12.2 WAIVER OF CLAIMS

1.56.1 GC 12.2.1.2 and 12.2.1.3

Delete GC 12.2.1.2 and GC 12.2.1.3 in its entirety.

1.56.2 GC 12.2.2

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

1.57 GC 12.3 WARRANTY

1.57.1 GC 12.3.1

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

1.57.2 GC 12.3.2

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

1.57.3 GC 12.3.4

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

1.57.4 GC 12.3.6

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 GC 12.3.6.

1.58 GC 13 FRENCH LANGUAGE SERVICES

1.58.1 GC 13

Add GC 13 FRENCH LANGUAGE SERVICES as follows:

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"GC 13 FRENCH LANGUAGE SERVICES

- 13.1 Definitions
 - .1 "French Language Services Act" means the French Language Services Act, R.S.O. 1990, c.F. 32, as amended.
 - .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 Frenchdesignated areas is available at http://www.ofa.gov.on.ca/en/flsa-mapdesig.html.
- 13.2 French Language Services
 - .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.
 - .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).
 - .3 A service refers to any service or procedure provided to the public, including communications.
 - .4 Services being provided in French must be equivalent to those offered in English, available within the same timeframe and of the same quality.
 - .5 Services and communications in designated areas include, but are not limited to:
 - (1) Consultations/Public Meetings
 - (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

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drawings/documents in French. When relevant, the consultant will compile and analyze the views of Francophones separately, because they may have different concerns.

(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.

(4) Communications

Communication plans, customer impact documents, information bulletins, notices of service disruption and public relations information will be bilingual.

(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.

(6) Contractor's Team

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

(7) 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/"

1.58 GC 14 CONTRACTOR WORK PERFORMANCE RATING

1.58.1 GC 14

Add GC 14 CONTRACTOR WORK PERFORMANCE RATING, as follows:

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"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 "Contractor Performance Review" report, a copy of which will be forwarded to the Contractor upon completion of Total Performance of the Work. Interim "Contractor Performance Review" 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 "Contractor's Performance Review" 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.

1.59 GC 15 CONFLICT OF INTEREST

1.59.1 GC 15

Add GC 15 CONFLICT OF INTEREST, as follows:

"GC 15 CONFLICT OF INTEREST

- 15.1 For the purposes of this Contract, a "Conflict of Interest" includes any situation or circumstances where, in relation to the performance of its contractual obligations in this Contract, the Contractor's other commitments, relationships or financial interests:
 - .1 could or could be seen to exercise an improper influence over the objective, unbiased and impartial exercise of its independent judgment; or

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- .2 could or could be seen to compromise, impair or be incompatible with the effective performance of its contractual obligations.
- 15.2 The Contractor shall:
 - .1 avoid all Conflict of Interest in the performance of its contractual obligations;
 - .2 disclose to the Owner without delay any actual or potential Conflict of Interest that arises during the performance of its contractual obligations; and
 - .3 comply with any requirements prescribed by the Owner to resolve any Conflict of Interest.
- 15.3 In addition to all other contractual rights or rights available at law or in equity, Owner shall have the right to immediately terminate this Contract, by giving notice in writing to the Contractor, where:
 - .1 the Contractor fails to disclose an actual or potential Conflict of Interest;
 - .2 the Contractor fails to comply with any requirements prescribed by Owner to resolve a Conflict of Interest; or
 - .3 the Contractor's Conflict of Interest cannot be resolved.
- 15.4 This section shall survive any termination or expiry of this Contract.

1.60 GC 16 – Liquidated Damages

Add new GC 16 – Liquidated Damages as follows:

"GC 16 – Liquidated Damages

- 16.1 Liquidated Damages for Delay of Trains and for Additional Track Closures
 - 16.1.1 In the event of, and for each and every occurrence of, an inservice GO Transit or UP Express or VIA Rail or PNR or Canadian Pacific or CN freight train being delayed as a result of: a negligent act; failure to observe and comply with any of the terms, conditions or requirements of the Contract Documents; failure to comply with any applicable acts, laws, statutes, rules or orders of authorities having jurisdiction; failure to properly perform the Work; or perform the work in a

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timely manner by the Contractor, any of its employees, agents or subcontractors, the Contractor shall pay to Metrolinx as liquidated damages, which the parties agree is a genuine preestimate of damages and not a penalty, the following:

- 16.1.1.1 The sum of Twenty Two Thousand Five Hundred dollars (\$22,500.00) for the first five (5) minutes of each and every delay; and
- 16.1.1.2 In addition, the sum of Ten Thousand dollars (\$10 000) for each subsequent ten (10) minute interval of each and every delay;

to a maximum daily amount of Two Hundred Thousand Dollars (\$200,000.00).

- 16.1.3 The maximum overall amount assessed for liquidated damages pursuant to SGC 16.1 be no greater than Two Million dollars (\$2,000,000.00).
- 16.2 Liquidated Damages for Failure to Meet Substantial Performance
 - 16.2.1 The Contractor acknowledges and agrees that the Owner will suffer harm in the event the Work is delayed and the Substantial Performance Date, as may be amended by Change Order, is not met. The Contractor further acknowledges and agrees that it is extremely difficult to determine the actual damages that the Owner will suffer as a result of such late performance of the Work and that the amounts stated herein represent a reasonable estimate of such damages.
 - 16.2.2 The Contractor shall be assessed liquidated damages as follows:
 - 16.2.2.1 Liquidated Damages in the amount of Ten Thousand dollars (\$10,000.00) per Working Day for each and every Working Day that the completion of the Work for Substantial Performance of the Work exceeds the date specified in the Agreement Between Owner and Contractor, and as may be amended by Change Order.
 - 16.2.2.2 The maximum amount assessed for liquidated damages pertaining to Substantial Performance of the Work shall be no greater than Two Million dollars (\$2,000,000.00).

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- 16.3 The Contractor acknowledges and agrees that any amounts payable pursuant to this GC 16 Liquidated Damages shall not be construed as a penalty imposed on the Contractor by the Owner, but as compensation to the Owner for damages sustained by late performance of the Work.
- 16.4 The Owner shall have the right to deduct the amount of any and all liquidated damages assessed against the Contractor under this GC 16 Liquidated Damages from any amount due to the Contractor.
- 16.5 The Consultant shall determine when the Work for each specific task to which liquidated damages are applicable, has been completed in accordance with the requirements of these Contract Documents.

END OF SECTION

GENERAL CONDITIONS OF THE CONTRACT

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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

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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 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 Work Schedule and Constraints

- 3.1 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.
- 3.2 Details of track closures, work blocks and full closures of the Bala subdivision shall be as specified in Section 02725 Track Closures.
- 3.3 The Contractor shall mobilize within 5 days of Notice to Proceed.
- 3.4 As noted in other sections and on the Drawings a significant portion of the work will occur during evenings, overnight and weekends. The expectation is work will occur 24 hours a day seven (7) days a week as required to ensure schedules are met and track closures are minimized.

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3.5 Due to the duration of the project, significant work will occur in winter conditions depending on how the project is staged by the Contractor. The Contractor shall include any and all costs and equipment associated with winter work as a result of this. The Contractor shall be responsible for quality of work, regardless of the weather conditions.

4.0 Hours of Work

- 4.1 The Contractor's regular hours of work for this Contract are expected to be 7:00 a.m. to 5:00 p.m., Monday to Sunday. To suit railway operational requirements, and for work blocks and full closures of the Bala Subdivision, the Contractor shall adjust the hours of work to continuous 24 hour/day operation at no additional cost to the Owner.
- 4.2 The Contractor shall be required to obtain a noise by law exemption for any work outside the hours listed in 4.1.

5.0 Subcontractors and Suppliers

- 5.1 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:
 - 5.1.1 Steelwork Fabricator;
 - 5.1.2 Piling Contractor;
 - 5.1.3 Pile Supplier;
 - 5.1.4 Span Installer;
 - 5.1.5 Concrete Supplier;
 - 5.1.6 Bearing Supplier;
 - 5.1.7 Cast-in-Place Concrete Work;
 - 5.1.8 Waterproofing Supplier and Waterproofing Applicator (if different than the Supplier);
 - 5.1.9 Ballast Mat Supplier and Ballast Mat Applicator (if different than the Supplier);

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- 5.1.10 Track Work Contractor;
- 5.1.11 Signal Work Contractor;
- 5.1.12 Flagging Contractor; and
- 5.1.13 All other subcontractors not specifically included in this list.
- 5.2 <u>Pre-qualified Subcontractors and Suppliers</u>
 - 5.2.1 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.
 - 5.2.2 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.
 - 5.2.3 Only the following pre-qualified Subcontractors below, are permitted to perform the Work of this section of this Contract. No other Subcontractor will be permitted to perform this Work. The Contractor shall not use its "Own Forces" for this section of the Work unless its name appears on the list below:
 - (a) <u>Track Work Contractors</u>
 - (i) A & B Rail Services Ltd. 12623 Coleraine Drive Bolton, ON L7E 3B5 Office: 905-951-6363 Fax: 905-951-1681 Contact: Jamie Black Regional Operations Manager – Ontario Cell: 416-899-3548 jamieblack@abrail.com
 - (ii) OWS Railroad Construction & Maintenance Inc.
 4320 Discovery Line, P.O. Box 1240
 Petrolia, Ontario NON 1R0

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Contact: Mr. Pat Gladwish Phone: 519-882-4996

- (iii) Peter Kiewit Infrastructure Co. 1425 North Service Road East, Unit 1 Oakville, ON L6H 1A7 Contact: Mike Tracey Phone: 905-337-4165 Email: michael.tracey@kiewit.com
- (iv) PNR RailWorks Inc.
 455 Silvercreek Parkway N.
 Guelph, Ontario N1H 8M7
 Contact: Mr. David Landreth
 Phone: 519-763-2960
- (v) Rail Cantech Inc.
 650 Lionel-Boulet Blvd.
 Varennes, Quebec J3X 1P7
 Contact: Martial Major
 Email: info@railcantech.com
 Phone: 450-652-3010
- (b) <u>Signal Contractors</u>
 - A & B Rail Services Ltd. 12623 Coleraine Drive Bolton, Ontario L7E 3B5 Dave Wilfong davewilfong@abrail.com
 - (ii) Black & McDonald Limited
 31 Pullman Court
 Scarborough, Ontario
 M1X 1E4
 David Maniaci
 Tel: 416-991-4967
 email: dmaniaci@blackandmcdonald.com
 - (iii) Condor Signal & Communications Inc.
 2388 Speers Road
 Oakville, Ontario
 L6L 5M2

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John Di Donato Tel: 905-469-0226 email: jdidonato@condorsignal.com

- (iv) CYMI-SICE Canada Joint Venture 55 Eglinton Avenue East Suite 803 Toronto, Ontario M4P 1G8 Luis Carrera Tel: 647-483-4026 email: LCarrera@sice.com
- (v) Mass. Electric Construction Canada Co. 1405 North Service Road East, Unit 4 Oakville, Ontario L6H 1A7 Troy Grill Tel: 905-337-4015 email: TGrill@MassElec.com
- (vi) PNR RailWorks Inc.
 65 Massey Road, Unit C
 Guelph, Ontario
 N1H 7M6
 Wayne Barnard
 Tel: 519-780-3151 email: wbarnard@pnrrailworks.com
- (vii) The Toronto Terminals Railway Company Limited 50 Bay Street, Suite 1400N Toronto, Ontario M5J 3A5 George Huggins Tel: 416-771-2598 email: george.huggins@ttrly.co

(c) <u>Track Protection Contractors</u>

 A & B Rail Services Ltd. 12623 Coleraine Drive Bolton, Ontario L7E 3B5 Dave Wilfong davewilfong@abrail.com

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- PNR Railworks Inc.
 2380 Royal Windsor Drive, Unit 11
 Mississauga, Ontario
 L5J 1K7
 Darryl Pater
 dpater@pnrrailworks.com
- (iii) Toronto Terminals Railway Company Limited 50 Bay Street, 14th Floor, Suite 1400B Toronto, Ontario M5J 3A5 George Huggins George.huggins@ttrly.com
- 5.2.4 Utility Contractors
 - (a) Only authorized Subcontractors identified by the owners of the utilities in the Railway Corridor are permitted to perform the Work of this section of this Contract. No other Subcontractor will be permitted to perform this Work. The Contractor shall not use its "Own Forces" for this section of the Work. Utility Owners shall only be contacted by the Contractor after award to obtain the necessary contact information for the authorized Subcontractors. The list of utility owners shall be advised by:
 - (i) CN Rail. Contact information for the relevant party in CN Rail will be advised upon award.
 - (ii) Bell 360. Contact information for the relevant party at Bell 360 will be advised upon award.
- 5.3 The Contractor shall not change the identified Subcontractors or Suppliers listed without written consent of Owner.

6.0 <u>Certificate of Recognition</u>

6.1 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 possess and maintain COR[™] "Certified" status with IHSA.

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7.0 Contractor's Use of Site

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

8.0 Codes and Standards

- 8.1 Where not governed by the requirements of more restrictive codes stipulated within the Contract Documents, the Contractor shall Perform Work in accordance with Ontario Building Code, Ontario Hydro Electrical Safety Code and applicable acts administered by other authorities having jurisdiction.
- 8.2 The Contractor's Work shall meet or exceed requirements of specified standards, codes and referenced documents.
- 8.3 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.

9.0 **Project Meetings**

- 9.1 The Contractor shall:
 - 9.1.1 Hold project meetings at times and locations approved by Consultant; and
 - 9.1.2 Notify parties concerned of meetings, to ensure proper co-ordination of Work;
- 9.2 Designated parties shall take required action on decisions made at meetings. The Consultant will record minutes of meetings and distribute to parties prior to next meeting.

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10.0 Sublet of Work

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

11.0 Examination

- 11.1 Examine site of Work, and investigate all matters relating to nature of Work to be undertaken.
- 11.2 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.

12.0 Setting Out of Work

- 12.1 Setting out of Work is sole responsibility of the Contractor.
- 12.2 Lay out Work in accordance with Contract Drawings.
- 12.3 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.

13.0 Existing Services

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

14.0 **Protection**

14.1 Contractor is cautioned to use appropriate construction methods in order to fully protect existing building, utilities and 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.

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15.0 Trades Qualification

- 15.1 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.
- 15.2 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.

16.0 Additional Drawings

16.1 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

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

PART 1 - GENERAL

1. Description

- (a) The Contractor shall be responsible for familiarization with the Place of the Work, the location of the Work and any limitations and constraints.
- (b) Before commencing Mobilization, the Contractor shall obtain and pay for all required Access Permits before entering onto land impacted by the Work.
- (c) The Contractor shall commence Mobilization at the Notice to Proceed date unless otherwise required by the Contract Documents and directed by Consultant.
- (d) The Contractor shall 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.
- (e) The Contractor shall be responsible for all required permits for transportation of the Contractor's equipment.
- (f) The Contractor shall check that proposed access routes meet roadway and bridge loading requirements and height clearance requirements for the equipment, supplies and materials being transported, and make changes to the access routes where necessary.
- (g) The Contractor shall mobilize and demobilize equipment and materials in accordance with all local, provincial and federal regulations and acts related to transportation and safety.
- (h) The Contractor shall mobilize and demobilize equipment by means of access routes shown on the drawings. Where access is not shown on the drawings, the Contractor shall make arrangements and pay for the required access.
- (i) Upon completion of the Work, the Contractor shall restore all access areas to the same condition as prior to the start of the Work.
- (j) The Contractor shall be responsible for security of Contractor's equipment and materials at the place of the Work.

2. Definitions

(a) 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

GENERAL REQUIREMENTS MOBILIZATION AND DEMOBILIZATION

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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.

3. Mobilization

- (a) Mobilization is deemed to include the provision of the following:
 - (i) Construction permits not obtained by the Consultant;
 - (ii) Initial Construction Schedule;
 - (iii) Initial Work Block Schedule;
 - (iv) Initial Shop Drawings and other submittal Schedules;
 - (v) Initial Contractor's Cash Flow Schedule;
 - (vi) Site Specific Safety Plan;
 - (vii) Environmental Plan; and
 - (viii) Spills Policy.
- (b) Mobilization includes assembly and delivery to the Place of the Work plant equipment, materials and supplies, necessary to carry out the Work that are not intended to be incorporated into the Work; the clearing of and preparation of the Contractor's work area (Note; this activity is separate from and not considered incidental to Grading Work specified in Section 02311); the complete assembly, in working order, of all equipment necessary to perform the required work; personnel services, and all other preparatory work required for commencement of the actual Work on the construction items for which payment is provided under the Contract.
- (c) <u>Mobilization is deemed not to include the provision of the following</u>, 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:
 - (i) Overhead and Profit;
 - (ii) Bond and insurances; and
 - (iii) Labour and costs.

4. <u>Demobilization</u>
GENERAL REQUIREMENTS MOBILIZATION AND DEMOBILIZATION

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- (a) Demobilization includes all activities and costs for transportation from site of personnel, equipment and supplies and materials not used in the Contract. This includes but is not limited to disassembly of the Contractor's and Consultant's offices, buildings, other facilities and portable toilets, and removal and site cleanup at the Place of Work for the Contract.
- (b) Demobilization includes submission and acceptance of final documentation required to meet the requirements of the Contract.

5. <u>Management and Disposal of Mobilization and Demobilization Materials</u>

(a) The Contractor shall dispose of materials resulting from Mobilization and Demobilization activities from the Place of the Work within forty-eight (48) hours of Total Completion of the Work.

END OF SECTION

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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).

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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:

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- 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 Electronic files in PDF format of shop drawings and product data, bearing the review stamp of the Contractor's QVE.
 - 6.2.2 Submissions reviewed by the consultant in PDF format will be returned to the Contractor, who is responsible for preparing all additional copies for distribution, and distributing to all required parties; and

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- 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

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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

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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

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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

TEMPORARY FACILITIES

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PART 1 - GENERAL

1. Access

- (a) The Contractor shall use designated entrance for access to Project site, maintain access roads for duration of Contract and make good damage resulting from Contractor's use of roads.
- (b) The Contractor shall build and maintain temporary roads where required and provide snow removal during period of Work.

2. <u>Site Offices</u>

- (a) Within two (2) weeks after execution of Contract, the Contractor shall provide a site office with temperature maintained to 22°C, lighted 750 Lx and ventilated, of sufficient size to accommodate site meetings and furnished with drawing laydown table and telephone, pay telephone not acceptable. In addition, the Contractor shall provide a portable washroom for the Owner and Consultants use with lock, heating and running water.
- (b) Within the site office, the Contractor shall provide a separate area of 8 m², furnished with the following exclusively for the Consultant's use for the duration of the Contract:
 - (i) A lockable 2-drawer legal filing cabinet;
 - (ii) A double pedestal executive desk with lockable drawers;
 - (iii) One swivel arm chair;
 - (iv) One metal, lockable storage cabinet;
 - (v) One angled drawing board;
 - (vi) Internet access via portable internet;
 - (vii) Duplex electrical receptacle (NEMA 5-20R) supplied with (20A, 120 V AC, 60HZ);
 - (viii) 3 in 1 colour printer/fax/copier; and
 - (ix) Clean site offices weekly or as needed.

3. <u>Provision for Traffic</u>

TEMPORARY FACILITIES

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(a) The Contractor shall at all times carry on the Work in a manner that will create the least interference with traffic consistent with the performance of the Work.

4. <u>Storage Sheds</u>

(a) The Contractor shall provide adequate weather-tight sheds with raised floors, for storage of materials, tools and equipment which are subject to damage by weather.

5. <u>Sanitary Facilities</u>

- (a) The Contractor shall provide sanitary facilities for work force in accordance with governing regulations and ordinances.
- (b) The Contractor shall post notices and take such precautions as required by local health authorities. Keep area and premises in sanitary condition.
- (c) The Contractor shall maintain sanitary facilities for the duration of the Project.

6. Parking

(a) Parking on site is minimal. The Contractor shall confirm with the Consultant the actual location and number of spaces available. The Owner is not required to provide parking to the Contractor and their forces.

7. Site Enclosures and Protection

- (a) The Contractor shall provide full protection to the public when Work is being carried out.
- (b) Protection shall be in the form of a 1.8 m high temporary chain link fence (fast fence/quick fence).
- (c) The Contractor shall maintain all temporary fencing in good repair.
- (d) Compliance with the requirements does not relieve the Contractor from the responsibility for the provision of protection and the adequacy of such protection.

8. <u>Temporary Water, Electricity, Lighting</u>

- (a) The Contractor shall be responsible for and shall assume the cost for provision of water, electricity, and lighting, including all required permits.
- (b) Conversions or alterations to existing sources of water to meet construction requirements are the responsibility of the Contractor.

TEMPORARY FACILITIES

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- (c) The Contractor shall supply electric power for all construction purposes. The Contractor shall make connections for electric power through co-ordination with the local Utility company
- (d) If local power is not available, the Contractor shall use generators to supply power, including supply of fuel and all maintenance. The generator must be a quiet type with a noise level at the rated output not exceeding 60 dB. The noise level at ¼ of the rated output must be less than 55 dB. The generator shall be CSA approved and shall bear CSA labels.
- (e) The Contractor shall provide lighting throughout work areas as required, evenly distributed, and at intensities to ensure that proper installations and applications are achieved
- (f) The Contractor shall provide lighting for emergency evacuation, safety and security throughout the Project at intensity levels required by jurisdictional authorities

9. <u>Heating and Ventilation</u>

- (a) The Contractor shall pay for costs of temporary heat and ventilation used during construction, including costs of installation, fuel, operation, maintenance and removal of equipment. Use of direct-fired heaters discharging waste products into work areas will not be permitted unless prior approval is given by Consultant.
- (b) The Contractor shall provide temporary heat and ventilation in enclosed areas as required to:
 - (i) Facilitate progress of Work;
 - (ii) Protect Work and Products against dampness and cold;
 - (iii) Prevent moisture condensation on surfaces;
 - (iv) Provide ambient temperatures and humidity levels for storage, installation and curing of materials; and
 - (v) Provide adequate ventilation to meet health regulations for safe working environment.
- (c) The Contractor shall maintain a minimum temperature of 10°C or higher where specified as soon as finishing work is commenced and maintain until acceptance of structure by Consultant.
- (d) With regard to ventilating, the Contractor shall:
 - (i) Prevent accumulations of dust, fumes, mists, vapours or gases in areas

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occupied during construction.

- (ii) Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.
- (iii) Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
- (iv) Ventilate storage spaces containing hazardous or volatile materials.
- (v) Ventilate temporary sanitary facilities.
- (vi) Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants.
- (e) The Contractor shall maintain strict supervision of operation of temporary heating and ventilating equipment to:
 - (i) Conform with applicable codes and standards;
 - (ii) Enforce safe practices;
 - (iii) Prevent abuse of services;
 - (iv) Prevent damage to finishes; and
 - (v) Vent direct-fired combustion units to outside.
- (f) Use of permanent system for temporary heating and ventilating will not be permitted, unless there are savings to the Contract Price and Consultant's written permission is obtained stating conditions of use, provisions relating to guarantees on equipment and operation and maintenance of system.

10. Site Signs and Notices

- (a) Contractor Signboard
 - (i) The Contractor shall direct requests for approval to erect a Contractor signboard to the Consultant. The Contractor must ensure signs conform to governing By-laws.
- (b) Safety and Instruction Signs and Notices
 - (i) Signs and notices for safety and instruction shall be in clear English and French language. Graphic symbols shall conform to CAN3-Z321-77.
- (c) Maintenance and Disposal of Site Signs
 - (i) The Contractor shall maintain approved signs and notices in good condition for duration of Project, and dispose of off-site on completion of Project or earlier if directed by Consultant.

TEMPORARY FACILITIES

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11. <u>Removal of Temporary Facilities</u>

(a) The Contractor shall remove temporary facilities from site when directed by Consultant.

END OF SECTION

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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 rightof-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.

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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 Metrolinx, the Consultant and the Flagging Contractor.
 - 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, Contractor's Site Supervisor, and Flagging Contractor's Site Supervisor.
 - 2.4.5 Map showing the route and location of the nearest hospital.
 - 2.4.6 List of onsite 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.

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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.
- 3.2 The Contractor shall provide all railway flagging protection. All costs for flagging protection shall be included in the lump sum tender item Railway Flagging Protection.
 - 3.2.1 All Work must be carried out and protected in accordance with the applicable requirements set out in Attachments "GO Transit Track Worker Safety Instructions".
- 3.3 All track protection/flagging will be done in accordance with the Canadian Railway Operating Rules and GO Track Worker Safety Instructions.
- 3.4 GO Transit Rail Corridors will audit compliance to the rules and instructions and investigate any and all reported or observed violations or safety concerns related to the rules and instructions.
- 3.5 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.
- 3.6 The Contractor shall submit work schedules to GO Transit Rail Corridors at least 30 days in advance which includes the desired method and forms of track protection and times to ensure appropriate communication with the Metrolinx "Centralized Work Block Coordination" function.
- 3.7 The Contractor shall ensure that a responsible person is present at all times to whom the Railway personnel will issue orders regarding work near the tracks and shall comply immediately with such orders and instructions.
- 3.8 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.
- 3.9 At no time shall idling equipment be left unattended by the operator.
- 3.10 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.

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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.
- 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 <u>and remain stopped</u> <u>until permission has been given to resume work by the flag person</u>.
- 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, and with the Owner's approval, Rail Contractor will install and remove temporary construction crossings at their own cost. 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

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acceptable to the Railway. Crossings constructed shall only be used by equipment when flagging protection has been provided by qualified 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.
- 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

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PART 1 - GENERAL

1. General Requirements

(a) This Section covers the Contractor's responsibility for protection of the environment during the Work.

2. Related Sections

(a) All Sections.

3. Contractor's Responsibilities

- (a) The Contractor shall be fully familiar with and comply with applicable laws, applicable environmental acts, regulations and municipal by-laws for environmental requirements, and as amended from time to time, which include without being limited to:
 - (i) Federal Legislation
 - .1 Canadian Environmental Protection Act (CEPA)
 - .2 Fisheries Act
 - .3 Migratory Birds Convention Act (MBCA)
 - .4 Navigation Protection Act (NPA)
 - .5 Transportation of Dangerous Goods Act (TDG)
 - (ii) Ontario Legislation:
 - .1 Environmental Protection Act (EPA)
 - .2 Ontario Water Resources Act (OWRA)
 - .3 Endangered Species Act (ESA)
 - .4 Fish and Wildlife Conservation Act (FWCA)
 - .5 Heritage Act
 - .6 Dangerous Goods Transportation Act (DGTA)
 - .7 Clean Water Act
 - .8 Noise Pollution Control Publication 115
 - .9 Noise Pollution Control Publication 118
 - .10 Technical Standards and Safety Act
 - .11 Energy Act
 - .12 Occupational Health and Safety Act (OHSA)
 - (iii) Toronto Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and

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Watercourses, O.Reg. 166/06 and Voluntary Project Review (VPR) application and response from TRCA.

- (iv) Transport Canada Navigable Waters Permit.
- (b) Prior to commencement of the Work, the Contractor shall provide to the Consultant a copy of the Contractor's Environmental Policy, including spills policy, as required by the Environmental Protection Act, and an Environmental Protection Program to implement the policy.
- (c) The Contractor shall complete the Work in a manner that:
 - (i) protects health and the environment;
 - (ii) complies with the requirements of the Contract Documents;
 - (iii) to the extent that is not inconsistent with the Contract Documents, complies with the Contractor's Environmental Management Plan, once approved by the Consultant;
 - (iv) adequately anticipates, protects and plans for impacts to the environment, including spills, erosion and sedimentation, waste disposal and the use, storage and disposal of Hazardous Materials; and
 - (v) to the extent that is not inconsistent with the Contract Documents, uses all commercially reasonable efforts to reduce, reuse or recycle nonhazardous and non-radioactive waste.
- (d) The Contractor shall provide all plans, reports and other documents identified herein, in accordance with Section 01300 Shop Drawings and Other Submittals.
- (e) The Contractor shall indemnify and hold harmless the Owner from all damages and liabilities assessed against the Owner as a result of Contractor noncompliance therewith.
- (f) The Contractor shall ensure and warrant that all employees possess and will maintain in effect all licenses, permits, authorizations, insurance and any other documents that the acts and/or regulations pertaining to environmental protection require it to have for the performance of contracted works.
- (g) The Contractor shall be solely responsible for the cost of all Work carried out to correct any environmental contamination caused by the Contractor, their sub-contractors or employees on GO Transit location or otherwise. If the Contractor fails to correct any environmental contamination resulting from the contracted work, the Owner may perform such work by its employees or agent. The Owner may hold-back monies from the Contractor for all cost incurred by the Owner in correcting such environmental contamination, plus thirty percent (30%) for overhead. In the event such remedial work is carried out by any public authority, the cost shall be borne by the Contractor.

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- (h) Failure by the Contractor, sub-contractors or employees to respect the established environmental protection program following best management practices may lead to temporary stoppage of Work, suspension of an employee from working on the Owner property, closure of the site until the situation is corrected or removal of the Contractor from the job site. Delays resulting from such closings and any resulting penalties shall be charged to the Contractor. The Contractor will not issue any claims against the Owner for these delays. No extension of contractual Work completion date will be granted as a result of any Work stoppage associated with environmental spills and/or incidents.
- (i) Prior to the commencement of the Work, the Contractor shall provide to the Consultant a Waste Audit and Reduction Program and Source Separation Program as required by O.Reg. 102/94 and O.Reg. 103/94, which shall be implemented throughout the Work.

4. Contractor Environmental Protection Program

- (a) The Contractor shall provide, for Consultant's acceptance, a comprehensive Environmental Protection Program which shall include the Spill Prevention and Contingency Plan, Emergency Response and Communications Plan, Dust Management Plan, Complaint Response Protocol and Erosion and Sediment Control Plan. These shall clearly explain the whole process of dust control, effluent (water) control and spill prevention and response.
- (b) The Contractor shall submit the Environmental Protection Program no later than 30 days prior to commencing work on Site, for the Consultant's approval and make appropriate changes as requested.
- (c) The Contract Personnel Accepted by the Consultant as the Environmental Specialist for the Work shall be vested with single point responsibility for all environmental matters, and shall coordinate all environmental regulatory requirements by the Consultant. The Contractor's Environmental Specialist shall have the appropriate reporting authority within the Contractor's organization.
- (d) The responsibilities of the Environmental Specialist shall include:
 - (i) Providing the Environmental Protection Program;
 - (ii) Ensuring regulatory compliance to applicable environmental legislation;
 - (iii) Ensuring compliance with all environmental requirements as outlined in studies, permits and approvals, and the TRCA Voluntary Project Review Process;
 - (iv) Comprehending and approving all environmental related Submittals prepared by other personnel in the Contractor's project team prior to submitting to the Consultant and coordinating all such Submittals and activities to provide a coherent process;

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- (v) Pre-construction, construction and post-construction environmental monitoring/inspection;
- (vi) Enforcing adherence within the Contractor's organization, including Subcontractors and Suppliers, to the accepted Environmental Protection Program; and
- (vii) Documenting all environmental and compliance issues and resolution of follow-up actions.
- (e) The Contractor shall keep on-site a list of hazardous materials, toxic products, Work procedures and contaminants used in the Work and clearly display at the Site the lists and Material Safety Data Sheets (MSDS).

5. Designated Substances

- (a) The Occupational Health and Safety Act (OHSA) imposes a duty on the Owner to inform the Contractor of any Designated Substances present at the Work Site, where it is reasonable for the Owner to have known about the substance.
- (b) The following list includes currently Designated Substances. These are subject to special regulations under OHSA:
 - (i) Asbestos;
 - (ii) Lead;
 - (iii) Ethylene oxide;
 - (iv) Mercury;
 - (v) Silica (free crystalline silica);
 - (vi) Vinyl chloride monomer (not PVC);
 - (vii) Benzene;
 - (viii) Arsenic;
 - (ix) Coke oven emissions;
 - (x) Acrylonitrile; and
 - (xi) Isocyanates.
- (c) The Contractor shall take appropriate health and safety precautions to protect human health and the environment, including recommending additional investigations or sampling if deemed appropriate. Such recommendations are subject to acceptance by the Consultant.
- (d) Asbestos:
 - (i) The Contractor shall notify the Consultant immediately if any material that is suspected to contain asbestos is discovered during demolition or construction;

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- (ii) The Contractor shall cease work in the area and barricade the area to prevent entry until such time as the Consultant confirms the presence or absence of asbestos;
- (iii) The Contractor shall comply with all provisions of the 'Occupational Health and Safety Act' and the 'Regulations respecting Asbestos on Construction Projects and in Buildings and Repair Operations'.

6. Spill Prevention and Response

- (a) The Contractor shall be solely responsible and liable for, without being limited to, all testing documentation, clean up, reporting, repairs, removal, damages and associated costs, and any other actions arising from any spill.
- (b) The Contractor shall provide the Consultant, with a Spill Prevention and Contingency Plan to ensure proper mitigation measures are in place for construction and operation.
- (c) The Contractor shall provide the Consultant, with an Emergency Response and Communications Plan and notification procedures are in place regarding groundwater quality during construction and operation.
- (d) The Contractor shall ensure all staff is trained on the emergency response and communications plan. Copies of training records shall also be provided.
- (e) Refueling of equipment and fuel storage shall be conducted in designated areas at least 30m from any watercourse with spill protection. The Contractor shall submit a proposal for all storage areas proposed within TRCA's regulated areas for approval prior to proceeding to stockpile the construction material and equipment.
- (f) The Contractor shall provide the appropriate quantity of 'Spill Response Kits' for the use by any Site personnel, including but not limited to Subcontractors and the Consultant. The Spill Response Kit shall contain materials and equipment capable of containing and disposing of any Spill that could occur during the course of the Work. All Site staff shall be training in the use of the Spill Response Kit.
- (g) All spills shall immediately be reported to the Rail Operations Control Centre at (416) 601-2174 and the Ontario Spills Action Centre at 1-800-268-6060. The Contractor shall immediately notify the Consultant who will report to the GO Transit Project Manager and System Safety.
- (h) In the event of a spill, the Contractor shall carry out the following steps, as a minimum:
 - (i) Follow the Spill and Prevention and Contingency Plan.
 - (ii) Quickly locate the source of contamination and, if possible, neutralize it.

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- (iii) Cut the supply of electrical current and turn off all sources of ignition. Extinguish any flame.
- (iv) Restrict access to the spill area and set up a secure zone.
- (v) Use a spill kit or any other barrier (sand, peat, moss, snow) to contain the spill.
- (vi) Prevent seepage into watercourse, storm drains, sewer systems etc. Use plastic tarps or other materials to build a retention pond.
- (vii) Immediately communicate the details to the Consultant and report on the type of spill, the quantity of spill, the location of the Spill and whether or not the contaminant has entered a sewer line or flood drain or if the Spill has occurred on unpaved ground.
- (viii) The recovered products and contaminated natural soil must be stored, treated recycled or disposed only by authorized carriers.
- (ix) Provide the necessary testing for contaminant levels and secure the necessary documentation for clean-up and disposal. The clean-up contractor and consultant hired by the Contractor must be approved by the Consultant and GO Transit Project Manager. Any remediation or verification sampling must be overseen by a qualified person as per O. Reg. 153/04.

7. Fires

(a) Fires and burning of rubbish on-site is not permitted.

8. Disposal of Waste and Excess Materials

- (a) The Contractor shall not bury rubbish or waste materials on-site.
- (b) The Contractor shall not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner onto Metrolinx property, into waterways, storm or sanitary sewers.
- (c) Any contaminated soils or hazardous materials must be handled in accordance with the Environmental Protection Act, O.Reg. 347, OPSS 180 General Specification for the Management of Excess Materials, and Management of Excess Soil – A Guide for Best Management Practices (MOE, 2014), and TDG.
- (d) 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.
- (e) The Contractor is responsible for the proper disposal of surplus or unsuitable material off the site. The Contractor shall arrange and pay for additional testing as required by the receiver site as a condition for acceptance of the

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material. Submit to the Consultant the forms provided under OPSS 180 which are signed by the receiver site.

- (f) Contaminated soils and other waste materials will be disposed at a landfill or other waste treatment disposal or treatment facility that has been licensed by the Ontario Ministry of the Environment and Climate Change (MOECC). The Contractor shall inform the Consultant in writing of all waste disposal or treatment facilities that will be used prior to removing waste from the Site. The Contractor will provide the Consultant with weigh bills from the receiving facilities for all wastes leaving the Site.
- (g) The Contractor must notify the Consultant of any suspected hazardous materials including contaminated soil, defined below, in excavation.
- (h) Clean soil is defined for this project as:
 - (i) Soil that has been sampled and analyzed for metals, Sodium Adsorption Ratio, Electrical Conductivity, volatile organic compounds, polyaromatic hydrocarbons, and petroleum hydrocarbons F1 to F4, and all parameters satisfy the Table 3 Standards for soil in Industrial/Commercial/Community Property Use, as published by the Ontario Ministry of the Environment and Climate Change (MOECC), in Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, and as may be updated by the MOECC from time to time; and
 - (ii) The soil does not contain visible waste, has no staining, and no odours.
- (i) Contaminated soil is defined for this project as:
 - (i) Soil that contains one or more parameters at a concentration that exceeds the Table 2 Standards for soil in Industrial/Commercial/Community Property Use, as published by the Ontario Ministry of the Environment and Climate Change (MOECC), in Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, and as may be updated by the MOECC from time to time; or containing visible waste, staining, or is a source of odours.
- (j) The Contractor must notify the Consultant of any suspected hazardous materials in excavation. Do not remove or bury such material without written permission from the Consultant.

9. Drainage

.1 The Contractor shall provide temporary drainage and pumping as necessary to keep excavations and Site free from water. Outfall from pumping operations must be directed away from creeks onto approved areas (e.g., splash pads or retention).

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- .2 The Contractor shall not pump water containing suspended materials into waterways, sewer or drainage systems.
- .3 The Contractor shall control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.
- .4 The Contractor shall ensure that water used for cleaning of equipment does not drain into streams, lakes or water courses. Fuel, lubricants and/or pesticides shall not be emptied into any watercourse, or on the ground.
- .5 The Contractor shall make provisions to contain any spill that may occur on-site.

10. Site Clearing and Plant Protection

- .1 Vegetation removal must not take place between April 15 and July 31 of any year. Where removal of vegetation cannot be avoided, during that period a qualified biologist shall be retained to conduct an avian survey to document the absence of migratory birds at those sites at the time of clearing.
- .2 The Contractor must protect trees and plants on-site and adjacent properties, adhering to local by-laws.
- .3 The Contractor shall install silt fencing and/or tree protection fencing prior to grubbing and excavation where appropriate to protect existing vegetation, and no closer than the dripline. Taller tree protection fencing (i.e. hoarding around trees) shall be installed in these areas to protect tree limbs from equipment in adjacent areas.
- .4 The Contractor must minimize stripping of topsoil and vegetation. Existing vegetation on embankments must be maintained as long as possible. All topsoil shall be stockpiled separately and used for restoration to facilitate natural regeneration of native species.
- .5 The Contractor must restrict tree removal to areas indicated on the Contract Drawings or as designated by the Consultant.

11. Wildlife Protection

- .1 The Contractor shall supply, install, inspect on a daily basis, and maintain bird exclusionary barriers on the bridge to prevent birds from nesting beneath the existing bridge. The exclusionary barriers shall be installed between September 1, 2017 and February 1, 2018.
- .2 The existing bridge shall be inspected for nests prior to the placement of exclusionary barriers. If nests are present, the nests shall be inspected by a Qualified Biologist hired by and at the Contractor's expense to ensure that eggs or birds are not present and no work shall be permitted to proceed that would result in the destruction of active nests.

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- .3 The Contractor shall take any additional measures necessary to prevent the establishment of bird nesting on the bridge.
- .4 If nests of species protected under the Migratory Birds Convention Act or the Fish and Wildlife Conservation Act are present but deemed not active by a Qualified Biologist and provides clearance for construction, installation of exclusionary barriers can proceed.
- .5 If nests of species protected under the Endangered Species Act are present, then the Contractor shall contact MNRF for further direction.
- .6 Should nesting activity occur following installation of the exclusionary barriers, work on the bridge shall stop and the Contractor shall implement actions as per c) and d) above. The Contractor shall be responsible for the cost, including the cost of delays, of rehabilitating the bridge to maintain the current class of track above without restriction until span replacement can proceed.
- .7 The Contractor shall meet the requirements of environmental laws and regulations and shall be responsible for all costs related to the supply, installation and maintenance of exclusionary barriers and any delays resulting from bird nesting on the existing bridge or failure to maintain the exclusionary barriers.
- .8 The site has the potential for use by Blanding's Turtle. Prior to the work, the Contractor shall retain a qualified biologist to identify areas of the work site where there is potential for Blanding's Turtle to exit the watercourse to nest.
- .9 Exclusion fencing shall be utilized by the Contractor in shoreline areas of the work site where there is potential for Blanding's Turtle to exit the watercourse to nest.
- .10 Should any Species at Risk be found within the site during the works, works shall cease until the Species at Risk has safely left the work area. Any sightings of Species at Risk shall be reported to Metrolinx and MNRF.
- .11 All construction equipment and vehicles shall give right-of-way (ROW) to wildlife, allowing wildlife to pass and proceed to a safe distance prior to construction equipment/vehicles commencing construction activities.
- .12 In the event wildlife is injured during construction activities, the Contractor shall immediately cease work activities and notify the Contract Administrator.
- .13 No additional compensation shall be made for work delays as a result of encounters with wildlife.

12. <u>Watercourse/Fisheries Protection</u>

.1 In-water work is permitted between July 1 and September 15.

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- .2 Provide erosion and sedimentation controls as shown in the Contract Drawings and as per the Contractor's Erosion and Sediment Control Plan.
- .3 Store equipment, construction material, excess material, construction debris, and empty containers at least 30 m away from the watercourse.
- .4 Where an area enclosed by cofferdams is being dewatered, the following shall apply:
 - (i) Prior to dewatering and isolation a qualified biologist retained by the Contractor shall electroshock at low frequencies to ensure American Eel and Silver Lamprey ammocoetes leave the area.
 - (ii) Fish salvage shall be undertaken by a qualified biologist within the isolated areas prior to any in-water works and dewatering activities. The Contractor shall be responsible for obtaining a License to Collect Fish for Scientific Purposes well in advance of construction in order to prevent delays and for adhering to the requirements of the License.
 - (iii) Pumps shall have a fish screen that meets DFO's Freshwater Intake Endof-Pipe Fish Screen Guideline to prevent entrainment or impingement of fish. Extra pumps shall be on site and in position in the event of a pump malfunction.
 - (iv) Discharge dewatering effluent so as to prevent the entry of sediment to the watercourse and comply with the *Ontario Water Resources Act.*
- .5 If the Consultant determines that controls are unacceptable, cease those operations as identified by the Consultant that are causing the entry of deleterious material into the watercourse. Such operations shall remain suspended until otherwise directed by the Consultant in writing.
- .6 On completion of the Work the Contractor shall remove all coffer dam materials from the watercourse including any material placed to provide temporary working areas.

13. Erosion and Sediment Control

.1 Prior to the commencement of any Work that might cause erosion and/or sedimentation, the Contractor must receive approval from the Consultant for an Erosion and Sedimentation Control Plan that the Contractor proposes to use. This plan must be in accordance with TRCA Guidelines on Erosion and Sediment

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Control for Urban Construction (December 2006) and Ontario Provincial Standard Specifications (OPSS).

- .2 The Contractor shall install sediment and erosion control measures prior to site clearing, grubbing, excavation filling or grading works and shall be maintained during the construction period and until after construction when the site had been stabilized. Extra silt fence/turbidity curtain shall be on site, should additional sediment control be required.
- .3 The stockpiling of topsoil must be restricted to outside the limits of flood plains.

14. Restoration

.1 The Contractor shall restore the Site to pre-construction conditions as soon as possible after completion of construction, to the satisfaction of the Consultant, Owner and Regulatory Authorities. The post-construction landscaping and rehabilitation plans shall be undertaken in a manner that is sympathetic to the overall setting.

15. Air Quality and Dust Control

- .1 The Contractor shall comply with air pollution requirements established by local agencies and the MOECC and shall provide adequate measures to control dust in accordance with OPSS 506.
- .2 The Contractor must take such steps as may be required to prevent dust nuisance resulting from operations. Prior to construction, the Contractor must submit for approval, a Dust Management Plan describing the mitigation measures which will be put in place to avoid contributing the air pollution.
- .3 The Contractor shall use new or well-maintained heavy equipment and machinery, fitted with fully functional emission control system/exhaust system, baffles and engine covers. All such equipment and machinery shall be operated within regulatory requirements.
- .4 The Contractor shall maintain all emission control devices on machinery in good working condition.
- .5 The Contractor shall regularly inspect and maintain all equipment emission control devices to ensure air emissions are within manufacturer and legislative limits.
- .6 The Contractor shall implement dust suppression on exposed soils to reduce the potential for airborne particulate matter during construction activities.
- .7 The Contractor shall cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads and unprotected ground surfaces.
- .8 The Contractor shall be responsible for all dirt and mud that is tracked onto the roadways and parking lots from vehicles entering or leaving the job site. The

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Contractor must, upon request from the Consultant, immediately proceed with cleanup operation at the Contractor's expense, or if in the opinion of the Consultant, the Contractor has not or cannot sufficiently remove the mud from the road, the Consultant will proceed with the necessary clean up with all costs being charged to the Contractor.

- .9 Where work requires the sawing of asphalt or the sawing or grinding of concrete, the Contractor shall use blades and grinders of the wet type together with sufficient water to prevent the incidence of dust, wherever dust would affect traffic or wherever dust would be a nuisance to residents of the area where the work is being carried out.
- .10 A Complaint Response Protocol shall be submitted, approved and implemented to the Consultant, prior to construction.

16. Statutory Approvals

.1 The Contractor shall ensure that all statutory approvals are obtained to commence construction. Such approvals, agreements, forms, etc. are to be obtained by the Contractor as advised by the Consultant, or otherwise.

17. Construction Operations

.1 The Contractor shall avoid unnecessary traffic, dumping and storage of materials. The Contractor shall keep movement of equipment and machinery to the construction side of the rail ROW.

18. Noise Control Measures

- .1 The Contractor shall obtain and pay for a noise by-law exemption permit as required or directed by the Consultant/Owner.
- .2 The Contractor shall comply with the requirements of NPC 115 and NPC 118.
- .3 The Contractor shall prevent excessive noise which may be disturbing to nearby residential areas. 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. The Contractor shall ensure that all equipment and vehicles are compliant with noise and air emission standards for applicable equipment.
- .4 The Contractor shall implement noise control measures where required during the construction phase, such as restricted hours of operation and the use of appropriate machinery and mufflers.
- .5 Where the Consultant/Owner determines the noise levels to be excessive, the Contractor shall take special precautions and apply noise abatement measures to reduce public noise exposure, including, but not limited to:
 - (i) Shields or other physical barriers to restrict the transmission of noise;

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- (ii) Soundproof housings or enclosures for noise producing machinery such as compressors, pumps, motors, generators or vac trucks;
- (iii) Efficient intake and exhaust silencers on air equipment
- (iv) Efficient intake and exhaust mufflers on internal combustion engines
- (v) Sound deadening lining material on hoppers and storage bins
- (vi) Conducting truck loading, unloading and hauling operations, so that noise is kept to a minimum;
- .6 The Contractor shall use air compressors and pneumatic hammers only with the expressed authorization of the Consultant.
- .7 A Complaint Response Protocol shall be submitted, approved and implemented to the Consultant, and the Owner, prior to construction.

19. <u>Vibration Control Measures</u>

- .1 The Contractor shall operate in accordance with local by-laws except where exemptions have been obtained.
- .2 The Contractor shall give consideration to the use of alternative construction equipment, where practical, that would generate lower vibration levels than typical methods or equipment.

END OF SECTION

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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;

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- (h) Smoke-Free Ontario Act;
- (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 sitespecific 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.

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- 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 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.

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- 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.
- 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;

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- 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;
- 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;
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- 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 responsibility and in accordance with the applicable instructions. 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;

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- 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.

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.

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- 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.

10.0 Working at Heights

- 10.1 <u>Scaffolding</u>
 - 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:

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- (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.
- (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:

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- (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.

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.

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- 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 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.

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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.
- 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".

GENERAL REQUIREMENTS MATERIALS AND EQUIPMENT

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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 Where not otherwise specified, the Contractor shall 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

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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.

GENERAL REQUIREMENTS MATERIALS AND EQUIPMENT

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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 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. The Contractor shall 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, complete with Owner's written authorization to Consultant to permit the substitution.

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.

GENERAL REQUIREMENTS CLEANING

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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 Schedule cleaning operations so that resulting dust and other contaminants will not fall on wet, newly painted surfaces.

GENERAL REQUIREMENTS PROJECT CLOSEOUT

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

1.0 Final Cleaning

- 1.1 Clean all equipment and accessories.
- 1.2 Avoid contamination of surrounding surfaces with cleaning fluids. Install temporary protection, if required, and remove same immediately upon completion of cleaning operation involved.
- 1.3 Methods of cleaning shall be in accordance with Manufacturer's recommendations of the finishes involved.
- 1.4 Soaps, detergents, and other cleaning materials and methods shall be as recommended by Manufacturer of finish surface material involved.
- 1.5 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:
 - 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.

GENERAL REQUIREMENTS PROJECT CLOSEOUT

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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.
 - 4.2.4 additional material used in project listed under various sections showing name of manufacturer and source supply.

GENERAL REQUIREMENTS PROJECT CLOSEOUT

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

- 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.

SPECIFICATIONS

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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

RICHMOND HILL LINE M. 8.5, 8.6 AND 8.8 BALA SUBDIVISION BRIDGE REPLACEMENTS CONTRACT NO. IT-2017-BS-003

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