

ONTARIO NORTHLAND

TRANSPORTATION COMMISSION

Request for Proposals No. RFP 2025 035

For

Iroquois Falls Subdivision Track Rehabilitation

REPLY BY DATE:

2:00:00 p.m. Friday, June 20, 2025

Primary Contact:

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PART 1 REQUEST FOR PROPOSALS

SECTION 1 - INTRODUCTION

1.1 General

(1) Ontario Northland Transportation Commission ("ONTC") is issuing this Request for Proposals ("RFP") to obtain proposals from a vendor/service provider(s) for the provision of the goods and/or services described in the RFP Specifications (the "Goods and/or Services").

(2) In this RFP:

"Applicable Laws" means the statutes, regulations, orders, by-laws and other laws of Ontario, Quebec, Manitoba, Canada and any municipal government relevant to the RFP and the subject matter of the RFP;

"Addendum" means the written supplementary information provided to potential Respondents prior to the Submission Deadline, which information becomes part of the RFP Documents;

"Business Day" means any day except Saturday, Sunday or a statutory holiday;

"Final Agreement" means the agreement for the supply of the Goods and/or Services entered into by ONTC and the Successful Respondent;

"Material" means a document or information that must be included in the Proposal including without limitation the information requested in the RFP Data Sheet, and is essential to allow ONTC to evaluate a Proposal and that if not included will result in the disqualification of the Proposal;

"Non-compliant" means the Proposal or the Respondent does not meet a requirement of the RFP Documents;

"Proposal" means the response to the RFP submitted by a Respondent to ONTC;

"Respondent(s)" means the entity submitting a Proposal and includes prospective respondents, whether or not that entity submits a Proposal. If the context requires it, "Respondent" includes any of the Respondent's respective shareholders, owners, officers, agents, consultants, partners, contractors, subcontractors, advisors, employees, or representatives;

"RFP Data Sheet" means the information and requirements contained in Schedule 2-A of Part 2:

"RFP Documents" means the documents listed in RFP Section 2.1 (1) and any additional documents issued through Addenda;

"Short-listed Respondent" means a Respondent selected to proceed to the next step in the evaluation process pursuant to section 6.2 (2) of the RFP; "Substantially Compliant" means Proposal does not meet the requirements of the RFP Documents; however, the Proposal includes all of the Material items, as identified in the RFP Data Sheet;

"Successful Respondent" means the Respondent selected by ONTC to enter into the Final Agreement.

- (3) The process to select the Short-listed Respondents for the supply of the Goods and/or Services (the "**RFP Process**") will commence with the issuance of these RFP Documents and will terminate at the earlier of:
 - (a) when ONTC and the Successful Respondent execute the Final Agreement; or,
 - (b) upon the termination of the RFP Process in accordance with the terms and conditions of this RFP.

1.2 Ontario Northland Transportation Commission

ONTC is an agency of the Province of Ontario that provides reliable and efficient transportation services to northern and rural communities. For over 120 years, the company has provided integrated and impactful transportation services including rail freight, passenger rail, motor coach transportation, rail repair, and remanufacturing services.

ONTC's rail services are vital in maintaining a reliable supply chain in Northern Ontario by connecting freight customers to global economies. The forestry industry, mining operations, farming communities, and manufacturers count on ONTC's services to deliver large volumes across vast distances. The company's 675 miles of mainline track span throughout northeastern Ontario and northwestern Quebec.

ONTC motor coaches connect rural Ontario to major centres providing access to education, medical appointments, shopping, and seamless connections to other transportation providers. The Polar Bear Express passenger train connects Moosonee and Cochrane, Ontario, providing an all-season land link for Indigenous communities on the James Bay Coast.

Improving and repairing transportation equipment is also part of ONTC's service offering. ONTC's unique mechanical skillset attracts new business and secures skilled trades jobs in Northern Ontario by remanufacturing and repairing locomotives, passenger rail cars, freight cars, and more.

ONTC makes provincial dollars reach further by creating innovative solutions that help drive economic growth sustainably, responsibly, and with future generations in mind. Throughout the agency, modernization is underway with many exciting projects that will improve how we operate. ONTC employs over 900 people including Locomotive Engineers, Motor Coach Operators, skilled tradespeople, and business professionals.

Employees work together to improve and deliver services that provide value to the regions served.

SECTION 2 - THE RFP DOCUMENTS

2.1 Request for Proposals Documents

- (1) The Request for Proposals documents consist of:
 - Part 1 Request for Proposals
 - Part 2 Requests for Proposals Summary of Requirements
 - (a) Schedule 2-A RFP Data Sheet
 - (b) Schedule 2-B Participation Registration Form

Part 3 - RFP Specifications

- (a) Schedule 3-A-1 Scope of Work
- (b) Schedule 3-A-2 Technical Specifications
- (c) Schedule 3-A-3 Policies and Procedures

Part 4 - Form of Proposal

- (a) Proposal Form 1 Proposal Submission Form
- (b) Proposal Form 1-A Schedule of Prices
- (c) Proposal Form 2 Respondent's General Information
- (d) Proposal Form 3 Acknowledgment to Comply with Part 3 Request for Proposals Specifications
- (e) Proposal Form 4 References
- (f) Proposal Form 5 Compliance with Contract Documents
- (g) Proposal Form 6 Health, Safety and Environment
- (h) Proposal Form 7 Schedule of Materials
- (i) Proposal Form 8 List of Equipment
- (i) Proposal Form 9 Schedule and Proposed Approach
- (k) Proposal Form 10 Schedule of Progress Payments
- (I) Proposal Form 11 List of Personnel and Resumes
- (m) Proposal Form 12 Current Labour Agreements
- (n) Proposal Form 13 Contractor's Qualification Statement
- (o) Proposal Form 14 Claims

Part 5 – CCDC 4-2023 Supplementary Conditions

(2) The RFP Documents shall be read as a whole. The Schedules and Addenda, if any, constitute an integral part of this RFP and are incorporated by reference.

- (3) Each Respondent shall verify the RFP Documents for completeness upon receipt and shall inform the Contact Person (identified in RFP Section 3.2(7)), immediately:
 - (a) should any documents be missing or incomplete; or,
 - (b) upon finding any discrepancies or omissions.
- (4) Complete sets of the RFP Documents are available at our company website at www.ontarionorthland.ca and MERX.
- (5) The RFP Documents are made available only for the purpose of Respondents submitting Proposals. Availability and/or use of the RFP Documents do not confer a license or grant for any other purpose.

2.2 Priority of Documents

- (1) If there are any inconsistencies between the terms, conditions or other provisions of the RFP Documents, the order of priority of RFP Documents, from highest to lowest, shall be:
 - (a) Any Addenda modifying the RFP Documents issued during the RFP Process;
 - (b) The RFP Data Sheet;
 - (c) Part 1 Request for Proposals;
 - (d) Part 3 Specifications; and,
 - (e) Any other RFP Documents.

2.3 Distribution of Documents - Electronic Distribution

- (1) ONTC will use an online electronic distribution system to distribute all RFP Documents.
- (2) Each Respondent is solely responsible for making appropriate arrangements to receive and access the RFP Documents through that electronic distribution system.

2.4 Information Provided by ONTC

- (1) Each Respondent is solely responsible for conducting its own independent research, due diligence, and any other work or investigations and seeking any other independent advice necessary for the preparation of its Proposal, negotiation or finalization of the Final Agreement and the subsequent delivery of all the Goods and/or Services to be provided by the Successful Respondent. Nothing in the RFP Documents is intended to relieve the Respondents from forming their own opinions and conclusions with respect to the matters addressed in this RFP.
- (2) No guarantee, representation or warranty, express or implied, is made and no responsibility of any kind is accepted by ONTC or its representatives for the completeness or accuracy of any information presented in the RFP Documents, if any, during the RFP Process or during the term of the Final Agreement. By submitting a Proposal, each

Respondent agrees that ONTC and its representatives shall not be liable to any person or entity as a result of the use of any information contained in the RFP Documents or otherwise provided by ONTC or its representatives during the RFP Process or during the term of the Final Agreement.

SECTION 3 - THE RFP PROCESS

3.1 RFP Process

- (1) The deadline for the submission of Proposals (the "Submission Deadline") is set out in the RFP Data Sheet.
- ONTC may amend, extend or shorten any of the dates and/or times prescribed in this RFP, at any time, at its sole discretion, including without limitation the Submission Deadline. If ONTC extends the Submission Deadline, all requirements applicable to Respondents will thereafter be subject to the new, extended Submission Deadline.

3.2 Questions and Communications Related to the RFP Documents

- (1) Respondents shall submit all questions, requests for clarifications, and other communications regarding the RFP Documents and the RFP Process by email to the Contact Person set out in section 3.2(7) no later than four (4) full Business Days before the Submission Deadline.
- (2) ONTC will endeavor to provide the Respondents with written responses to questions that are submitted in accordance with this RFP Section 3.2, by no later than two (2) full Business Days before the Submission Deadline. Responses to any questions or requests for clarifications, will be collected and distributed with answers to be delivered to all Respondents who have submitted the Participation Registration Form by way of emailed addenda from ONTC in accordance with the timeline set out in this Section 3.2(2).
- (3) The responses to questions form part of the RFP Documents.
- (4) ONTC may, in its sole discretion:
 - (a) answer questions that ONTC deems to be similar from various Respondents only once;
 - (b) edit any question(s) for the purpose of clarity;
 - (c) respond to questions submitted after the deadline for submission of questions if ONTC believes that such responses would be of assistance to the Respondents generally; and,

- (d) exclude any questions that, in the sole opinion of ONTC, are ambiguous, incomprehensible, or are deemed by ONTC to be immaterial to the RFP Process, the RFP Documents, or the Goods and/or Services.
- (5) If Respondents find discrepancies, omissions, errors, departures from laws, by-laws, codes or good practice, or information considered to be ambiguous or conflicting, they shall bring them to the attention of the Contact Person in writing, and not less than four (4) full Business Days before the Submission Deadline, so that ONTC may, if ONTC deems it necessary, issue instructions, clarifications or amendments by addendum to all Respondents prior to the Submission Deadline. ONTC will endeavor to, but is not required to, issue such Addenda at least two (2) full Business Days prior to the Submission Deadline. It is each Respondent's responsibility to seek clarification from ONTC of any matter it considers to be unclear in the RFP Documents or the description of the Goods and/or Services and the Respondent may seek clarification in accordance with this Section 3.2. Neither ONTC nor the Government of Ontario shall be responsible for any misunderstanding by a Respondent of the RFP Documents, the RFP Process or the Goods and/or Services.
- (6) If ONTC gives oral answers to questions at any meeting (Section 3.4), these answers will not be considered final, and may not be relied upon by any of the Respondents, unless and until such answers are provided by way of an addendum in accordance with this Section 3.2.
- (7) The Contact Person designated by ONTC for this RFP is *Brinda Ranpura*, *Procurement Contracts Specialist*, *555 Oak Street East*, *North Bay*, *Ontario P1B 8L3* (705) 472-4500 ext. 548, brinda.ranpura@ontarionorthland.ca (the "Contact Person"). The above Contact Person is the sole contact for this RFP. A Respondent may be disqualified where contact is made with any person other than the Contact Person.
- (8) ONTC will not be responsible for statements, instructions, clarifications, notices or amendments communicated orally by ONTC to one or more of the Respondents. Statements, instructions, clarifications, notices or amendments by ONTC, which affect the RFP Documents, may only be made by addendum.

3.3 Addenda/Changes to the RFP Documents

(1) ONTC may, in its sole discretion, amend, supplement, or change the RFP Documents prior to the Submission Deadline. ONTC shall issue amendments, supplements, or changes to the RFP Documents by Addendum only. No other statement or response(s) to questions, whether oral or written, made by ONTC or any ONTC advisors, employees or representatives, including, for clarity, the Contact Person, or any other person, shall amend, supplement or change the RFP Documents. Addenda will be distributed in the same manner as the RFP and shall become part of the RFP Documents.

(2) Each Respondent is solely responsible for ensuring that it has received all Addenda issued by ONTC. Respondents may, in writing by email to the Contact Person, seek confirmation of the number of Addenda, issued under this RFP.

3.4 Respondents' Meeting

- (1) To assist Respondents in understanding the RFP Documents, and the RFP Process, ONTC may conduct an information meeting (the "Respondents' Meeting") for all Respondents. Whether or not ONTC will conduct a Respondents' Meeting is set out in the RFP Data Sheet. If ONTC is conducting a Respondents' Meeting, the meeting will be held on the date and at the time and location set out in the RFP Data Sheet.
- (2) Attendance by Respondents at a Respondents' Meeting may not be mandatory but, if one is held, Respondents are strongly encouraged to attend. Whether or not the Respondents' Meeting is mandatory will be identified on the RFP Data Sheet. When a Respondents' meeting is mandatory, all attending persons or entities will be required to sign the "Site Meeting Log" to confirm their attendance and provide a valid email address for the purpose of receiving information.
- (3) If ONTC gives oral answers to questions at the Respondents' Meeting, these answers will not be considered final, and may not be relied upon by any of the Respondents, unless and until such answers are provided by way of an Addendum in accordance with Section 3.2.
- (4) <u>If pre-registration for the Respondents' Meeting is necessary, the deadline for registration will be set out in the RFP Data Sheet and details regarding the registration process will be set out in the RFP Data Sheet.</u>

3.5 Prohibited Contacts

- (1) Respondents and their respective 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 the RFP Process.
- (2) Without limiting the generality of Section 3.5(1) above, neither Respondents nor any of their respective advisors, employees or representatives shall contact or attempt to contact, either directly or indirectly, at any time during the RFP Process, any of the following persons or organizations on matters related to the RFP Process, the RFP Documents, or their Proposals:
 - (a) any member of the Evaluation Team (as defined in Section 6.1), except the Contact Person;
 - (b) any advisor to ONTC or the Evaluation Team, except the Contact Person; or.

- (c) any directors, officers, employees, agents, representatives or consultants of:
 - (i) ONTC, except the Contact Person;
 - (ii) Ontario Ministry of Transportation;
 - (iii) The Premier of Ontario's office or the Ontario Cabinet office;
 - (iv) A Member of Provincial Parliament (including the Premier); or,
 - (v) Any other person or entity listed in the RFP Data Sheet.
- (3) If a Respondent or any of their respective shareholders, owners, officers, agents, consultants, partners, contractors, subcontractors, advisors, employees, representatives, or other third parties acting on behalf or with the knowledge of the Respondent; in the opinion of ONTC, contravenes RFP Section 3.5(1) or 3.5(2), ONTC may, but is not obliged to, in its sole discretion:
 - (a) take any action in accordance with RFP Section 7.2; or
 - (b) impose conditions on the Respondent's continued participation in the RFP Process that ONTC considers, in its sole discretion, to be appropriate.

3.6 Media Releases, Public Disclosures, Public Announcements and Copyright

- (1) A Respondent shall not, and shall ensure that its shareholders, owners, officers, agents, consultants, partners, contractors, subcontractors, advisors, employees, representatives, or other third parties acting on behalf or with the knowledge of the Respondent do not, issue or disseminate any media release, social media or Internet post, public announcement or public disclosure (whether for publication in the press, on the radio, television, internet or any other medium) that relates to the RFP Process, the RFP Documents or the Goods and/or Services or any matters related thereto, without the prior written consent of ONTC.
- (2) Neither the Respondents or any of their respective shareholders, owners, officers, agents, consultants, partners, contractors, subcontractors, advisors, employees, representatives, or other third parties acting on behalf or with the knowledge of the Respondent shall make any public comment, respond to questions in a public forum, or carry out any activities to either criticize another Respondent or Proposal or to publicly promote or advertise their own qualifications, interest in or participation in the RFP Process without ONTC 's prior written consent, which consent may be withheld, conditioned or delayed in ONTC 's sole discretion. Respondents, and their respective advisors, employees and representatives are permitted to state publicly that they are participating in the RFP Process but shall not publicly identify other Respondents without the prior written consent of ONTC.
- (3) Respondents shall not use the name of ONTC or any of ONTC's logos, designs, colours or registered trademarks and names used, owned or registered by ONTC, during the RFP Process, if selected as the Successful Respondent, or at any time prior to, during, or

following the supply of the Goods and/or Services, except with the prior written consent of ONTC.

3.7 Confidentiality and Disclosure Issues - Respondent Information

- (1) Respondents are advised that ONTC may be required to disclose the RFP Documents, any other documentation related to the RFP Process and a part or parts of any Proposal pursuant to the *Freedom of Information and Protection of Privacy Act* (Ontario) ("FIPPA"). Respondents are also advised that FIPPA does provide protection for confidential and proprietary business information. Respondents are strongly advised to consult their own legal advisors as to the appropriate way in which confidential or proprietary business information should be marked as such in their Proposals. Subject to the provisions of FIPPA, ONTC will use reasonable commercial efforts to safeguard the confidentiality of any information identified by the Respondent as confidential but shall not be liable in any way whatsoever to any Respondent if such information is disclosed based on an order or decision of the Information and Privacy Commissioner or otherwise as required under the Applicable Laws.
- (2) The Respondent agrees that ONTC may disclose Proposals, and all information submitted in or related to the Proposals, to the Government of Ontario.
- (3) ONTC may provide the Proposals to any person involved in the review and/or evaluation of the Proposals on behalf of ONTC and ONTC may:
 - (a) make copies of the Proposal; and/or,
 - (b) retain the Proposal.
- (4) ONTC may disclose any information with respect to the Respondents, the Proposals and the RFP Process as required by the Applicable Laws.
- (5) The Respondent shall not require ONTC or any of its representatives to sign a non-disclosure agreement in respect of any step taken or information provided as part of this RFP Process, provided that if the nature of the subject matter of the RFP is such that, in the opinion of ONTC, it would be appropriate to enter into a non-disclosure agreement with a Respondent or Respondents, ONTC and/or the Respondent shall enter into such agreement in a form and with the content satisfactory to ONTC.

3.8 Confidential Information

(1) In this RFP, "**RFP Information**" shall mean all material, data, information or any item in any form, whether oral or written, including in electronic or hard-copy format, supplied by, obtained from or otherwise procured in any way, whether before or after the RFP Process, from ONTC or any Ministry or Agency of the Government of Ontario, in connection with the RFP Documents or the Goods and/or Services excluding any item which:

- (a) is or becomes generally available to the public other than as a result of a disclosure resulting from a breach of this RFP Section 3.8;
- (b) becomes available to the Respondent on a non-confidential basis from a source other than ONTC, so long as that source is not bound by a nondisclosure agreement with respect to the information or otherwise prohibited from transmitting the information to the Respondent by a contractual, legal or fiduciary obligation; or,
- (c) The Respondent is able to demonstrate was known to it on a non-confidential basis before it was disclosed to the Respondent by ONTC.

(2) RFP Information:

- shall remain the sole property of ONTC or the Government of Ontario, as applicable, and the Respondent shall maintain the confidentiality of such information except as required by law;
- (b) shall not be used by the Respondent for any other purpose other than submitting a Proposal or performing obligations under any subsequent agreement with ONTC relating to the Goods and/or Services;
- (c) shall not be disclosed by the Respondent to any person who is not involved in the Respondent's preparation of its Proposal or in the performance of any subsequent agreement relating to ONTC, or the Government of Ontario, as applicable, without prior written authorization from ONTC;
- (d) shall not be used in any way detrimental to ONTC or the Government of Ontario; and,
- (e) if requested by ONTC, shall be returned to the Contact Person or destroyed by the Respondent no later than ten (10) calendar days after such request is received in writing by the Respondent.
- (3) Each Respondent shall be responsible for any breach of the provisions of this RFP Section 3.8 by any person to whom it discloses the RFP Information.
- (4) Each Respondent or Short-listed Respondent acknowledges and agrees that a breach of the provisions of this RFP Section 3.8 would cause ONTC, the Government of Ontario and/or their related entities to suffer loss which could not be adequately compensated by damages, and that ONTC, the Government of Ontario and/or any related entity may, in addition to any other remedy or relief, enforce any of the provisions of this RFP Section 3.8 upon application to a court of competent jurisdiction without proof of actual damage to ONTC, the Government of Ontario or any related entity.

- (5) Notwithstanding RFP Section 9.3, the provisions of this RFP Section 3.8 shall be binding and shall survive any cancellation or termination of this RFP and the conclusion of the RFP Process.
- (6) ONTC may, in its sole discretion, require that Respondents execute a legally binding nondisclosure agreement in a form and substance satisfactory to ONTC prior to receiving the RFP Information.

3.9 Governing Laws and Attornment

- (1) This RFP Process and the Final Agreement entered into pursuant to this RFP Process shall be governed and construed in accordance with the laws of Ontario, the laws of Quebec, the laws of Manitoba, if relevant to the subject matter of this RFP, and the applicable laws of Canada, excluding any conflict of laws principles.
- (2) Each Respondent agrees that the courts of the Province of Ontario shall have exclusive jurisdiction to entertain any action or proceeding based on, relating to or arising from this RFP process.

3.10 Licenses and Permits

(1) If a Respondent is required by the Applicable Laws to hold or obtain a license, permit, consent or authorization to carry on an activity contemplated in its Proposal, neither acceptance of the Proposal nor execution of the Final Agreement shall be considered to be approval by ONTC of carrying on such activity without the requisite license, permit, consent or authorization.

3.11 Respondents' Costs

- (1) The Respondent shall bear all costs and expenses incurred by the Respondent relating to any aspect of its participation in this RFP Process, including, without limitation, all costs and expenses related to the Respondent's involvement in:
 - (a) the preparation, presentation and submission of its Proposal;
 - (b) due diligence and information gathering processes;
 - (c) attendance at any Respondents' Meeting(s) or presentations;
 - (d) preparation of responses to questions or requests for clarification from ONTC;
 - (e) preparation of the Respondent's own questions during the clarification process;
 - (f) preparation of prototypes, proof of concept and/or demonstrations; and,

- (g) any discussions or negotiations with ONTC regarding the Final Agreement.
- (2) Without limiting the generality of Section 9.1(2) of this RFP, in no event shall ONTC or the Government of Ontario be liable to pay any costs or expenses or to reimburse or compensate a Respondent under any circumstances for the costs or expenses set out in Section 3.11(1), regardless of the conduct or outcome of the RFP Process.

3.12 Delay and Costs of Delay

(1) By submitting a Proposal, the Respondent waives all claims against ONTC and the Government of Ontario including any claims arising from any error or omission in any part of the RFP Documents or RFP Information or any delay, or costs associated with delays, in the RFP Process.

3.13 Clarification and Verification of Respondent's Proposal

- (1) Following submission of a Proposal, ONTC may:
 - (a) request a Respondent to clarify or verify the contents of its Proposal, including by submitting supplementary documents; and/or,
 - (b) request a Respondent to confirm an ONTC interpretation of the Respondent's Proposal.
- (2) Any information received by ONTC from a Respondent pursuant to a request for clarification or verification from ONTC as part of the RFP Process may, in ONTC's discretion, be considered as an integral part of the Proposal even if such information should have been submitted as part of the Respondent's Proposal and may, in ONTC's discretion, be considered in the evaluation of the Respondent's Proposal.
- (3) ONTC may, in its sole discretion, verify or clarify any statement or claim contained in any Proposal or made subsequently in any interview, presentation, or discussion. That verification or clarification may be made by whatever means that ONTC deems appropriate which may include contacting the persons identified in the contact information provided by the Respondent and contacting persons or entities other than those identified by any Respondent.
- (4) By submitting a Proposal, the Respondent is deemed to consent to ONTC verifying or clarifying any information and requesting additional information from third parties regarding the Respondent) and its directors, officers, shareholders or owners and any other person associated with the Respondent as ONTC may determine is appropriate.
- (5) ONTC is not obliged to seek clarification or verification of any aspect of a Proposal, or any statement or claim made by a Respondent.

(6) Reguests for clarifications shall not be construed as acceptance by ONTC of a Proposal.

3.14 Two-Envelope Process

- (1) ONTC may elect to complete a Two-Envelope Process. Whether Respondents will be required to submit their Proposals using a Two-Envelope Process will be identified on the RFP Data Sheet.
- (2) If ONTC elects to complete a Two-Envelope Process, the Proposal shall be broken down into two components; a technical submission and a financial submission.
- (3) If ONTC elects to complete a Two-Envelope Process, ONTC will identify a minimum score that must be attained on the technical submission on the RFP Data Sheet. Proposals that do not meet the minimum score for the technical submission following evaluation of the technical submission, will not proceed further in the evaluation process, provided that ONTC may, in its sole discretion, based on the overall scores of all the technical submissions, revise the minimum score required to proceed further in the evaluation process. Financial submissions will only be opened and evaluated for the Proposals that meet the minimum score for the technical submission.

SECTION 4 - PROPOSAL CONTENT AND FORMAT

4.1 Format and Content of Proposal

- (1) Respondents shall submit their Proposal in one envelope or, if submitting electronically, one electronic folder. Where required by the RFP Data Sheet to follow the two-envelope process, Respondents shall submit the technical submission and the financial submission in two separate envelopes or, if submitting electronically, two separate electronic folders.
- (2) Unless otherwise specified in the RFP Data Sheet, Respondents shall not submit preprinted literature with their Proposals. Any unsolicited pre-printed literature submitted as part of a Proposal will not be reviewed by the Evaluation Team.

(3) Each Respondent will:

- (a) in a clear, concise and legible manner, complete and submit all documentation and information required by Part 2, Part 3, and Part 4 to the RFP:
- (b) for a hard copy submission, complete any handwritten portions of the proposal forms in ink;
- (c) provide all information requested and ensure that an authorized person or persons sign all forms where indicated. Failure to provide all requested information on the proposal forms and failure to fill in all blank spaces may result in a Proposal being determined to be non-compliant; and,

- (d) use only the proposal forms issued as part of the RFP documents unless otherwise indicated.
- (4) Information provided by Respondents on hard copy proposal forms may be amended prior to the Proposal submission, provided the amendments are initialed by an authorized representative of the Respondent. Un-initialed pre-submission amendments may result in the Proposal being declared non-compliant.
- (5) Proposals that are not originals (if hard copy), are unsigned, incomplete, conditional or illegible, may be declared non-compliant.
- (6) The Harmonized Sales Tax (HST) shall not be included in the price. Any taxes or increases to taxes announced prior to the date of the issuance of the RFP Documents and scheduled to come into effect subsequent to it shall be taken into consideration at time of invoicing.

(7) Price

- (a) Price shall be an all-inclusive lump sum price (excluding HST), unless otherwise indicated in the RFP Documents; and,
- (b) Where the RFP requires the Respondent to provide a breakdown of the price in Proposal Form 1-A, the price as stated in Proposal Form 1 shall govern in the case of conflict or ambiguity between the price and the sum of the breakdown of the price.

(8) Listing of Subcontractors

Each Respondent shall complete the "Subcontractors" section of Proposal Form 2 – Respondent's General Information, naming the Subcontractors which the Respondent will employ to perform an item of the work called for by the RFP Documents. Failure of the Respondent to list Subcontractors where required, may result in the Proposal being declared non-compliant.

4.2 Proposal Submission Form

- (1) Each Respondent will complete and submit the forms included in Part 4 Form of Proposal. Failure of the Respondent to complete and submit one or more of the forms included in Part 4 - Form of Proposal, may result in the Proposal being declared noncompliant.
- (2) Respondents shall execute the Proposal Submission Form as follows:
 - (a) in the case of a sole proprietorship, the sole proprietor will sign the Proposal Submission Form and have the signature witnessed;

- (b) in the case of a corporation, an authorized signing officer will sign the Proposal Submission Form; or,
- (c) in the case of a partnership, a partner or partners authorized to bind the partnership will sign the Proposal Submission Form and have their signatures witnessed.

4.3 Bid Performance Security

- (1) The Respondent shall provide with its Proposal, Bid Performance Security in one of the following forms:
 - (a) Irrevocable stand-by Letter of Credit ("LOC"); or,
 - (b) Bid bond

(the "Bid Performance Security").

The Bid Performance Security shall be:

- (a) in the Respondent's own name;
- (b) if a bid bond, issued by a surety licensed to conduct surety and insurance business in Ontario;
- (c) in a form satisfactory to Ontario Northland;
- (d) for a term of at least ninety (90) calendar days after the Submission Deadline; and,
- (e) in the amount of ten percent of the total bid price excluding HST.

The Bid Performance Security is for the benefit of Ontario Northland and will be retained by Ontario Northland to compensate Ontario Northland for the damages it will suffer if the Successful Respondent fails to provide the Contract Securities (defined in Section 4.3(2), below) and evidence of insurance and other documents required by this RFP or by the Final Agreement, or fails to execute the Final Agreement within the time required by the RFP Documents.

The Bid Performance Security of the Successful Respondent will be returned after the Successful Respondent delivers to Ontario Northland compliant Contract Securities and evidence of insurance and other documents required by this RFP or by the Final Agreement and the Successful Respondent has executed the Final Agreement, all within the time required by the RFP Documents.

The Bid Performance Security of all other Respondents shall be returned to the Respondents upon the occurrence of the earlier of:

(a) execution by both parties of the Final Agreement between Ontario Northland and the Successful Respondent;

- (b) the expiry of the 90-day period following the Submission Deadline:
- (c) the cancelation of the RFP process without an award of the contract; or,
- (d) the disqualification of all Proposals.

(2) Agreement to Bond

The Respondent shall provide with its Proposal an agreement to bond issued by a surety company undertaking to provide a fifty percent (50%) Performance Bond and a fifty percent (50%) Labour and Material Bond (the "Contract Securities") in the form prescribed by the *Construction Act*, both to be provided to Ontario Northland by the Successful Respondent following award of the contract.

(3) Proposals not accompanied by the required Bid Performance Security and the required agreement to bond will be declared non-compliant.

The Respondent shall include the actual cost of all bonds, with no mark-up, in the Proposal price.

4.4 References and Past Performance Issues

- (1) If specified in the RFP Data Sheet, Respondents shall provide reference information. Unless otherwise set out in the RFP Data Sheet, all references shall be, where possible, with respect to similar goods and/or services, as applicable, during the five (5) years immediately prior to the Submission Deadline. Unless otherwise set out in the RFP Data Sheet, the Respondent shall provide a minimum of three (3) references.
- (2) ONTC may, in its sole discretion, confirm the Respondent's experience and ability to provide the Goods and/or Services by contacting the Respondent's references. However, ONTC is under no obligation to contact references submitted by any Respondent. References and information received from references, if contacted, will be taken into account in the evaluation process as identified in the RFP Data Sheet.
- (3) ONTC may take into account in the evaluation process reliable information received from the Government of Ontario or its Agencies regarding past performance of a Respondent, provided information evidencing past poor performance by a Respondent is provided to the Respondent (subject to any restrictions or disclosure imposed by applicable law) and the Respondent is afforded an opportunity to respond to the information.
- (4) If ONTC receives information from referees of a Respondent's past poor performance, ONTC shall advise the Respondent (subject to any restrictions on disclosure imposed by applicable law) and afford the Respondent an opportunity to respond to the information prior to considering this information as part of the evaluation process.

4.5 Conflict of Interest

(1) For the purposes of this Section 4.5, the term "**Conflict of Interest**" includes, but is not limited to, any situation or circumstance where the interests, conduct, other commitments

or relationships of a Respondent, a Respondent's family member or an officer, director or employee of the Respondent could or could be perceived to, directly or indirectly, compromise, impair or be in conflict with the integrity of the RFP Process, the subject matter of the RFP or ONTC.

- (2) Each Respondent shall promptly disclose any potential, perceived or actual Conflict of Interest of the Respondent to the Contact Person in writing. If ONTC discovers a Respondent's failure to disclose a Conflict of Interest, ONTC may, in its sole and absolute discretion disqualify the Respondent or terminate the Final Agreement if such Respondent is the Successful Respondent.
- (3) ONTC may, in its sole discretion, and in addition to any other remedy available at law or in equity:
 - (a) waive any Conflict of Interest;
 - (b) impose conditions on a Respondent that require the management, mitigation and/or minimization of the Conflict of Interest; or,
 - (c) disqualify the Respondent from the RFP Process if, in the sole and absolute opinion of ONTC, the Conflict of Interest cannot be managed, mitigated or minimized.

SECTION 5 - PROPOSAL SUBMISSION, WITHDRAWAL, MODIFICATION

5.1 Submission of Proposals and Late Proposals

(1) Each Respondent shall submit their proposal in the format prescribed in the RFP Data Sheet. ONTC will not accept any proposal submission that is not submitted in the format prescribed in the RFP Data Sheet.

ONTC may elect to accept Electronic Bid Submissions, Physical Bid Submissions or a combination of both.

(a) If ONTC elects to use Electronic Bid Submissions, submissions shall be submitted on, and in accordance with, forms supplied by ONTC. All responses are to be submitted to ONTC through the use of MERX Electronic Bid Submission (EBS). Respondents shall be solely responsible for the delivery of their Proposals in the manner and time prescribed in the RFP Data Sheet.

Questions concerning submitting through MERX should be addressed to:

MERX Customer Support
Phone 1-800-964-6379
Email merx@merx.com

Any Proposal from a Respondent whose name does not appear on the official MERX document request list (i.e., who has not downloaded the documents themselves) will be declared invalid, and the Proposal will not be considered.

MERX EBS does not allow submissions to be uploaded after the bid submission deadline; therefore, the Respondent should ensure they allow plenty of time to upload the documents.

Where required by the RFP Data Sheet to use a two-envelope process, Respondents shall include two separate and clearly identifiable attachments: 1) Technical and, 2) Financial. The file names for the technical and financial attachments should be sufficiently distinguishable such that ONTC does not need to open the attachments to differentiate between them.

(b) If ONTC elects to use Physical Bid Submissions, Respondents shall submit one original and the number of copies of its Proposal (in hard copy) specified in the RFP Data Sheet and the number of electronic copies of its Proposal (on a properly labelled CD or USB key in PDF format) specified in the RFP Data Sheet, at the correct location for submission and on or before the Submission Deadline. If there is any difference whatsoever between the electronic copy of the Proposal and the original hard copy, the original hard copy of the Proposal, as submitted, will govern. The electronic copy of the Proposal is solely for the convenience of ONTC.

Respondents shall submit their Proposals to the attention of the Manager, Public Procurement by prepaid courier or personal delivery at the following address:

Ashley Commanda
Manager, Public Procurement
Ontario Northland Transportation Commission
555 Oak Street East
North Bay, Ontario P1B 8E3

The Respondent shall place their Proposal Submission in a sealed envelope or package with the Respondent's full legal name and return address, the RFP Number, the Submission Deadline and the label "Proposal Submission" clearly displayed on the outside of the envelope.

Where required by the RFP Data Sheet to use a two-envelope process, Respondents shall have one sealed envelope as prescribed above that contains two individual sealed envelopes inside that are clearly marked "Technical Submission" and "Financial Submission".

- (c) For the convenience of the Respondents, and only when identified in the RFP Data Sheet, ONTC may allow either an Electronic Bid Submission through MERX or a Physical Bid Submission. The Respondent shall only use one method and follow the same procedure prescribed above.
- (2) Proposals must be received before the time noted in the RFP Data Sheet.
- (3) Proposals will be date and time stamped at the place receiving the Proposals. Late Proposals will be returned unopened.
- (4) Proposals which are submitted by facsimile transmission, email, or by electronic means other than MERX will NOT be considered.
- (5) Respondents are solely responsible for the method and timing of delivery of their Proposals.
- (6) ONTC reserves the right to make copies of the Respondent's Proposals as it may be required for the purpose of conducting a full evaluation of the Proposal submitted.
- (7) The Respondent should identify and mark any trade secret or proprietary intellectual property in its Proposal.

5.2 Late Proposals

(1) ONTC will reject Proposals that are received after the Submission Deadline.

5.3 Withdrawal of Proposals

- (1) When submitting a Physical Bid Submission, a Respondent may withdraw its Proposal at any time before the Submission Deadline by notifying the Contact Person in writing. ONTC shall return, unopened, a Proposal that has been withdrawn.
- (2) When submitting an Electronic Bid Submission, MERX will allow withdrawal of Proposals up to the Submission Deadline.

5.4 Amendment of Proposals

- (1) When submitting a Physical Bid Submission, Respondents may amend their Proposals after submission but only if the original Proposal is withdrawn and the amended Proposal is submitted before the Submission Deadline.
- (2) Electronic Bid Submissions through MERX will allow amendments up to the closing date and time; however, Respondents are responsible for ensuring they allow sufficient time to upload the amended documents.

(3) If more than one Proposal is received from the same Respondent before the Submission Deadline, only the last Proposal received before the Submission Deadline will be considered.

5.5 Proposal Irrevocability

(1) Subject to the Respondent's right to withdraw or amend the Proposal before the Submission Deadline, the Respondent's Proposal is irrevocable and shall remain in effect and open for acceptance for ninety (90) days after the Submission Deadline.

5.6 One Proposal per Person or Entity

- (1) Except as set out in the RFP Data Sheet or with ONTC 's approval:
 - (a) a person or entity shall submit or participate in only one Proposal either individually or as a Respondent team member; and,
 - (b) a person or entity shall not be a subcontractor of a Respondent and also submit a Proposal individually or as a Respondent team member in the same RFP Process.
- (2) If a person or entity submits or participates in more than one Proposal in contravention of RFP Section 5.6(1), ONTC may, in its sole discretion, disqualify any or all of the Proposals submitted by that person or entity or in which that person or entity is a participant.

SECTION 6 - PROPOSAL EVALUATION

6.1 Evaluation Team

- (1) ONTC will establish an evaluation team for the purpose of evaluating Proposals (the "Evaluation Team").
- (2) The Evaluation Team may, in its sole discretion, delegate certain administrative functions related to the evaluation of Proposals to a separate team of individuals who are not members of the Evaluation Team, who will be supervised by the Evaluation Team. Without limiting the generality of the foregoing, but for greater particularity, the Evaluation Team may seek the advice and assistance of third-party consultants and the Government of Ontario. Each Respondent acknowledges that the RFP documents may have been prepared with the assistance of a third-party consultant and that the consultant may participate in the evaluation of the Proposals.

6.2 Evaluation of Proposals

(1) The Respondents' Proposals will be reviewed and evaluated by the Evaluation Team on the basis of the evaluation criteria set out in the RFP Data Sheet (the "Evaluation Criteria").

- (2) After selection of the Short-listed Respondent(s), ONTC may, in its sole discretion, negotiate changes, amendments or modifications to the Short-listed Respondent's Proposal or the Final Agreement.
- (3) If ONTC is of the opinion that any of the following apply, then ONTC may, in ONTC 's sole discretion, decline to select that Respondent to be a Short-listed Respondent:
 - (a) a Respondent has submitted a price that is clearly insufficient to perform the supply of Goods and/or Services;
 - (b) a Respondent has previously provided poor performance to ONTC or a subsidiary of ONTC;
 - (c) a Respondent is disqualified from participating in the RFP Process per RFP Section 7.2 (1)(i);
 - (d) ONTC cannot, to ONTC 's satisfaction, prior to the conclusion of the RFP Process, verify independently or through a third party or parties any and/or all information, statements, representations and/or warranties contained in the Proposal;
 - (e) a Respondent or any subcontractor of the Respondent is not financially sound, or ONTC is unable to obtain from the Respondent or third-party sources reasonable assurances of the financial position of the Respondent or any of its subcontractors;
 - (f) the overall cost to ONTC would be significantly increased with that Respondent;
 - (g) the Respondent failed to meet the mandatory requirements specified in the RFP Data Sheet; or,
 - (h) the Respondent failed to attain the minimum score required for the Technical Submission, where the RFP Data Sheet called for a twoenvelope process.

6.3 Short-Listing

- (1) The Evaluation Team will establish the list of Short-listed Respondents based on the Evaluation Criteria.
- (2) The number of Respondents short-listed is in the sole discretion of ONTC.

6.4 Interviews, Site Visits, Demonstrations and Presentations

- (1) ONTC may, in its sole discretion, conduct interviews, demonstrations, site visits or presentations as part of the evaluation process if set out in the RFP Data Sheet.
- (2) The evaluation of any interviews, demonstrations, site visits or presentations will be conducted in accordance with the process set out in the RFP Data Sheet.
- (3) ONTC may conduct interviews, demonstrations, site visits or presentations with some or all Respondents, or may restrict participation to only the Short-listed Respondent(s).

SECTION 7 - GENERAL EVALUATION AND DISQUALIFICATION PROVISIONS

7.1 ONTC's Discretion

- (1) ONTC may determine, in its sole discretion:
 - (a) the membership of the Evaluation Team;
 - (b) if a Proposal is compliant with the RFP Documents;
 - (c) if a failure to comply is material;
 - (d) if a Proposal or a Respondent is disqualified;
 - (e) the evaluation results and ranking for each Respondent; and,
 - (f) which Respondent, if any, and how many Respondents, based on the evaluation process, will be Short-listed Respondents.

7.2 Disqualification

- (1) ONTC may, in its sole discretion, disqualify a Respondent or a Respondent's Proposal or cancel its decision to identify a Respondent as a Short-listed Respondent or a Successful Respondent, at any time prior to the execution of the Final Agreement by ONTC, if:
 - (a) The Respondent fails to cooperate in any attempt by ONTC to clarify or verify any information provided by the Respondent in its Proposal;
 - (b) The Respondent contravenes RFP Section 3.5, RFP Section 3.6 or RFP Section 5.6(2);
 - (c) The Respondent fails to comply with the Applicable Laws;
 - (d) The Proposal contains false or misleading information, or the Respondent provides false or misleading information in any part of the RFP Process;

- (e) The Proposal, in the sole discretion of ONTC, reveals a Conflict of Interest that cannot be managed, mitigated or minimized;
- (f) There is evidence that the Respondent colluded with one or more other Respondents in the preparation or submission of Proposals;
- (g) The Respondent has previously breached or been in default of compliance with any term of any agreement with ONTC and such breach or default has not been waived by ONTC or the Respondent has not cured the default;
- (h) The Respondent has been convicted of an offence in connection with any services rendered by the Respondent to ONTC, or to any Ministry, Agency, Board or Commission of the Government of Ontario or the Government of Canada;
- (i) The Respondent, at the time of issuance of this RFP or any time during the RFP Process, has an outstanding claim or is engaged in an ongoing legal dispute with ONTC, other than an adjudication under the Construction Act;
- (j) The Proposal is not Substantially Compliant;
- (k) The Respondent has failed to notify ONTC of, or ONTC has not approved, a post-submission change in the control of the Respondent or in the circumstances of the Respondent that may materially negatively impact the Respondent's ability to perform its obligations if selected as the Successful Respondent; or,
- (I) The Respondent has received a Vendor Performance Evaluation as part of ONTC's Vendor Performance Policy, and received a total rating on the Final Performance Form that disqualifies the Respondent from participating in the RFP Process.
- (2) Notwithstanding Section 7.2 (1), ONTC shall retain the right to select as the Successful Respondent, any Respondent(s) which, in ONTC's sole and absolute discretion, has submitted a substantially compliant Proposal(s).

7.3 General Rights of ONTC

- (1) ONTC may, in its sole discretion and at any time during the RFP process:
 - (a) reject any or all of the Proposals;
 - (b) accept any Proposal or any portions of any Proposals for any reason whatsoever;

- (c) reject any Proposals or any portions of Proposals for any reason whatsoever,
- (d) if only one Proposal is received, elect to either accept it, reject it, or enter into negotiations with the applicable Respondent;
- (e) elect not to proceed with, cancel, or terminate the RFP;
- (f) alter the Submission Deadline or any other deadlines associated with the RFP Process:
- (g) change the RFP Process or any other aspect of the RFP Documents; or,
- (h) cancel this RFP Process and subsequently conduct another competitive process for the same Goods and/or Services that are the subject matter of this RFP or subsequently enter into negotiations with any person or persons with respect to the Goods and/or Services that are the subject matter of this RFP.
- (2) If ONTC, in its sole discretion, is of the opinion that all of Proposals submitted are not substantially compliant, ONTC may:
 - (a) take any action in accordance with Section 7.3. (1);
 - (b) carry out a process whereby all Respondents are directed to correct the deficiencies in their Proposals for re-submission; or,
 - (c) negotiate an agreement for the whole or any part of the Goods and/or Services with a Respondent which has submitted a Non-compliant Proposal.

SECTION 8 - AGREEMENT FINALIZATION AND DEBRIEFING AND SUCCESSFUL RESPONDENT

8.1 Finalization of the Agreement

- (1) ONTC may, in its sole discretion, retain more than one Respondent to provide the Goods and/or Services.
- (2) ONTC reserves the right in its sole discretion to sub-divide and/or bundle the Goods and/or Services which are the subject of this RFP and award one or any number of separate contracts for the Goods and/or Services.
- (3) ONTC may, in its sole discretion, enter into negotiations with one or more Respondent(s) for the purpose of selecting a Successful Respondent(s) and finalizing an agreement.

- (4) Either ONTC or a Respondent may withdraw from negotiations at any time prior to the Successful Respondent(s) being identified.
- (5) The Successful Respondent is expected to enter into the relevant CCDC form of Agreement which is included in Part 5. Proposal Form 5 Compliance with Contract Documents allows a Respondent to submit suggested changes to the Draft Agreement. ONTC does not have any obligation to accept any proposed changes to the Supplementary Conditions and will do so in its sole discretion. ONTC may, in ONTC 's sole discretion; (i) consider only a minimal number of changes to the Draft Agreement; (ii) consider significant material proposed changes to negatively impact the evaluation of the Respondent's proposal; or (ii) disqualify any Respondent where the changes or the number of changes made by the Respondent to the Supplementary Conditions would be, in ONTC 's sole discretion, too onerous to successfully negotiate within the timeframe set out in Section 8.1 (6) below or are unacceptable to ONTC.

In any event, ONTC will not accept any material changes to the clauses in the Supplementary Conditions relating to the Confidentiality, Personal Information, Intellectual Property ownership and infringement, Indemnification, Limitation of Liability or rights of ONTC on termination. ONTC, as an Ontario Crown corporation, is unable to provide indemnities pursuant to s.28 of the *Financial Administration Act* (Ontario).

If a Respondent does not submit any proposed amendments in Proposal Form 5, it will be deemed to have accepted and will be required to execute the Final Agreement in the form attached to this RFP. If a Respondent has submitted proposed amendments to the Final Agreement, negotiations respecting those amendments shall be conducted within the timeframe set out in Section 8.1(6).

- (6) If a Successful Respondent fails or refuses to enter into and execute the Final Agreement within ten (10) Business Days of being notified they are the Successful Respondent (ONTC may extend such period of time in ONTC 's sole discretion), or a Successful Respondent fails or refuses to provide the documentation in accordance with Section 8.1(7), ONTC may, in its sole discretion, take any one of the following actions:
 - (a) terminate all negotiations and cancel its identification of that Respondent as a Successful Respondent;
 - (b) select another Respondent or Short-Listed Respondent as the Successful Respondent;
 - (c) take any other action in accordance with Section 7.3; or,
 - (d) pursue any other remedy available to ONTC at law.
- (7) Prior to supplying any Goods and/or Services pursuant to the Contract, the Successful Respondent shall deliver to ONTC:

- (a) The performance bond and the labour and material bond described in the RFP Documents. The form of such bonds shall comply with the requirements prescribed in the *Construction Act*. Refer to the link below for the appropriate form (Form 31 and 32). http://ontariocourtforms.on.ca/en/construction-lien-act-forms/
- (b) Certificates of insurance as specified in the CCDC form of Agreement;
- (c) Executed Contractors Health and Safety Responsibility Agreement;
- (d) Respondent's Health and Safety, and Environmental Policies; and,
- (e) A current Clearance Certificate issued by the Workplace Safety and Insurance Board, if applicable.

8.2 Notification If Successful or Not

(1) The Successful Respondent and unsuccessful Respondents will be notified by ONTC in writing regarding their success or failure in the RFP Process.

8.3 Debriefing

(1) Respondents may request a debriefing after receipt of a notification pursuant to RFP Section 8.2. All Respondent requests should be in writing to the Contact Person no later than 60 calendar days after receipt of the notification. ONTC will conduct debriefings in the format prescribed by the OPS Procurement Directive.

SECTION 9 - LEGAL MATTERS AND RIGHTS OF ONTARIO NORTHLAND

9.1 Limit on Liability

- (1) The total liability of the Respondent to Ontario Northland for loss and damage arising from the Respondent who is selected as the Successful Respondent but then fails to deliver the Contract Security, evidence of insurance or other documents required under Section 8.1(7) within the time period specified in Section 8.1(6) or fails to execute the Final Agreement shall be limited to the value of the Bid Performance Security provided by the Respondent pursuant to Section 4.3. The liability of the Respondents for any other loss or damage suffered by Ontario Northland as part of this RFP Process shall be without limit.
- (2) By submitting a Proposal,
 - (a) each Respondent acknowledges ONTC 's rights as stated herein and absolutely waives any right of action against ONTC for ONTC 's failure to accept the Respondent's Proposal whether such right of action arises in contract, negligence, bad faith, or any other cause of action;

- (b) each Respondent covenants and agrees that, under no circumstances, shall ONTC, or any of its employees, officers, representatives, agents or advisors, be liable to any Respondent, whether in contract, tort, restitution, or pursuant to any other legal theory, for any claim, action, loss, damage, cost, expense or liability whatsoever and howsoever arising from this RFP Process, a Respondent's Proposal in response to this RFP Process, or due to the acceptance or non-acceptance of any Proposal, or as a result of any act or omission by ONTC and/or its employees, officers, representatives, agents or advisors, including any information or advice or any errors or omissions that may be contained in the RFP Documents, or any other documents or information provided to a Respondent, or arising with respect to the rejection or evaluation of any or all of the Proposals, any negotiations with any of the Respondents, or the selection of any Respondent as a Short-listed Respondent or the Successful Respondent; and,
- (c) each Respondent shall indemnify and hold harmless ONTC, its employees, officers, representatives, agents and advisors, from and against any and all claims, demands, actions or proceedings brought by third parties, including but not limited to the Respondent's subcontractors or suppliers, in relation to this RFP Process.

9.2 Power of Legislative Assembly

(1) No provision of the RFP Documents (including a provision stating the intention of ONTC) is intended to operate, nor shall any such provision have the effect of operating, in any way, that would interfere with or otherwise fetter the discretion of the Legislative Assembly of Ontario in the exercise of its legislative powers.

9.3 RFP Not a "Bidding Contract" or a Tender

(1) Notwithstanding any other provision of this RFP, this RFP is not a tender call, ONTC does not intend to create any contractual relations or obligations with any of the Respondents by virtue of issuing this RFP, and this RFP is not an offer to enter into a contract (often referred to as "Contract A"). Except as provided in RFP Section 3.8, 4.3 and 9.1, neither this RFP nor the submission of a Proposal by a Respondent shall create any legal or contractual rights or obligations whatsoever on any of the Respondent, ONTC, the Government of Ontario or any Ministry of the Government of Ontario.

SECTION 10 - VENDOR PERFORMANCE

10.1 General

- (1) ONTC has established a Vendor Performance Policy, which provides a framework for ONTC to maximize the value for money of its Vendors by:
 - (a) proactively managing the performance of Vendors in accordance with

ONTC 's Purchasing Policy; and,

(b) creating a record of past performance for use by ONTC when selecting Vendors for the supply of goods and services.

10.2 Vendor Performance Evaluation

(1) Successful Respondents who enter into a Final Agreement with ONTC may be required to participate in the Vendor Performance Evaluation process.

10.3 Vendor Ratings for Proposal Evaluation Purposes

(1) ONTC may access a Respondent's Vendor Performance Evaluations for previous contracts as part of the Evaluation Process. The manner in which the Respondent's ratings will be used will be identified in the Evaluation Criteria of the RFP Data Sheet.

SECTION 11 - TRANSPARENCY AND FAIRNESS

11.1 General

- (1) ONTC is committed to procuring goods and services through a process that is conducted in a fair and transparent manner, providing equal opportunity to vendors.
- (2) ONTC endeavors to provide specifications that meet the requirements of the procurement without naming specific brands. However, there may be instances where a third-party consultant prepares a specification on behalf of ONTC, and a specific brand is named. In these instances, alternate materials or products may be used if ONTC determines the proposed materials or products are equivalent to the materials or products in the specifications. Respondents shall submit proposed alternate materials or products with their Proposal submission to be considered.

SECTION 12 - INTERPRETATION

12.1 General

- (1) In this RFP, the singular shall include the plural and the plural shall include the singular, except where the context otherwise requires.
- (2) All references in this RFP to "discretion" or "sole discretion" means in the sole and absolute discretion of the party exercising the discretion.
- (3) For clarity, where the expression "Government of Ontario" is used in this RFP, it includes all Ministries and Agencies of the Government of Ontario.



PART 2 REQUEST FOR PROPOSALS SUMMARY OF REQUIREMENTS

PART 2 - REQUEST FOR PROPOSALS SUMMARY OF REQUIREMENTS SCHEDULE 2-A RFP DATA SHEET

RFP 2025 035 Iroquois Falls Subdivision Track Rehabilitation								
Contact Details								
Contact Person	Brinda Ranpura Procurement Contracts Specialist							
Contact Information	555 Oak Street East North Bay, Ontario, P1B 8L3 brinda.ranpura@ontarionorthland.ca (705) 472-4500 ext. 548							
Proposal Detail								
Site Visit	Not Applicable							
Validity of Proposals	90 days following the Submission Deadline							
Format of Submission	Respondents shall submit their Proposal through MERX Electronic Bid Submissions (EBS). Refer to Part 1, Request for Proposals, Section 5.1 (1) (a). MERX EBS does not allow Proposals to be uploaded after the Submission Deadline; therefore, Respondents shall ensure they allow sufficient time to upload the documents. Proposals which are submitted by facsimile transmission, by email or by							
	electronic means other than MERX <u>will NOT</u> be considered.							
Two-Envelope Process	This procurement will <u>not be</u> a two-envelope process.							
Distribution Method	The RFP Documents will be posted on the ONTC website and MERX. Any addenda to the RFP will be posted at these two (2) locations.							

PART 2 - REQUEST FOR PROPOSALS SUMMARY OF REQUIREMENTS SCHEDULE 2-A RFP DATA SHEET cont'd

RFP 2025 035 Iroquois Falls Subdivision Track Rehabilitation

Proposal Detail continued

Respondents are required to submit <u>all of the material</u> documents listed below as part of their Proposal. Respondents shall confirm they have included the documents listed below with their Proposal by placing a checkmark in the column "Included in Proposal". If the Respondent fails to include a document listed below as being "Material", the respondent may be disqualified in accordance with section 6.2 (3) of the RFP.

Item Included Item is in classified **Proposal** as (indicate Material with ✓) This checklist Proposal Form 1 - Proposal Submission Form Material Proposal Form 1-A - Schedule of Prices Material Proposal Form 2 - Respondent's General Information Material Proposal Form 3 - Acknowledgment to Comply with Part Material 3 – Request for Proposals Specifications Proposal Form 4 - References Material Proposal Form 5 - Compliance with Contract Documents Proposal Form 6 - Health, Safety and Environment Material Proposal Form 7 – Schedule of Materials Proposal Form 8 - List of Equipment Proposal Form 9 - Schedule and Proposed Approach Material Proposal Form 10 - Schedule of Progress Payments Proposal Form 11 - List of Key Personnel and Resumes Material Proposal Form 12 - Current Labour Agreements Proposal Form 13 - Contractor's Qualification Statement Material Proposal Form 14 – Claims Bid Performance Security and Agreement to Bond Material (Scanned Copy Acceptable)

Submission Requirements

PART 2 - REQUEST FOR PROPOSALS SUMMARY OF REQUIREMENTS SCHEDULE 2-A cont'd RFP DATA SHEET

RFP 2025 035 Iroquois Falls Subdivision Track Rehabilitation									
Important Dates									
Publication Date		Friday, May 16, 2025							
Participation Registration Form		Complete and submit to the Contact Pers possible	on as so	on as					
Deadline for Additional Information Request		Four (4) full Business Days prior to the Su Deadline	ubmissio	n					
Submission Deadline Date and Time		Friday, June 20, 2025 at 2:00:00 p.m. (EDT)							
Target Completion Date		Friday, September 26, 2025							
Notes Pertaining to Final Agreement									
Liquidated Damages	Supplementa beyond the until Substa	em rate calculated in relation to Section ary Conditions is \$2,000 for each calendary prescribed date for Substantial Performan antial Performance of the Work is achieven the terms of the Contract.	ar day o	of delay e Work					
Procedure of Selection	1								
	below. Re Requiremen	s must satisfy all of the Mandatory Requestions will receive a pass/fail for est. The spondents who fail any of the will be disqualified from the RFP Process	each Ma the Ma						
Mandatory		Mandatory Requirement	Pass	Fail					
Requirements	the Contract	has provided sufficient evidence to pass or Safety Pre-Qualification (Part 4 - Form , Proposal Form 6, Health, Safety and i)							
	prescribed in	ance Security and Agreement to Bond as Part 1, Request for Proposals, Section 4.3 py acceptable with Proposal)							

PART 2 - REQUEST FOR PROPOSALS SUMMARY OF REQUIREMENTS SCHEDULE 2-A continued RFP DATA SHEET

RFP 2025 035 Iroquois Falls Subdivision Track Rehabilitation

Track Renabilitation					
Procedure of S	Selection				
Evaluation General Procedure	Respondents must score a minimum of 60% for both Experience and Qualifications and Schedule and Proposed Approach to qualify for shortlist consideration. Respondents who fail to score a minimum of 60% in each of these categories will be disqualified from the RFP Process.				
	Description	Weight			
	Price ONTC will use the following to calculate the initial score for price: Lowest price of all Proposals / price of Respondent x 40 = Score				
	ONTC reserves the right in its sole discretion to consider the best overall value when evaluating price and adjust the score accordingly. If ONTC, in its sole discretion, is of the opinion that the Respondent has submitted a price that is too low to adequately complete the scope of work, then ONTC reserves the right not to use that price as the "Lowers price of all Proposals".	40			
Evaluation Criteria	Experience and Qualifications ONTC will assess Respondents' experience and qualifications using the information supplied in Part 4 of this RFP. The following subweights will apply:				
	 Resumes of Key Personnel (Including Subcontractor(s) if any) - The Respondent should be able to demonstrate through their resumes that their staff has previous similar experience in Northern Canada - 5 points 				
	Company Profile (Including Subcontractor(s) if any) - 5 points	24			
	Project Profile 1 to 3, inclusive - 9 points (3 points each)				
	Respondents are required to provide a written narrative and demonstrate compliance with all applicable Ontario labour codes where the service is provided. – 5 Points				
	ONTC may or may not contact references as part of the evaluation and may use this information as part of this score.				

PART 2 - REQUEST FOR PROPOSALS SUMMARY OF REQUIREMENTS SCHEDULE 2-A cont'd RFP DATA SHEET

RFP 2025 035 Iroquois Falls Subdivision Track Rehabilitation

Procedure of	Selection cont'd	
170004410 01	Description	Weight
	 Schedule and Proposed Approach ONTC will assess the Respondent's Schedule and Proposed Approach based on the following: Respondent shall include the Schedule in the format requested as indicated in Part 4 – Form of Proposal – Proposal Form 9 – Schedule and Proposed Approach. The contractor must clearly demonstrate in the schedule that they can achieve the milestone completion date of September 26, 2025 – 11 Points Is the Project Schedule and Proposed Approach logical and 	16
Evaluation Criteria	do they have sufficient detail, including durations for each task? - 5 points	
Chiena	Describe how and when you will use local workforce, local vendors, local manufacturers, local contractors, and local apprentices/trainees to achieve the project goals and provide the requested services – 5 points	5
	 Environmental and Sustainability Provide evidence of compliance to Ontario's environmental requirements (e.g. recycling, waste management practices, etc.) – 8 points Respondents shall provide a copy of their Health, Safety and Environmental Protection Policy – 7 Points 	15
	Total	100

PART 2 - REQUEST FOR PROPOSALS SUMMARY OF REQUIREMENTS SCHEDULE 2-B PARTICIPATION REGISTRATION FORM

Required in order to register and receive any communications in relation to the requirement referenced below.

Date:			
Reference Number:	RFP 2025 035		
Description of Requirement:	Iroquois Falls Subdivision Track Rehabilitation		
•	•	ate in the above referenced requirement and will be in relation to this process and project until further	
Company Name:			
Address:	-		
	·		
Name of person registering to company referenced above (p print): Email Address: Phone Number: (Main Office N Cell Number:	lease		
Signature of Primary Contact:	_		
Return form to the Contact Pers	son as refere	nced below via email as an attachment:	
Prinda Pannura			

Brinda Ranpura
Procurement Contracts Specialist
Ontario Northland Transportation Commission

Phone: 705-472-4500 Ext. 548

Email: <u>brinda.ranpura@ontarionorthland.ca</u>

Website: www.ontarionorthland.ca



PART 3 REQUEST FOR PROPOSALS SPECIFICATIONS

PART 3 - RFP SPECIFICATIONS SCHEDULE 3-A-1 SCOPE OF WORK

INTRODUCTION

Ontario Northland Transportation Commission (ONTC) undertakes rail infrastructure upgrade and maintenance programs annually in order to provide a safe and reliable train service across northeastern Ontario and northwestern Quebec. ONTC's objective is to upgrade ties, surface and replace turnouts that will require the services of a qualified contractor.

This tie and turnout program will occur on 1 subdivision between Porquis Junction and Iroquois Falls. The estimated total of the program is approximately 7.84 track miles which includes 6.52 miles on the mainline and 1.32 miles of yard track.

Subdivision	Total Miles	Estimated number of mainline ties	Estimated number of yard ties	Number of turnouts to be replaced	Number of extra tie plates to be replaced
Iroquois Falls	6.52	3,000	5,000	5	3,000

These numbers are estimates only and are subject to change. The actual tie replacement list will be updated once weather permits and ties are marked by ONTC.

The work may commence when weather permits at a date mutually agreed upon between the Contractor and ONTC. The work shall be completed by **Friday, September 26, 2025.**

SCOPE OF WORK - Tie and Turnout Replacement

The place of the Work is located along the Iroquois Falls Subdivision, Ontario.

ONTC anticipates replacing ties, turnouts and surface along the Iroquois Falls Subdivision, Ontario. Upon its completion, the track should be to the proper elevation for a safe and efficient freight and passenger train operations.

1.1 Obligations of the Contractor

1.1.1 Ties

- (1) Mobilize and demobilize equipment to and from ONTC railway.
- (2) Replace all ties as identified under this Scope of Work.
- (3) Replace all tie plates as identified under this Scope of Work.
- (4) Tamp all ties that are replaced and any adjacent ties that are left hanging before the end of each working day.
- (5) Stockpile used ties on railway right-of-way as instructed by onsite supervisor.

- (6) Replace any 11" single shoulder plates or missing plates with 11" double shoulder plates, or matching tie plates to the area.
- (7) Place all required slow order flags as instructed by onsite supervisor.
- (8) Distribute and spread ties from bundles to replacement locations from nearest sidings/yard/spur.
- (9) Provide the ONTC onsite supervisor with a daily work report indicating amount of ties installed. This report must include time worked by all employees and must be signed daily by Contractor representative and ONTC onsite supervisor. These reports must be submitted with invoice for payment.
- (10) Provide all-inclusive pricing per tie installed per subdivision.
- (11) Provide all fuels and lubricants.
- (12) Contractor is to arrange work day so that no more than 14 hours/day are worked in conjunction with the ONTC foreman.
- (13) Contractor is expected to work during "naturally" occurring work blocks. See Schedule 3- A-3 ONTC Train Service Plan. Contractor will be given a guaranteed minimum 8-hour work block per day (uninterrupted or in two different blocs). A stand by rate will apply when this minimum guarantee (i.e. a wok block totaling 8 hours per day in one continuous work block or two different blocks) is not obtained.
- (14) Contractor shall request, in writing, the need of a work train to move boarding car consist, loaded/empty tie cars, loaded/empty rail cars and box cars. The written request shall be made to ONTC 7 days' prior to the work train move being required. The written request shall be made to the Track Programs Supervisor and the Manager, Track Programs.
- (15) Contractor shall provide a qualified signal maintainer on an as-required basis. ONTC will inform the contractor 7 days prior to the requirement. The signal maintainer must have experience maintaining and repairing track circuit and motion sensor Grande Crossing Warning Systems on Class 1 railways. Pricing for this work must be outlined on Proposal Form 1-A Schedule of Services.

1.1.2 Surfacing

- (1) Mobilize and demobilize equipment to and from ONTC property.
- (2) Surface the track behind all tie replacement areas. This must be done immediately following the installation of the ties and at no time be more than 2 miles behind the tie installation crew.
- (3) Surface all newly installed turnouts.
- (4) Provide at minimum a tamper model HARSCO MKIV or Plasser GRM 3000 or better and a mechanical ballast regulator with broom. All equipment radios must also be programmed with ONTC channels and CN20. All equipment shall also be insulated to

- work in signaled circuits to avoid disruption to the signal systems.
- (5) Compact all joints/curves with a minimum of three (3) tamping head insertions. All other areas to receive a minimum of two (2) tamping head insertions.
- (6) Dismantle and reconstruct crossing surfaces located through the tie change areas in order to allow for continuous surfacing.
- (7) Contractor is to arrange traffic protection when dismantling and reconstructing a crossing.
- (8) Responsible for track quality control behind surfacing operation. Items include, but not limited to, picking up downed ties, replacing broken joint bars, addressing high spikes and adjusting anchors. This requirement is not limited to the tie that is replaced but the entire surfaced track.
- (9) Provide the ONTC onsite supervisor with a daily report indicating the amount of track surfaced in feet (Milepost to Milepost), curve super elevation change, if any, and rail temperature. This report must include time worked by all employees, and must be signed daily by Contractor representative and ONTC onsite supervisor. These reports must be submitted with invoice for payment.
- (10) Provide pricing per hour for any additional out of scope surfacing, including switches (all inclusive).
- (11) Provide all fuels and lubricants.
- (12) Contractor must ensure that surfacing operation (i.e. Tamper and Regulator) is completed after the ties have been replace and the ballast distribution has occurred.
- (13) Contractor is to arrange work day so that no more than 14 hours/day are worked.
- (14) Contractor is expected to work during "naturally" occurring work blocks. See Schedule 3-A-3 for Train Service Plan. Contractor will be given a guaranteed minimum 8 hour work block per day (uninterrupted or in two different blocs). A stand by rate will apply when this minimum guarantee (i.e. a wok block totaling 8 hours per day in one continuous work block or two different blocks) is not obtained.
- (15) Contractor shall provide a qualified signal maintainer on an as-required basis. ONTC will inform the contractor seven (7) days prior to the requirement. The signal maintainer must have experience maintaining and repairing track circuit and motion sensor Grade Crossing Warning Systems on Class 1 railways. Pricing for this work must be outlined on Proposal Form 1-A Schedule of Prices

1.1.3 Turnout Installation

- (1) Unload switch material, rails and ties from flat cars.
- (2) Switch is not preassembled. Contractor obligations are to build, install, and surface the new switch and dismantle the old switch.

- (3) Extra rails may be required to be installed to match the existing rail headwear on the mainline or rail type in the siding/spur outside of the turnout area. Rail should match throughout the entire turnout area (first joint in front of the head blocks to fouling point).
- (4) Replaced switch material must be placed at a location as directed by onsite supervisor. Material must be loaded on the ONTC provided flat car.

1.2 Obligations of ONTC

1.2.1 Ties and Turnout Installation

- (1) Mark ahead of installation all ties (track and switch) to be replaced.
- (2) Provide full time supervisor for flagging protection. ONTC foremen will be allowed to work the following work cycles (days on/days off): 5/2 7/7, 8/6, 9/5, 10/4.
- (3) Supply required ties, spikes and turnout material (anchors and plates as required). ONTC will deliver to worksite via nearest siding/yard/spur.

1.2.2 Surfacing

- (1) Provide full time supervisor for flagging protection. ONTC foremen will be allowed to work the following work cycles (days on/days off): 5/2 7/7, 8/6, 9/5, 10/4.
- (2) Provide all required ballast via work train.
- (3) Provide signal maintainers to protect signal system as required.
- (4) Provide contractor with all required curve data prior to commencement of contract.

1.3 Operational Procedures and Requirements

The Contractor shall be responsible for complying with the <u>operational procedures and requirements set out in 3-A-3.</u> The Contractor will also be required to adhere to the requirements set out in the Contractor Handbook. The Contractor Handbook will be issued to the Successful Respondent upon award and reviewed at the project kick-off / orientation.

PART 3 - RFP SPECIFICATIONS SCHEDULE 3-A-2 TECHNICAL SPECIFICATIONS

For tie installation, the following specifications shall be followed. Refer to the specifications below:

- Ties
- 1. In all cases, the PRLT is 85°F.
- 2. The following Manual of Track Requirements:
 - Sub-Part C Track Geometry
 - Gauge
 - Surface and Lining
 - Sub-Part D Track Structures
 - Prevention and Control of Fires on the Right of Way
 - Surfacing
- 1. In all cases the PRLT is 85°F.
- 2. All surfacing work must take place within the working zone temperature range of 15°F above the PRLT and 30°F lower than the PRLT. (55°F 100°F).
- 3. After all tamping operations, the cribs must be properly filled in and ballast section must be trimmed/plowed, broomed and finished according to the Manual of Track Requirements, section 4.1.3.3 Ballasting or to the satisfaction of the onsite supervisor. Please refer to drawing S-124 (attached).
- 4. When surfacing, the tamping operation must be completed in a manner that will prevent the tie from becoming skewed and the track from becoming center bound.
- 5. During surfacing, the tamping operation must be such that the ballast under the tie is completely compacted and the rail firmly seated on the tie plate.
- 6. When surfacing on curves, the approved super elevation and spiral are to be maintained. A list will be supplied.
- 7. During surfacing operations, care must be taken not damage signal installations. These include, hot box sites, dragging equipment and wheel impact load detectors and signaled crossings. Where these installations may be affected, the ONTC onsite supervisor must be notified a minimum of 48 hours in advance so that the arrangements may be made with signal personnel.
- 8. All shims in surfacing areas must be removed prior to all surfacing operations.

- 9. When surfacing up to a bridge, care must be taken to prevent ballast from falling on bridge bearing areas, therefore the regulator must work away from the bridge while regulating/plowing.
- 10. The following Manual of Track Requirements: Section:
 - Sub-Part C Track Geometry
 - Gauge
 - Surface and Lining
 - Sub-Part D Track Structures
 - Prevention and Control of Fires on the Right of Way

PART 3 - RFP SPECIFICATIONS SCHEDULE 3-A-3 REFERENCE DOCUMENTS

SECTION	TITLE	DATE		
Ties	MTR Gauge – Sub Part C. Track Geometry			
	MTR Section 3 – Prevention and Control of F	ires on the Right of Way		
	MTR Sub-Part D. Track Structure			
Surfacing	MTR Surface and Lining			
ONTC Service Design	Train Service Plan	April 30, 2023		
SIG -1	Notification of the Signal Department when	September 11, 2019		
	working in Crossing Approach Circuits			
SIG – 8	Reporting Damage to Signals Components	September 20, 2021		
JP/IS - 5	Job Procedure: Setting Track Units On or Off	April 07, 2004		
ONTC Industrial Operat	April 01, 2024 – March			
31, 2029				
Ontario Northland Fit for Duty Policy June 10, 2024				

SUB-PART C. TRACK GEOMETRY

1. Scope

a) The following prescribes the requirements for the gauge, alignment, and surface of track and the elevation of the outer rails and speed limitations for curved track.

2. Gauge

- a) Gauge is measured between the heads of the rails at right angles to the rails in a plane 5/8" (16 mm) below the top of the rail head.
- b) Standard gauge is 56 ½" (1,435 mm).
- c) Gauge must be within the limits prescribed in the following table:

Class of track	The gauge must be at least (inches and millimeters)	But not more than (inches and millimeters)
Excepted track	N/A	58 1/4" <i>(1,480 mm)</i>
1	55 3/4" (1,416 mm)	58" (1,473 mm)
2	55 3/4" (1,416 mm)	57 ¾" (1,467 mm)
3	56" (1,422 mm)	57 ¾" (1,467 mm)
4 and 5	56" (1,422 mm)	57 ½" (1,461 mm)
Yard Track Category 1 & Category 2	56" (1,422 mm)	57 ¾" (1,467 mm)
Yard Track Category 3 & Category 4	55 3/4" (1,416 mm)	58" (1,473 mm)

Figure SUB-PART C - 1 - Gauge (inches and millimeters)

3. Variation in Gauge

a) When the gauge is less than 56 inches (1,422 mm) and the change in gauge over a distance of 20 feet (6,096 mm) or less on either side of the defective location exceeds 1 ½ inches (38 mm), train speed must be reduced according to Class 1 track speed.

4. Gauge Rods

- a) Do not use gauge rods as a permanent replacement for ties to correct a gauge problem on main track and main track sidings,
- b) In yards and spurs, gauge rods may be used to assist in maintaining gauge in areas where additional strength is needed (for example, in yard turnouts and in areas of high curvature or wye tracks) but must not be used in lieu of ties,
- c) Gauge rods may be used as a temporary repair on main track and main track sidings when it is impractical to perform a proper repair,
- d) In such cases, 16 inches (406 mm) of the gauge rod will be painted in the center of the track and be highly visible. For gauge rods that are applied on main track, the location and number used are to be recorded on the "Temporary Gauge Rod Report" form, which is to be kept up to date. The date the gauge rods are removed will be recorded on the same form.
- e) The Track Inspector should also record the GPS location of gauge rods whenever possible,
- f) Temporary gauge rods are to be removed as quickly as practical, but in no case shall remain in the Main track for more than one year,
- g) Locations where temporary gauge rods are installed on main track, shall be inspected on foot quarterly.





5. Geometry Standards

- a) All track must meet or exceed the track geometry standards defined in the Canadian Railway Track Safety Rules, for all track in Canada.
- b) Track geometry standards are defined for five classes of track based upon maximum operating speeds for freight trains and passenger trains.
 - i. Figure Sub-Part A-1 in Part II 1 Classes of Track: Operating Speed Limits
- c) The requirements specify limits of certain track conditions existing in isolation. A combination of track conditions, none of which individually amounts to a deviation from the requirements in these standards, may require remedial action to provide for safe operations over the track.
- d) Track geometry can be measured by track geometry vehicles or by hand measurement. When unloaded track is measured to determine compliance, the amount of any rail movement that occurs while the track is loaded must be added to the measurements taken.
 - i. Should any of the following symptoms occur in the track, assume rail movement will occur;
 - Hanging ties
 - Excess adzing
 - Tie plates nose-diving towards the field side
 - Loose or missing bolts
 - High, missing, bent or throat cut spikes
 - Batter or bent rail ends
 - Engine burns
 - Corrugated rail
 - Worn or missing tie plate shoulder, ice built up in plates
 - High water and clogged ditches and
 - Cluster of bad ties

Add to the Unloaded Measurement in a Mainline Outside of Joint				
	In Tangent		In a Curve	
Measurement	No	With	No	With
	Symptoms	Symptoms	Symptoms	Symptoms
Cougo	1/16"	3/16"	1/8"	1/4"
Gauge	(2 mm)	(5 mm)	(3 mm)	(6 mm)
Crosslevel	1/8"	1/4"	1/8"	1/4"
Crossievei	(3 mm)	(6 mm)	(3 mm)	(6 mm)

Figure SUB-PART C - 2 – Static Measurements Outside a Joint (inches and millimetres)

Add to the Unloaded Measurement in a Mainline in Joint Area					
	In Tangent		In Tangent In a Curve		Curve
Measurement	No	With	No	With	
	Symptoms	Symptoms	Symptoms	Symptoms	
Cougo	1/8"	5/16"	5/16"	3/8"	
Gauge	(3 mm)	(8 mm)	(8 mm)	(10 mm)	
Crosslevel	1/4"	3/8"	1/4"	7/16"	
Clossievei	(6 mm)	(10 mm)	(6 mm)	(11 mm)	

Figure SUB-PART C - 3 – Static Measurements in a Joint (inches and millimetres)

e) Locations where track measurements do not meet the track geometry standards for the class of track are considered defective. Track defects must be protected by speed restrictions and repaired as soon as possible.



6. Responsibility

- a) The Track Inspector is responsible for:
 - i. Checking deterioration in track geometry between track evaluation car tests,
 - ii. Ensuring that track geometry is maintained within the track geometry standards, or providing appropriate track protection.
- b) Track conditions must equal or exceed the track geometry standards for the class of track as laid out in the Rules Respecting Track Safety. Where conditions on track do not comply with these requirements action must be taken to:
 - i. Bring the track into compliance,
 - ii. Reduce speed to such that is in compliance,
 - iii. Halt operations over the track or,
 - iv. Operate under the authority of a qualified Track Inspector or Manager
 - Notwithstanding the above, in the case of Class 1 track that is not in compliance with these Rules, operation under the authority of a Track Supervisor for not more than 30 days. This does not apply where defective rails are involved.





3. Prevention and Control of Fires on the Right of Way

3.1 General

- a) Transport Canada has issued Rules for the Control and Prevention of Fires on Railway Right-of-Ways. These Rules require all Railways to have methods in place to prevent the starting of fires and to control fires that may be started on the railway right-of-way,
- b) It is the responsibility of the Railway Company to extinguish all fires,
 - On the railway right of way irrespective of the manner in which the fires were started, and;
 - ii. Off the railway right of way that were started as a result of railway operations.

3.2 Fire Plan

- a) Under Transport Canada Rules, ONTC has developed a Fire Prevention and Preparedness Plan in consultation with the Ontario Ministry of Natural Resources,
- b) It is the responsibility of the Director, Rail Infrastructure to update the Fire Plan as required and to ensure that all concerned are provided with current copies.

3.3 Working during Fire Season

- a) The Fire Plan outlines precautions and restrictions which must be implemented for work undertaken during the fire season. The precautions are contained in <u>Appendix "G" Ontario</u> Guidelines for Modifying Railway Operations in response to Fire Danger,
- b) It is the responsibility of each Manager, Track Inspector, Foreman and Extra Gang Foreman to know the current hazard level and to apply the proper precautions or restrictions for the work to be carried out,
- c) The Superintendent, Maintenance of Way will ensure that a sufficient number of employees receive the appropriate training required under the Plan,
- d) The Superintendent, Maintenance of Way will ensure that proper equipment in good working order is supplied where required, prior to the start of the fire season

3.4 Reporting of Fires

a) The individual in charge will immediately report wildfires and suppression of wildfires to the Rail Traffic Controller who will advise fire services using the appropriate number.



SUB-PART D. TRACK STRUCTURE

Scope: This subpart prescribes the requirements for ballast, tie, track assembly fittings and the physical conditions of rails.

1. Ballast

1.1 Ballast Conditions

a) Ballast: General

- i. Unless it is otherwise structurally supported, all track must be supported by material which will:
 - Restrain the track laterally, longitudinally, and vertically under dynamic loads imposed by railroad equipment and thermal stress exerted by the rails;
 - Transmit and distribute the load of the track and railroad rolling equipment to the subgrade;
 - Provide adequate drainage for the track; and
 - Maintain proper track cross-level, surface and alignment.

b) Track Construction

- For new construction use the Current Specification for Ballast to select and prepare ballast materials.
- ii. For new construction ensure that the ballast section when complete conforms to design specifications.

c) Contaminated Ballast

- i. Areas that have become contaminated so that they no longer allow water to freely drain must be identified so that they can be corrected,
- ii. Each Fall, the District Manager will prepare a list of contaminated ballast areas in his territory. This list is to be forwarded to the Manager, Track Programs who will determine the appropriate corrective action.

1.2 Ballasting Preparation

a) Clearances

- i. Obtain approval from the Engineer, Technical Services for any planned ballasting operation that will reduce line clearances.
- ii. Report to the Engineer, Technical Services all track raises or re-alignments that may affect line clearances.

b) Bridges

i. If bridges are within the section of track planned for re-ballasting, bridge spans must be raised or plans made to undercut each bridge approach for a sufficient distance to permit a safe, smooth riding run-out. The Manager, Structures Program must approve the course of action.





c) Public Crossings

i. At public crossings, re-ballasting must be done without risk or major inconvenience to the public. Advise the road authority of the nature and extent of the work to be done. Arrange for the installation of barricades, warning lights, and other safety devices to protect people and vehicles using the crossing. The Railway Association of Canada (RAC) Circular #13, at the back of this manual, offers information on the proper steps in providing protection at crossings.

1.3 Ballasting and Undercutting – Special Precautions

a) Track Buckling

 Take all necessary precautions to avoid track buckling. Pay close attention to the temperature when planning to use under-track plows, sleds and undercutters.
 Fill cribs and restore shoulders with new ballast as soon as possible.

b) Transitions / Run-Out Gradients

i. The transition or run-out gradients must be made on tangent track and must be fully tamped and level to provide a smooth transition from newly ballasted track to old ballast. In no case can the rate of run-out be more than that shown in table below:

MAXIMUM TRANSITION OR RUN-OUT GRADIENT				
Max. Permissible Train Speed	Rate of Run-out			
90 miles per hour	One inch in 105 feet			
80 miles per hour	One inch in 95 feet			
70 miles per hour	One inch in 85 feet			
60 miles per hour	One inch in 70 feet			
50 miles per hour	One inch in 60 feet			
40 miles per hour	One inch in 45 feet			
30 miles per hour	One inch in 35 feet			
20 miles per hour	One inch in 25 feet			
10 miles per hour	One inch in 15 feet			

Figure SUB-PART D - 1 - Run-Out Gradient

c) Ballasting Cross Sections

- i. Cribs filled to a minimum of 1" (25 mm) below the top of tie,
- ii. No ballast left on top of ties, spikes and tie plates,
- iii. Shoulder ballast for jointed rail to be minimum of 6" (152 mm) out from end of tie before sloping,
- iv. Shoulder ballast for CWR track to be minimum of 12" (305 mm) out from end of tie before sloping

d) Track Geometry

- i. Throughout the entire process (the unloading of ballast, the first operation of trains, the final raising and tamping of the track, the return of traffic to normal track speed) the following track geometry must be maintained:
 - The maximum cross level on the outside rail of a curve may not be more than 7 inches (178 mm) on any track. Curves exceeding 6 inches (152 mm)





- cross level must be monitored and have a remedial action plan to bring it back to 6 inches (152 mm) or less cross level.
- The difference in curve elevation between any two points 60 feet (18,288 mm) apart must be not be more than 1 ½ inches (38 mm), with the tie and rail taken into account.

e) Freshly Dumped Ballast

i. Take care to ensure that freshly dumped ballast does not extend more than 2-1/2 inches (64 mm) above the top of the rail. This will prevent damage to equipment and reduce the risk of derailing light rail cars.

1.4 Ballasting and Undercutting in CWR Territory

a) Requirements

 i. Work requirements and speed restriction requirements associated with ballasting and undercutting in CWR territory are given in <u>Sub-Part D – Section 7.8 –</u> <u>Prevention of Track Buckling.</u>







2. Ties

2.1 Ties in Track

- a) Existing tie type, length, and spacing may remain in place until programmed tie replacement or ballast renewal is performed.
- b) Installed centered with the track and square with the rail, with the end of the tie approximately 18 ½ inches from the field edge of the rail base.
- c) Installed in tracks Class 2 and above at 20 3/8" (518 mm) centers
- d) Installed at 21 1/4" (540 mm) centers in Class 1 tracks.

2.2 Tie Spacing during Bridge Work

- a) Maximum clear span of ties on bridges with unsupported running rail*;
 - 115 lb rail 24" (610 mm)
 - *smaller rail sections must be as per and approved by a Bridge Engineer

2.3 Tie Defects

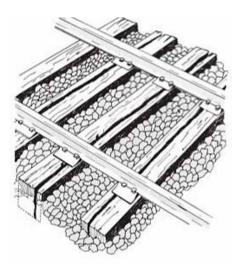
- a) Each 39-foot segment of track must have a sufficient number of cross ties which in combination provide support that will hold gauge, surface, and alignment.
- b) Defective ties are defined as those that are:
 - i. Broken through,
 - ii. Split, or otherwise damaged, to the extent that it will allow the ballast to work through, or will not hold spikes or rail fasteners,
 - iii. Plate cut more than 2" (51 mm) of the tie thickness,
 - iv. Tie cut more than 40% of thickness, or
 - v. So deteriorated that the tie plate or base of rail can move laterally 1/2" (13 mm) relative to the tie.
 - vi. Not holding surface, line, or gauge.





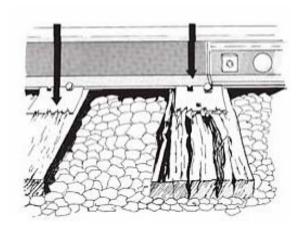
Tie Split End to End

- tie will not hold spikes or rail

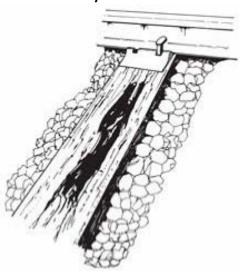


Spike Killed or Crushed

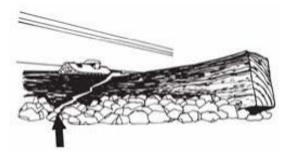
- sign of spreading track



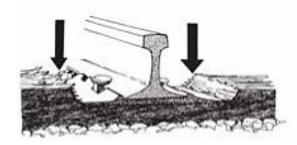
Decayed Tie



Broken Tie Under Rail Base



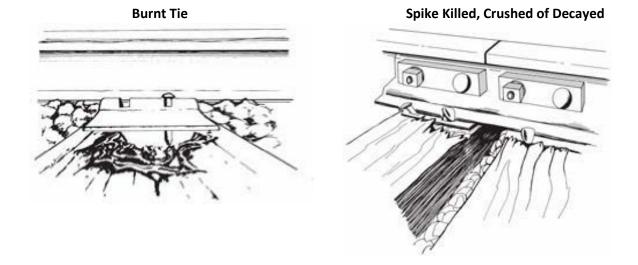
Tie Cut More Than 40% of Thickness



Tie Adzed to a Depth of 2" or Greater

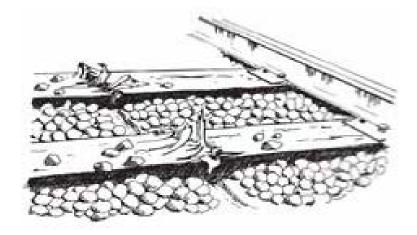






Damaged Tie

- Depth of 2" or more due to derailments, dragging equipment or fire





c) Note that each 39 foot segment has approximately 22 ties. Ensure that at least the number of non-defective ties shown in the following table:

MINIMUM NON-DEFECTIVE TIES PER 39 FT				
CLASS OF TRACK	Tangent track and curves to 2°	Turnouts and curved track over 2°		
Class 1	5	6		
Class 2	8	9		
Class 3	10	10		
Class 4, 5	12	14		

Figure SUB-PART D - 3 - Minimum Non-Defective Ties per 39'

d) For Class 1 or Class 2 lines, ensure that each rail joint is supported by at least one non-defective tie, with a tie plate, whose centerline is within 24 inches (610 mm) either side of the rail joint location. Ensure that there are not more than 2 defective ties in adjacent positions in the joint area.

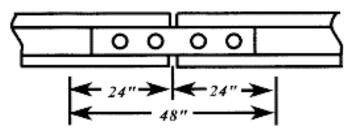


Figure SUB-PART D - 4 - Class 1 and Class 2 - Non-Defective Tie Spacing in a Joint - Within 24"

e) For Class 3 through Class 5 track, ensure that each rail joint is supported by at least one non-defective tie, with a tie plate, whose centerline is within 18 inches (457 mm) either side of the rail joint location. Ensure that there are not more than 2 defective ties in adjacent positions in the joint area.

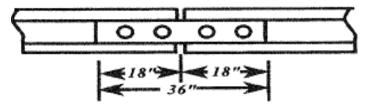


Figure SUB-PART D - 5 - Class 3 through Class 5 - Non-Defective Tie Spacing in a Joint - Within 18"

f) Where the above tie conditions are not met, local forces must spot in ties or train speeds must be restricted to bring the track into compliance.



2.4 Tie Maintenance

- a) When renewing ties, maintain the surface, line and gauge of the track. Immediately tamp the new tie so as to make its bearing surface match that of the adjacent ties.
- b) Do not insert tie plates after the tie has been tamped.
- c) When a spike is pulled, plug the spike hole in the tie with a wooden tie plug or approved chemical tie compound. When re-spiking, drive the spike into the plug (if possible).
- d) A cluster (or spot renewal) program should be undertaken when there is a high frequency of;
 - Four or more consecutive defective ties,
 - ii. Three or more consecutive defective ties in a curve greater than 2°; or
 - iii. Defective ties in the joint area.
- e) When renewing ties, regardless of method of installation;
 - Correct gauge where required,
 - ii. Where required, no more ballast than is absolutely necessary should be removed from the crib or shoulder,
 - iii. All ties installed must be spiked and anchored, the ballast shoulders restored, and the ties properly tamped before the close of each day. Any adjacent ties that may be left hanging should also be tamped; and
 - iv. When necessary to allow trains to operate through tie gang renewal areas during working hours, not more than three consecutive ties on tangent track or two consecutive ties on curved track can be left unspiked, ties on either side of all joints must be spiked, and the speed must be limited to a maximum of 10 mph,
 - v. In preparation for the following day tie installation the spiking pattern may be reduced to a minimum of 2 rail holding spikes (one gauge and one field) per plate on each tie to be removed,
 - vi. Hard and softwood ties should not be mixed on the main track except when changing from one category to another (eg. curve to tangent).
- f) When piling ties for pick-up or disposal, place them:
 - i. At a safe distance from the track, clear of the wing of ballast regulators.
 - ii. On the opposite side of the track from any wire line (if possible).
 - iii. Where they will not block key sight lines.
 - iv. Where they will not present a hazard to employees.
 - v. Away from streams, rivers, environmentally sensitive or drainage systems.

2.5 Tie Inspection

- a) Examine ties in track as early as possible each year to determine their condition. Identify and include on a tie count list any ties that are candidates for renewal based on current condition. Include ties that are defective as in <u>Sub-Part D Section 2.3 Tie Defects</u>. Also include ties that exhibit the following conditions:
 - i. Split end-to-end,
 - ii. Adzed or plate cut more than 2 inches,
 - iii. Severely crushed,
 - iv. Spike killed, or
 - v. Severely decayed.
- b) Do not use a pick or other sharp instrument on the top of the tie when testing ties.





- c) The Track Inspector must prepare a mile by mile list showing the number of ties that are defective on main tracks, 1/5 of the track miles each year to complete all main tracks every 5 years,
- d) Renewal ties must be marked and recorded for which programmed tie renewal is planned for the following year.

2.6 Installing Track and Switch Ties in CWR Territory

a) Tie Replacement in CWR Territory

- i. No ties will be installed when the rail temperature is above the PRLTR (100°F / 37.8°C) unless directed by the Director, Rail Infrastructure. The Director, Rail Infrastructure must specify all necessary precautions to be taken,
- ii. In CWR territory the maximum number of consecutive track ties that can be renewed in a single pass shall be:

NUMBER OF CONSECUTIVE TIES				
	Tangent track to 2° curves	Greater than 2°		
With a Junior or Production Tamper	5	4		
With Hand Tamping or Hydraulic Tools	3	2		

Figure SUB-PART D -6 – CWR Territory - Maximum # of Ties Renewed in a Single Pass

- iii. Switch ties in CWR territory may be replaced in a single pass provided the appropriate speed restriction is applied.
- iv. Crossing ties in CWR territory replaced as part of crossing rehabilitation may all be changed in a single pass provided;
 - Crossing surface is replaced immediately following tie renewal,
 - Crossing approaches are restored and are of sound condition; and
 - The appropriate speed restriction is applied.
- v. Hard and softwood ties should not be mixed on the main track except when changing from one category to another (eg. curve to tangent).

b) Speed Restriction Requirements in CWR Territory

i. Speed restriction requirements associated with installing track and switch ties in CWR territory are given in <u>Sub-Part D – Section 7.8 – Prevention of Track Buckling.</u>





3. Tie Plates

3.1 Second Hand Plates

- a) The use of new or second hand tie plates shall be as directed by the Director, Rail Infrastructure, however;
 - i. Broken or damaged tie plates must not be reused,
 - ii. Tie plates with excessively worn spike holes or shoulders should not be reused.

3.2 Installation of Tie Plates

- a) Tie plates must be installed so that;
 - i. The plates have full, even bearing on the ties,
 - ii. The field side plate should is square against the field side base edge of the rail,
 - iii. The plate is centered on the tie,
 - iv. The rail is canted toward the center of the track (if applicable),
 - v. Each plate has the same cant.
- b) In Classes 3 through 5 track where timber crossties are used there shall be tie plates under the running rails on at least (8) eight of any (10) ten consecutive ties,
- c) Ensure that there are no metal objects that cause concentrated loading solely supporting the rail between the rail and the tie plate. This includes the tie plate shoulders and spike heads,
- d) Torch cutting of tie plates is not permitted,
- e) 14 inch tie plates shall be used with 115 lb rail on all main track curves in excess of 3 degrees.

3.3 Tie Plates in Jointed Track

- a) Replace missing or broken tie plates as necessary to effectively maintain gauge.
- b) Existing tie plates may remain in place until a rail relay is performed.







4. Spiking

4.1 Driving Spikes (spike patterns)

a) Each rail shall be spiked as per the appropriate attached spiking pattern,

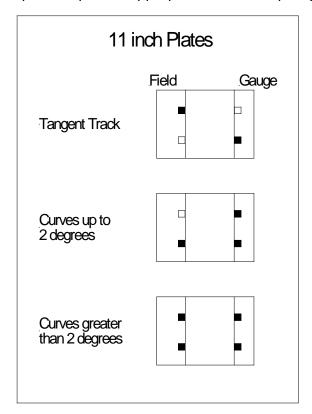


Figure SUB-PART D - 7 - Spiking Patterns - 11" Plates

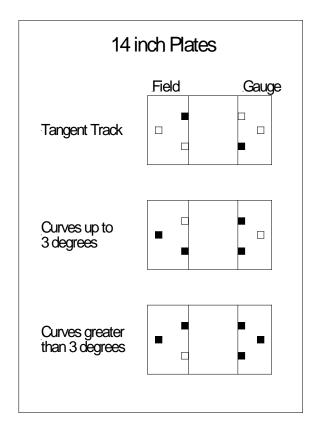


Figure SUB-PART D - 8 - Spiking Patterns - 14" Plates



- b) Drive spikes vertically with the face of the spike in contact with the base edge of the rail, except spikes against insulated joints, which will be installed with heads turned away from the joint bar and not in solid contact with the joint bar. No fastenings may be installed at insulated joints in a manner that may short circuit the track circuit,
- c) Spikes will be driven to a depth such that the spike head is within 3/16" (5 mm) of top of the rail base. Every effort should be made not to overdrive spikes,
- d) Spikes should not be driven at the ends of insulated joint bars in any manner that would cause the insulated joint bar to become electrically connected to the rail,
- e) Spikes will be driven only with a standard spike maul, pneumatic or hydraulic spiking hammer or spiking machine,
- f) Spikes will not be driven within 2 inches (51 mm) of the end of, or in the slots of, skirted (slotted) joint bars.

4.2 Pulling Spikes

- a) When pulling spikes, a spike lifter will be used when spikes cannot be loosened with a claw bar,
- b) Spike between the running rail and guard rails, as well as spikes in tight areas around heel blocks and frogs will be removed using a four-ball spike puller and claw bar,
- c) Claw bars will not be struck with mauls or other tools.

4.3 Spiking Considerations in Jointed Track

- a) Use spike lengths and spiking patterns that meet the ONTC standard.
- b) When rails over 39 feet in length are laid on single-shoulder tie plates, use 6 spikes per tie, or preferably, use dual shoulder plates.
- c) Replace missing and broken spikes as necessary to effectively maintain gauge.
- d) Existing spiking patterns may remain in place until a rail relay or tie program is performed.
- e) When broken spikes are found in curves, carry out an inspection of the whole curve and adjacent tangent to ensure that no dangerous spike condition exists. Special attention must also be paid to the condition of tie plates when performing the inspection. Unusual wear patterns and broken plates indicate other problems exist.

4.4 Spike Sizes for Shimming

- a) 6 ½" spike for ½" shims
- b) 7 ½" spike for 1 ½" shims
- c) 8 ½ spike for 2 ½" shims
- d) 9 1/2" spike for 3 1/2" shims





5. Anchors

A sufficient number of anchoring devices will be applied to provide adequate longitudinal restraint.

5.1 Approved Anchors

- a) Do not substitute alternate types of rail anchors unless the substitution is approved by the Director, Rail Infrastructure,
- b) Only use rail anchors in the rail section for which they are intended. All rail anchor designs must be approved by the Director, Rail Infrastructure,
- c) Use approved rail anchors that are all the same type when installing out-of-face. Anchors used to replace or support existing anchors should also be of the same type as those in the track section, if possible.
- d) In all cases, at locations where track or rail movement occurs due to heavy traffic on grades, to train braking or to soft sub-grade, install additional rail anchors as required to restrict movement of the rail.

5.2 Anchor Application

- a) Anchors should be applied uniformly along the rail against ties,
- b) To avoid tie skewing, anchors must be installed in the same direction against the same tie on the opposite rail. Ties should be at right angles to rail before applying anchors,
- c) Anchors will be applied to the gauge side of the rail when practicable,
- d) When it is necessary to adjust rail anchors by hand and if the anchor is 1 inch or less from its proper position, it can be driven along the rail. Otherwise, you must remove the anchor and reapply it.
- e) When changing rail or renewing ties, all anchors removed must be reapplied,
- f) Sprung or damaged rail anchors will not be installed,
- g) Use only the proper tools or machines when applying or removing anchors in order to avoid damaging the anchor or the risk of injury. The use of spike mauls is prohibited. Anchors should be removed from the rail while the rail is still in track,
- h) When installing anchors, ensure the anchor is fully engaged on the rail base, with the rail base inside the lip of the anchor. Rail anchors must not be overdriven,
- i) Do not install anchors within one inch of a plant or field weld,
- j) Do not install anchors on the rail opposite joints,
- k) Do not install rail anchors where they will contact and damage signal connection wires,
- I) Rail anchors are not to be used on shimmed track. Anchors removed during shimming shall be replaced promptly when shims are removed
- m) In jointed rail, the minimum number of evenly spaced anchors per 39' of track are;

Class of Track	No. of Ties to Box Anchor
1	every 4 th tie
2 and 3	every 3 rd tie
4 and 5	every 2 nd tie

Figure SUB-PART D - 9 - Anchor Application Spacing

n) On track where 40' or longer rails are laid as bolted rail, box anchor at least every second tie for restraint.





5.3 Anchors in Turnouts

a) Turnouts should be fully anchored to the extent possible in both jointed and CWR track.

5.4 Anchor Requirements in CWR

- a) In CWR track, rail anchors will be installed in a box pattern on every other tie except;
 - i. At permanent joints within CWR (joints that will not be welded), then every tie will be box anchored for a minimum distance of 200' each direction from the joint,
 - ii. When jointed rail abuts CWR, a minimum of 200' of rail on either side immediately adjacent to the joint will have every tie boxed anchored,
 - iii. At turnouts, non-glued insulated joints and crossing frogs, every tie will be box anchored for a minimum distance of 200' each way from the turnout or joint,
- b) When CWR is installed on a bridge, the Manager, Track Programs will provide an anchor plan for the bridge

5.5 Anchors in Jointed Track

- a) On 39-foot or shorter lengths of rail in Class 2 through Class 5 track, box anchor jointed track at least at every third tie for restraint in both directions. At a joint, box-anchoring spacing may be adjusted to every second tie, or alternatively to every fourth tie, to avoid box anchoring a tie adjacent to the joint.
- b) On track where 40-foot or longer rails are laid as bolted rail, box anchor at least every second tie for restraint in both directions.
- c) When required, install additional anchors on the jointed track to prevent track movement.
- d) When laying bolted rail do not allow trains to pass over unanchored track except in an emergency. Then, the following must be done before allowing a train to pass over the track:
 - i. inspect the track,
 - ii. place a speed restriction of not more than 10 MPH, and
 - iii. advise train crews to not use dynamic braking during movement over the track.
- e) Existing anchor patterns may remain in place until a rail relay or tie program is performed.
- f) Replace missing or broken anchors as necessary to effectively control movement of the rail.
- g) Re-apply or replace anchors removed during track maintenance work upon completion of the work.
- h) Re-apply anchors after shims are removed from track.
- i) At locations where track or rail movement occurs, for example due to heavy traffic on grades, train braking or soft sub-grade, install additional rail anchors to control movement of the rail.





6. Rail

6.1 General Rail Instructions

- a) Do not install rails shorter than 12 feet (3,658 mm) in length in main track unless authorized by standard plan.
- b) Do not use rail or joint bars that have been cut with a torch or that has holes that have been made with a torch. Torch cut rail must be clearly marked.
- c) Use a drill to make boltholes in the field. Never use a torch to burn boltholes.
- d) When cutting rail for re-use, make the cut at least 6 inches (152 mm) from any torch mark on the rail.
- e) Whenever possible, maintain a minimum stagger of 12 feet (3,658 mm) between bolted joints and/or the welds.
- f) Lay rail to the standard gauge as per <u>Sub-Part C, Section 2 Gauge</u>. In order to maintain correct gauge, at least every fourth tie must be gauged on tangents and every third tie on curves. Plug all spike holes properly.
- g) Rail must not be struck with a spike maul, steel hammer or similar tool.

6.2 Protection of Worn Rail

- a) Rail that reaches Line C wear must be removed from track, or train speed must be restricted to a speed as near as possible to equilibrium speed, while not exceeding the maximum allowable speed for the class of track, until the rail can be changed out. Note that if rail change-out cannot be done within 30 days, or within 60 days on Class 2 track that does not carry passenger or dangerous commodity traffic, then a further speed restriction to 10 MPH must be applied. Refer to Line limits in Appendix A Rail Wear Limits & Rail Management Decision Zones.
- b) Where rail wear has resulted in joint bars being heavily impacted by wheel flanges, the joint must be welded or a high clearance bar or compatible worn bar must be applied. Train speed must be restricted to a speed as near as possible to equilibrium speed until the joint is welded or a high clearance bar is applied. Refer to Figure Sub-Part C 55 Curve Elevation Table Balanced.

6.3 Protection of Defective Rail

a) All rail defects detected visually or by using rail flaw detector cars, including defects temporarily repaired by the application of joint bars, must be monitored within 30 calendar days of their detection and at least monthly thereafter, until change out of defective rail.





RAIL DEFECT FIGURE KEY					
#	Defect	Designation	Where Found		
1	Bolt Hole Crack	BHO or BHJ	FIGURE SUB-PART D - 11		
2	Broken Base	BBO or BBJ	FIGURE SUB-PART D - 12		
3	Broken Rail or Ordinary Break	BR	FIGURE SUB-PART D - 13		
4	Damaged Rail	-	FIGURE SUB-PART D - 14		
5	Defective Field Weld or Defective Plant Weld	DWF or DWP	FIGURE SUB-PART D - 15		
6	Engine Burn Fracture	EBF	FIGURE SUB-PART D - 16		
7	Head and Web Separation	HWO or HWJ	FIGURE SUB-PART D - 17		
8	Horizontal Split Head	HSH or HSJ	FIGURE SUB-PART D - 18		
9	Piped Rail	PRO or PRJ	FIGURE SUB-PART D - 19		
10	Split Web	SWO or SWJ	FIGURE SUB-PART D - 20		
11	Transverse Defect or Detailed Fracture	TDD	FIGURE SUB-PART D - 21		
12	Transverse Defect Under a Weld Repair	DFW or TDW	FIGURE SUB-PART D - 22		
13	Transverse Fissure or Compound Fissure	TDT	FIGURE SUB-PART D - 23		
14	Vertical Split Head	VSH or VSJ	FIGURE SUB-PART D - 24		

Figure SUB-PART D - 10 - Rail Defect Key

1. Bolt Hole Crack – BHO or BHJ					
Contractor's Designation	Defect Size* (inches and millimeters)	Protection Code	Ways to Reduce Frequency of Defect Occurring		
	Cracked Out	1	Joint elimination Keep bolts tightened. Tamp up joints. Build up rail ends by welding.		
BHO (outside of joint or in joint area)	More than 1/2" to more than 1-1/2" (More than 13 mm to more than 38 mm)	4			
,	1/2" or less (13 mm or less)	8	Use proper drilling fixture. Regularly change drill bits.		
	Appearance in Track	Defect Cause			
	Bolt hole cracks originate at a bolt hole in a joint or at a former joint location (e.g. thermite weld) or any holes drilled in rail for any purpose. These cracks can radiate outwards at an angle towards both head and base. In the past bolt hole cracks have progressed from the first bolt hole from the end of the end of the rail at an angle approximately the 45 degree maximum shear plane. In harder premium rails, bolt hole cracks are not regularly seen growing at a large range of angles, some close to vertical, and to emanate from the 2 nd or 3 rd drilling.		Loose joint bars, battered rail ends and bad ties in the joint area. Another key initiator is a nick or burr introduced in the drilling of bolt hole by a dull drill bit or an off-center drilling.		

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 11 - Bolt Hole Crack



2. Broken Base – BBO or BBJ						
Contractor's Designation	Defect Size*	Protection Code		Ways to Reduce Frequency of Defect Occurring		
BBO (outside of joint or in a joint)	N/A	9		Avoid mishandling rail, striking rail with sharp tools.		
Appeara	Appearance in Track			Defect Cause		
	Base breaks are also called broken bases or base fractures. Base breaks are rarely found by rail flaw detector cars unless they have progressed under the rail web, as the ultrasonic signal is only transmitted through the rail web. Base breaks can be recognized as a crack starting near the junction between the base and the web, and extending either along the axis parallel to the rail, curving outwards to the base, or as a halfmoon shape of break		ur ra or fil th br de w ba	Base breaks develop outwards under the flexural action of the rail from a seam, segregation or inclusion near the base/web fillet, or inwards from a nick on the edge of the rail. Base breaks also result from derailments or from damaged wheels that have run along the base of the rail, contacting rail anchors.		

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 12 - Broken Base



3. Broken Rail or Ordinary Break – BR					
Contractor's Designation	Defect Size*	Protection Code		Ways to Reduce Frequency of Defect Occurring	
BR	N/A	1		Destress Surfacing	
Appearance in Track			Defect Cause		
Ordinary Break No Visible Defect	Partially or completely broken through, without evidence of a fissure or other type of rail defect that may have caused the break.		High tension in rail, skid flats, out of round wheels, shelled wheel treads.		

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 13 - Broken Rail or Ordinary Break

4. Damaged Rail						
Contractor's Designation	Defect Size*	Protection Code	Fr	Ways to Reduce requency of Defect Occurring		
N/A	N/A	7				
Ap	Defect Cause					
Any rail broken or injured by wrecks, broken, flat, or unbalanced wheels, slipping, or similar causes.						

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 14 - Damaged Rail



5. Defective Field	l Weld or Defective	Plant Weld -	- DWF	or DWP
Contractor's Designation	Defect Size*	Protection Code	Way	s to Reduce Frequency of Defect Occurring
DWF (CO)	Cracked Out, or	1 or 10		Destressing.
DWP (CO)	81 – 100%		Preve	ent gouges in finish grinding.
DWF (L) DWP (L)	41 – 80%	4 or 7	The	rmite welding crucible must be dry.
DWF (M) DWP (M)	21 – 40 %	4 or 7	Us	e of proper welding kit for metallurgy.
DWF (S) DWP (S)	0 – 20%	Suf 4 or 7		ficient preheat and cooling time when welding.
	A			oid use of damaged tools.
<i> </i>	Appearance in Trac	k		Defect Cause
TRANSVERSE DEFECT H - BREAK H - BREAK *HORSESHOE* "BIG DIPPER" BREAK	Defects in flashbutt or thermite we may be either a transverse separation the rail head at the weldment or fracture in the rail web or base emanating from a poor weld. Weld defects in the rail head are difficult to detect but can be found rail flaw detector cars. They cannot be inspected visually until the transverse defect has cracked out show a vertical crack on the side of the rail head. Web fractures may have one of several characteristic shapes, variously referred to as "flat cracks" horseshoe breaks", "S" breaks, "Is breaks, or "big dipper failures."		ration or a did by inot ut to e of ks",	In the head of the rail, the origin may be a slag inclusion or oxide entrapment. In the web, fracture may be the result of gouges left from poor finish grinding or from residual stresses in the rail, as in the case of a split web. In many cases, the cause may be poor fusion due to improper preheat or excessively rapid cooling.

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 15 – Defective Field Weld or Defective Plant Weld



6. Engine Burn Fra	cture - EBF			
Contractor's Designation	Defect Size*	Prote Co	ction de	Ways to Reduce Frequency of Defect Occurring
	100 % (Cracked Out)	1		
EBF	81 – 99%	2	2	
	21 – 80 %	5	5	
	0 – 20%	7	7	
Appearance in Track				Defect Cause
	Flat spot on rail, a hairline crack on the side of the rail head when the defect cracks out, thermal cracks extending from the burn to the gauge corner and down the side of the head		cause impact burn of slip. I engin therm	te burn fractures are ed by repeated wheel ets at the site of an engine due to excessive wheel Rail metal under an e burn is usually cally damaged and eptible to fatigue.

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 16 - Engine Burn Fracture



7. Head and Web	Separation – HWO o	r HWJ	
Contractor's Designation	Defect Size* (inches and millimeters)	Protection Code	Ways to Reduce Frequency of Defect Occurring
	Cracked Out	1	Keep bolts tightened.
HWO (outside of	More than 3" (More than 76 mm)	6	Build up battered rail ends.
joint or in joint	1/2" to 3" (13 mm to 76 mm)	4	Inspect rail when
area)	Less than 1/2"		replacing crossing.
	(Less than 13 mm)	8	Maintain good joint support.
A	Defect Cause		
	Separation of the heat the rail through the fill the head is termed a "Web Separation". Head and web separation occur at highway cross are recognized by irrestrunning longitudinally or parallel to the head. They can also be recoded sound when tap hammer.	joints or as a result of corrosion fatigue	
	In the joint area the conscured by angle ba		

 $^{^{*}}$ % of head covered by defect or crack length in inches.

Figure SUB-PART D - 17 - Head and Web Separation



8. Horizontal Split	Head – HSH or HSJ				
Contractor's Designation	I (inches and I —		cotection Code	Ways to Reduce Frequency of Defect Occurring	
	Cracked Out		1	D	
HSH (outside of joint or in joint	More than 12" (More than 305 mm)		3	Remove rails with same heat number if defects persist.	
2" to 12" (51 mm to 305 mm)			4	Slot rail ends.	
	Less than 2" (Less than 51 mm)		-	Siot fall effus.	
Appearance in Track			Defect Cause		
	Horizontal split heads can sometimes be detected visually as they can cause a local flattening of the rail head which would cause a dark spot in contrast to the adjacent shiny running band. When it cracks out, it can be seen as a hairline horizontal crack on the way down from the top of the rail.		progressi along a p surface. internal si inclusion making.	tal split head is a ve longitudinal fracture lan parallel to the rail The origin is at an eam, segregation or introduced in the steel It usually grows rapidly stop at the end of the at a weld.	

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 18 - Horizontal Split Head



9. Piped Rail – PR	O or PRJ				
Contractor's Designation	Defect Size* (inches and millimeters)		tection ode	Ways to Reduce Frequency of Defect Occurring	
	Cracked Out		1		
PRO (outside of joint or in joint	' IIVIOLE MAN 70 MM		6	Remove rails with same	
area)			heat number if defects.		
	Less than 1/2" (Less than 13 mm)	8			
Appearance in Track			Defect Cause		
	Piped rails are seen in older steels. When fully progressed, they can be seen as a bulging of the web on either side or both sides, possibly with shallow cracks on the bulging surface. A slight sinking of the rail head may also be seen.		longitu the we found i are gei defect bulged	rails are the result of a dinal seam or cavity in b of the rail, typically n older rails. Piped rails nerally not a serious unless the web has or where the pipe has ssed into a weld.	

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 19 - Piped Rail



10. Split Web – SW	O or SWJ				
Contractor's Designation	Defect Size* (inches and millimeters)		otection Code	Ways to Reduce Frequency of Defect Occurring	
	Cracked Out		1		
SWO (outside of	More than 3" (More than 76 mm)		6	Avoid mishandling rail,	
joint in joint area)	1/2" to 3" (13 mm to 76 mm)		4	striking with sharp tools.	
	Less than 1/2" (Less than 13 mm)		8		
Appearai	nce in Track		Defect Cause		
	Split webs are longitudinal or occasionally transverse cracks along the side of the web and extending into or through it. Often they can be recognized as a "bleeding" crack in the web.		bad star identifica nick or a	bs will occur as a result of a mping of the rail ation numbers or due to a gouge in the rail. Split sually grow rapidly in the a.	

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 20 - Split Web



11. Transverse D	efect or Detailed Fr	racture - T	DD		
Contractor's Designation	Defect Size*	Protection Code	<u>on</u>	Ways to Reduce Frequency of Defect Occurring	
TDD (CO)	100 % (Cracked Out)	1		Grind gauge corner with production rail grinder to	
TDD (L)	41 – 99%	2 or 9		provide relief.	
TDD (M)	21 – 40%	3 or 9		Run for a period with	
TDD (S)	0 – 20%	9		lubricators.	
*See <i>Repair Note 1</i> in addition to the above Protection Codes			Destress. Improve tie condition.		
Appe	arance in Track			Defect Cause	
Detail Fracture from Shelling Detail Fracture from Head Check	The distinguishing of a transverse defethe crystalline cent nucleus and the nesmooth surface of the development which surrounds it. Transverse defects are usually found but ultrasonic or induct testing cars, but will occasionally reach surface where they identified by cracks side or corners of the head.	ect are re or early the of (TD's) by ion Il the of can be of on the	due ins loca whe De- cor in a	erloading of gauge corner to loss of rail, cant, ufficient relief of gauge corner ation interfering with throat of eel. tail fractures are more mmon in dirty rail steels and areas where the rail is in sion.	

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 21 - Transverse Defect or Detailed Fracture



12. Transverse Defec	ct Under a Weld Re	pair – D	FW c	r TDW
Contractor's Designation	Defect Size*	Protec Cod		Ways to Reduce Frequency of Defect Occurring
DFW or TDW (CO)	100 % (Cracked Out)	1		
DFW or TDW (L)	41 – 99%	2 or	9	
DFW or TDW (M)	21 – 40%	3 or 9		Follow correct preheating instructions prior to
DFW or TDW (S)	0 – 20%	9		welding.
*See <i>Repair Note 1</i> in	addition to the above Codes	e Protec	tion	
Appeara	nce in Track			Defect Cause
Detail Fracture under	When defect cracks out under a weld repair it can be seen as a hairline crack at right angles to rail running surface.			lequate preheating of Irfaced rail end during weld air.

^{* %} of head covered by defect or crack length in inches.

Weld

Figure SUB-PART D - 22 - Transverse Defect Under a Weld Repair



13. Transverse* Contractor's Designation		Sure or Compour	Protection Code	Ways to Reduce Frequency of Defect Occurring	
	41 - 21 - 0 - 2 Note	ecked Out) - 99% - 40%	1 2 7 7 e above		ange out non-Mackie or on-control cooled rail.
	Appe	earance in Track			Defect Cause
Transverse Fiss	ure	The term "transy describes a tran has nucleated from the central location in the distinguishing transverse defeating crystalline central the nearly smooth development who the transverse defeating occasionally found by induction testing occasionally real where they can be cracks on the side the rail head.	sverse defect om a more in the railhead ing features of ct are the e or nucleus a th surface of the ich surrounds octs (TD's) are rultrasonic or cars, but will ch the surface be identified b	d. a and the s it.	Transverse fissures are usually the result of trapped hydrogen or other imperfections in rail steel and usually not found in modern rails.
Compound Fiss	ure				

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 23 - Transverse Fissure or Compound Fissure



^{**} Transverse defects occurring in non-Mackie and non-control cooled rails are subject to the same rules applying to transverse fissures, except that the entire length of rail must be changed out in all cases.

14 Vertical Spli	t Head – VSH or VSJ		
Contractor's Designation	Defect Size* (inches and millimeters)	Protection Code	Ways to Reduce Frequency of Defect Occurring
	Cracked Out	1	
VSH (outside of	More than 12" (More than 305 mm)	3	Grind rail to centre wheel contact band over rail web.
joint or in joint area)	2" to 12" (51 mm to 305 mm)	4	Remove rails with same
	Less than 2" (Less than 51 mm)	-	heat number if defects persist.
*See Repair	Note 2 in addition to the Protection Codes	e above	r
Appeara	nce in Track		Defect Cause
	In the field, visual detection is facilitated by the appearance of a dark streak on the running surface, indicating that one side or the other of the rail is dropping. The dark streak may turn in at the originating point of the VSH. A rust streak may then be apparent on the head / web fillet.	Vertical split heads are progressive longitudinal fractures where the head the rail separates vertically along a se segregation, or inclusion in the rail, usually near the middle of the head. It separation may progress rapidly up to full length of the rail before gradually turning out to field or gauge. Occasionally a vertical split head may also pass through a weld to find the saseam that was rolled into an adjacent. Vertical split heads grow because of the shearing action of wheels riding to field to gauge. Residual tensile stresses malso play a role. Vertical split heads occurring in rails with moderate wear a primarily the result of poor steelmaking. While vertical split heads are usually associated with dirty steel, they will progress faster in heavily worn rails the have flattened in service.	

^{* %} of head covered by defect or crack length in inches.

Figure SUB-PART D - 24 - Vertical Split Head



6.5 Protection Code Description

- a) All rail defects, including those temporarily repaired by the application of joint bars, must be monitored within 30 calendar days of their detection and at least monthly thereafter, until change out of defective rail.
- b) The following lists the specific protection codes used in the column four of the table of Rail Defects and Protection Codes with a description of the protection associated with each code.

	PROTECTION CODE DESCRIPTION
Code	Explanation of Protection Codes
1	Assign a qualified track inspector to visually supervise each operation over defective rail. Apply Movement Over Broken Rails policy
2	Assign a qualified track inspector to visually inspect. Once inspected that person may authorize operation to continue without continuous visual supervision at a maximum of 10 mph for up to 24 hours prior to another such visual inspection or replacement or repair of the rail. After joint bars have been applied, allow trains to operate over this defect at 30 mph.
3	Assign a qualified track inspector to visually inspect. Restrict the operation of trains to not more than 10 mph. Defective rails must be replaced as soon as possible.
4	Limit operating speed over defective rail to that as authorized by a qualified track inspector. The operation of trains must be restricted to not more than 30 mph or maximum allowable speed under the class of track, whichever is lower.
5*	Assign a qualified track inspector to visually inspect. Restrict the operation of trains to not more than 10 mph until weld repair bars applied. Then, limit the operating speed to not more than 40 mph or maximum allowable speed under the class of track, whichever is lower, and if rails are not replaced within 3 days, lower the operating speed to 10 mph.
6	Restrict operation of trains to not more than 30 mph as designated by a qualified track inspector or maximum allowable speed under the class of track, whichever is lower, and visually inspect by a qualified track inspector in not more than 10 days.
7	Restrict the operation of trains to not more than 30 mph apply joint bars within 10 days. Then, limit the operating speed to not more than 40 mph or maximum allowable speed under the class of track, whichever is lower.
8	Restrict operation of trains to not more than 50 mph or maximum allowable speed under the class of track, whichever is lower, and if rails are not replaced within 72 hours, lower the operating speed to 35 mph or maximum allowable speed under the class of track, whichever is lower.
9	Apply joint bars and restrict operation of trains to not more than 30 mph or a maximum allowable speed under the class of track, whichever is lower. As a general note, in applying joint bars, 2 bolts per rail end are to be used in the outer most holes.
10*	Assign a qualified track inspector to visually inspect. Apply joint repair bars and restrict operation of trains to no more than 30 mph or maximum allowable speed under the class of track, whichever is lower, and if rails are not replaced within 24 hours, lower the operating speed to 10 mph.

Figure SUB-PART D - 25 - Description of Protection Codes

*When the rail defect extends through a weld, a section of rail must be cut out when making either emergency or permanent repairs. Note, these repairs must be made in accordance with ONTC Standards.

	The repaired trace, these repairs must be made in accordance with our obtained as
Code	Action
1	When changing out the defective rail, remove from the track all rail showing gross distortion of the rail section (for example, heavy flow) plus all rail with evidence of rail shelling, occurring in the same rail.
2	When changing out the defect, replace the entire rail and make an inspection to ensure that the defect has not traveled through the weld into an adjacent rail.

Figure SUB-PART D - 26 - Repair Notes



(in)

6.6 Authorizing Movement over Rail Breaks

- a) This requirement expands upon practices outlined in <u>Figure Sub-Part D 25</u> and has been developed to provide specific criteria for a qualified employee to authorize a train or engine to proceed safely over rail breaks,
 - For the purpose of this, a rail break shall be considered a complete break of the rail,
- b) A train or engine must not be permitted to operate over a rail break when any of the following conditions exists:
 - The rail break is in a tunnel or on a bridge,
 - For supervised moves, the rail break is within 500 feet (152,400 mm) of a bridge or tunnel,
 - For unsupervised moves, the rail break is within 500 feet (152,400 mm) of a bridge or tunnel,
 - The ties on either side of the break are defective, crushed, or split in the tie plate area,
 - Cracks are observed radiating from the broken rail ends,
 - The rail break occurs in an area of unstable grade,
 - The offset (overhang) is greater than 2 inches (51 mm),
 - The gap is greater than 3 1/2 inches (89 mm),

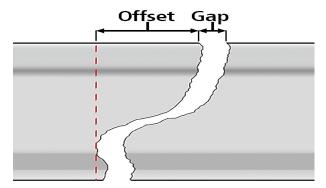


Figure SUB-PART D - 27 - Movement Over a Rail Break - Offset and Gap Measurement Visual

- In the case of a joint area, the break extends beyond the limits of the joint bar, or
- The break occurs in an area in which the Superintendent, Maintenance of Way has specified that movements over rail breaks are not permitted.
- c) Where none of the above conditions exist and joint bars are installed with at least one bolt through the center of the break, trains or engines are allowed to operate over the break at a speed not exceeding 10 miles per hour,
- d) When none of the conditions outlined in item (b) exist and the gap size is too small to allow for the installation of joint bars with one bolt through the center of the break (less 1 1/8" (29 mm)) trains may be permitted to operate over the broken rail at a speed not exceeding 5 miles per hour, under a supervised movement,
- e) If the break is at a weld location and bolt holes exist, splice bars, or temporary weld bars must be installed with at least one bolt in each rail end,
- f) The condition of the rail break, splice bars, and supporting ties, must be visually observed as the train or engine operates over the break,
- g) The requirement for supervision of the train movement over the rail break may be waived if the rail break is a significant distance from a location where the employees' vehicle can be cleared, for example, where there is no other track, grade crossing or road nearby, or where



(in)

access by foot is impeded by adverse weather conditions provided the following regulatory requirements are met:

- The rail break is either,
 - An ordinary break;
 - A complete break in which there is a sign of a transverse fissure or compound fissure; or
 - A complete break at a defective weld,
- Splice bars must be installed,
- The condition of the rail break, splice bars and supporting ties must be inspected prior to each movement over the break,
- Not more than 24 hours has elapsed since the initial inspection of the defect (defects must be repaired within 24 hours of detection), and
- h) A 5 mph speed restriction must be applied in accordance with the applicable operating rules:
- i) The Rail Traffic Controller (RTC) must be notified, in a clear manner, as to how the restriction is to be applied. One of the following methods must be used;
 - Flags placed in accordance with CROR Rule 843,
 - By the use of an approved rail break sign, or
 - When flags or an approved rail break sign are not available, restrictions must be applied between two identifiable locations.
- j) Records of these rail breaks must be kept for a period of at least 1 year and include the following information:
 - The mileage and subdivision where each rail break occurred,
 - The measured gap and offset at the rail break, and
 - The type of rail defect.
- k) Repairs must be completed within 24 hours from the time the defect is first inspected.



6.7 Supervised Movements over Rail Breaks

If the condition of the rail break, splice bars, and supporting ties, can be visually observed as the train or engine operates over the break, use the following flow chart to determine the appropriate action:

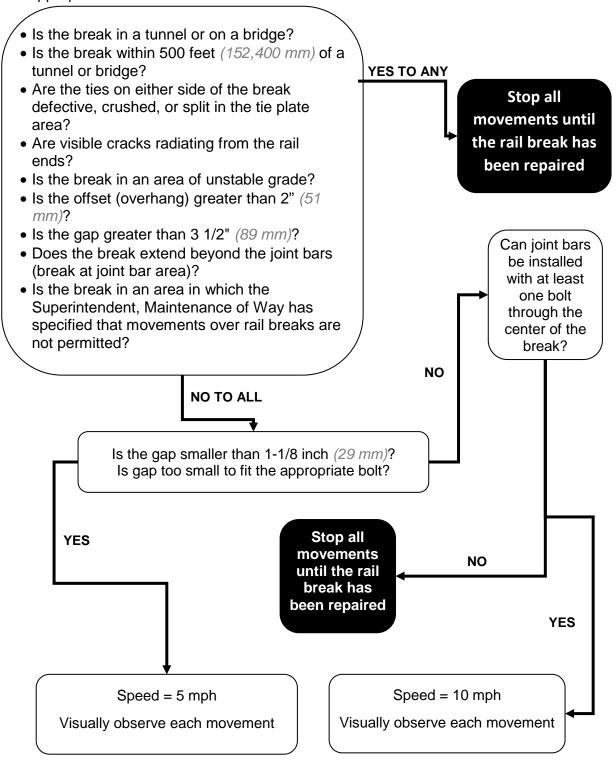


Figure SUB-PART D - 28 - Movement Over Rail Breaks - SUPERVISED



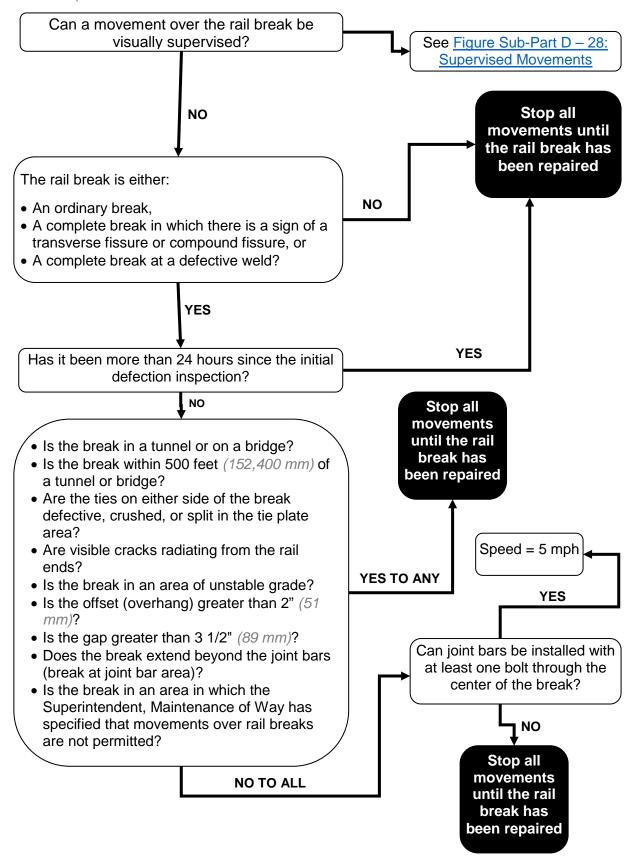


Figure SUB-PART D - 29 - Movement Over Rail Breaks - UNSUPERVISED



6.9 Inspection of Broken Rail

a) When any broken rail is found on a main track or siding, the Track Maintenance Foreman or whichever employee first arrives at the location, must inspect the track for 300 feet (91,440 mm) in each direction from the break, looking for pieces of equipment and for damage to the rail or track, e.g. wheel marks.

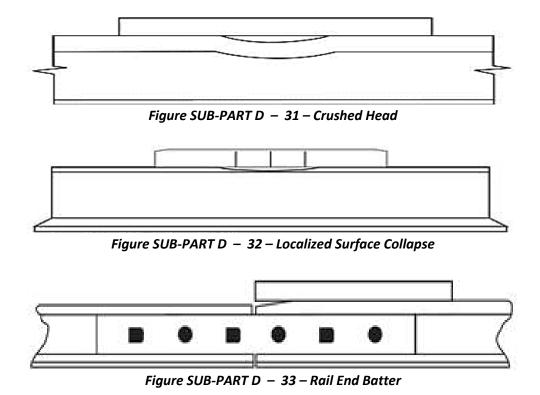
6.10 Crushed Head, Localized Surface Collapse and Rail End Batter

a) The following criteria shall be used in restricting the operating speed over crushed heads, surface collapse and rail end batter until such time as they can be corrected.

Depth of Defect CH, LSC and REB	Remedial Action
Less 1/8" (3 mm)	Monitor and repair
1/8" to 3/16"	Limit operating speed to 30 mph
(3 mm) to (5 mm)	and repair or replace
Greater than 3/16"	Limit operating speed to 10 mph
(5 mm)	and repair or replace

Figure SUB-PART D -30 – Crushed Heads, Surface Collapse and Rail End Batter (inches and millimetres)

- b) Crushed Heads, Localized Surface Collapse and Rail End batter on Class 3 track and higher, measuring 1/8" (3 mm) or greater will be monitored by local forces monthly until repaired or replaced.
- c) A record of inspection location, date and measurement taken must be maintained.
- d) Depth of crushed heads, localized surface collapse and rail end batter shall be determined using a straight edge and a taper gauge as per the following diagrams:









6.11 Rail Identification

- a) Rail branding is the raised letters and numbers along the web of the rail. Rail stamping is on the opposite side of the web and has indented letters and numbers.
 - i. Branding identifies:
 - Rail weight or section, manufacturer, manufacturing method, year and month rolled

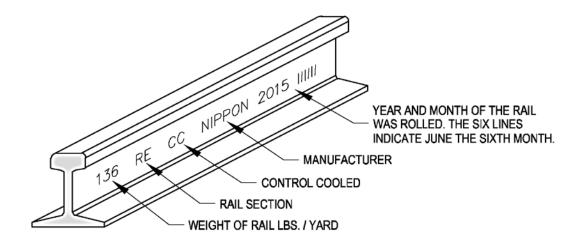


Figure SUB-PART D - 34 - Rail Branding

- ii. Stamping identifies:
 - Heat, ingot and rail sequence in manufacturing process

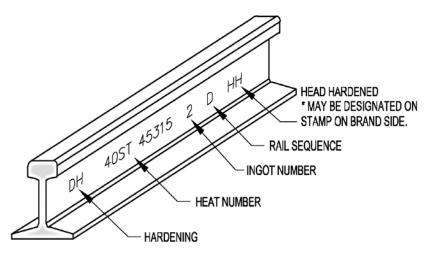


Figure SUB-PART D - 35 - Rail Stamping

6.12 Rail Removal

- a) When removing a defective rail, remove the full length of the rail if the following apply:
 - Non-Mackie or non-control-cooled rails are being removed from the track because of transverse fissures
 - ii. Mackie or control-cooled rails are being removed from the track because of:
 - vertical split heads outside the joint area
 - transverse fissures or transverse defects accompanied by gross distortion of the rail section (for example, heavy flow or evidence of rail shelling)





- b) In territory laid with Mackie, CC or VT rail keep only rail with the corresponding brands or stamps on the rail racks.
- c) For each rail removed from the main track because it is broken or has a defect, a Mainline Rail Failure Report form must be completed. The exception is rail defects found and reported by the rail flaw detection cars.
- d) Rail removed from track that is defective or that is otherwise unfit for relay in track, and cannot be improved by treatment, must be classified and marked as scrap (XXXX). It must be stored for removal in a location that is apart from the racks where maintenance and relay rail plugs are stored.

6.13 Rail Wear Limits and Rail Management Design Zones

See Appendix A

6.14 Rail Classification

- a) When released from track, rail must be properly classified to ensure the best possible use with these general rules,
 - New Rail
 - New rail is laid in primary main lines.
 - Premium Rail
 - New Premium Rail is laid where authorized by the Director, Rail Infrastructure,
 - Premium Rail has an increased resistance to wear because of its chemical composition and special hardening process,
 - Premium Rail should not be mixed with Intermediate Rail due to the different wear rate.
 - Intermediate Rail
 - Intermediate Rail is used in the majority of applications at Ontario Northland due to our relatively low annual gross tons of traffic.
- b) The classification, description and marking of rail are as follows;

RAIL					
Classification	Description	Marking			
New Rail	Rail not previously used in service, to be laid where allowed	N/A			
Main Line Rail	Rail previously in service that is fit for relay in Main Lines	One white spot			
Branch Line Rail (Agrium and Iroquois Falls Subdivisions)	Rail previously in service that is fit for relay in main track on Branch Lines	Two white spots			
Yard, Siding and Pagwa Spur Rail	Rail previously in service that is fit for relay in subsidiary tracks	Three white spots			
Repair Rail	Rail previously in service that is fit for repair of defective rails in Main or Branch Lines	Orange "R"			
Scrap Rail	Rail that is unfit for relay due to wear or internal defects	Four "X's" (XXXX)			

Figure SUB-PART D - 36 - Marking of Rail Released from Track

- c) Partly worn rail that is intended to be re-used in main track,
 - Be center marked for lifting,
 - Be classified,





- Have the vertical and gauge wear values written on the web of the rail,
- Be neatly stacked, rail section, in identifiable stands for each. For rail stands along the right-of-way, ensure the area allows for accessibility year-round but doesn't interfere with operations,
- Have the latest ultrasonic test information marked on the web of the rail approximately three feet from the end of the rail by minimum of two inch high letters with a paint stick. The marking will indicate "UTT" and the date of the last ultrasonic test.
 - Rail which has not been UTT tested and is to be used in track, shall have a Class 2 speed restriction placed until it has been ultrasonically tested and shall be inspected weekly.

d) Main Line Rail

- Main Line Rail released from track is classified as follows;
 - The rail is a 115 lb or heavier section,
 - The rail is without known defects,
 - The rail's wear is not more than the limits for Main Line rail shown on Figure Sub-Part D 37,
 - The rail's end batter is 1/16 inch (2 mm) or less,
 - For previously worn jointed rail only, the clearance between the back of the new joint bars and the web of the rail is 3/16 inches (5 mm) or more – measured at the lower fillet,
 - The rail is 20 feet (6,096 mm) or longer unless it has been cut shorter for a special purpose.





RAIL CLASSIFICATION 115 lb. RE Rail

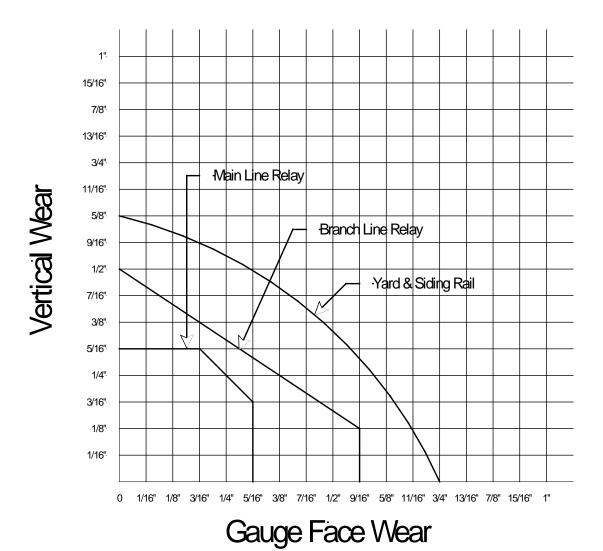


Figure SUB-PART D -37-115 lb RE Rail Wear (Vertical and Gauge)

 Unless authorized by the Director, Rail Infrastructure, only 115lb RE rail will be used for relay rail in Main Line or Branch Line track programs.

e) Branch Line Rail

- Lighter rail may be used as Repair Rail in Branch Lines when used for repair purposes.
- Branch Line Rail released from track is classified as follows;
 - The rail is a 115 lb or heavier section (lighter rail may be classified as branch line rail when required for repair purposes on existing branch lines),
 - The rail is without known defects,
 - The rail has only bends that can be straightened easily,
 - The rail wear is not more than the limits identified for Branch Line Rail in Figure Sub-Part D 37,
 - The rail's end batter is 1/8 inch (3 mm) or less,





- For previously worn jointed rail only, the clearance between the back of the new joint bars and the web of the rail is 1/8 inch (3 mm) or more, measured at the lower fillet,
- The rail is 20 feet or longer unless it has been cut shorter for a special purpose.
- f) Yard and Siding Rail released from track is classified as follows;
 - The rail is an 85lb or heavier section (lighter rail may be classified as siding rail when required for repair of existing sidings or yard tracks),
 - The rail is without known defects, sharp bends or excessive wear which make it unsuitable for use,
 - The rail is 20 feet or longer unless it has been cut shorter for a special purpose,
 - The rail wear is less than the limits shown in Figure B for Yard and Siding Rail.
- g) Repair Rail
 - Repair Rail released from track is rail of suitable length and wear condition so that it
 will fit in curves or tangent track without producing a condition of rail end mismatch.
 Repair Rail must not exceed limits of Line B wear in Appendix A.
- h) Scrap Rail
 - Scrap Rail is any rail with defects that would render it unsuitable for use in track,
 - Rail of any weight with wear exceeding Line C wear is considered Scrap Rail

6.15 Marking Rail Removed from Track

- a) Rail released from track will be marked according to Figure Sub-Part D 36,
- b) All rail removed from track must be handled in one of the following ways:
 - i. If not suitable for re-use (scrap), then the rail must be marked as scrap by marking four X's (e.g. XXXX) on the rail.
 - ii. If suitable for re-use and 10 MGT or less traffic has run over the rail since it was last ultrasonically tested, then the rail must be marked to identify its length and grade classification. If more than 10 MGT of traffic has run over the rail since the last ultrasonic test, it must be retested prior to being identified for re-use. Grade Classifications are contained in Sub-Part D Section 6.14.
 - iii. If the rail has a detected defect, then the rail must be marked as per rail flaw detector instructions. Defects which are cut out must be marked as scrap.
- c) The classification markings will be placed on the web of the rail approximately four feet from the end,
- d) Rail released that has low head wear but excessive end batter is to be classified to the higher classification and marked for cropping,
- e) Rail to be cropped should be painted on the appropriate end in orange paint for approximately one foot,
- f) Repair Rails should have their head wear measurements marked on the top of the rail, near one end using a permanent paint stick or other device immediately over the "R".





6.16 Bolted Rail

6.16.1 Rail Expansion

- a) Make an expansion allowance at each rail joint for the changing length of the rail due to the changing rail temperature.
- b) No expansion allowances are needed where bolted rail abuts continuous welded rail.
- c) Measure the rail temperature of each rail laid with an approved thermometer. To measure the rail temperature, place the thermometer on the base of the rail near the web away from the wind and out of the direct rays of the sun. The use of an infrared temperature measurement tool is acceptable.
- d) Provide the proper space allowance for expansion by placing shims of metal, fiber or wood between the ends of the adjoining rails as each rail is laid, except at insulated joints. These shims must be left in place until the line of rail is fully bolted and spiked. If rail anchors are provided, do not remove the shims until the rail line is anchored at least 10 rail lengths beyond the joint.
- e) The following figure shows the expansion allowances for various lengths of rail at different rail temperatures (in degrees Fahrenheit):

EXPANSION ALLOWANCE (inches and millimeters)							
LENGTH OF RAIL (FEET)	0" <i>0 mm</i>	1/16" 2 mm	1/8" 3 mm	3/16" 5 mm	1/4" 6 mm	5/16" 8 mm	
30 – 50	Above 85°F	65° - 85°F	40° - 64°F	20° - 39°F	0° - 19°F	Below 0°F	
30 – 30	Above 29.4°C	18.3 – 29.4°C	<i>4.4</i> − 17.8°C	-6.7 – 4.4°C	-17.8 – -7.2°C	Below -17.8°C	RAIL
F4 00	Above 85°F	74° - 85°F	61° - 73°F	48° - 60°F	35° - 47°F	Below 35°F	TEMPERATURE
51 – 90	Above 29.4°C	23.3 – 29.4°C	16.1 − 22.8°C	8.9 − 15.6°C	1.7 – 8.3°C	Below 1.7°C	

Figure SUB-PART D - 38 - Rail Expansion Allowance

6.16.2 Rail End Mismatch

a) Where rail end mismatch exceeds 1/8" (3 mm) on the top or the gauge side of a rail joint, it shall be repaired promptly by grinding, welding or replacement of the rail. Until such time as these repairs are made, movements over the mismatch shall not exceed the speed for the appropriate class of track, as prescribed by the following table:

Class of Track	Maximum Mismatch on Top of Rail	Maximum Mismatch on Gauge Side of Rail
1	1/4" (6 mm)	1/4" (6 mm)
2	3/16" (5 mm)	3/16" (5 mm)
3, 4, and 5	1/8" (3 mm)	1/8" (3 mm)

Figure SUB-PART D - 39 - Rail End Mismatch (inches and millimetres)





6.16.3 Joint Securement

- a) In conventional jointed track, each joint shall have at least 4 bolts and with at least 2 in each abutting rail in Classes 2 through 5 track and with at least 2 bolts in Class 1 track, with at least 1 in each abutting rail.
- b) In the case of CWR track, each rail shall be bolted with at least 4 bolts at each joint and with at least 2 in each abutting rail.
- c) Use standard, compromise or high-relief six-hole joint bars for all rails over 39 feet unless otherwise specified.
- d) When tightening bolts, ensure that the joint bars are seated properly and tighten bolts to proper specification.
- e) Replace missing bolts as soon as conditions permit.
- f) Existing joint bars may remain in place until a rail relay is performed.
- g) Rail bolt holes will be located using the correct indexing bar. The indexing bar will be placed so that the edge of the indexing bar matches the end of the rail,
- h) Only joint bars of the correct design for the rail section, drilling pattern and bolt type will be used,
- i) All joints in must be inspected at a minimum frequency of that shown in <u>Sub-Part F Section</u> 10,
- j) Joint bars that are cracked or broken must be replaced. On the occasion that the bars cannot be immediately corrected then place a speed restriction of not more than 10 mph under the authority of a qualified person. Except, if a joint bar on Classes 3 through 5 track is cracked, broken, or because of wear allows vertical movement of either rail when all bolts are tight, it must be replaced.
- k) Joint bars that are cracked or broken between the middle two bolt holes regardless of the class of track must be replace immediately, or the <u>Movement Over Rail Break Policy</u> must be applied.
- I) Rail joints should be slotted to prevent flowed rail and chipped joints,
- m) Where 33 to 39 foot panels are installed and three or more consecutive square joints exist, speed will be limited to that of class 3 track.
- n) Use a drill to make boltholes in the field. Never use a torch to burn boltholes.

6.16.4 Insulated Joints

- a) Defective insulated joints must be repaired or replaced promptly,
- b) Signal forces must report defective insulated joints to track forces promptly,
- Signal forces must advise the track forces of the location of insulated joints for proper signal operation. The location must not be changed without the approval of the Superintendent Signals,
- d) Encapsulated (coated) insulated joints are to be used in jointed rail sections,
- e) Fibre bars may be used in light rail sections,
- f) Plates must be used with all insulated joints on wood track ties. Insulated tie plates will be used on ties within 2" (51 mm) of the end post of an insulated joint,
- g) Insulated joints should be suspended, that is, the end post should not be over a tie,
- h) Rail ends where insulated joints are to be installed must conform to the following;
 - i. The end face shall be saw cut and bolt holes drilled to the proper size and location for the rail section,
 - ii. All rough edges and burrs shall be removed from the end face and the bolt holes,





- iii. Batter shall not exceed 1/32 inch (1 mm),
- iv. The heights of the adjacent rails shall not differ by more than 1/16 inch (2 mm).
- i) All rust, scale, dirt or other foreign matter must be removed from the rail joint area and from the joint bars before the joint is installed
- j) If the end post projects above the top of rail, it must be trimmed so that the top is below the top of rail, but not exceeding 1/8 inch (3 mm) below,
- k) Track near insulated joints shall be adequately anchored. Non-glued insulated joints will be considered as joints and will be anchored to the correct standard,
- I) Rail anchors must not be applied on the sides of ties adjacent to bootlegs,
- m) Rail end overflow must be removed at insulated joints by slotting. The gap should be filled with silicone sealer to prevent the influx of dirt and grinding material,
- n) After welding insulation must not be replaced until the rails have cooled,
- o) Insulated joints, no longer required must be removed from track as soon as possible.

6.16.5 Compromise Joints and Rails

- a) Compromise bars connect two rails of different weights together. They are constructed such that the bars align the running surface and gauge sides of different rails' sections.
- b) There are two kinds of compromise joints:
 - Directional (Right or Left hand) compromise bars are used where a difference in the width of the head between two sections requires the offsetting of the rail to align the gauge side of the rail.
 - Non-directional (Gauge or Field Side) compromise bars are used where the difference between sections is only in the heights of the head or where the difference in width of rail head is not more than 0.125" at the gauge point. The gauge point is the point on the gauge side of the rail exactly 0.625" below the top of the rail.
- c) To determine the hand of the joint, face the joint from the center of the track. When the larger rail section is on the left side of the joint, it is left hand joint. When the rail of larger section is on the right, it is a right hand joint,
- d) A compromise joint consists of one gauge side and one field side bar. The rail sections that the compromise bar will fit are indicated at each end of the bar,
- e) Compromise joint bars must not be modified from its initial design to fit a different rail section,
- f) Compromise joints must not be installed in turnouts, or within 20 feet of an open deck bridge, turnout, highway crossing or railroad crossing,
- g) Compromise joint must be painted blue for ease of recognition,
- h) Compromise rails consist of a single piece of rail, with a forged transition from one rail section to another. Compromise rails may be universal or "handed", depending on the rail sections, and are identified just as a joint would be,
- i) Compromise rails will be fully supported and tamped with the correct size tie plates under the corresponding rail section.

6.16.6 Use of Torch-Cut Rail – Emergency Only

a) If a torch-cut rail is used in the track in an emergency, use it for the passage of emergency equipment only. A slow order of 10 miles per hour must be maintained until the rail is changed. The torch-cut rail must be replaced before regular train operations can continue.





6.16.7 Work in Jointed Rail

a) To prevent track buckles in Jointed Rail, restrictions laid out in <u>Sub-Part D – Section 7.9</u> are to be followed upon completion of work.







6.17 Guard Rails

6.17.1 Installation of Interior Guard Rails

- a) Guard rails must be installed at the following location;
 - i. All bridges that have supporting structure extending above the top of the ties,
 - ii. All bridges that have the underside supporting structure protruding beyond the deck of the bridge,
 - iii. All bridges that cross major roadways (two lane paved highway or greater),
 - iv. All bridges that cross commercially navigable waterways,
 - v. All bridges longer than 100 ft.,
 - vi. All bridges with curves 2 degrees and over,
 - vii. Any other locations designated by the Director, Rail Infrastructure.
- b) Guard rails should be considered, where piers of overhead structures are within 17 feet of centerline of track, there are no crash walls, and the track speed is greater than 10 mph,
- c) Existing guard rails that are not required per the above criteria, may not be removed without notifying the Director, Rail Infrastructure,
- d) Guard rails shall be installed as per Standard Plans,
- e) Guard rails will be spiked with two spikes per tie, without tie plates on every tie.

6.17.2 Temporary Removal of Guard Rails

a) Whenever guard rails are temporarily removed on main track to accommodate track or bridge work, a temporary speed restriction of 10 mph is required.







7. Continuous Welded Rail (CWR)

7.1 CWR Responsibilities

- a) All track forces must properly protect and promptly report any unusual conditions observed developing in CWR to the Track Inspector or District Manager.
- b) All supervisory personnel including Track Maintenance Foremen and Track Inspectors, on whose territory CWR is laid, must be familiar with the causes, high-risk conditions, and work as well as slow order requirements to avoid track buckles as summarized in the Sub-Part D Section 7.8 Prevention of Track Buckling.
- c) All employees responsible for the maintenance or inspection of CWR must be trained and qualified in the maintenance of CWR.
- d) The current PRLT at Ontario Northland is 85°F and the PRLTR is 85°F plus 15°F (29.4°C plus 8.4°C).

7.2 Handling and Unloading CWR

- a) When unloading CWR;
 - i. Place rail as close to the location of installation as possible.
 - ii. When practicable, unload rail 6 feet or more from the centerline of track
 - iii. Separate and offset rail ends to allow by-pass if the rail expands
 - iv. Minimize the number of cuts in a string
 - v. Secure remaining rail on train prior to moving to a new location
- b) When moving or dragging lengths of CWR;
 - i. Maximize the use of rail dollies to prevent damage to rail and track structure.
 - ii. If dragging on the track;
 - Place blocking to prevent impacting switch components or road crossings.
 - Inspect damage to spikes, anchors or clips behind the movement, especially in curves, caused by the rail
 - Before dragging rail, must follow Industrial Operations Protocol to ensure adequate fire prevention and suppression measures are taken

7.3 Before Laying CWR

Lay CWR only if:

7.3.1 Ballast in CWR

a) The ballast is of sufficient quantity and quality to restrain the track laterally under dynamic loads imposed by railroad equipment and thermal stress exerted by the rails.

7.3.2 Ties in CWR

a) The tie condition and spacing is sufficient to ensure that gauge, surface, and alignment can be maintained to within the limits for the specific class of track prescribed by the current Transport Canada Track Safety Rules.

7.4 Laying Continuous Welded Rail

7.4.1 Rail Temperature: When Laying CWR

a) Unless advised otherwise by the Director, Rail Infrastructure, the PRLT (preferred rail laying temperature) at ONTC is 85°F (29.4°C),





- b) Measure the rail temperature of each CWR string laid with an approved thermometer. To measure the rail temperature place the thermometer on the base of the rail near the web away from the wind and out of the direct rays of the sun,
- c) Heat CWR to the preferred laying temperature during installation when the rail temperature is below the minimum preferred rail laying temperature. Ensure even distribution heat over the length of the rail installed.

7.4.2 Joints: When Laying CWR

- a) Bolt each joint in CWR with at least four bolts, and with at least two bolts in each abutting rail.
- b) Use standard, compromise or high relief six-hole joint bars in CWR territory where an approved design exists.
- c) Use six-hole joint bars with at least four bolts installed on standard joints that are planned to be eliminated through field welding. To facilitate welding, the two middle holes of the joint should not be drilled.
- d) Use six bolts per joint on joints located in turnouts, diamonds, crossovers, and bridges, as well as in compromise joints and insulated joints.

7.4.3 Anchoring: When Laying CWR

- a) Box anchor CWR at every second tie for restraint in both directions, this includes where joints are planned to be field welded in Class 3 through Class 5 track.
- b) For Class 3 through Class 5 track, where joints will not be field welded, box anchor every tie for 200 feet in each direction from the joint.
- c) For Class 1 and 2 track, the Manager, Track Programs in consultation with the Director, Rail Infrastructure may exempt the requirement to box anchor every tie for the first and last 200 feet of each CWR string.
- d) Box anchor jointed track connected to CWR strings every tie for 200 ft. When necessary, install additional anchors on the jointed track to prevent track movement.
- e) Anchor rail through turnouts and other special track work connected to CWR according to the applicable Standard.
- f) Box anchor each approach to a turnout and each approach to a track crossing (diamond) at every tie for a distance of 200 feet away from the turnout or track crossing.
- g) Do not allow trains to pass over unanchored CWR except in an emergency. Then, the following must be done:
 - i. inspect the track,
 - ii. place a speed restriction of not more than 10 MPH, and
 - iii. advise train crews to not use dynamic braking during movement over the track.

7.4.4 Tie Plates: When Laying CWR

a) Use double-shoulder tie plates for rail lengths longer than 90 feet and rail weight 100lb or heavier.

7.4.5 Spiking: When Laying CWR

- a) Use spike lengths and spiking patterns that meet the requirements outlined in <u>Sub-Part D Section 4 Spiking.</u>
- b) Each spike hole of the tie will be plugged, preferably with chemical plugging compound





7.5 After Laying Continuous Welded Rail

7.5.1 Documentation of CWR Laid

- a) Prepare and retain for 3 years a record of all CWR strings laid indicating:
 - i. the date,
 - ii. the string number,
 - iii. the weight of rail,
 - iv. the manufacturer,
 - v. the year,
 - vi. the temperature at which the rail was laid,
 - vii. the mileage location, and
 - viii. whether the string was E or W rail.

7.6 CWR and Bridges

7.6.1 Bridge Considerations and CWR

- a) Do not lay CWR on any bridge, unless the Manager, Structures has confirmed the bridge conditions meet the requirement for laying CWR,
- b) Bolted joints in connecting strings of continuous welded rail must not be located on bridges. Also, they must not be located on roadbed approaches within 300 feet of the ballast walls at either end of the bridge.

7.6.2 Anchors for CWR on Bridges

- a) If CWR is to be laid on a bridge, the Manager, Structures will provide an anchor plan for that bridge.
- b) On open deck bridges with CWR on the approaches, box anchor every tie for a distance of at least 200 feet starting 20 feet back from the back wall on each approach.

7.6.3 Fastenings for CWR on Bridges

a) The installation of all new and replacement decks on open deck bridges is the responsibility of the Manager, Structures and is to be carried out in accordance with applicable standards.

7.7 Maintenance of Continuous Welded Rail

7.7.1 Surfacing and Lining in CWR Territory

- a) Where the track will be surfaced by tamping machine, at a rail temperature of 50°F (10° C) or lower:
 - i. The employee responsible for the surfacing work must set reference stakes over the full length of each curve of 3 degrees or greater before track is surfaced. Set 3 or more stakes no more than 200 feet apart and clear of work activity so they will not be disturbed.
 - ii. The Track Inspector must ensure that reference measurements are taken 1 week after each curve is surfaced.
 - iii. The Track Inspector must ensure that all curves with an average inward movement of 1 inch (25 mm) or more are corrected before hot weather arrives. This is done by restoring the curve to its proper alignment, or by cutting the rail and re-stressing it.



- b) Where it is necessary to surface track when the rail temperature is, or is expected to be, more than 15 F degrees above the preferred rail laying temperature (PRLT) perform additional track inspections while surfacing and behind surfacing work.
- c) Do not spike line in CWR territory if at all possible. Never spike line track when the rail temperature is above the preferred rail laying temperature.

7.7.2 Ballasting and Undercutting in CWR Territory

- a) When track has been skeletonized, take steps to restore the track to its original line as soon as possible.
- b) Where the track will be skeletonized at a rail temperature of 70°F (20° C) or lower:
 - The employee responsible for the ballasting or undercutting work must set reference stakes over the full length of each curve before track is surfaced. Set 3 or more stakes no more than 200 feet apart and clear of work gang activity so they will not be disturbed.
 - ii. The Track Inspector or Manager must ensure that reference measurements are taken 1 week after each curve is surfaced.
 - iii. The Track Inspector must ensure that all curves with an average inward movement of 1 inch (25 mm) or more are corrected before hot weather arrives. This is done by restoring the curve to its proper alignment, or by cutting the rail and re-stressing it
- c) Do not permit the movement of trains over skeleton track, except for work trains unloading ballast. The work train operations may be made at 5 mph and only after ensuring that all ties are spiked and all rail anchors are applied.
- d) When new ties are installed, re-apply anchors in accordance with the ONTC's standard anchor pattern.
- e) As a guideline if the total raise in CWR territory will be more than 4 inches, perform the raise in at least 2 lifts. Allowing enough time between lifts to permit rail traffic to compact the ballast.

7.7.3 Joints for Maintenance of CWR

- a) Bolt each joint in CWR with at least four bolts, and with at least two bolts in each abutting rail.
- b) When tightening bolts, ensure that the joint bars are seated properly and tighten bolts securely.
- c) Replace missing bolts as soon as conditions permit.
- d) Use standard, compromise or high-relief six-hole joint bars in CWR territory unless otherwise specified.

7.7.4 Spikes for Maintenance or Upgrading of CWR

- a) Replace missing and broken spikes as necessary to effectively maintain gauge.
- b) Existing spiking patterns may remain in place until a rail relay is performed.
- c) When broken spikes are found in curves, carry out an inspection of the whole curve and adjacent tangent to ensure that no dangerous spike condition exists. Special attention must also be paid to the condition of tie plates when performing the inspection. Unusual wear patterns and broken plates indicate other problems exist.





7.7.5 Anchors for Maintenance of CWR

- a) Existing anchor patterns may remain in place until a rail relay is performed.
- b) Replace missing or broken anchors as necessary to effectively control movement of the rail.
- c) Re-apply or replace anchors removed during track maintenance work immediately upon completion of the work.
- d) Where replacement rails are installed, re-apply or replace the anchors that were removed. Box anchor every tie on both the repair rail and the adjoining CWR for 200' each direction. Anchors must bear on the same tie when box anchoring on every tie.
- e) At locations where track or rail movement occurs, for example due to heavy traffic on grades, train braking, or soft sub-grade, install additional rail anchors to control movement of the rail. Record these trouble areas and forward the information to the Track Inspector and the District Manager.

7.7.6 Tie Plates for Maintenance of CWR

a) Replace missing or broken tie plates as necessary to effectively maintain gauge and to ensure proper support of the rail.

7.7.7 Shims for Maintenance of CWR

- a) Do not use shims with total thickness greater than 2-1/2 inches (64 mm) in CWR territory, unless protected by a slow order restricting trains to less than 2/3 the authorized timetable speed.
- b) Further protection may be required when shims are installed in sensitive locations such as at the approaches to bridges, the spirals in curves, at or near turnouts and at road crossings,
- c) Do not remove shims if the rail temperature is more than the preferred rail laying temperature.

7.7.8 Restressing CWR

- a) Restress CWR laid at temperatures below the minimum preferred rail laying temperature range when rail heaters are not available before the rail temperature reaches 40°F above the temperature at which the rail was laid.
- b) Restress CWR laid at temperatures more than 15°F above the maximum preferred rail laying temperature before winter. Where it is not possible to restress CWR laid at temperatures more than 15°F above the maximum preferred rail laying temperature before winter, then take other action such as apply additional rail anchors, fully drill and bolt joints, or apply slow orders to mitigate the risks of pull aparts, of rail string-lining and of rail tipping in plates at low temperatures.
- c) See Appendix B for restressing instructions

7.7.9 Repair of Pull-Aparts, Broken and Defective Rails in CWR

- a) When repairing pull-aparts, broken or defective rails, to the extent that is practicable, ensure that the amount of rail that is put in the track equals the amount of rail removed.
- b) It is very critical to remove rail added during cold weather repairs before the rail temperature exceeds the adjusted rail laying temperature.





- c) A complete CWR Maintenance Record Form is required for each pull-apart and for each repair of CWR that involves the adding or removing of rail.
- d) Monitor repairs where rail was added or removed as temperatures change and protect track with a slow order if required.
- e) At locations where a pull apart has occurred a second time within the same season, fully drill and bolt the joint and box anchor every tie for a minimum of 200 feet in both directions.

7.7.10 Repairing Pull-Apart of 3 inches or Less – Method 1

At a minimum, include the following steps, or alternatively the steps listed in Method 2 below, for the repair of a pull-apart of 3 inches or less:

- a) Use a rail puller to pull the rail together.
- b) Apply a minimum of 4 bolts (2 bolts in each abutting rail) in each joint.
- c) Re-apply or replace displaced anchors.
- d) Complete a CWR Maintenance Record form.

7.7.11 Repairing Pull-Apart of 3 inches or Less – Method 2

At a minimum, include the following steps, or alternatively the steps listed in Method 1 above, for the repair of a pull-apart of 3 inches or less:

- a) Cut in a permanent replacement rail of a minimum 12 feet in length.
- b) Lay the replacement rail with the maximum allowable joint gap.
- c) Use six-hole joint bars at each joint, where applicable.
- d) Apply a minimum of 4 bolts (2 bolts in each abutting rail) in each joint.
- e) Re-apply or replace displaced anchors.
- f) Complete a CWR Maintenance Record form.

7.7.12 Repairing Pull-Apart of More than 3 inches

At a minimum, include the following steps for the repair of a pull-apart of more than 3 inches:

- a) Cut in a permanent replacement rail of a minimum 12 feet in length.
- b) Lay the replacement rail with the maximum allowable joint gap.
- c) Use six-hole joint bars at each joint, where applicable.
- d) Apply a minimum of 4 bolts (2 bolts in each abutting rail) in each joint.
- e) Re-apply or replace displaced anchors.
- f) Complete a CWR Maintenance Record form.

7.7.13 Repairing Broken Rail in CWR

At a minimum, include the following steps for the repair of a broken rail:

- a) Cut in a permanent replacement rail of a minimum 12 feet in length.
- b) Install proper joint gaps as per Sub-Part D Section 6.16.1.
- c) Use six-hole joint bars at each joint, where applicable.
- d) Apply a minimum of 4 bolts (2 bolts in each abutting rail) in each joint.
- e) Re-apply or replace displaced anchors.
- f) Fill out a Mainline Rail Failure Report form for the broken rail.
- g) Complete a CWR Maintenance Record form if rail is added or removed.





7.7.14 Repairing Defective Rails (detected by Rail Flaw Detector) with a Replacement Rail in CWR

At a minimum, include the following steps for the repair of a defective rail with a replacement rail:

- a) Cut in a permanent replacement rail of a minimum 12 feet in length.
- b) Install proper joint gaps as per <u>Sub-Part D Section 6.16.1</u>
- c) Use six-hole joint bars at each joint, where applicable.
- d) Apply a minimum of 4 bolts (2 bolts in each abutting rail) in each joint.
- e) Re-apply or replace displaced anchors.
- f) Complete a CWR Maintenance Record form if rail is added or removed.

7.7.15 Temporary and Permanent Joints: Maintenance and Inspection in CWR

CWR is defined as any rail with a length of over 400 feet. Where CWR currently exists, or where new or partly worn CWR is being installed, the intent should be to maintain the CWR in existing lengths or to create or increase the length of CWR by eliminating permanent and temporary rail joints. Rail joints within or joining adjacent lengths of CWR that will not be eliminated before November 30th of any given year must comply with and be maintained with the requirements for permanent rail joints in CWR. Rail joints within or joining adjacent lengths of CWR that are intended to be eliminated prior to November 30th of any given year must comply with and be maintained with the requirements for temporary joints in CWR.

- a) Permanent joints in CWR will be fully drilled and bolted, joint bars applied, and the rail fully box anchored 200' (60,960 mm) each side of the joint on every tie. The rail will be spiked in all available holes for 19' 6" (5,944 mm) on both sides of joint.
- b) Temporary joints in CWR must use six-hole joint bars. To facilitate welding, the hole nearest the end of the two abutting rails must not be drilled. A joint gap not exceeding 3/8" (10 mm) is to be left with four bolts installed in the outer most holes of the joint.
- c) All temporary joints must be eliminated or converted to permanent joints by November 30th of any given year.
- d) Records of the location, date of installation, date of inspection, and date of removal of all temporary joints must be maintained by the District Manager.
- e) As per <u>Sub-Part D Section 10</u>, a walking track inspection of all joints will done yearly at a minimum.



(in)



7.8 Buckled Track

7.8.1 Prevention of Track Buckling

This section lists the Requirements for inspection, track work and slow orders to reduce the risk of track buckling in CWR territory. Except in cases of emergencies, no out of face surfacing and lining, rail replacement or tie renewal will be performed if the rail temperature is above the PRLTR ($100^{\circ}F$ ($37.8^{\circ}C$)). As a guideline, rail temperature will be 25 to $30^{\circ}F$ above the ambient temperature.

Track buckling is a constant threat during times of high or rapidly rising temperatures. It is of particular concern on CWR territory in the spring and early summer.

7.8.2 Indicators of Potential Track Buckle

- a) Watch for indicators of potential track buckling problems such as:
 - i. Wavy rail.
 - ii. New line deviations, such as short flat spots in curve or kinks in tangent track.
 - iii. Gaps or voids in ballast at end of ties.
 - iv. Rail base not properly seated in the plates.
 - v. Rail running through the anchors that may require restressing, resetting anchors and/or installing additional anchors.
 - vi. Churning of ballast caused by tie movement resulting in gauge and line kinks.
 - vii. Longitudinal movement of switch point in relation to stock rail, resulting in improper switch adjustment.

7.8.3 Locations Prone to Track Buckling

- a) Pay particular attention to the following locations that are more prone to track buckles:
 - i. Curves.
 - ii. Bridge approaches.
 - iii. Grade crossings.
 - iv. Crossings with other railroads (diamonds).
 - v. Bottom of a heavy grade.
 - vi. Spots where the subgrade is soft or wet.
 - vii. Rock cuts where rail temperatures may be extremely high.
 - viii. Areas having a history of lateral instability.
 - ix. Recently disturbed track e.g. tie replacements, surfacing, new turnouts, etc.
 - x. Locations where track work has been undertaken in cold weather and rail has not been adjusted, rail anchors not applied or ballast not restored.
 - xi. Previous track buckle not permanently repaired.

7.8.4 Protection of a Track Buckle or Imminent Track Buckle

- a) A track buckle is an emergency situation. When a track buckle is detected, immediately take the following steps until the condition is corrected:
 - i. Stop all traffic through the area until temporary / permanent repairs are complete, or
 - ii. Have a qualified employee inspect the buckled location, determine that the track is safe for the passage of trains, and then supervise the passage of each train over the location at a maximum of 10 mph until temporary repairs are complete.





- When there are indications that a track buckle may be about to occur (see <u>Sub-Part D – Section 7.8.2</u>), immediately take the following steps to protect train traffic until the condition is corrected:
 - place a 10 mph slow order, or
 - stop rail traffic if the situation warrants.
- b) Inspect track protected by a heat slow daily while the order is in effect. Conduct inspections during the heat of the day.

7.8.5 Temporary Repair of a Track Buckle

- a) For temporary repairs of track buckles, place the track in the best possible alignment where the track will not move and where it will provide clearance for train operation at 10 mph.
- b) Protect temporary repairs with a 10 mph slow order until permanent repairs are complete.

7.8.6 Permanent Repair of a Track Buckle

- a) For permanent repairs of track buckles, take corrective actions that address the root cause, prevents recurrence, and allows for train operation at authorized timetable speed. Permanent repairs could involve:
 - i. apply new or additional anchors,
 - ii. add ballast to shoulder and cribs,
 - iii. replace defective ties
 - iv. tamp, surface, line and regulate,
 - v. cut out rail and restress.
- b) A qualified Track Inspector must re-inspect permanent repairs to track buckles in the heat of the day and verify the effectiveness of repairs before returning track to authorized timetable speed.
- c) When rail is removed in repairing a track buckle complete a CWR Maintenance Record Form.

7.8.7 Track Buckle Reporting

a) Fill out a Track Buckle Report for each track buckle. A Track Buckle Report is NOT required if the track buckles while work is being carried out. Send a copy to the District Manager.





7.9 Placing Temporary Speed Restrictions Account Work

7.9.1 General Requirements

a) Place a temporary speed restriction as per <u>Figure SUB-PART D - 40 - Temporary Speed</u>
<u>Restrictions for Track Work.</u> Speed restrictions ensure safe train operations until the affected track stabilizes. Restrictions need to stay in place to allow the ballast to consolidate, rail compressive forces to equalize and the subgrade to compact. Take more restrictive measures when conditions warrant.

7.9.2 Responsibility for Placing Speed Restrictions

- a) During the work or before returning the track to service, the qualified foreman / supervisor in charge must ensure the following:
 - i. Adequate gauge, surface, and alignment have been established.
 - ii. Sufficient crib and shoulder ballast is in place.
 - iii. The rail is properly anchored.
 - iv. Turnout is within standards.

7.9.3 Speed Restrictions Length

a) To minimize running rail and other dynamic forces, trains must have time to brake and adjust slack before entering the disturbed track. To ensure trains reach the desired speed before entering the affected track, place speed restrictions at least 0.1 mile in each direction from the outside limits of the affected track. For heavy grades, sharp curves or substandard track conditions, extend speed restrictions farther from the work limits, if needed.

7.9.4 Speed Restriction Requirements while Carrying Out Track and Switch Tie Renewals

Apply the following speed restrictions in order to prevent track buckling while carrying out track and switch tie renewals:

- a) When traffic must pass before all ties are fully plated, spiked, and anchored, and before all newly installed ties are tamped, ballast cribs filled and shoulders pulled up the following must be done:
 - i. inspect the track,
 - ii. place a speed restriction of not more than 10 MPH, and
 - iii. advise train crews to not use dynamic braking during movement over the track.





b) When tie renewals are complete, before traffic can pass ensure that conditions laid out in <u>Figure SUB-PART D - 40 - Temporary Speed Restrictions for Track Work</u> satisfied and place the associated restrictions:

Temporary Speed Restrictions for Track Work						
Type of Work	Temperature	TSO in CWR	TSO in Jointed Rail			
Rail laying, curve and out of face	Any	1 – train at 10 mph then inspect, if ok then, 1 – train at 25 mph then inspect, if ok track speed	1 – train at 25 mph, then inspect, if ok track speed			
Spot tie renewal,	At or above PRLT	2 – trains at 25 mph then inspect, if ok then track speed	1 – train at 25 mph then inspect, if ok track speed			
Spot surfacing	Below PRLT	Inspect If ok track speed	Inspect If ok track speed			
Out of face tie renewal,	At or above PRLT	1 – train at 10 mph, then inspect, if ok then, 10 – trains at 25 mph, then inspect, if ok track speed	1 – train at 10 mph, then inspect, if ok, 5 – trains at 25 mph then inspect, if ok track speed			
Out of face surfacing, Turnout replacement, Undercutting,	Between PRLT and 40°F below the PRLT	1 – train at 10 mph, then inspect, if ok then, 5 – trains at 25 mph, then inspect, if ok track speed	1 – train at 10 mph 2 – trains at 25 mph then inspect, if ok track speed			
Lining	40°f or more below the PRLT	2 – trains at 25 mph, then inspect If ok track speed	1 – train at 25 mph then inspect, if ok track speed			

Note 1: Train is defined as freight or a mixed train; Passenger trains are not to be counted for provisions of this table.

Note 2: Do not remove speed restrictions in the heat of the day

Note 3: In the interpretation of Maximum Speed the Timetable may dictate a more restrictive speed.

Figure SUB-PART D - 40 - Temporary Speed Restrictions for Track Work

c) Before placing any speed restrictions, a qualified foreman or track Inspector must inspect all track work. Once the required trains have passed over the track, re-inspect the track in the heat of the day before returning the track to authorized timetable speed. The qualified employee will modify / remove the slow orders.

IMPORTANT: There may be conditions where further speed restrictions are required. The person in charge of the work must ensure that field inspections on the completed work are carried out and that areas of concern are identified and protected.

d) Do not increase speeds in the heat of the day.





e) For spot tie replacement by hand in CWR territory, it is not necessary to apply a speed restriction if **all** the following conditions are satisfied:

SPEED RESTRICTIONS – SPOT TIES	
CONDITION	MAXIMUM SPEED
At most two adjacent ties are replaced;	
The four ties on each side of the replaced ties are undisturbed; and	
3. Installing new ties should disturb the track as littles as possible, jacking of track should be to minimum, base of plates on newly installed ties upon completion of install should be even with (0" below or at more 1/4" (6 mm) above) base of plate on adjacent undisturbed tie;	Authorized Timetable Speed
4. The ambient temperature is less than 80°F (27°C) and is expected to stay less than 80°F (27°C) for 48 hours	
5. Newly installed ties are fully plated, spiked, anchored and tamped. Cribs are full and shoulders restored.	

Figure SUB-PART D - 41 - Speed Restrictions - Spot Ties

If any of the above 5 conditions are not satisfied, the appropriate speed restrictions as laid out in <u>Figure SUB-PART D - 40 - Temporary Speed Restrictions for Track Work</u> are to be applied.

7.9.5 Speed Restriction Requirement when Surfacing and Lining in CWR Territory

Apply the following speed restrictions in order to prevent track buckling while surfacing and lining:

- a) When traffic must pass before all ties have been tamped and run-outs made and before all cribs have been filled with ballast and all shoulders have been pulled up the following must be done:
 - i. inspect the track,
 - ii. place a speed restriction of not more than 10 MPH, and
 - iii. advise train crews to not use dynamic braking during movement over the track.
- b) When surfacing and lining, before traffic can pass ensure that the conditions are satisfied and place the associated speed restrictions detailed in Figure SUB-PART D 40 Temporary Speed Restrictions for Track Work
- c) Before placing any speed restrictions, a qualified foreman or track inspector must inspect all track work. Once the required trains have passed over the track, re-inspect the track in the heat of the day before returning the track to timetable speed.

IMPORTANT: There may be conditions where further speed restrictions are required. The person in charge of the work must ensure that field inspections on the completed work are carried out and that areas of concern are identified and protected.

d) Do not increase speeds in the heat of the day.





e) When surfacing by hand or by machine in CWR territory, it is not necessary to apply a speed restriction if **all** the following conditions are satisfied:

IG
MAXIMUM SPEED
of of d
Authorized Timetable Speed
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Figure SUB-PART D - 42 - Speed Restrictions - Spot Ties

If any of the above 4 conditions are not satisfied, the appropriate speed restrictions as laid out in <u>Figure SUB-PART D - 40 - Temporary Speed Restrictions for Track Work</u> are to be applied.

7.9.6 Speed Restriction Requirements when Ballasting and Undercutting in CWR Territory Apply the following speed restrictions in order to prevent track buckling while ballasting and undercutting:

- a) When traffic must pass before all ties have been spiked, all rail anchors have been applied and all ties on the newly ballasted track and run-outs have been tamped the following must be done:
 - i. inspect the track,
 - ii. place a speed restriction of not more than 10 MPH, and
 - iii. advise train crews to not use dynamic braking during movement over the track.
- b) Where track is re-ballasted by skeletonizing track, before traffic can pass ensure that the conditions are satisfied and place the associated speed restrictions detailed in <u>Figure SUB-PART D 40 Temporary Speed Restrictions for Track Work</u>
- c) Before placing any speed restrictions, a qualified foreman or track inspector must inspect all track work. Once the required trains have passed over the track, re-inspect the track in the heat of the day before returning the track to timetable speed.
 - **IMPORTANT:** There may be conditions where further speed restrictions are required. The person in charge of the work must ensure that field inspections on the completed work are carried out and that areas of concern are identified and protected.
- d) Do not increase speeds in the heat of the day.





8. Turnouts and Track Crossings

8.1 General

- a) A turnout is a combination of a switch, a frog, the rails necessary to connect the switch and the frog, two guard rails (unless it is a self-guarded frog), and a switch stand for operating the switch.
- b) A turnout begins with the switch and ends with the frog.
- c) A turnout is usually referred to by its number (frog angle or number). For example, a #10 turnout uses a number 10 frog.

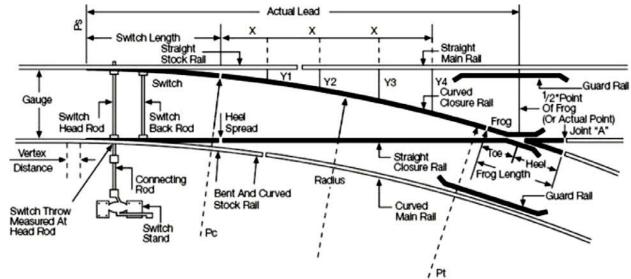


Figure SUB-PART D - 43 - Turnout Components

- d) In turnouts and track crossings (diamonds), the fastenings must be intact and maintained so as to keep the components securely in place. Each switch, frog and guard rail must be kept free of obstructions that may interfere with the passage of wheels.
- e) Turnouts are to be inspected in accordance with Sub-Part F, Section 11.

8.2 Signals System

- a) Care will be taken when working around turnouts to avoid interfering with Signals Systems:
 - Use extreme care not to short across an insulated gauge rod, insulated gauge plate or insulated joints, when using any tool that conducts electricity such as a track wrench, shovel, ballast fork, tie tongs or metal broom,
 - ii. At locations where snow-clearing devices are installed, use extra precautions because of the possibility of creating a short circuit through the metal ductwork.

8.3 Turnout Installation

- a) Turnouts must not be installed or renewed on main track curves, except in special cases as authorized by the Director, Rail Infrastructure,
- b) Power, Dual Control, Spring and Electrically Locked switches shall be installed only at locations approved by the Director, Rail Infrastructure,
- c) When turnouts are being constructed, trains should not be permitted to move in a facing point direction until;
 - i. The frog is properly protected by a guard rail,





- ii. The main track switch point is lined and locked against the stock rail. If the points cannot be lined and locked, points must be secured with an approved switch point clamp and spiked. When spiking a point the gauge plate must have an appropriate hole intended for point securement. Also the tie must be sound enough to secure the point.
- d) Switch stand requirements are as follows,
 - Switch stands should be plumb and be securely spiked, bolted or lagged to the head block ties, Stands on spring switches shall be securely bolted to the head block ties,
 - ii. Main track switch stands shall be of an approved rigid type,
 - iii. On other than main track, approved rigid, or safety stands may be used,
 - iv. Semi-automatic stands of an approved type may be used on yard tracks only where speeds do not exceed 15 MPH,
 - v. Approved rigid stands must be used with spring switches, or where operating stands are used with derails,
 - vi. New and rebuilt switch stands may be supplied with ergonomic switch handles,
 - vii. Switch stands must be located so as to conform to approved plans,
 - viii. Low stands must be used where stands are to be located between tracks having track centres 18' or less,
 - ix. Switch stands and switch machines must be placed, wherever possible, on the closed point side of the track, so the connecting rod is in tension, when the switch is set for the normal position,
 - x. The handles on all high switch stands should be positioned so that when the switch is in the normal position the handle faces away from the frog and away from the track. When the switch is lined over for the diverging route the handle should move in the same direction as the points,
 - xi. When installing parallel or ground throw switch stands, the operating level must point toward the frog for normal position.
 - xii. Switch stands must be equipped with the proper reflectorized target according to CROR and be in an effective condition,
- e) Switch rods and connecting rod bolts must be inserted with the nuts on the top side and secured with cotter pins,
 - i. Ensure the connecting rod jaw openings, bolt holes and bolts correctly match the switch rods.
 - ii. The connecting rod bolt under the switch stand must be installed with the head of the bolt on the upper side,
- f) Stock rails and switch points requirements are as follows,
 - i. Switch points shall fit snugly against the stock rails for the entire length of the planed portion.
 - ii. Turnout stock rails shall be horizontally bent as shown on the standard plan. An approved rail bender shall be used for bending rails.
 - iii. It is important that stock rails are properly seated in the switch plate having no lateral movement in the plates and that switch plates have no movement on the ties. Care must be taken in adjusting braces to avoid over-driving and rotating the stock rails out of the rail seat of the plate.





- iv. Switch points must be installed directly opposite each other. Adequate rail anchors must be installed to resist rail movement
- v. Switch points should not overhang the gauge plate nor be more than 1" (25 mm) back from the edge of the gauge plate.
- vi. Switch point protectors;
 - Switch point protectors or switch point guards of an approved type may
 be installed, to protect the switch point where the speed on any route
 through the turnout does not exceed 15 mph. Care must be taken when
 installing to ensure that the protector fits properly against the rail and that
 any flowed metal on the gauge side of the straight stock rail is ground off,
 - Switch point protectors that attach to the tip of the switch point are no longer acceptable for use at ONTC.
- g) Ballast will be cleaned from cribs to a depth adequate to prevent contact with rods and to facilitate winter switch maintenance and drainage.
- h) Locks and keeper requirements are as follows,
 - All main track stands must be equipped with an approved switch lock in good
 working order and properly chained to the stand on high mast switch stands or to
 the ties on low mast switch stands. Switch stands on other than main tracks are
 to be equipped with a hook type keeper unless otherwise directed,
 - On all main track hand operated switches, high security switch locks must be installed.
 - At locations where vandalism is a concern, high security switch locks may also be installed as directed by the Director, Rail Infrastructure on the following,
 - Hand operated switches on other than main tracks,
 - Other devices such as derails, electric switch locks, foot pedals, push button operation panels, etc.
 - Approved switch point locks must be installed on all manually operated main track switches (except spring switches) seen as facing points from a highway crossing at grade where all the following conditions exist;
 - The crossing is not protected by gates, and;
 - The train speed is 50 mph or faster (30 mph where sight lines are poor),
 and;
 - The switch is within 200 ft of the crossing.
 - Where switch point locks are installed, the switch will be identified by painting the top of the switch stand castings white





8.4 Maintenance of Turnouts

8.4.1 General Maintenance of Turnouts

- a) The Signal Maintainer shall be present when any planned work, which may interfere with the functioning of the signal apparatus, is being performed.
- b) Insulation in switch rods, and gauge plates shall be maintained in good condition at all times.
- c) Switch stands, switch plates, connecting rod bolts, and spring frogs shall be kept properly lubricated to provide easy movement and to protect against excessive wear.
- d) Switch stands, targets, masts, connecting rods and all other component parts must be kept in good operating condition and must have defective parts repaired or replaced immediately.
- e) The application of heat or mechanical methods to repair bent or twisted switch stand masts is not permitted.

8.4.2 Switch Stand

- a) Check the switch lock or keeper.
- b) Check that the stand is securely fastened to the headblock ties.
- c) Ensure that mast bearing areas are well lubricated.

8.4.3 Switch Target

a) Check the condition of reflectorized targets.

8.4.4 Eyebolt

- a) Check the relative movement between the handle and top casting, and between the top casting and mast. When the relative movement becomes so great as to require excessive extension of the eyebolt from the mast barrel, the switch stand must be replaced.
- b) When excessive eyebolt wear affects the quality of service provided by the switch stand, replace it return the old one to the Yard for rebuilding.

8.4.5 Connecting Rod

a) Inspect the connecting rod for excessive wear in bolt holes. Check connecting rod bolts to ensure that the nut and cotter pins are in place.

Near Point	Far Point	Crank Eye on Stand	Clevis on Connecting Rod
Fits Properly	Too Tight	Screw In	Screw In
Fits Properly	Too Loose	Screw Out	Screw Out
Too Tight	Fits Properly	Screw In	Screw Out
Too Loose	Fits Properly	Screw Out	Screw In
Too Tight	Too Tight	Screw In	None
Too Loose	Too Loose	Screw Out	None

Figure SUB-PART D - 44 - Switch Adjustment





8.4.6 Switch Rods

- a) Switch rods and transit clips should have sufficient clearance so as not to contact the side of the tie or the slide plate.
- b) Check switch rods for excessive wear in bolt hole areas. Check insulation in insulated rods. Check for excessive wear on rod clips, rod clip bolts and on the connecting rod bolt.

8.4.7 Switch Points and Stock Rails

- a) Gaps in switch points, regardless of size, are unacceptable. The points must fit tightly against the entire planed portion of the stock rail.
- b) Metal flow on switch points and stock rails shall be kept ground off to maintain proper gauge and to prevent chipping of these parts.
 - Flow should not exceed 1/16" (2 mm) on switch point or gauge side of stock rails.
- c) Stock rail on the turnout side must be properly bent to provide a good fit for the switch point.
- d) Chipped or broken switch point tips must not have a thickness greater than 3/16" (5 mm),
- e) Switch point tip is not less than 1/2" (13 mm) below the top of the stock rail,
- f) Switch points are square to each other and not overhang the gauge plate by more than 1" (25 mm).

NOTE: Every effort must be made to replace the defective switch point and stock rail. A mainline switch point will only be welded upon the direction of the Superintendent, Maintenance of Way.

g) Switch points are manufactured such that the running surface is higher than the stock rail, as measured at the location where the distance between the gauge side of the stock rail and gauge side of the switch point when tight against the stock rail is 4-1/2" (114 mm). When this vertical dimension is reduced by wear to 3/16" (5 mm), the location must be monitored for signs of wheel contact on the stock rail. Where contact is evident, the switch point must be renewed. In a new installation, the top of the point will be at least 1/4" (6 mm) above the top of the stock rail at the 4-1/2" (114 mm) point between the switch point and stock rail. To provide the proper vertical clearance when the switch point is worn, it is necessary to use a stock rail that is equally worn.





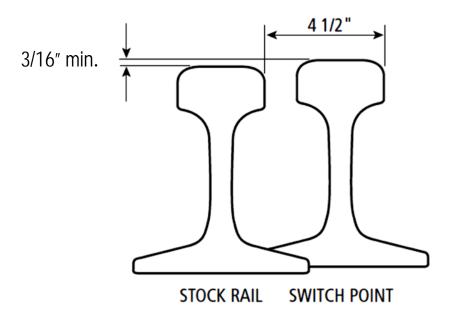


Figure SUB-PART D - 45 - Switch Point / Stock Rail Minimum Clearance

h) Ensure that points and stock rails are of the same rail section (eg. Samson point with Samson stock rail)

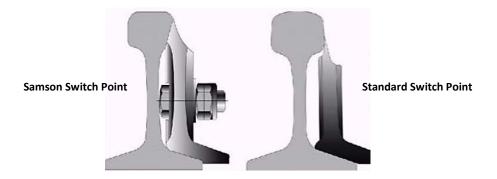


Figure SUB-PART D - 46 - Samson vs. Standard ("knife-edge") Switch Point and Stock Rail

8.4.8 Ties

- a) Maintain good tie condition under the heel assembly.
- b) Ties must be installed and maintained in accordance with the layout shown on the standard plan. Check the number of ties in the turnout. During major tie renewals, the number must be brought up to standard.
- c) Ties are to be square to the through track in lateral turnouts.
- d) Ties are to be well tamped throughout the turnout.
- e) Ties must hold surface, line and gauge and are no longer useable when they are:
 - i. Broken through,
 - ii. Split, or otherwise damaged, to the extent that it will allow the ballast to work through, or it will not hold spikes or rail fasteners,
 - iii. Plate cut more than 2" of the tie thickness, or
 - iv. So deteriorated that the tie plate or base of rail can move laterally 1/2 inch relative to the tie.





8.4.9 Tie Plates

- a) Broken, bent or missing plates are to be replaced
- b) Shoulder plates, or plates with cut rail seats, worn to the extent that the seat width is more than the nominal design width by 1/8 inch (3 mm) must be replaced.
- c) Gauge plates with defective insulation must be reported to the Signal Maintainer.
- d) Rails are to be properly seated in the gauge and riser slide plates and that rail braces are tight and well driven, but not overdriven to the extent that rail is canted inward.
- e) Riser slide plates and spring frog plates are to be properly lubricated to permit free movement of switch points and spring wing rail.
- f) All other plates are properly seated with shoulders bearing firmly against the rail base.

8.4.10 Heel Blocks

a) Replace bolts where required and maintain them in a tight condition.

8.4.11 Cotter Pins

a) All cotter pins are to be in place.

8.4.12 Frogs

a) The guard rail lateral setting in frogs must be within the limits prescribed in the following table:

Class of Track	Guard Check Gauge MINIMUM	Guard Face Gauge MAXIMUM
1	54 1/8" (1,375 mm)	53 1/4" (1,353 mm)
2	54 1/4" (1,378 mm)	53 1/8" (1,349 mm)
3, 4	54 3/8" (1,381 mm)	53 1/8" (1,349 mm)
5	54 1/2 " (1,384 mm)	53" (1,346 mm)

Figure SUB-PART D - 47 - Guard Rail Lateral Limits (inches and millimeters)

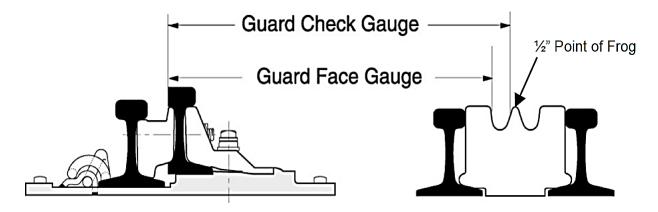


Figure SUB-PART D - 48 - Guard Check Gauge and Guard Face Gauge Measurement Locations

- b) Check the frog for alignment and lateral movement, and check for signs of wheel flange contact on the point.
- c) Ensure that frogs are maintained in accordance with the appropriate standard plan and instructions for frog maintenance.



- d) Check whether the point is worn vertically to the maximum wear limit allowed by standard plan at the actual point of the frog. If the point is worn to the maximum wear limit, the frog should be repaired or removed. The maximum wear limit is 1/2" (13 mm) from the top of the frog. Measurement is taken by use of a straight edge and a special gauge for point wear.
- e) If the tread portion of the frog casting is worn down 3/8" (10 mm) or more below the original contour, operating speed must be limited to 10 mph until the frog is repaired or removed.
- f) Check for loose bolts in the frog and in the rail joint connections.
- g) Check flangeways with a check gauge. The flangeway depth must not be less than 1-1/2" (38 mm). If the check gauge contacts the bottom of the flangeway, worn frog surfaces must be repaired or the frog removed.
- h) If a frog point is chipped, broken, or worn more than 5/8" (16 mm) down and 6" (152 mm) back, restrict operating speed over the frog to not more than 10 mph.
- i) Guard rail bolts and fasteners must be intact and tight. Guard rail wear surfaces must not be worn more than 5/8" (16 mm).
- j) If the frog is removed, you must remove the guard rail as well or protect against it.
- k) Self-Guarded Frogs
 - i. Check that the side wear measurement on raised self-guarded frog does not exceed 3/8" (10 mm).
 - ii. Self-Guarded Frogs are not permitted in tracks where speeds exceed 15 MPH.
 - iii. If repairs are made to a self-guarded frog without removing it from service, the guarding face must be restored before rebuilding the point.
- Spring Frogs
 - i. Check for loose deck bolts on the hold-down housings and brace stops.
 - ii. The toe of each wing rail must be solidly tamped and fully and tightly bolted
 - iii. Ensure that a clearance of 1/16 inch (2 mm) to 1/4 inch (6 mm) is in place between the top of the horn and the hold-down housing. The top of the horn must be parallel to the inside of the top of the housing.
 - iv. Check to see that the spring wing rail bears evenly on all base plates. This can be checked by noting wear marks on the plates.
 - v. When the wing is fully opened, the flangeway opening is at least 1-3/4" (45 mm) but not more than 1-7/8" (48 mm).
 - vi. Check the toe block assembly for:
 - Correct bearing of the spring wing rail with respect to the block.
 - Cracks in the toe block.
 - Bolt hole cracks in the spring wing rail (the bent and counter-bored joint bar must be removed).
 - Excessive wear on the shoulder bolts, sleeve or bolt holes in the rail.
 - vii. Check the spring for sufficient tension. The nut on the spring bolt should be adjusted to a torque of not less than 10 lbs. and not more than 15 lbs. The correct assembly housing is shown on the standard plan.
 - viii. Ensure that cotter pins are in place at both ends of the spring bolt.
 - ix. Check that the spring wing rail is in correct contact with the point rail.
 - x. The outer edge of a wheel tread may not contact the gauge side of the spring wing rail.





8.4.13 Bolts

- a) Ensure that the bolts throughout the complete turnout are installed according to Standard Plan. They must be tightened to full specifications approximately 6 weeks after initial installation and annually after installation.
- b) When installing bolts in turnouts, lubricate bolts by completely immersing the threads of bolts in new / used motor oil.
- c) When installing guard rail bolts, the tapered washer should be installed on the guard rail side.
- d) All new special track work 100 lb. or less will be assembled using Grade 5 bolts. All new special track work 115 lb. or greater will be assembled using Grade 8 bolts,
- e) Grade 5 bolts can be identified by three (3) radial lines on the head of the bolt. Grade 8 bolts have six (6) radial lines,
- f) Whenever grade 8 bolts are used, each bolt must be equipped with a hardened steel washer.

Note: All torques listed are for lubricated bolts using a graphite-based lubricant.

Size of Bolt (inches)	1"	1 1/16"	1 1/8"	1 1/4"
Torque – ft - Ibs	670	850	1200	1600

Figure SUB-PART D - 49 - Torque to be Applied to Grade 5 Bolts for Special Track Work

Size of Bolt (inches)	1"	1 1/4"	1 3/8"
Torque – ft - lbs	840	1675	2500

Figure SUB-PART D - 50 - Torque to be Applied to Grade 8 Bolts for Special Track Work



8.4.14 Gauge

- a) Measure track gauge throughout the turnout at locations from 4 to 6 ties apart, starting 10 ft ahead of the turnout. This includes the entire siding curve leading from the turnout track. Maintain gauge throughout the balance of the turnout. If there is evidence of movement of the tie plates then consider and calculate the gauge under load.
- b) Gauge is measured between the heads of the rails at right angles to the rails in a plane 5/8 inch (16 mm) below the top of the rail. Standard gauge is 56-1/2 inches (1,435 mm).
- c) Gauge must be within the limits prescribed in the following table:

Class of track	The gauge must be at least (inches and millimeters)	But not more than (inches and millimeters)
Excepted track	N/A	58 1/4" (1,480 mm)
1	55 3/4" (1,416 mm)	58" (1,473 mm)
2	55 3/4" (1,416 mm)	57 ¾" (1,467 mm)
3	56" (1,422 mm)	57 ¾" (1,467 mm)
4 and 5	56" (1,422 mm)	57 ½" (1,461 mm)
Yard Track Category 1 & Category 2	56" (1,422 mm)	57 ¾" (1,467 mm)
Yard Track Category 3 & Category 4	55 3/4" (1,416 mm)	58" (1,473 mm)

Figure SUB-PART D - 51 - Gauge (inches and millimeters)

d) Variation in Gauge is when the gauge is less than 56" (1,422 mm) and the change in gauge over a distance of 20' or less on either side of the defective location exceeds 1-1/2 inches (38 mm), train speed must be reduced according to Class 1 track speed.

8.4.15 Rails

a) Examine rails for surface defects and signs of internal defects.

8.4.16 Rail Anchors

- a) Check that track is properly anchored adjacent to and through turnouts, in accordance with the ONTC standard plan.
- b) Adequate rail anchors must be installed to resist rail movement and / or skewing of switch points.

8.4.17 Ballast

- a) Good ballast and proper drainage are necessary in order to maintain good surface and line through the turnout. Ensure there is even ballast section with tie cribs full, except in the switch point area during the winter.
- b) Ballast section is in accordance with the standard plan.
- c) A good drainage ditch should be present on both sides of the track.

8.4.18 Surface

 a) Observe surface irregularities by sighting along the underside of the head of rail. Start well before the switch points and move ahead as necessary to observe the entire length





of the turnout. Pay special attention to the surface of the turnouts, particularly at the frog, since the surface has a direct effect on service life.

8.4.19 Alignment

a) Observe irregularities in alignment of turnouts in tangent track by sighting along the gauge side of the rail, on the frog side of the turnout, from a position well before the switch points. Search for irregularities in alignment of turnouts in curved track by observation or by stretching a 62-foot cord along the gauge side of the outer rail of the curve and measuring the offsets at the center of the cord. Also, observe the curved closure rails for uniformity of curvature.

8.4.20 Cross Level

a) Measure cross level throughout the turnout at locations from 4 to 6 ties apart. Maintain cross level to match the cross level of the track in which the turnout is located.





12. Surfacing and Lining

a) General – Surfacing and Lining

- i. Do not raise track more than necessary to maintain good surface.
- ii. When the track is raised during surfacing operations, do not allow the rate of change in surface, i.e. the rate of run-out, to be more than the rate shown in Figure Sub-Part D 1 Run-Out Gradient.
- iii. Special attention is to be given to the surface and line of track at the approaches to bridges, culverts, switches, diamonds, road crossings and tunnels.
- iv. When surfacing around insulated joints, switch machines, crossing protection equipment or other signal devices, care must be taken to prevent damage to bond wires, conduits or other signal connections to the track. Particular attention is to be given to Hotbox Equipment.
- v. Ensure brooming and regulating operations do not damage adjacent property especially at highway underpasses and pedestrian walkways.
- vi. To prevent centre bound track, avoid tamping tie centres.
- vii. Whenever it is necessary to disturb the ballast to permit surfacing and lining, whether it is manual or mechanical, restore the ballast shoulder and fill the ballast cribs before returning the track back to train service.
- viii. To control harmonics on Class 2 through 5 jointed track with staggered joints, the cross level differences shall not exceed 1 ¼ inches (32 mm) in all of six consecutive pairs of joints, as created by 7 low joints. Track with joints staggered less than 10 feet shall not be considered as having staggered joints. Joints within the 7 low joints outside of the regular joint spacing shall not be considered as joints for purposes of this section. For 79 ft or 80 ft rails, this subsection is not applicable.
- ix. The rules specify the limits of certain track conditions existing in isolation. A combination of track conditions, none of which individually amounts to a deviation from the requirements in these rules may require remedial action to provide for safe operation over the track.

b) Surfacing and Lining and Clearances

i. When surfacing or lining track where overhead or lateral clearances are involved (for example: at approaches to the ends of bridges; or alongside signals, fuelling stations and platforms), the general level of the track, its alignment, its curve elevation, and its distance from adjacent tracks must not be changed without the authority of the Manager, Engineering Services. Where permanent reference points are situated to indicate the location and elevation of the track, they must be adhered to.

c) Surfacing and Lining in CWR Territory

- i. Work requirements and speed restriction requirements associated with surfacing and lining in CWR territory are given in <u>Sub-Part D Section 7.8 Prevention of Track Buckling.</u>
- ii. The work requirements and speed restrictions for Surfacing and Lining in CWR territory also apply in jointed territory.





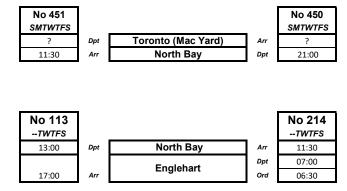
Train Service Plan

Effective on or about Apr 30th, 2023

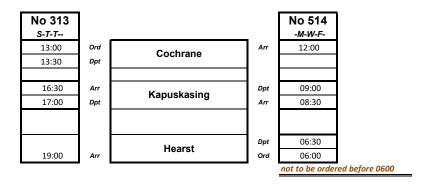
revision to 214 ord time - 313/514 - 419 ord time

Northward Direction

Southward Direction



No 211 SMTWTF-	No 213 -M-W-F-	No 207 S-T-T				No 308 s-T-T	No 414 -M-W-F-	No 512 SMTWTF-
13:00 13:30	12:30 13:00	04:30 05:00	Ord Dpt	Englehart	Arr	14:00	21:30	22:30
16:30	13.00	03.00	Arr	Noranda	Dpt			19:30
				Porquis				
		08:30	Arr	Kidd	Dpt	10:30		
	16:45		Arr	Cochrane	Dpt Ord		17:30	



	<u>Polar Bear</u>	Express				Polar Be	ear Express	
Freight	June 25, 2023 to Oct 20, 2023	Oct 17, 2022 to June 23, 2023				Oct 17, 2022 to June 23, 2023	June 25, 2023 to Oct 20, 2023	Freight
No 419 -M-W-F-	No 423 SMT-TF-	No 421 -MT-TF-			_	No 622 -MT-TF-	No 624 SMT-TF-	No 620 -M-W-F-
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Reissued: September 11, 2019

<u>To:</u> All Infrastructure Department Employees

SIG-1

Notification of the Signal Department When Working in Crossing Approach Circuits

The practice of performing non-emergency work within the approach circuits of signalized crossings without first giving the Signal Department an advance notice of <u>at least 24</u> hours will no longer be tolerated. These requirements for safety and operational reasons must be adhered to. In future, noncompliance with the procedure shown may result in an investigation.

Proper notice to the Signal Department should be a job briefing item when work is being performed in areas that could affect the crossing circuits.

The following steps should be adhered to if your work affects the signals:

- 1. Call the area signal maintainer (phone numbers attached) or Michael Rennie, Manager of Signals and Communications at 705-271-6588, at least 24 hours before you intend to start work. Be certain you establish personal contact, don't simply leave a message.
- 2. Identify the mile or crossing location where you intend to work, and then describe the type of work you intend to carry out, such as welding, changing rail, crossing upgrades, surfacing, regulating, etc...
- 3. If your work affects the safety of road and train traffic, then a qualified employee shall provide flagging protection until relived by a maintainer.
- 4. If work can be completed without affecting the crossing circuits, then after such work is completed, the crossing should be tested in accordance with, **Section 2.3** in the Manual of Track Requirements, by the foreman in charge of the work.

Under no circumstances should planned work be carried out on a crossing circuit without first following the steps outlined.

Remember, the 24-hour rule is a **minimum** and the longer the notice the better, with 48 hours being preferred.

In an emergency situation, The RTC's office must be advised immediately; also the Signal Department must be advised so that, after the track work is complete, they can make necessary repairs.

Michael Rennie Manager, Signals & Communications

TERRITORY	HEADQUARTERS	RESPONSIBILITIES INCLUDE
Englehart South	Englehart Jake Cote Cell- 705-272-8401 Office-705-544-2292 ext.132	All Equipment on the Temagami Subdivision Crossings, Hot Box Detectors, High Water Detectors etc Crossing 0.81 (Georgia Pacific)
Englehart North	Englehart Shawn Harman Cell-705-544-3046 Office-705-544-2292 ext.132	All Equipment on the Kirkland Lake Subdivision Crossings, Hot Box Detectors etc All Equipment on the Ramore Subdivision up to and including the High Water Detector at Mile 32
Cochrane South	Cochrane Marc Dupuis Cell-705-272-9219 Office-705-272-4046	All Equipment on the Ramore Subdivision From Mileage 56.5 to 109.3 All the Equipment on the Devonshire Subdivision Kidd Hot Box Detector Kidd Crossing #11
Cochrane North	Cochrane Kurtis Westbrook Cell-705-266-3421 Office-705-272-	All Equipment on the Kapuskasing Subdivision Hot Box Detectors on the Island Falls Subdivision

Reissued: September 20, 2021

<u>To:</u> All Infrastructure Department Employees

SIG – 8 Reporting Damage to Signals Components

There have been incidents over past winter and summer work seasons where Signal Department equipment was damaged, likely by Snowfighter wings or track equipment. The extent of the damage was NOT reported at the time and in some cases unauthorized repairs were made that were discovered later by Signals staff. ALL Infrastructure employees are reminded that ANY damage to Signals equipment, whether it be in-track or wayside components, MUST be promptly reported to either the Maintainer or Technician on that territory or to the S&C Manager directly. Safety at crossings and properly working detector equipment is critical to our railway. In addition, any attempt to make emergency repairs without the involvement of Signal department personnel could result in inoperative signals that may not be detected until after an incident occurs.

Please note, the directive to report any failures or damaged caused by the public remains in place. We all depend on this equipment for our own and the public's safety.

The contact number and territories for all Signals staff is as below.

Kurtis Westbrook – Signal Maintainer (Cochrane to Hearst) (Cell) 705-266-3421

Vacant - Signal Maintainer (Mi.56.5 to 109.3 Ramore Sub, Devonshire Sub) (call the Relieving Signal Maintainer for the interim)

Austin Talbot - Signal Maintainer (Englehart to North Bay) (Cell) 705-303-2387

Shawn Harman - Signal Maintainer (Englehart - Rouyn - Mi 32 RSD) (Cell) 705-544-3046

Mike Emmell – Relieving Signal Maintainer (System-wide relief) (Cell) 705-544-3343

Craig Jennings – Signal & Communication Technician (AEI Readers, Train Radio) (Cell) 705-679-3041

Michael Rennie, Manager Signals & Communications (Cochrane)
(Office) 705-272-5338 ext. 620
(Cell) 705-271-6588

M. Rennie Manager, Signals & Communications

INDUSTRIAL OPERATIONS FIRE PREVENTION AND PREPAREDNESS PLAN

April 1, 2024 – March 31, 2029

<u>Ontario Northland</u>

This plan has been prepared for submission to the Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRF), Aviation, Forest Fire and Emergency Services (AFFES) in accordance with the requirement under section 21 of the Outdoor Fires Regulation.

Company Representative: Paul-Andre Lajeunesse Issued: 2024-02-28

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1.0 General

Company: Ontario Northland Transportation Commission

Focus of operations: Railroad

General location of operations: North Bay to Moosonee with connections to Swastika east to Rouyn-Noranda, Porquis Jct. west to South Porcupine, and Cochrane west to Hearst and Calstock

Operations by risk category:

Risk category	Operations
Very high fire risk	Operations that use heavy machinery equipped with metal parts that may come into contact with rocks or similar material in the course of normal operations and cause sparks.
High fire risk	Hot Work; welding, torch or saw cutting of metal and grinding, operations involving open flame. Thermite welding. Rail production grinding. Switch cross grinding.
Moderate fire risk	
Low fire risk	Surfacing, tie installation, under-cutting, gauging, spiking, gophering

2.0 Fire Prevention Planning

The following measures will be undertaken to ensure compliance with the *Forest Fires Prevention Act:*

- All camps, mines mills and dumps will have the area surrounding the camp, mine, mill, and dump cleared of flammable debris for a distance of at least 30 metres.
- All brush, debris, non-merchantable timber, and other flammable material resulting from land clearing will be safely disposed of through piling and burning, chipping or other fire safe method.
- Any fire started by the operation will be reported to the MNDMNRF without undue delay.
- Staff will be instructed on the rules around smoking during the fire season and the proper disposal of smoking materials.
- All burners, chimneys, engines, incinerators, and other spark-emitting outlets will be equipped with an adequate device for arresting sparks.

The following measures will be undertaken to ensure compliance with the *Outdoor Fires Regulation*.

- No fire will be started outdoors unless the conditions will allow the fire to burn safely from start to extinguishment.
- Fires started outdoors will be monitored until extinguished.
- Brush and debris will be burned in accordance with section 2 of Ontario Regulation 207/96 or any issued fire permit.
- Fires burned in an incinerator will comply with section 3 of Ontario Regulation 2017/96.

- Grass and leaf litter will be burned in accordance with section 4 of Ontario Regulation 207/96 or any issued fire permit.
- Burning will cease when fire permits are suspended or during restricted fire zone periods.
- Equipment or machinery being operated for industrial purposes within a forest area will be equipped with a serviceable fire extinguisher rated at least 6A80BC.
- Staff operating chainsaws or brush saws will do so in accordance with section 10 of Ontario Regulation 207/96.
- Staff operating equipment or machinery in a forest area during the fire season will do so in accordance with section 11 of Ontario Regulation 207/96.
- Filled backpack pumps will be carried on or located within 30 metres of every piece of heavy equipment, and whatever else required by Table 1 of the IOP.
- Our operations do not require additional fire suppression equipment.

The following are additional measures that will be undertaken to prevent wildland fires:

Prior to the next day's operation supervisors / employees will:

- Determine the minimum fire suppression equipment needed based on the type of operation they are conducting.
- Determine the fire risk category / operational risk.
- Determine the initial forest fire fuel group that they will be working in.
- Determine "leaf on / leaf off" conditions from Fire Intensity Code Reports.
 - o Adjust Fuel Group based on "leaf on / leaf off" and other modifications.
- Determine the closest weather station to the area they will be working in.
- Access the MNDMNRF Fire intensity Code Report for the closest weather station for the work location.
 - o via the internet @ https://www.ontario.ca/page/fire-intensity-codes or;
 - by telephone through the corresponding Fire Management Headquarters responsible for the weather station.
- Determine the fire intensity code for the worksite fuel group they will be working in.
- Determine the work modifications for the next day.
- Modify or mitigate operations as necessary.

Refer to the Field Guide to the Industrial Operations Protocol and Regulation.

Note:

- If the work scheduled for the day will involve several different forest fire fuel groups, the highest hazard forest fire fuel group will be utilized.
- If the work for the day will transition across several different weather station areas. The fire intensity codes for the highest reporting weather station will be utilized.

Rail cutting, Welding or Grinding, Thermite Welding: High Fire Risk Category

- A Minimum of 1 filled backpack pump will be located within 3 metres of each individual operation.
- If the fire intensity code for the work site is A, B or C a water delivery system with a minimum of 340 litres of water will be on site.
- Vehicles are equipped with fire extinguishers.

The operations will be considered a **MODERATE FIRE RISK** if in addition to the above the following are in place at the time of the operation.

Prior to operations the worksite will be soaked with water or a fire suppression foam
mixture before the operation begins and after the operation are completed for the day
and will keep the worksite in a wet condition during the operation.

- At least one worker will be assigned to monitor the worksite while the operation is being carried out to watch for sparks or other signs that a fire has been ignited and to take immediate action to halt the spread of fire if it is safe to do so.
- At least one worker will be employed to actively patrol the worksite for at least one hour after the operation is completed for the day and extinguish any fires they may find if it is safe to do so.
- Workers engaged in monitoring or patrolling will be equipped with a device capable of immediate two-way communication with the local fire management headquarters and ensure that any fires that may occur are immediately reported to the Ministry.
- Workers will put in place non-combustible screens designed and able to catch any and all material capable of producing fire ignition.

Switch Cross Grinding: High Fire Risk Category

- A minimum of 1 filled backpack pump will be located within 3 metres of each individual operation.
- If the fire intensity code for the work site is A, B or C a water delivery system with a minimum of 340 litres of water will be on site.
- Vehicles are equipped with fire extinguishers.

The operations will be considered a **MODERATE FIRE RISK** if in addition to the above the following are in place at the time of the operation.

- Prior to operations the worksite will be soaked with water or a fire suppression foam
 mixture before the operation begins and after the operation are completed for the day
 and worksite will be kept in a wet condition during the operation.
- At least one worker will be assigned to monitor the worksite while the operation is being carried out to watch for sparks or other signs that a fire has been ignited and to take immediate action to halt the spread of fire if it is safe to do so.
- At least one worker will be employed to actively patrol the worksite for at least one hour after the operation is completed for the day and extinguish any fires they may find if it is safe to do so.
- Workers engaged in monitoring or patrolling will be equipped with a device capable of immediate two-way communication with the local fire management headquarters and ensure that any fires that may occur are immediately reported to the Ministry.
- Workers will put in place non-combustible screens designed and able to catch any and all material capable of producing fire ignition.

Rail Production Grinding: High Fire Risk Category

- A minimum of 4 backpack pumps will be located on site where the production grinder is operating.
- A water delivery system with a minimum of 3,750 litres of water will be on site where the production grinder is operating.
- The production grinding supervisor will notify the administrative Fire Management
 Headquarters and Regional Prevention Compliance Specialist of its intention to conduct
 Rail Production Grinding a minimum of 24 hours in advance of the operation taking
 place. This notification will include;
 - Contact information
 - The hours of operation of the grinding operation.
 - Suppression equipment and manpower resources on hand.
 - Ease of ignition associated with the operation and fire starts during the last operating period.
- At the end of each shift the production grinding supervisor will notify the administrative Fire Management Headquarters and the Regional Fire Prevention Specialist of their;

- Progress during the last shift
- Any operational concerns that they may have including ease of ignition and fire starts during the last operating period.
- Where they expect to be grinding within the next operational period.

Mechanical Brushing: Very High Fire Risk Category

A minimum of 1 backpack pump will be located within 30 metres of each machine.

Other:

• Local assigned high rails are equipped with a minimum of backpack pumps, foaming agent, pails, shovels, and a fire extinguisher.

In addition to the suppression equipment requirements above;

- A fuel performance catalyst (FPC) is added to the locomotives fuel year-round for the purpose of reducing emissions.
- Ongoing locomotive exhaust screen inspections to be completed prior to and during the fire season each year.

Emergencies Due to Exigent circumstances:

As per section 23(2) of Ontario Regulation 207/96 if operations are immediately necessary to ensure public safety or due to exigent circumstances the company must complete industrial operations outside the provisions of "Part II, Industrial Operations" the company will;

- Immediately notify the appropriate Fire Management Headquarters of the location and type of work being completed as well as the suppression resources on hand.
- Ensure that a "pumping unit" with a minimum of 800 feet of hose is on site.
 - o The amount of hose on site must be sufficient to reach and cover the work area.
- Identify a water source of sufficient quantity or ensure that there is enough water on site to meet the requirements of the work being completed.
- Ensure that a minimum 4-person, trained crew is available on-site during operations to wet the work site down or take immediate action should a fire start.
- Ensure that at least one individual with two-way communications is available to monitor operations for fire and immediately report the fire without delay.

Note: Depending on the circumstances a Ministry of Northern Development, Mines, Natural Resources and Forestry Fire Officer may request that additional resources or actions be taken to ensure that all wildland fire concerns are addressed.

Definitions of Operational Modifications:

P = Prevention (Normal Operations)

Wildfire prevention is a part of normal operations and at a minimum, the requirements identified in the *Forest Fires Prevention Act* and Outdoor Fires Regulation must be followed. These should be identified in the operation's fire plan if one is required.

SS = Short Shift

Operations are **not** permitted between 1200 and 1900 hrs local daylight savings time. Prevention measures still apply and a dedicated patrol* of the area must be carried out for one hour after operations shut down. Workers conducting the dedicated patrol must immediately report fires that are detected.

RS = Restricted Shift

Operations are **not** permitted between 0800 and 2200 hrs local daylight savings time. Prevention measures still apply and a dedicated patrol* of the area must be carried out for one hour after operations shut down. Workers conducting the dedicated patrol must immediately report fires that are detected. Water sources close to operations should be identified prior to commencing any operations.

SD = Shutdown

Operations are **not** permitted starting at 0600 hrs local daylight savings time on the first day of shutdown. Operations will remain suspended until conditions change and Prevention, Short Shift or Restricted Shift is indicated. Prevention measures still apply and a dedicated patrol* of the area must be carried out for one hour after operations cease. Workers conducting the dedicated patrol must immediately report fires that are detected. Once this initial patrol is complete, lower risk operations working in the vicinity can offer dedicated fire patrols during the shutdown period.

*Personnel assigned to patrol a worksite are expected to move as much as required to continually assess the entire worksite for fires. If a fire is discovered, they are required to first notify MNDMNRF of the fire and its location and then, if it is safe to do so, try to extinguish the fire.

For the purposes of this Plan, Railway Subdivisions will be aligned with the following MNRF Fire Weather Stations:

On an annual basis the weather stations and subdivision alignment will be reviewed with MNRF to ensure they are correct.

Subdivision	Mileage Range	Station	Station Name	Fire Management Headquarters
	0 - 35	TRM	Trout Mills	North Bay
Tomogomi Sub	35 - 78	MTN	Marten River	North Bay
Temagami Sub	78 - 134	LOO	Loon Lake	North Bay
	134 – end of sub	KLK	Kirkland Lake	Timmins
Kirkland Lake Sub	0 - 33	KLK	Kirkland Lake	Timmins
	0 - 51	KLK	Kirkland Lake	Timmins
Ramore Sub	51 - 79	ABL	Abitibi Lake	Timmins
	79 – end of sub	TIM	Timmins	Timmins
Iroquoio Follo Sub	0 - 2	TIM	Timmins	Timmins
Iroquois Falls Sub	2 – end of sub	COC	Cochrane	Cochrane
Dovonobiro Sub	0 – 2	0 – 2 TIM		Timmins
Devonshire Sub	2 – end of sub	COC	Cochrane	Cochrane
	0 - 25	COC	Cochrane	Cochrane
Kapuskasing Sub	25 - 47	OKE	Oke	Cochrane
	47 - 101	KAP	Kapuskasing	Cochrane
	101 – end of sub	HEA	Hearst	Cochrane
Kanuakasing Sub. ACD	0 - 11	KAP	Kapuskasing	Cochrane
Kapuskasing Sub - AGR	11 – end of sub	RUF	Rufus Lake	Cochrane
Island Falls Sub	0 - 22	COC	Cochrane	Cochrane
	22 – 76	ILF	Island Falls	Cochrane
	76 – 116	SMO	Smokey Falls	Cochrane
	116 - 187	STG	Stringer Lake	Cochrane

3.0 Fire Preparedness

Our operations are to be considered trained and capable.

80% of our field staff are trained and proficient to the pertinent fire suppression level.

Training is delivered by in house trainers.

In addition to the backpack bumps and equipment caches identified in section 2.0 we have the following equipment available for fire suppression:

ONTC LOCATION OF FIRE FIGHTING EQUIPMENT – 2024

LOCATIONS	Shovels	Pails	Crew Cab Hi-Rail	Back Pack Pumps	Foaming Agents	200 Gallons of Water	Spark Shields	Boom Truck Hi-Rail (with 200 gallons of water)	100' Hose	Honda Pump	Wajax Pump (with 800' Hose)
North Bay North Section	Х	Х	Х	Х	Х		Х				
Temagami Section	Х	X	х	X	х		Х		X		
Temagami MP 72											Х
Rouyn Section	Х	Х	Х	Х	Х		Х				
Rouyn MP 60											Х
Englehart Section	х	Х	Х	Х	х	Boom Truck	Х	Х	Boom Truck	Boom Truck	
Englehart MP 0											Х
Matheson Section	Х	X	Х	Х	Х		Х				
Porquis Section	Х	X	Х	Х	Х		Х				
Cochrane Section	X	X	Х	X	х	Boom Truck	Х	Х	Boom Truck	Boom Truck	
Cochrane MP 0											Х
Otter Rapids Section	х	Х	Х	Х	Х		х				
Otter Rapids MP 93.5											X
Moose River Section	х	X	Х	X	Х		Х				
Moosonee Section	х	Х	Х	Х	Х		х				
Kapuskasing Section	Х	Х	Х	Х	Х		Х				
Hearst Section	х	X	Х	Х	X		Х				
2- Welding Trucks	Х	Х	Х	Х	Х		Х				
Gang #94	х	Х		Х	Х		х		Х	Х	

This equipment will be checked for serviceability on a yearly basis and maintained in serviceable condition throughout the fire season.

The wildland fire hazard will be monitored daily by accessing forecasted weather conditions, fire indices and the fire intensity codes. Intensity codes representing the operational area will be determined and modification/mitigation will be made as required by the Outdoor Fires Regulation 207/96.

4.0 Communications

The process for field operations to communicate with MNDMNRF staff will be through the RTC's office by radio or telephone. The RTC will contact MNDMNRF. The process for MNDMNRF to contact field operations will be by calling the RTC's office and they will relay the message by radio.

The company will ensure that all employees working in field operations will be aware of the standard fire prevention measures as well as the fire hazard and specific fire prevention processes that may entail. The company will do this by emailing and faxing the information to the locations in the field before the end of the previous business day.

4.1 Positive Protection

When a fire occurs on a railway line works, the Ministry of Northern Development, Mines, Natural Resources and Forestry will request positive protection form the railway following the MNDMNRF Process for Securing Positive Protection along Railway Rights-of-Way which can be found in Appendix I.

To secure positive protection along the right-of-way, the Ministry of Northern Development, Mines, Natural Resources and Forestry Sector Response Officer must contact the RTC office by telephone 705-544-2292 ext. 141.

4.2 Notification and Requests for Information

When a fire occurs on a railway line works the Ministry of Northern Development, Mines, Natural Resources and Forestry will notify the railway of the occurrence using the "**Notification and Request for Information for a Fire on Railway Property**" form found in Appendix II.

5.0 Annual Fire Prevention and Preparedness Plan Update

5.1 Annual Operations

This update applies to the 2024 fire season for **Ontario Northland**

The following shows the operations being undertaken by area this season.

TASK AND LOCATION	TIMEFRAME	Weather Station Code(s)
Temagami Subdivision		
 Install 8.8 miles of new continuous welded rail and new 80' rails at the following locations; Miles 3.7 to 4 Miles 8.5 to 11.8 Miles 131.4 to 136.2 	May - July	TRM LOO KLK
Joint Elimination Program (flash butt welding)	April - December	TRM MTN LOO KLK
 Install approximately 10,500 ties between Miles 25 – 46 	May – June	TRM MTN
Complete required tie change outs in switches / sidings as required		
Anchoring various locations		
Crop and pull to remove battered joints – various locations		
Gauging as required		
Distribute rock from Rabbit Creek Pit to various locations for surfacing		

TASK AND LOCATION	TIMEFRAME	Weather Station Code	
Ramore Subdivision			
 Install 12.4 miles of new CWR and 80' bolted rail at the following locations; Miles 13.3 to 14 Miles 17 to 18 Miles 58.4 to 67.4 Miles 87.7 to 88 Miles 90.9 to 91.2 Miles 91.5 to 91.8 Miles 95.7 to 95.8 Miles 96.2 to 96.5 Miles 97.2 to 97.4 Miles 98.9 to 99.1 	July - August	KLK ABL TIM	
Joint Elimination Program (flash butt welding)	April - December	KLK ABL TIM	
 Install approximately 14,000 ties between Miles 26 - 54 	June - July	KLK	
Anchoring various locations			
Crop and pull to remove battered joints – various locations			
Gauging as required			
Distribute rock from Jardine Pit to various locations for surfacing	_		

TASK AND LOCATION	TIMEFRAME	Weather Station Code
Kirkland Lake Subdivision		
Anchoring various locations		
Crop and Pull to remove battered joints – various locations		
Gauging as required		
Distribute rock from Jardine Pit to various locations for surfacing		
Devonshire Subdivision		
Complete required tie change outs in switches / sidings as required		
Distribute rock from Potter Pit to various locations for surfacing		

TASK AND LOCATION	TIMEFRAME	Weather Station Code
Kapuskasing Subdivision		
Install approximately 13,500 ties between Mile 0 - 27	September - October	COC OKE
Complete required tie change outs in switches / sidings as required		
Joint maintenance at various locations		
Anchoring various locations		
Crop and pull to remove battered joints – various locations		
Gauging as required		
Distribute rock from Val Rita Pit to various locations for surfacing		

TASK AND LOCATION	TIMEFRAME	Weather Station Code
Island Falls Subdivision		
 Install approximately 7.1 miles of relay rail between Miles 34.6 to 37.9 and 41.5 to 45.3 	September - October	ILF
Install approximately 17,500 ties between Miles 0 - 27	September – October	COC ILF
Install approximately 6,000 ties between Miles 42 - 54	September – October	ILF
Complete required tie change outs in switches / sidings as required		
Anchoring various locations		
Crop and pull to remove battered joints – various locations		
Gauging as required		
Distribute rock from Coral Pit to various locations for surfacing		

5.2 Wildland Fire Reporting

Ontario Northland is responsible for the suppression of wildland fires originating from company operations if it is safe to do so. All fires will be reported immediately to the local fire service using the appropriate MNDMNRF Wildland Fire Reporting number.

Northwest Region – 310-Fire (3473) or (807) 937-5261 (Fire Reporting only)

Northeast Region – 310-Fire (3473) or (705) 564-0289 (Fire Reporting only)

Southern Region – local municipal fire department (911) or MNDMNRF at (705) 564-0289

5.3 Company and MNDMNRF Contacts

Provincial Fire Contact	
	Mike Pistilli
Prevention & Prescribed Burning Coordinator	Address: 922 Scott St, Fort Frances, ON, P9A 1J4
Coordinator	Phone Number: Mobile: 807-275-6767
	Name: TBD
Fire Prevention & Education Program Advisor	Address: TBD
naviooi	Phone Number: TBD
_	Name: Lori Skitt
Prevention and Compliance Team Lead	Address: PO Box 850, 95 Ghost Lake Rd. Dryden , ON P8N 2Z5
	Phone Number: 807 937-7410, Mobile: 807-323-1279
NER Regional Fire Contact	
	Name: Jeremy Verdiel
NER Fire Prevention & Compliance Specialist	Address: 6150 Skyline Drive, Garson, ON, P3L 1W3
oposiano:	Phone Number: 705-564-5389, Mobile: 705-561-6348
	Name: Lyle Lacarte/Miguel Berthiaume
NER Fire Intelligence Specialist	Address: 6150 Skyline Drive, Garson, ON, P3L 1W3
NEK Fire intelligence Specialist	Phone Number: 705-564-6011/6025
	Intel Desk during fire season: 705-564-6075
	Dan Leonard/Mike Jackson
NER Duty Officer	Address: 6150 Skyline Drive, Garson, ON, P3L 1W3
NER Duty Officer	Phone Number: 705-564-6049/6012
	Duty Desk During Fire Season: 705-564-6076

Subdivision and	MNR Contact	MNR Contact
Mileage	Fire Management Supervisor	Sector Response Officer
Temagami Sub	Name: James Zacher	Location: North Bay
Mi 0.0 - 118.3	Address: 40 Voodoo Cresent North Bay, ON P1C 0B7	SRO Phone Number: 705-475-5623
	Office: 705-475-5536	Fire Intensity Codes:
		Phone Number: 705-475-5609
		Toll Free: 866-619-5079
Temagami Sub	Name: Joel Legasy	Location: Timmins
Mi 118.3 - 138.2	Address: Ontario Government Complex, Hwy. 101 East, P.O. Bag 3090	SRO Phone Number: 705-235-1306
Ramore Sub	South Porcupine, ON P0N 1H0	Fire Intensity Codes:
Mi 0.0 - 77.0	Office: 705-235-1368	Phone Number: 705-235-1374
Ramore Sub		
Mi 94.0 - 113.0		
		-
Kirkland Lake Sub		
Mi 0.0 - 33.0		
Ramore Sub	Name: Richard Perin	Location: Cochrane
Mi 77.0 - 94.0	Address: 3-2 Hwy 11 south, Cochrane, ON P0L 1C0	SRO Phone Number: 705-272-7135
Iroquois Fall Sub	Office: 705-272-7141	
Mi 0.0 6.0	Office: 705-272-7141	Fire Intensity Codes:
		Cochrane - Phone Number: 705-272-7148
Devonshire Sub		Hearst - Phone Number: 705-362-4346
Mi 0.0 27.0		-
Kapuskasing Sub		
Mi 0.0 128.0		
AGR Mi 0.0 - 17		
Island Falls Sub		-
0.0 - 187.0		

The following lists the **Ontario Northland** contacts:

Name	Position	Location	Phone number
*Railway Traffic Controller		Englehart	1-800-558-4129 (24 hours per day) rtc@ontarionorthland.ca and mrtc@ontarionorthland.ca
Paul-Andre Lajeunesse	Director Infrastructure	Englehart	Office (705) 472-4500 ext. 124 Cell (705) 499-7386 Fax (705) 475-5033 paul-andre.lajeunesse@ontarionorthland.ca
Jeremy Girard	Superintendent Maintenance of Way	Cochrane	Office (705) 472-4500 ext. 616 Cell (705) 347-0058 Fax (705) 272-4802 jeremy.girard@ontarionorthland.ca
Chad Martin	District #1 Manager	Temagami Sub Ramore Sub Kirkland Lake Sub Iroquois Falls Sub Devonshire Sub	Office (705) 544-2292 ext. 125 Cell (705) 545-0725 Fax (705) 544-2297 chad.martin@ontarionorthland.ca
Justin Delarosbel	Track Patrol	North Bay Yard and Customer Tracks Mile 0.0 to Mile 25.1 Temagami Sub	Cell (705) 544-3125 Fax (705) 472-1890 justin.delarosbel@ontarionorthland.ca
Vince Gagne	Track Patrol	Mile 25.1 to Mile 138.5 Temagami Sub	Cell (705) 545-0927 vincent.gagne@ontarionorthland.ca
Calvin Mills	Track Patrol	Englehart Yard Mile 0.0 to Mile 67.37 Ramore Sub	Cell (705) 545-0680 calvin.mills@ontarionorthland.ca
Tyler Chartrand	Track Patrol	Mile 0.0 to Mile 60.04 Kirkland Lake Sub Rouyn-Noranda Yard	Cell (705) 303-7146 tyler.chartrand@ontarionorthland.ca
Shawn Giroux	Track Patrol	Porquis Yard and Kidd Yard Mile 67.37 to Mile 109.7 Ramore Sub Mile 0.0 to Mile 27.18 Devonshire Sub Mile 0.0 to Mile 6.40 Iroquois Falls Sub	Cell (249) 313-0189 Fax (705) 272-4802 shawn.giroux@ontarionorthland.ca
David Lallier	District #2 Manager	Kapuskasing Sub Agrium Sub Pagwa Sub Island Falls Sub	Office (705) 472-4500 ext. 632 Fax (705) 272-4802 dave.lallier@ontarionorthland.ca
Paul Loder	Track Patrol	Cochrane Yard Mile 0.32 to Mile 68.0 - Kapuskasing Sub Mile 27.18 to Mile 28.05 - Devonshire Sub	Cell (705) 498-5291 Fax (705) 272-4802 paul.loder@ontarionorthland.ca
Pat Duguay	Track Patrol	Kapuskasing Yard and Hearst Yard Mile 68.0 to Mile 129.1 Kapuskasing Sub Agrium Spur Mile 0.0 to Mile 22.5 Pagwa	Cell (705) 272-9445 Fax (705) 272-4802 patrice.duguay@ontarionorthland.ca
Richard Ferguson	Track Patrol	Mile 0.0 to Mile 93.5 Island Falls Sub Otter Rapids - all tracks	Cell (705) 367-6362 Fax (705) 272-4802 richard.ferguson@ontarionorthland.ca
William Solomon	Track Patrol	Moosonee Yard Mile 93.5 to Mile 187.88 Island Falls Sub	Cell (705) 336-8412 Fax (705) 336-2089 william.solomon@ontarionorthland.ca

^{*} Designates the main emergency contact in the company for AFFES.

5.4 Contacts for Notification and Request for Information for a Fire on Railway Property

Ontario Northland requests that the "Notification and Request for Information for a Fire on Railway Property" forms be emailed to the following individuals:

Name	Phone Number	E-mail Address
Rail Traffic Controller	705-544-2292 ext.141	rtc@ontarionorthland.ca
Jeremy Girard	705-347-0058	jeremy.girard@ontarionorthland.ca
Wendy Middaugh	705-544-2292 ext.134	wendy.middaugh@ontarionorthland.ca and
		mrtc@ontarionorthland.ca

Information requested by the Ministry of Northern Development, Mines, Natural Resources and Forestry will be provided by Jeremy Girard, Superintendent Maintenance of Way to the Ministry of Northern Development, Mines, Natural Resources and Forestry contact identified on the form.

6.0 Fibre Optic Cable Locations

TEMAGAMI SUBDIVISION

Buried Beside Track		
From Mile	To Mile	Track Side
3.06	3.37	West
3.37	46.05	East
46.05	69.9	West
69.9	110.5	East
110.5	112.43	West
112.43	112.65	Both
113.41	113.5	Both
113.5	138.23	Both

RAMORE SUBDIVISION

Buried Beside Track		
From Mile	To Mile	Track Side
0.6 (No 5 track North Yard)	1.88	Both
1.88	25.9	Both
26.33	112.36	Both
112.36	116.0 (end of rail)	Both

KIRKLAND LAKE SUBDIVISION

Buried Beside Track		
From Mile	To Mile	Track Side
North Leg of Wye Switch Swastika	5.19	West
0.3	5.42	East
6.31	10.8	East
10.9	35.55	East
36.05	56.3	East
56.35	57.75	East

Aerial	
From Mile	To Mile
5.42	6.31
10.8	10.9
35.55	36.05
56.3	56.35

IROQUOIS FALLS SUBDIVISION

Buried Beside Track		
From Mile	To Mile	Track Side
0.08	5.65	West

DEVONSHIRE SUBDIVISION

Buried Beside Track		
To Mile	Track Side	
0.78	1 on West (between	
	mainline and No1 Track	
0.78	2 on East (beside	
	Devonshire Sub siding	
	and Town siding)	
5.05	1 on West	
5.05	1 on East	
28.2	1 only West	
	To Mile 0.78 0.78 5.05 5.05	

Note: At Cochrane follows No 5 Track, Ice House Track and Shed Track and crosses under 4 tracks north of the station through a duct.

ISLAND FALLS SUBDIVISION

Buried Beside T	rack	
From Mile To Mile Track Sid		Track Side
0.30	0.31	East
0.64	31.5	East
31.5	93.11	West
93.11	94.5	East
94.5	124.0	West
124.0	186.04	East

KAPUSKASING SUBDIVISION

	Buried Beside Tra	ck
From Mile	To Mile	Track Side
0.4	27.68	East
27.68	67.98	West
67.98	69.46	East
70.5	126.59	West
126.59	128.3	East

The following changes should be considered as amendments to the fire prevention and preparedness plan:

- Production Grinding and Mechanical Brushing information has been updated.
- MNDMNRF and ONTC Contacts have been updated as indicated throughout Plan.
- Annual Operations 2023 have been updated to 2024's Annual Operations.
- Location of Fire Suppression / Prevention Equipment 2023 has been updated to be 2024's Location of Fire Suppression / Prevention Equipment.
- Process for Securing Positive Protection along Railway Right of Way is in place as shown in the Appendices.
- Notification and Request for Information for Fire on Railway Property is in place as shown in the Appendices.

APPENDICES

Appendix I

Notification and Request for Information for Fire on Railway Property Form

1. Fire Information	
MNDMNRF District:	MNDMNRF Fire Number:
Railway Company:	Subdivision: Mileage:
Date and Time Fire Reported to MNDMNF	RF:
Detected by:	
2. Notification	
	Northern Development, Mines, Natural Resources and Forestry ccurred along the railway right-of-way. The information is as
Fire Burning on: North South W	Vest ☐ East ☐ Side of track
Present Fire Condition: Not Under Contro	ol Present Fire Size: ha
Out Date (if known):	Final Size (if known): ha
MNDMNRF Resources Used: Yes \(\text{N} \)	No ☐ Railway Resources Used: Yes ☐ No ☐
Personnel:	Personnel:
Equipment:	Equipment:
Aircraft:	Other:
Other:	
General Comments/ Recommendations:	

3. Information Request

To aid in our Investigation of a fire which occurred along the railway right-of-way, please provide the following information to the MNDMNRF Official identified below:

- 1) Identification number of the last 3 trains that passed the above mileage before the fire was reported.
- 2) Direction of travel of each train
- 3) Identification of the locomotive(s) operating under power in each train

Train ID Number	Time	Locomotive(s) under power	Dir. of travel	Video (saved/retained)
			<u> </u>	□Y □N □Y □N □Y □N
4) Identification	number of the	first train to pass the above mil	eage <u>after</u> the fire wa	as reported.
Train ID Number	Time	Locomotive(s) under power	Dir. of travel	Video (saved/retained)
				□Y □N
Name of Railway Co Title: Email: P.O. Box or Street Ac City: Postal Code: Telephone Number:		al: , ON		
Completed inform	ation reque	est should be directed to	:	
Name of MNDMNRF Title: Email: P.O. Box or Street Ac City: Postal Code: Telephone Number: Date and Time:		, ON		
Date and Time.				

 $\textbf{cc.} \ \underline{\textbf{chelsea.osesky@ontario.ca}}, \underline{\textbf{jeremy.verdiel@ontario.ca}} \ \textbf{and} \ \underline{\textbf{paul.chandler@ontario.ca}}$

Appendix II

Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRF) Process for Securing Positive Protection along Railway Rights of Way

In order to provide direction to MNDMNRF staff and ensure a consistent approach to engaging in fire suppression activities along railway rights of ways, the following process will be followed by MNDMNRF staff.

Upon the report and confirmation of a fire along a railway right of way the MNDMNRF Sector Response Officer (SRO) for the Sector responsible for the fire will;

- 1) Confirm the location of the fire with the MNDMNRF Incident Commander.
- 2) Contact the railway (RTC / Railway contact) as per the direction provided in the Railway Fire Prevention and Preparedness Plans.
- 3) Advise of a fire on the right of way, location and condition.
- 4) Verbally request Positive Protection.
- 5) Request that (RTC / Railway contact) contact the SRO directly when a TOP / OCS Authority has been issued and be provided with the following information:
 - a. Permit / Authority Reference #;
 - b. Foreman (Permit / Authority Holder) Name;
 - c. Foreman Contact Phone #;
 - d. Location where positive protection has been put in place;
- 6) The SRO will also request that the Foreman (Permit / Authority holder) contact him / her directly to confirm that;
 - a. Positive Protection is in place
 - b. Positive protection is in the correct location.
- 7) Once Positive Protection has been confirmed with the Foreman (Permit / Authority holder) the Sector Response Officer will:
 - a. Contact the Incident Commander (MNDMNRF) onsite.
 - b. Advise that positive protection is in place and location.
 - c. Provide the Incident Commander the contact information for the Foreman (Permit /Authority holder).
- 8) The SRO will document the request on the MNDMNRF "Positive Protection Request form".
- 9) MNDMNRF (Sector Response Officer / Incident Commander) will notify the Foreman (Permit / Authority holder) when positive protection is no longer required.

Note:

- 1. Until such time that the Sector Response Officer (MNDMNRF) has confirmation from the Foreman (Permit / Authority holder) that positive protection is in place, MNDMNRF Fire Personnel will remain a distance of 15 metres (50 ft.) back from the edge of the ties along the rail line. This includes the landing of a helicopter on railway tracks or rights of ways.
- 2. During this time water bombing / bucketing operations may take place on the ROW, if deemed necessary and safe to do so by the Air Attack Officer or Pilot in Command as per MNDMNRF guidelines.
- 3. MNDMNRF Staff will abide by standard railway safety procedures and maintain situational awareness even when positive protection is in place.
- 4. Once the Foreman (authority / permit holder) is on site and has been in contact with the Incident Commander and it is determined safe to do so, trains may be able to access the working area under the protection of the Foreman (authority / permit) holder.

Appendix III

Railway Positive Protection Request Form

Railway Company Name:	Fire #:
Railway Contact # (RTC – CP Police	ce):
Positive Protection Request (Time	/ Date):
Location of Positive Protection Req	uest (Sub / Mile):
TOP / OCS (Permit / Authority) re	ference #:
Foreman Name:	Contact #:
Location of TOP / OCS in place:	From Mile: to Mile:
Subdivision:	
Confirmed with Foreman TOP/OC	CS in place & location (Time / Date):
Incident Commander (IC) Name:	
Confirmation with I.C. that Positive	Protection in place (Time / Date)
Request for Positive Protection rem	noval by (MNDMNRF) name:
Cancellation (Date /Time / Foremar	n):

Personnel must remain clear of the tracks a distance of 15 meter (50 feet) from the edge of the railway ties until the Sector Response Officer receives confirmation from the Foreman that Positive Protection (TOP / OCS) has been issued and in place. This includes the landing of a helicopter on railway tracks or rights of way.

Steps for SROs to follow:

- 1) Verbally notify the designated railway company contact as per fire plan (RTC / CP Police) of the location, track mileage, and condition of the fire occurrence and request Positive Protection.
- 2) Verbally request to be contacted by (RTC / CP Police) when TOP / OCS Authority has been issued to get Authority #, Foreman name and contact info and where positive protection will be in place.
- 3) Verbally request that the Forman issued the (Permit / Authority) contact you directly.
- 4) <u>"SRO's must communicate directly with the Foreman who holds the permit / authority and confirm that Positive Protection is in place and confirm location."</u>
- 5) Once confirmed by the foreman, contact the Incident Commander, advise that positive protection is in place and where, and provide IC with Foreman contact information.
- 6) Only after Positive Protection is confirmed with the Foreman can crews work closer to the tracks. (Standard rail safety measures must be adhered to by all personnel.)
- Positive Protection Request Form(s) should be completed as required and appended to the Notification of Fires on Railway Rights of Way when submitted to railway.

 When no longer required a request to the foreman should be made to remove positive protection and documented on request form.

Terms and Definitions

Positive Protection: A term used by the railway industry to identify that protection is in place for track work or a track condition. Positive protection is provided by a Foreman who has been issued a TOP/OCS Clearance for a specific area of the track and who, once issued a TOP / OSC has complete control of that section of track.

Track Occupancy Permit (TOP) / Occupancy Control System Clearance (OCS) is issued by the RTC to an employee of the railway qualified under the Canadian Rail Operation Rules to hold such authority. The authority ensures the limits and tracks identified in the permit are positively protected from allowing train movements to enter the affected limits. In certain circumstances train movements may be allowed into the affected limits ONLY under the direction of the foreman named in the permit. TOP / OSC authority numbers will end with the initial of the RTC who issued the authority.

Occupancy Control System (OCS) is a method of control used to move train traffic over a territory. OCS territory uses clearances (permission) issued by the RTC to trains and foreman (usually between whole miles) to allow occupancy of a section of track. Unlike CTC which uses signals.

Centralized Traffic Control System (CTC) is a method of control used to move train traffic by the use signal indication and routing. CTC uses signal blocking by ways of a TOP issued by the RTC to protect track work and track machines. Signal indication is the authority required by train into a control block. TOP's are issued mostly between controlled block signals.

Permit/Authority Holder (Foreman) – is an individual who works for a railway company and who has/given authority over a specific section or area of a rail line through the issuance of a TOP or OCS. The occupancy holder should be onsite and is a supervisor or foreman.

RTC: Rail Traffic Controller.

Controlled Block Signal is a signal capable of displaying stop indication.

ONTARIO NORTHLAND PERSONNEL - GEN

DATE FORMALIZED January 18, 2019		Policy Reference
REVISION DATE: June 10, 2024	FIT FOR DUTY POLICY	6-ZD

POLICY STATEMENT

No person under the influence, or carrying, intoxicating liquor / a drug or narcotic substance, or experiencing the secondary effects of same shall enter or knowingly be permitted to enter and / or use Ontario Northland property, facilities, equipment or vehicles.

PURPOSE

Ontario Northland is committed to the safety and well-being of our Employees, our customers, other individuals affected by the actions of our Employees, the public, and the environment. Further, Ontario Northland complies with legislated requirements, and is committed to the prevention of illegal activities within our operations. Every Employee of Ontario Northland has a responsibility to safeguard the trust and safety of the public by ensuring compliance with this Policy.

This Policy is intended to:

- establish Ontario Northland's standards and expectations with respect to be fit for duty;
- clarify the respective responsibilities of Ontario Northland and its Employees to ensure an drug and alcohol-free working environment;
- · outline the consequences for non-compliance with this Policy;
- provide consistent guidelines for all Employees to follow;
- identify, assist and where appropriate, accommodate Employees who may have substance use disorders (including for example a drug and/or alcohol related dependency);
- identify, assist and where appropriate, accommodate Employees who may have a medical condition requiring a prescribed medication with the potential to impact fit for duty:
- implement appropriate remedial or corrective action for Employees who violate this Policy, noting that each case will be assessed on its individual merits;
- this policy supplements, but does not modify the General Safety Rule 1.1, Canadian Rail Operating Rules (C.R.O.R) Rule G. Nothing in this policy reduces the requirements of Rule G.

1.0 SCOPE

1.1 EMPLOYEES

This Policy applies to all Employees, of Ontario Northland Transportation Commission (ONTC) or Nipissing Central Railway (NCR) (ONTC and NCR hereinafter collectively referred to "Ontario Northland").

1.2 CONTRACTORS

All contractors (which include subcontractors) will be notified of the applicable provisions of this Policy. Contractors will be expected to comply with and enforce these requirements in respect of their Employees, subcontractors, etc.

2.0 **DEFINITIONS**

Alcohol - The intoxicating agent in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols including methyl and isopropyl alcohol. Beverage alcohol includes but is not limited to beer, wine, distilled spirits and very low alcohol products (e.g. beer with 0.5% alcohol by volume).

Company Property - Means equipment, materials, buildings, facilities, machinery and vehicles owned, leased, rented or used by Ontario Northland.

Contractor/Subcontractor - Any person or entity providing services to Ontario Northland, providing services in connection with Ontario Northland's operations or providing services on Ontario Northland's workplace, pursuant to a contract. This includes contractors, subcontractors and the Employees of contractors and subcontractors.

Drug - A drug includes recreational drugs and medications:

Recreational Drug: Includes controlled drugs and substances, illegal drugs, and legal drugs, including recreational marijuana, taken without the prescription or authorization of a regulated health professional. The intentional misuse of prescription or non-prescription medication comes within the category of recreational drugs.

Medication: Prescription and non-prescription drugs used for the treatment of an illness, injury or a medical condition. A prescription drug must be prescribed or authorized by a regulated health practitioner. A non-prescription or "over-the- counter" drug does not require a prescription or authorization, but it must be used for the purpose of treating an illness, injury or a medical condition.

Employee - All Employees of Ontario Northland, including full-time, part-time, temporary and spare Employees, individuals employed pursuant to fixed term or indefinite contracts of employment, and, for the purposes of this Policy, all students, volunteers and interns.

Fit for Duty - An Employee who is fit for duty is capable of performing their duties in a safe, productive and efficient manner, free from the adverse effects of drug and alcohols. An Employee impaired by drugs and alcohol is not fit for duty. The impairing effects include acute impairment, the after-effects and the withdrawal symptoms associated with drug or alcohol use.

Extreme Fatigue - Physical or mental exhaustion that reduces an individual's alertness such that a safety hazard is created or results in the inability to safely perform work.

Safety Sensitive Position - Refers to any position, including Safety Critical positions as defined by the Railway Safety Act, or are governed by the Ministry of Transportation of Ontario, in which individuals have a key and direct role in Ontario Northland's operation and where performance impacted by alcohol, drugs (which includes medications) or extreme fatigue could result in a significant incident, or could affect the health, safety, or security of the Employee, other employees, customers, members of the public, other individuals, property, or the environment.

For a list of positions, please see Appendix B: Safety - Sensitive Positions

Substance Abuse Professional (SAP) - This is an individual with knowledge of and clinical experience in the diagnosis and treatment of drug and alcohol related disorders. The SAP will assess if the Employee has an alcohol or drug dependency, make recommendations regarding education and treatment, and recommend a return-to-duty monitoring program including unannounced testing. If someone holds a safety critical position, this may include an assessment by an Addictions Medicine Physician in accordance with Railway Medical Rules.

Workplace - Any land, property, structures, facilities, premises, location, Ontario Northland vehicle and equipment owned, leased, operated or otherwise controlled by Ontario Northland or any other place at, upon, from or near which an Employee works in the course of their duties.

3.0 RESPONSIBILITIES

3.1 EMPLOYEE

Ontario Northland has standards of performance (Standards) that all Employees must satisfy. Employees must read, understand their responsibilities under and observe this Policy. Each Employee is required to sign the *Fit for Duty Policy Acknowledgement* which will be placed in his/her Employee file.

Prohibited Conduct

Employees are prohibited from the following while on duty (which includes working hours and break times) or while they are attending at the Workplace or attending at or operating Company property:

- Engaging in the use, consumption, distribution, possession or manufacture of drugs and alcohol, subject to the exceptions in this Policy with respect to medications. This will include all cannabis-derived treatments, preparations, or recreational products, including CBD.
- 2. Being unfit for duty due to the consumption of drugs and alcohol.

Fit For Duty & Reporting Responsibilities

All Employees are expected to comply with the following:

- 1. Report to work fit for duty and remain fit for duty during their working hours and break times;
- 2. Immediately notify a supervisor or manager if the Employee is, or believes they are, unable to report for work fit for duty or remain at work fit for duty;
- Immediately notify a supervisor or manager if the Employee, in good faith, believes that another Employee or contractor who they reasonably believe is under the influence of drugs and/or alcohol or has violated or otherwise believes is violating this Policy;
- 4. Cooperate with any investigations into breaches or potential breaches of this Policy. In addition to the above requirements, all Employees are reminded that they have a legal obligation under Part II, Section 126 (1) (g-h) of the Canadian Labour Code to report to their employer or supervisor the existence of any hazard of which they either know or suspect.

On-Call / Subject to Duty

Employee's on-call or subject to duty must refrain from drugs or alcohol use and Employees must be fit for duty, while they are on-call or subject to duty. If an Employee is unfit for duty due to drug or alcohol use or any other reason, and the Employee is called in to report for duty, it is the responsibility of the Employee to decline the call to work.

Break Times

Employees must not consume drugs and/or alcohol during the workday, which includes during break times. This requirement applies to all Employees including telecommuting Employees working from home. Employees are, however, permitted to use medications during the workday, provided that the medication will not affect fitness for duty and the medication is required for a legitimate medical reason. Please see the Medications section below for the applicable rules.

Medications

- If an Employee requires a medication for a legitimate medical reason, the Employee must ensure
 that the medication will not affect the Employee's ability to report for and remain at work fit for duty.
 To fulfill that responsibility, it may be necessary for the Employee to determine from their doctor or
 pharmacist whether the medication has the potential to affect the Employee's ability to be fit for duty.
- If the medication may affect fitness for duty, the Employee has an obligation to report that concern to their supervisor/manager and/or Human Resources for review.
- If an Employee has taken a medication and, as a result, is unable to report for work or remain at work fit for duty, the Employee must immediately report this to a supervisor or manager.
- If accommodation is required, Ontario Northland will make every effort to accommodate the Employee in accordance with human rights legislation. The Employee will be required to provide medical documentation in accordance with health care information confidentiality and privacy laws to substantiate accommodation requests and facilitate appropriate accommodation.

Prevention, Assistance & Treatment

- Substance use disorders are treatable illnesses. Early prevention and treatment are key to rehabilitation. If an Employee has or believes they may have a substance use disorder, the Employee should seek professional assistance. In addition, Employees should encourage coworkers to access professional assistance if the Employee knows or has reason to believe the coworker has or is developing a substance use disorder.
- Employees are encouraged to use counselling and treatment services available to them through the Ontario Northland's Employee & Family Assistance Program (EFAP) and/or the community - 1-888-814-3327.
- If an Employee has a substance use disorder, the Employee should notify a supervisor, manager and/or Human Resources. Prompt disclosure of a known or potential substance use disorder ensures that the Employee will be directed to EFAP, a SAP or other resources, if the Employee has not already accessed such assistance, and it also ensures the facilitation of appropriate accommodation required by the Employee, the Employees' recovery, and the health and safety of

the Employee and the workplace.

- An Employee who self discloses a substance use disorder will not be disciplined or terminated from employment as a result of the disclosure. In addition, the decision to self-disclose will not become a part of the Employee's personnel file. However, it is necessary that the Employee make that disclosure promptly and before engaging in any Policy violation. If an Employee refrains from disclosing a substance use disorder and subsequently engages in a Policy violation (e.g., by attending at work unfit due to drug or alcohol use), the Employee cannot avoid the disciplinary consequences of that Policy violation by disclosing a substance use disorder after the fact.
- It is the responsibility of an Employee undergoing treatment for a substance use disorder to actively participate and comply with their treatment and post treatment monitoring programs.

Driving Offences

Employees must:

- Immediately report any loss of driving privileges to their manager or supervisor if driving a vehicle or
 operating on track equipment is necessary in the performance of their duties.
- Immediately report any charges of intoxicated driving or driving under the influence while operating a company vehicle or equipment.
- Co-operate with any investigation into a violation of this Policy, including testing for drug or alcohol
 use as allowed for under this Policy.

Unfit for Duty Investigations and Investigations of Potential Policy Violations

- If there are reasonable grounds to believe an Employee is attending at work unfit for duty, the
 Employee will be relieved of duty pending an investigation. Each situation will be assessed on a
 case-by-case basis. Consideration will be given to whether there has been a Policy violation and, if
 so, the appropriate discipline. Consideration will also be given to whether the Employee requires
 accommodation.
- If there are immediate medical concerns, arrangements will be made for medical attention, as required.
- Depending on individual circumstances, before being permitted to return to work, the Employee may
 be required to provide medical documentation confirming they are fit for duty and/or medical
 documentation setting out the individual's medical restrictions, if any.
- The Employee will comply with requests for drug and alcohol testing pursuant to the Drug and Alcohol Testing provisions set out below in this Policy.

Searches & Inspections

Ontario Northland may conduct searches with or without prior notice for drugs or alcohol when there
is reasonable cause to believe they are present on company premises, or within company owned,
leased or operated equipment or vehicles. This includes personal belongings on company premises
or within company owned, leased or operated equipment or vehicles.

 All Employees, contractors, subcontractors, and anyone operating company property are subject to inspection on the grounds of reasonable cause.

Consequences of a Policy Violation

- In all situations involving potential breaches of this Policy, an investigation will be conducted to determine whether a Policy violation has occurred. An Employee suspected of being in violation of this Policy may be removed from duty pending the completion of an investigation.
- If it is determined that an Employee violated this Policy, the Employee may be subject to discipline, up to and including termination of employment.
- Employees with positive drug test results, positive alcohol test results, and Employees that refuse
 to test are in violation of this Policy and may be subject to discipline, up to and including termination
 of employment. See below for the Drug and Alcohol Testing provisions of this Policy.

Confidentiality

Ontario Northland will maintain Employee confidentiality, including the confidentiality of Employee medical information, as required by law.

3.2 MANAGERS & SUPERVISORS

Managers and supervisors of Ontario Northland are responsible for promoting a workplace free from the safety risks associated with drugs and alcohol, and shall comply and carry out the following responsibilities:

- Managers and supervisors shall work with and support Employees who seek assistance from their
 health care providers for dealing with substance abuse or dependence issues. Managers and
 supervisors may also refer the Employee to the Employee and Family Assistance Program (EFAP),
 while maintaining strict confidentiality.
- Managers and supervisors shall participate and complete any training related to this Policy.
- Managers and supervisors shall seek to identify, investigate and address any situations where an
 Employee appears to be unfit for duty, under the influence of drugs and/or alcohol in the workplace
 or appears to be suffering from a potential substance use disorder.
- Managers and supervisors shall immediately deal with and investigate reports of potential impairment or unfit for duty situations in the workplace.
- Following an incident or "near-miss" situation, supervisors and managers should assess whether
 drug and alcohol testing is required based on criteria in the ONTC Guide and/or under this Policy.
 When possible, this decision will be made with another supervisor or manager of higher authority.
- When there is reasonable cause to believe an Employee is unfit for duty due to drugs or alcohol, supervisors and managers should assess whether drug and alcohol testing is required based on criteria in the ONTC Guide and/or under this Policy. When possible, this decision will be made with another supervisor or manager of higher authority.
- Managers and supervisors shall decide, based on a reasonable cause standard, in what situations

- a search of company property for drugs or alcohol is warranted, and are required to contact Human Resources before taking such action when possible.
- Managers and supervisors shall also ensure that all Employees, contractors and subcontractors working on Ontario Northland property read and are aware of this Policy.

3.3 HUMAN RESOURCES

Human Resources shall:

- facilitate, support, and assist in the implementation of this Policy.
- work with managers, supervisors, Employees, and trade unions to support and implement treatment and return to work programs.
- assist managers and supervisors in investigating and addressing workplace situations involving substance abuse and dependence, and in identifying any necessary accommodation options.

3.4 DRUG AND ALCOHOL AWARENESS & ACCOMMODATION

To help ensure a safe, drug and alcohol-free workplace, Ontario Northland shall:

- Provide educational/training to managers and supervisors regarding the signs of impairment and how to perform an observational inspection of Employees' appearance and/or behaviour. Managers and supervisors will also be trained on how to evaluate suspicions of the consumption of drugs and/or alcohol;
- Provide copies of and inform all Employees of the Policy, awareness regarding the responsible use
 of alcohol and other drugs, recognition of drug or alcohol problems, and resources available to assist
 Employees with drug or alcohol problems;
- Recognize substance use disorders, which may include drug and alcohol dependencies, as disabilities. As part of its commitment to accommodation, Ontario Northland will allow for the Employee and Family Assistance Program to provide assistance for Employees with drug and/or alcohol problems;
- Every effort will be made to provide reasonable accommodation to Employees whose legitimate use
 of medication may impact their ability to perform their duties;
- Impose corrective action on Employees who violate their responsibilities under this Policy;
- Take reasonable measures to ensure that Employees who are unfit or potentially unfit and unable to drive home safely are provided with alternative transportation.

4.0 ALCOHOL & DRUG TESTING

Below are the circumstances in which Ontario Northland may require an Employee to undergo drug and alcohol testing. The reasonable cause testing, post-incident / near-miss testing provisions apply to Employees in Safety-Sensitive positions. Follow-Up testing provisions apply to all Employees.

4.1 REASONABLE CAUSE TESTING

Reasonable cause testing applies where there are reasonable grounds to suspect an Employee is unfit due to drugs and/or alcohol. This may include but is not limited to: smelling alcoholic beverages and/or marijuana on breath, slurred speech, glassy and/or red eyes, unsteadiness in walking or standing, flushed face, disorientation or drowsiness and mood changes.

Before being asked to undergo testing, the Employee will be taken to a private area and interviewed. In the event the Employee cannot provide a reasonable explanation for their behaviour, or the supervisor or manager reasonably remains of the belief that the Employee is not fit due to drugs and alcohol, the supervisor will ask the Employee to participate in reasonable cause drug and alcohol testing.

4.2 POST- INCIDENT TESTING

As part of its investigation into any work-related incident, Ontario Northland may require that an Employee submit to drug and alcohol testing. Before requiring a test, there will be a preliminary assessment to determine whether the Employee's acts or omissions may have caused or contributed to the incident. As part of that assessment, the Employee concerned and, if applicable, any witnesses to the incident will be interviewed. Consideration will be given to whether other factors, such as

equipment failure, inclement weather, or other environmental factors, clearly caused the incident. If such factors do not appear to be the cause a supervisor or manager may ask the Employee to submit to post-incident drug and alcohol testing.

Transportation Arrangements for Reasonable Cause & Post-Incident Testing

For reasonable cause and post-incident testing, if an Employee must attend off-site for the test, appropriate transportation will be arranged. If the Employee's test results are not immediately available (e.g., if the Employee's drug test result is pending **or inconclusive**), arrangements will be made for the Employee's transportation home.

Procedure Following Reasonable Cause & Post-Incident Testing

An Employee who is asked to take a reasonable cause or post-incident test will be relieved from duty pending the results. Should both the alcohol and drug test be negative the employee will return to duty without loss of pay.

Should either the alcohol and drug test be positive the employee may be held out of service with pay and a formal investigation will be conducted as soon as possible.

4.3 CERTIFICATION TESTING

Applicable to Employees when in non-safety sensitive positions transferring into safety-sensitive positions. An offer of a safety-sensitive position to an Employee in a non-safety sensitive position will be conditional upon the Employee passing a drug and alcohol test. The Employee must pass the test to transfer into the safety-sensitive position. A positive test result or a refusal to test will render the Employee ineligible for the position.

4.4 RANDOM TESTING

Ontario Northland employees will not be subject to random testing, unless they are employed as a motor coach operator who operates or could operate a motor coach into the United States.

4.5 FOLLOW-UP TESTING

Post Treatment

As part of their return-to-work agreements, an Employee who has completed a treatment program for a substance use disorder may be required to pass a return to work drug and alcohol test and be subject to periodic, unannounced testing for a specified period of time. Such testing will support an employee's recovery and monitors the individual's progress and commitment towards rehabilitation.

Post-Violation

As part of their return to work agreements, an Employee who has violated the Policy may be required to pass a return to work drug and alcohol test and be subject to periodic, unannounced testing for a specified period of time.

4.6 REFUSAL TO TEST

Employees are expected to comply and cooperate with requests to undergo drug and alcohol testing. A refusal to do so constitutes a violation of this Policy. Examples of refusals include:

- failing to provide an adequate specimen sample (e.g. urine, oral fluid) for a drug test without a valid medical explanation;
- failing to provide adequate breath for an alcohol test without a valid medical explanation;
- · failing to submit to a test when requested to do so;
- adulterating or tampering with a specimen provided for testing;
- engaging in any conduct which obstructs the testing process.

4.7 PROCEDURES & METHODS OF DRUG AND ALCOHOL TESTING

- A positive alcohol breath test is a result of 0.04 Blood Alcohol Concentration (BAC) or higher. If the
 initial test reports a positive result, Employees will be required to test again 15 minutes after the
 initial test to confirm results. Any Employee who has a breath alcohol test result of 0.02 to 0.039
 BAC will be removed from work until it is safe to return (at least before their next work day or shift)
 and may be subject to appropriate discipline.
- Drug testing will be administered by a urine sample or an oral fluid sample.
- The tables below set out the initial and confirmation cut-off levels applicable to the classes of drugs that will be tested for with urine and oral fluids.

Table 1 Urine drug concentration limits	
Drugs or classes of drugs	Confirmation concentration equal to or in excess of ng/mL
Marijuana metabolite	15
Cocaine metabolite	100
Opioids:	
 Codeine 	2000
 Morphine 	2000
 Hydrocodone 	100
 Hydromorphone 	100
 Oxycodone 	100
 Oxymorphone 	100
6-Acetylmorphine	10
Phencyclidine	25
Amphetamines:	
 - Amphetamine 	250
 - Methamphetamine 	250
• - MDMA1	250
• - MDA2	250

Table 2 Oral Fluid concentration	n limits
Drugs or classes of drugs	Confirmation concentration equal to or in excess of ng/mL
Marijuana metabolite (THC)	10
Cocaine metabolite	8
Cocaine or	
Benzoylecgonine	
Opioids:	
 Codeine 	40
 Morphine 	40
 Hydrocodone 	40
 Hydromorphone 	40
 Oxycodone 	40
 Oxymorphone 	40
6-Acetylmorphine	4
Phencyclidine	10
Amphetamines:	
 - Amphetamine 	50
 - Methamphetamine 	50
• - MDMA1	50
• - MDA2	50

- If the laboratory determines that the specimen provided for drug testing contains drug concentration levels at or above the specified confirmation cut-off level, the result will be considered "non-negative" and will be reviewed by an independent Medical Review Officer ("MRO").
- The MRO will provide the Employee with a chance to provide a reasonable, medical explanation for the non-negative result.
- The MRO will then determine whether to report the result to Ontario Northland's designated individual as a positive result, a negative result, a negative with a safety concern, a cancelled result, or a refusal to test. Positive results and refusals to test are considered violations of this Policy. Negative results and cancelled results are not Policy violations.

Attachments and Supplementary Documents:

Appendix A: Fit for Duty Policy Acknowledgement

Appendix B: Safety Sensitive Positions

APPENDIX A

Fit for Duty Policy Acknowledgement

You acknowledge that you have reviewed this Policy and you understand that you must comply with the Policy. You further acknowledge that you are committed to protecting yourself, your co-workers and the workplace against safety risks arising from drugs and alcohol.

Employee Name (PRINT):	
Employee Signature:	
Date:	

APPENDIX B

Safety Sensitive Positions Updated September 14, 2023

Safety Sensitive Position: Refers to any position, including Safety Critical positions as defined by the Railway Safety Act, or are governed by the Ministry of Transportation of Ontario, in which individuals have a key and direct role in Ontario Northland's operation and where performance impacted by alcohol, drugs (which includes medications) or extreme fatigue could result in a significant incident, or could affect the health, safety, or security of the employee, other employees, customers, members of the public, other individuals, property, or the environment.

All employees, including Supervisors, Managers, who may be required to perform safety-sensitive duties from time-to-time, or to temporarily relieve in a safety-sensitive position, are included.

BUSINESS UNIT	POSITION
Station Operations & Express Freight	Chef
	Steward/Waiter
	 Warehouseman
	 Terminal Support
Guest Services	• CSSA
Bus Fleet & Facilities Maintenance	 Dispatch/Controller
	 Facilities Coordinator
	Mechanic - Bus
	 Storesperson
	Shop Foreman
	 Supervisor Motor Coach Operator
	 Sr Fleet Manager
	 Sr Manager Motor Coach Operations
	 Motor Coach Trainer
	 Operations Supervisors
	 Fleet and Safety Compliance Co-ord.
	 Manager Operations Supp & Control
	 Maintenance Planner
Bus Operations	Motor Coach Operator
Signals & Communications Systems	 Signal & Communications Technician
	 Signal Maintainers
	 Lead Signal Maintainer
	 Manager Signals & Communications
Track & Structures (Infrastructure)	Assistant Track Maintenance (Forman)All Foreman positions.

	B&B Foreman Line Gang
	District Manager
	Extra Gang (Forman)
	 Machine Operator Taking a Clearance
	Maintainer Work Equipment Shop
	Rail Lubrication Operator Maintenance
	Snowplow Foreman
	Snowplow Wingmen
	Spreader Foreman
	Spreader Wingmen
	Structures Program Manager
	 Superintendent Maintenance of Way
	Track Inspector/Supervisor
	Track Technician/labour
	Track Program Manager
	Truck Driver
Rail / RRC / Stores	All Cleaners
	 All Skilled Trades and Apprentices
	Engine Attendant
	Engine Watchmen
	Material Handler/Forklift Operator
	Production Worker
	Quality Assurance
	Storesperson
	Stockkeeper
	Supervisor Equipment
	Supervisor Metal Fabrication
	Supervisor RRC
	Supervisor Shop Maintenance
	Watchman
	Work Cell Leader
	Truck Driver
	Superintendent Equip. Mtce. Stores Supervisor.
	Stores Supervisor
	Sr Manager Strategic Procurement
	Manager Inventory & Warehousing Manager Pail Treffic Control
Rail Transportation/Training & Regulatory Affairs	Manager, Rail Traffic ControlConductors & Trainman
	Rail Traffic Controller
	Janitor Jacometics Engineer
	Locomotive Engineer Facility and Table 29
	Equipment Trainer
	Field Trainer



PART 4 REQUEST FOR PROPOSALS FORM OF PROPOSAL

Note: Respondent is required to complete Part 4 in its entirety in order to be considered as having submitted a complete Proposal. Part 4 will be provided in Word format to Respondents who return Schedule 2-B - Participation Registration Form.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 1 PROPOSAL SUBMISSION FORM

RFP Number: RFP 2025 035		
Description: Iroquois Falls Subdivision Track Rehabilitation		
Submitted To:	ONTARIO NORTHLAND TRANSPORTATION COMMISSION	
We,		
(Name of Respondent)		

having carefully examined, understood, and completed the Request For Proposals Documents as described in Section 2 - The RFP Documents, and Addenda No. __ to No. __, inclusive, and having familiarized ourselves thoroughly with local conditions, hereby agree to supply the services associated with the Iroquois Falls Subdivision Track Rehabilitation as outlined on the following Proposal Form 1-A - Schedule of Prices.

The award of the Contract is subject to budgetary approval.

ONTC reserves the right in its sole discretion to sub-divide and/or bundle the Goods and/or Services which are the subject of this RFP and award one or any number of separate contracts for the Goods and/or Services.

ONTC reserves the right, in its sole discretion, to disqualify any Respondent that is a U.S. Business as defined in Proposal Form 2.

Proposal Forms

The information contained in the Proposal Forms, as listed in the Request for Proposals and attached hereto, forms an integral part of this Proposal.

Declarations

We hereby declare that:

- (a) We will execute the Agreement within ten (10) Working Days of receipt of the Final Agreement;
- (b) We agree to perform and fully complete the Work on or before the agreed upon schedule;
- (c) The Work is to start no later than the agreed upon start date in the schedule;
- (d) Work is deemed to be complete when Work is substantially complete as defined in the Construction Act and the Contractor is demobilized from the site;
- (e) The statutory holdback pursuant to the Construction Act will be 10% and a warranty holdback of 2.5%;
- (f) We will provide the required evidence of insurance, as specified in the ONTC CCDC 4-2023 Supplementary Conditions included in Part 5 of the RFP Documents, with our execution of the Agreement;
- (g) For the General Liability Insurance, Ontario Northland Transportation Commission is to be included as an additional insured:

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 1 cont'd PROPOSAL SUBMISSION FORM

- (h) Coverages and limits of insurances will be provided and maintained by all Subcontractors in accordance with subsection (f) above.
- (i) No person, corporation or other legal entity other than the undersigned has any interest in this Proposal or in the proposed Contract for which this Proposal is made;
- (j) This Proposal is irrevocable for a period of ninety (90) days from the Submission Deadline;
- (k) It is understood and agreed that if this Proposal is accepted, we will not commence the Work until we have executed the Final Agreement and delivered it to ONTC and/or we are advised in writing by ONTC to proceed with the Work;
- (I) All copies of plans and specifications and other said RFP Documents furnished to us for the purpose of this Proposal are the property of ONTC and shall be kept confidential and not divulged in any manner by us. They will not be used on other work by us and will be returned to the issuing office when requested or promptly when not bidding; and,
- (m) We have no right to reimbursement by ONTC for expenses, both direct and indirect, which may have been incurred by us in preparing this Proposal or otherwise participating in the RFP Process.

Signed and submitted for and on behalf of:

Contractor:				
	(Company Name)			
	(Street Address or Postal Box	Number)		
	(City, Province and Postal Coo	le)		
Signature:				
	I have authority to bind the cor	poration.		
Name and Title:				
Email:				
Dated at	this	d	av of	. 2025.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 1-A PROPOSAL SUBMISSION FORM SCHEDULE OF PRICES

Please refer to the separate Schedule A - Schedule of Prices excel worksheet. This form must be completed as part of the Proposal.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 2 RESPONDENT'S GENERAL INFORMATION

The Respondent must complete this document and submit it as part of their Proposal.

Name <i>Please indicate the c</i>	complete lega	I name of the firm		
Tax Registration # (I	HST)			
Tax Registration # (0	GST)			
Tax Registration # (0	QST)			
Address				
Telephone Number				
Web Address				
Please indicate any firm operates (if app	•) under which the		
Owner 🗌 Pai	rtnership 🗌	Corporation		
Relationship <i>(if appli</i>	cable)			
Parent Company				
Subsidiaries				
Affiliates				
Ontario Business:	Yes	No 🗌		
activities on a perma	anent basis in	Ontario. The busin	stributor of any business structure that conduness either has its headquarters or a main of tario at the time of this RFP.	
Canadian Business:	Yes	No 🗌		
its activities on a per	manent basis rritory within C	in Canada. The bເ Canada or has at le	distributor of any business structure that cor usiness either has its headquarters or a main ast 250 full-time employees in any one provi	office
U.S. Business:	Yes 🗌	No 🗌		
"U.S. Business"	A supplier n	nanufacturer or dis	stributor of any business structure (includir	na a s

"U.S. Business": A supplier, manufacturer or distributor of any business structure (including a sole proprietorship, partnership, corporation or other business structure) that (i) has its headquarters or main office located in the U.S., and (ii) has fewer than 250 full-time employees in Canada at the time of the applicable procurement process. If a Respondent is a subsidiary of another corporation, part 1 of the definition above is met if that Respondent is controlled by a corporation that has its headquarters or main office located in the U.S.

If the Respondent has not demonstrated eligibility with a "No" response to being a U.S. Business, ONTC reserves the right, in its sole discretion, to disqualify the Respondent.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 2 cont'd RESPONDENT'S GENERAL INFORMATION

Canadian Trade Partner Country: Yes No No
"Canadian Trade Partner Country": A country that is signatory to one or more of the following trade agreements:
 Comprehensive Economic and Trade Agreement (CETA); World Trade Organization's Agreement on Government Procurement (WTO-GPA); Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP); or, Canada-UK Trade Continuity Agreement (Canada-UK TCA).
Bill S-211:
ONTC adheres to, and reports under the Government of Canada's Bill S-211 Fighting against Forced Labour and Child Labour in Supply Chains Act.
 Is your company required to report under the Government of Canada's Bill S-211 Fighting against Forced Labour and Child Labour in Supply Chains Act? Yes No
2. Is your company compliant with the Government of Canada's Bill S-211 Fighting against Forced Labour and Child Labour in Supply Chains Act? Yes No
3. Has your company been involved in forced and/or child labour in the past? Yes No If yes, please provide details including date and action taken to mitigate.
Main Contact Person (for the purposes of this Proposal)
Name
Title
Telephone # Fax #
E-mail address
Indicate below your company/business' invoice terms:

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 2 cont'd RESPONDENT'S GENERAL INFORMATION

Does your company/business have the capability to handle Electronic Funds Transfers?									
YES NO									
If yes, please provide the necessary banking information as part of your submission.									
If available, please provid	le your Dunn & Bradstreet Refe	erence Number:							
How many years of experience proposed herein?	erience does your company ha	ave in the provision	of goods or services						
<u>Subcontractors</u>									
The Respondent must indicate where they will use subcontractors for specific services.									
Description of Services	Subcontractor's Name	% Contract Value	Telephone Number						

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 3 ACKNOWLEDGMENT TO COMPLY WITH PART 3 - REQUEST FOR PROPOSALS SPECIFICATIONS

Ontario Northland Transportation Commission (ONTC) is committed to procuring goods and services through a process that is conducted in a fair and transparent manner, providing equal opportunity to vendors.

Respondent acknowledges that they can fully comply with Part 3 – Request for Proposals Specifications.	
(Check one) YES; NO	

If the Respondent indicates "NO", they shall provide details as an attachment to this Proposal Form 3, indicating how they will deviate from the requirements identified in Part 3 – Requests for Proposals – Specifications.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 4 REFERENCES

The Respondent must supply here the reference information of three (3) relevant customers for which they have provided similar services within the last five (5) years. ONTC is **NOT** to be listed as a Reference.

Reference #1

Company name	
Location	
Description of services provided	
Start and end dates	
Value of the contract	
Contact person name and title	
Phone	E-mail

Reference #2

Company name	
Location	
Description of services provided	
Start and end dates	
Value of the contract	
Contact person name and title	
Phone	E-mail

Reference #3

Company name	
Location	
Description of services provided	
Start and end dates	
Value of the contract	
Contact person name and title	
Phone	E-mail

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 5 COMPLIANCE WITH CONTRACT DOCUMENTS

The Respondent may suggest changes to the Supplementary Conditions included in Part 5 of this RFP using the table below. ONTC does not have any obligation to accept any proposed changes to the Supplementary Conditions and will do so in its sole discretion. Significant material proposed changes to the Supplementary Conditions may impact the evaluation of the Respondent's proposal. ONTC will not accept any material changes to the clauses in the Supplementary Conditions relating to Confidentiality, Personal Information, Intellectual Property ownership and infringement, Indemnification, Limitation of Liability or rights of ONTC on termination. ONTC, as an Ontario Crown corporation, is unable to provide indemnities pursuant to s.28 of the *Financial Administration Act* (Ontario).

Exception	Supplementary Conditions, ONTC Schedule, Article, or Sub-Clause	Existing Wording	Respondent's Proposed Wording	Reason for Proposed Change
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 6 HEALTH, SAFETY AND ENVIRONMENT

Respondents shall review the attached Health and Safety Policy Statement and include the following with their Proposal:

- 1. Submit a copy of the most recent version of your Health, Safety, and Environmental Protection Policy. Include safety documentation, if available, for working near an active railway. Provide evidence of compliance to Ontario's environmental requirements.
- 2. Submit the attached Contractor Health and Safety Responsibility Agreement.
- 3. Submit the attached Contractor Safety Pre-Qualification Form and associated supporting documents. The following items must be submitted by the contractor for prequalification:
 - WSIB Safety Record: Submit a copy for the last 3 years or equivalent accident/injury data.
 - <u>Current Clearance Certificate</u>: Confirms Contractor has met reporting and payment obligations to WSIB. ONTC requires the Contractor to submit a copy of the clearance certificate every 2 months and before the final payment on the contract has been made.
 - Past environmental, Health and Safety Records: A copy for the last 2 years.
 - <u>Training and Certification Records</u>: Documentation verifying all workers have received the necessary safety training required in relation to the scope of the RFP.
 - <u>Hazardous material list</u>: List of all hazardous materials that will be brought onto ONTC property, if applicable.
 - ONTC may require a separate work plan detailing higher hazard work activity or any tasks that may tend to produce adverse consequences.

Respondents must pass the Contractor Safety Pre-Qualification. Failure to pass will result in disqualification from the procurement process.

4. Provide evidence of compliance to Ontario's environmental requirements (e.g. recycling, waste management practices, etc.)



DATE FORMALIZED April 2016	
REVISED February 2023	Health and Safety Policy

POLICY STATEMENT

In keeping with our value of *Safety. Full Stop*. Ontario Northland Transportation Commission (ONTC) / Nipissing Central Railway (NCR) is committed to providing a safe and healthy work environment. Safety is core to everything we do. We don't settle for less, for our people or our customers, even when operating pressures make it difficult to do so.

As part of developing a safety culture, we will collectively strive to prevent accidents and incidents through a risk-based approach with the goal to continuously improve. Employees are required to report safety concerns immediately and can do so without fear of reprisal, while management ensures all employees receive quick follow-up.

We will adopt the latest in systems to improve the reporting, investigation, and implementation of corrective actions, close-out, and trend analysis of accidents and incidents. We will communicate safety and encourage engagement at all levels of the organization, such as during tailgates, briefings, and meetings.

The success of ONTC/NCR safety programs will be ensured through the collective and cooperative efforts of all, including management, employees, unions, and Workplace Health and Safety Committees. All ONTC/NCR members will jointly participate in safety, health and loss prevention initiatives to ensure a safe and healthy workplace for all employees.

Chad Evans

President and CEO

Ind light

CONTRACTOR HEALTH AND SAFETY RESPONSIBILITY AGREEMENT

In su	bmitting	g this Proposal,	I/We, on behalf of,			
certif	y the fo	llowing:		(legal name of company)		
(a)	as rec		e 25(2) (j) of the <i>Occu</i>	l maintain a program to implement such policy pational Health and Safety Act, R.S.O. 1990,		
	The re	equirements in	(a) do not apply to em	oloyers with five (5) or less employees.		
(b)		•	•	I in this Proposal, I/We and on behalf of our eresponsibility to, and shall:		
	(i)		e obligations under the with the OHSA and it	OHSA and ensure that all work is carried out s regulations;		
	(ii)		dequate and compete protect the health and	ent supervision is provided as required under safety of workers; and		
	(iii)	•	s inherent in the work	to all employees to ensure they are informed and understand the procedures for minimizing		
(c)		We agree to take precautions reasonable in the circumstances for the protection of vorker health and safety, as required under the OHSA.				
Date	d at		this day	of, 202		
An Au	thorize	d Signing Office	er			
(Key	Contac	t)				
			(Title)			
			(Telephone Number)			
			(Firm's Name)			
			(Firm's Address)			



1. (Company Identifica	tion:			, and a second	ONTC Use
Com	pany Name:			Telep	phone:	
Maili	ng Address:			Fax:		
				E-ma	il:	
2. F	Form of Business: Sole Proprietor	□ Par	rtnership:		Corporation	
	Officers: ident / CEO President			-	Years with the Company	
	surer is the manager mo	ost responsible	e for health and safe	ty?		
Nam	e:			Title:		
4.	How many years	has your busi	iness operated unde	r its cu	rrent name?	
5.	Under Current M	anagement Si	ince (Date)			
6.	Parent Company		, ,			
Pare	nt Name:					
City:		Province / St	tate:		Postal / Zip Code:	
	sidiaries:					
7.	Insurance Contac Title:	ct Information Telephone:			Fax:	
0	Insurance	Tune of Cov			Talanhana	
8.	Carriers:	Type of Cove	erage.		Telephone	
9.	Organization:					
Dasc	erihe the nature of t	he work your	company specialized	d in:		
	sibe the nature or t	ile work your	company specialized			



10. a)	Health and Safety Are any of the abo	Performance by services that you perform normally subcontracted to	□ Yes	□ No	
,	others?	• ,	••	•	
b)	Can you provide a	a Workplace Safety & Insurance Clearance Certificate?	☐ Yes	□ No	
c)		experience rated (CAD-7, NEER)? If yes attach CAD-7 reports s and go to item e). If no, complete item d).	□ Yes	□ No	
d)	Has an employee defined by the On the last 3 years: i)	of your company suffered a fatal accident or "critical injury" as tario Occupational Health & Safety Act? Please provide for total number of lost time accidents by rate group, ii) total id accidents, iii) total number of hours worked by each rate	□ Yes	□ No	
e)	• .	y ever been subjected to a Workwell Audit? If yes, what was	□ Yes	□ No	
f)	•	ents, claims or suits pending or outstanding against your	□ Yes	□No	
g)	Have you received	d any regulatory (MOL, MOE, etc.) orders and/or prosecutions? If yes, provide details of all prosecution and fines for the separate sheet.	□ Yes	□ No	
h)	Do you have invol Infrastructure Hea	lvement in provincial safety associations such as the lth & Safety Association (IHSA) and/or Workplace Safety & es (WSPS)? If yes, please name:	□ Yes	□ No	
11.	Health and Safety	Program and Procedures:			
		a written health and safety policy? If yes, include a copy.	☐ Yes	□ No	
	•	a written health and safety program?	☐ Yes	□ No	
	c) If so, are the f	following elements addressed?	☐ Yes	□ No	
	i. Participatio	on by all levels in the organization	☐ Yes	□ No	
	ii. Accountab employees	ilities & responsibilities for managers, supervisors and	☐ Yes	□ No	
	iii. Adequate	resourcing for meeting health and safety requirements	☐ Yes	□ No	
	iv. Hazard ide	entification and control	☐ Yes	□ No	
	v. Health and	d safety performance measurement and evaluation	☐ Yes	□ No	
	vi. Corrective	actions implementation	☐ Yes	□ No	
	Health and Safety P and practice docum	rogram: Does the health and safety program include procedures ents such as:			
	•	nergy Control, Lock-out – Tag-out	☐ Yes	□ No	
	b) Confined Spa	ce Entry	□ Yes	□ No	
	c) Working at He	eights, Fall Protection	☐ Yes	□ No	
	d) Personal Prot	ective Equipment (PPE)	☐ Yes	□ No	
	e) Portable / Ele	ctric Power Tools	☐ Yes	☐ Yes	

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	Untario	North	land
	OIII COIII O	1401 611	

	f)	Vehicle Safety	☐ Yes	□ No	
	g)	Compressed Gas Cylinders	☐ Yes	□ No	
	h)	Electrical Equipment Grounding Assurance	☐ Yes	□ No	
	i)	Powered Industrial Vehicles (forklifts, cranes, etc.)	☐ Yes	□ No	
	j)	Heavy Construction Equipment (excavators, backhoes, bulldozers, etc.)	☐ Yes	□ No	
	k)	Excavation and Trenching	☐ Yes	□ No	
	l)	Housekeeping	☐ Yes	□ No	
	m)	Accident / Incident Reporting and Investigation	☐ Yes	□ No	
	n)	Hazard / Unsafe Condition Identification, Reporting and Communication	□ Yes	□ No	
	o)	Workplace Hazardous Materials information System (WHMIS)	☐ Yes	□ No	
	p)	Emergency Action Plan / Evacuation Plan	☐ Yes	□ No	
	q)	Spill Response / Reporting	□ Yes	□ No	
	r)	Respiratory Protection	□ Yes	□ No	
	s)	Designated Substances Management	☐ Yes	□ No	
	t)	Waste Staging / Disposal	☐ Yes	□ No	
	u)	Traffic Control	☐ Yes	□ No	
	v)	Hearing Conservation	☐ Yes	□ No	
13.	do no	ou have a policy/procedure for terminating contracts of subcontractors who of comply with the requirements of the <u>Occupational Health & Safety Act</u> , ciated regulations and / or company safety rules?	☐ Yes	□ No	
14.	can	our employees read, write and understand English to the degree that they safely perform their tasks without the aid of an interpreter? (If no, provide a ription of your plan to assure that they can safety perform their tasks)	☐ Yes	□ No	
15.	-	ou have personnel certified in Emergency First Aid and CPR on site? If provide copies of certificates of training for site personnel proposed for the ct?	□ Yes	□ No	
16.	Do y	ou have First Aid kits available to your staff?	□ Yes	□ No	
17.		your company use a formalized Health and Safety Plan for conducting	☐ Yes	□ No	
18	large	projects?			
10.		projects? the company conduct pre-placement medical examinations?	□ Yes	□ No	
	Does		□ Yes	□ No	
19.	Does	the company conduct pre-placement medical examinations?			
19. 20.	Does Is tas	the company conduct pre-placement medical examinations? k-adequate PPE provided to workers?	□ Yes	□ No	



Signature:

22. Equ	ipment and Manuals:			
a.	Do you conduct inspections on operating equipment (e.g. excavators, cranes, forklifts, vehicles, etc.) as per regulatory requirements?	☐ Yes	□ No	
b.	Do you maintain operating equipment in compliance with regulatory requirements?	☐ Yes	□ No	
C.	Do you maintain applicable pre-use inspection and maintenance certification records for operating equipment?	☐ Yes	□ No	
d.	Are records available upon request	☐ Yes	□ No	
23. Sub	contractors			
a.	Do you use health and safety performance criteria in the selection of contractors?	☐ Yes	□ No	
b.	Do you require your subcontractor to have a written health and safety program?	☐ Yes	□ No	
C.	Are your subcontractors included in	☐ Yes	\square No	
	health and safety orientation	☐ Yes	□ No	
	health and safety meetings	☐ Yes	□ No	
	workplace inspections	☐ Yes	□ No	
	health and safety audits	☐ Yes	□ No	
d.	Does the company have a policy for the termination of contracts of subcontractors who do not comply with the Occupation Health and Safety Act, regulations under the Act, contractor rules, programs, protocols policies or procedures?	☐ Yes	□ No	
е.	Does the company have a progressive discipline policy for employees and subcontractors?	☐ Yes	□ No	
24 Hea	Ith and Safety Training			
a.	Are you aware for the regulatory training requirements for your employees?	☐ Yes	□ No	
b.	Have your employees received the required health and safety training?	☐ Yes	□ No	
C.	Do you have specific health and safety training for supervisors?	□ Yes	□ No	
d.	Do you keep records of health and safety training for employees?	□ Yes	□ No	
e.	Are records of health and safety training available on request?	□ Yes	□ No	
25. Job		_ 100		
a.	Have employees been trained in appropriate job skills?	☐ Yes	□ No	
b.	Are employee job skills certified where required by regulation or industry standard?	☐ Yes	□ No	
C.	Are certificates available upon request?	☐ Yes	□ No	
26. Hea	Ith and Safety Supervision			
a.	Does the company have a health & safety coordinator?	☐ Yes	□ No	
b.	Who is the highest ranking safety professional in the company			
at all times	at the above information is true and correct to the best of my knowledge. I also agree to follow all terms while performing work for ONTC. I understand that supporting documentation may be requested for description.			
Mame, I	Please DOUT			

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 7 SCHEDULE OF MATERIALS

SCHEDULE OF MATERIALS - VARIATIONS (AND SOURCES)
VARIATIONS:

MATERIALS SOURCES: (ADD WHERE REQUIRED)

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 8 LIST OF EQUIPMENT

List all Equipment, owned or controlled by the Respondent for use on the Work. Such list shall show for each Unit the description of the Unit, capacity, condition, age, present location, the owner's name and all-inclusive hourly rental rates. Such equipment shall be subject to inspection by ONTC to verify the stated information.

ONTC reserves the right to perform random site inspections in order to ensure the Successful Respondent's equipment used to perform the Work coincides with the information provided below. Any deviations may be subject to the terms of the Final Agreement. Any changes to this proposed list of equipment requires prior approval from ONTC.

<u>Quantity Description Capacity Condition Age Location Owner Hourly Rental Rate</u>

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 9 SCHEDULE AND PROPOSED APPROACH

PROJECT SCHEDULE

Respondents shall include a schedule with their Proposal. The schedule shall be in <u>Gantt chart format</u>, showing all activities of the Work and the critical path. The schedule shall reflect the milestone dates listed below.

Request for Proposal Close	Friday, June 20, 2025
Project Completion Date	Friday, September 26, 2025

Respondents shall include as an attachment to this Proposal Form 9, details regarding the following -			
Do you agree to complete the above work required by September 26, 2025?			
Respondent confirms that they will complete the Work required by September 26, 2025.			
(Check one) YES; NO			

ONTC has established the date for Completion of the Work with consideration for strict project timelines. As such, and subject to ONTC's sole discretion, a failure to confirm that the work will be completed by the identified date may result in disqualification of the Proposal.

PROPOSED APPROACH

The Respondent shall provide <u>a written narrative plan</u> on their proposed approach for the project, demonstrating their ability to complete the project on budget and on schedule within the timelines identified.

Evidence of a thorough review of the RFP Documents should be apparent in the Respondent's Schedule and Proposed Approach.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 10 SCHEDULE OF PROGRESS PAYMENTS

Indicate below, the estimate of the monthly progress billings (gross before holdback) for the duration of the Agreement.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 11 LIST OF PERSONNEL

List the names of the key personnel who will be assigned to the Work and <u>include their resumes.</u> This information shall be for the use of ONTC in assessing the Proposal. <u>In the event of a Subcontractor(s)</u> being listed as key personnel, the Respondent shall also include their resume(s).

• Full detailed resumes of the key personnel should be provided.

Roles and Responsibilities of key personnel should include:

- A brief description identifying the role and responsibilities of each key personnel, with respect to the Services requested;
- A statement describing the number of years of related working experience of the individual key personnel in working together on previous relevant projects;
- A statement indicating whether the key personnel is an employee of the Respondent or is a Subcontractor; and,
- A statement of availability of key personnel identified for each role indicating that the individual is available for the required Contract Term.

The Respondent must designate named individuals for each of the following key personnel roles:

<u>Role</u>	Key Responsibilities	Qualifications and	Name of	Actual Years	
		Experience	Individual	of Experience	

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 12 CURRENT LABOUR AGREEMENTS

List the current labour agreements the Respondent has in force covering this type of work in the Province in which the Work is to be performed.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 13 CONTRACTOR'S QUALIFICATION STATEMENT

1. The Respondent shall include a company profile that describes the company's background and capabilities, number of years in business and depth of available relevant resources and equipments and description of the specific services offered and specialties.

In the event that the Respondent is using a subcontractor(s) for a portion(s) of the scope of work associated with this RFP, they shall also include with this Proposal Form 13, a company profile for each subcontractor.

2. The Respondent shall supply a minimum of three (3) relevant project descriptions for projects of a similar nature and scope that have been completed within the last five (5) years.

The project descriptions shall include:

- a) Company/Client
- b) Name of contact and contact details
- c) Project Name and Location
- d) The scheduled project start and end date
- e) The actual start and end date
- f) The project value of the Respondent's scope of work for the project at the beginning of the project
- g) The project value of the Respondent's scope of work for the project at the end of the project
- h) Detailed description of the Respondent's scope of work for the project. The description should detail if subcontractors were used to complete part of the scope.
- i) Outcomes of the project (i.e., completed on schedule and on budget etc.)

ONTC may, in its sole discretion, confirm the Respondent's experience in the projects identified by contacting the named contacts above, in addition to the references provided as part of Proposal Form 4.

- 3. The Respondent shall provide a written narrative and describe how and when you will use Ontario's local workforce, local vendors, local manufacturers, local contractors, and local apprentices/trainees to achieve the project goals and provide the requested services. Please list any local subcontractors or suppliers being used for the successful completion of this project.
- 4. The Respondent shall provide a written narrative and evidence that they are meeting or exceeding Ontario Labour Laws where the service is provided.

ONTC will consider all information submitted in the Respondent's Proposal when evaluating the Respondent's experience.

PART 4 - FORM OF PROPOSAL PROPOSAL FORM 14 CLAIMS

Submit an up to date list of outstanding, pending or anticipated claims, proceedings, liens or other legal claims, actions or proceedings.



PART 5 REQUEST FOR PROPOSALS CCDC 4-2023 SUPPLEMENTARY CONDITIONS

ONTARIO NORTHLAND – SUPPLEMENTARY CONDITIONS – CCDC 4 – 2023 – REVISED 12 MARCH 2025 AMENDMENTS TO THE AGREEMENT BETWEEN OWNER AND CONTRACTOR

1. ARTICLE A-1 THE WORK

- 1.1 In paragraph 1.1, delete the words "and for which" and "is acting as and hereinafter called the "Consultant"".
- 1.2 Delete paragraph 1.3 in its entirety and replace it with the following:

"1.3	commence the We	ork by the	day of	in th	e year 2025	and, subject	to adjustr	ment ir
	Contract Time as	provided for in	the Contract	Documents,	attain <i>Substa</i>	antial Perform	ance of th	ie Work
	by the day of		in the year 2	025, and atta	in <i>Ready-fo</i>	<i>r-Takeover</i> by	the 26th	day of
	September in the	year 2025."						

2. ARTICLE A-4 CONTRACT PRICE

2.1 <u>Delete</u> paragraph 4.4 and <u>replace</u> it with the following:

"The Contract Price shall remain fixed for the duration of the Contract Time, subject only to adjustments as provided for in the Contract Documents. For certainty, the Contractor assumes all risks in connection with cost increases for Products, Labour, and Construction Equipment prescribed by the Contract Documents for the performance of the Work, and the Contractor assumes all responsibility for liabilities and additional costs that may arise as a result of the Contractor's inclusion of any Product, Construction Equipment, Supplier, or Subcontractor in its calculation of the Contract Price."

3. ARTICLE A-5 PAYMENT

- 3.1 Delete paragraph 5.1 in its entirety, including all subparagraphs thereunder and replace it with the following:
 - "5.1 Subject to the provisions of the Contract Documents and the Construction Act, the Owner shall:
 - .1 make progress payments to the *Contractor* on account of the *Contract Price* when due together with such *Value Added Taxes* as may be applicable to such payments,
 - .2 upon Substantial Performance of the Work being achieved, as jointly certified by the Owner and the Contractor, and upon the expiry of the holdback period that follows the publication of the certificate of Substantial Performance of the Work, as stipulated in the Construction Act, there being no claims for lien registered against the title to the Place of the Work and no written notices of lien delivered to the Owner, pay the Contractor the unpaid balance of the holdback, together with such Value Added Taxes as may be applicable to such payment, less any amount stated in any Notice of Non-Payment that is published by the Owner in accordance with the Construction Act, and
 - .3 after Ready-for-Takeover has been achieved in accordance with the Contract Documents and the Work is complete, there being no claims for lien registered against the title to the Place of the Work and no written notices of lien delivered to the Owner, pay the Contractor the unpaid balance of the Contract Price in accordance with GC 5.5. FINAL PAYMENT, together with such Value Added Taxes as may be applicable to such payment."
- 3.2 <u>Delete</u> paragraph 5.2, including all subparagraphs thereunder in its entirety and <u>replace</u> it with the following:
 - "5.2 Interest on late payments, if any, will be in accordance with the Construction Act."

4. ARTICLE A-6 RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING

- 4.1 <u>Delete</u> the text of ARTICLE A-6 RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING (retaining the provisions setting out the addresses of the *Owner* and the *Contractor*) and <u>replace</u> it with the following:
 - "6.1 Notices in Writing between the parties or between them and the Owner's project manager shall be considered to have been received by the addressee on the date of receipt if delivered by hand or by commercial courier during normal business hours or if sent during normal business hours by e-mail during

the transmission of which no indication of failure of receipt is communicated to the sender, and addressed as set out below. Such *Notices in Writing* will be deemed to be received by the addressee on the next *Working Day* if sent by e-mail after normal business hours or if sent by overnight commercial courier. Such *Notices in Writing* will be deemed to be received by the addressee on the fifth *Working Day* following the date of mailing, if sent by pre-paid registered post, when addressed as set out below. An address for a party may be changed by *Notice in Writing* to the other party setting out the new address in accordance with this article."

5. ARTICLE A-9 CONFLICT OF INTEREST

5.1 Add new Article A-9 as follows:

"ARTICLE A-9 CONFLICT OF INTEREST

- 9.1 The *Contractor*, all of the *Subcontractors*, and any of their respective advisors, partners, directors, officers, employees, agents, and volunteers shall not engage in any activity or provide any services where such activity or the provision of such services creates a *Conflict of Interest* (actually or potentially, in the sole opinion of the *Owner*) with the provision of the *Work* pursuant to the *Contract*.
- 9.2 The *Contractor* shall disclose to the *Owner*, in writing, without delay, any actual or potential situation that may be reasonably interpreted as either a *Conflict of Interest* or a potential *Conflict of Interest*, including the retention of any *Subcontractor* or *Supplier* that is directly or indirectly affiliated with or related to the *Contractor*."

6. ARTICLE A-10 TIME OF THE ESSENCE / LIQUIDATED DAMAGES

- 6.1 Add new ARTICLE A-10 TIME OF THE ESSENCE/LIQUIDATED DAMAGES as follows:
 - 10.1 It is agreed that one of the reasons the Contractor was selected by the Owner for this Contract is the Contractor's representation and warranty that it will attain Substantial Performance of the Work and Readyfor-Takeover within the Contract Time stated in Article A-1.3 of this Contract. The Contractor acknowledges that it has been advised by the Owner that it is critical to the Owner that Substantial Performance of the Work and Ready-for-Takeover is achieved within the Contract Time. The Contractor agrees that time is of the essence in the performance of the Contractor's obligations under this Contract.
 - 10.2 The Contractor further acknowledges its understanding that the Owner is responsible and must account to the Government of Ontario, its customers and passengers and the residents of Northern Ontario. A failure by the Contractor to attain Substantial Performance of the Work and Ready-for-Takeover within the Contract Time will result in damages to the Owner and to the Government of Ontario, its customers and passengers and the residents and businesses in Northern Ontario, which would be difficult or impractical to quantify but would nevertheless have a significant negative impact on the Owner and its ability to provide the services the Owner is obliged to provide to the residents and businesses in Northern Ontario.
 - 10.3 Given the significance of the requirement for the Contractor to achieve Substantial Performance of the Work and Ready-for-Takeover, as described in Article A-10.2, the Contractor further acknowledges and agrees that, without limiting the Owner's entitlement to any additional or other damages, if it fails to achieve Substantial Performance of the Work and Ready-for-Takeover within the Contract Time, the Owner will incur substantial damages and the extent of such damages shall be incapable or very difficult of accurate measurement. Nonetheless, the parties acknowledge that as of the effective date of this Contract, the amount of liquidated damages set forth in subparagraph 10.4 below represents a good faith estimate on the part of the parties as to the actual potential damages that the Owner would suffer because of late completion of the Project. It is expressly acknowledged and agreed by and between the parties that the amount of such liquidated damages does not include any penalty. Notwithstanding the foregoing, where the Project is delayed beyond the Contract Time, the Owner shall be entitled to (i) the liquidated damages as calculated pursuant to Article A-10.4, or (ii) in the event that the Contractor claims that this liquidated damages provision is invalid or unenforceable and the Contractor prevails on such a defence, the damages arising from the delay suffered by the Owner including, without limitation, consequential, special, incidental, and indirect damages, costs and other expenses incurred or suffered by the Owner.
 - 10.4 The Owner shall require that the Contractor pay to the Owner (or have deducted from Contract payments) liquidated damages at the per diem rate set out in the Contract Documents for each calendar day of delay beyond the prescribed date for Ready-for-Takeover until Ready-for-Takeover is achieved

and certified, pursuant to the terms of the *Contract*. If there is no per diem rate set out in the *Contract Documents*, the *Contractor* shall pay to the *Owner* the *Administration Costs* incurred by the *Owner* as a result of the delay.

- 10.5 Liquidated damages will be assessed as incurred and reflected as deductions from amounts that may be due under any applications for payment pending at the time that such liquidated damages are assessed. All liquidated damages not deducted from payments prior to final payment shall be deducted from the final payment to be made by the *Owner* to the *Contractor* pursuant to GC 5.5 FINAL PAYMENT and any amount of liquidated damages in excess of the final payment amount, shall be paid by the *Contractor* to the *Owner*, within 30 days following a written demand by the *Owner* for such payment.
- 10.6 The liquidated damages payable under this paragraph are in addition to and without prejudice to any other remedy, action or any other alternative claim that may be available to the *Owner*."

AMENDMENTS TO THE DEFINITIONS

7. DEFINITIONS

7.1 Add the following new definitions:

Acceptance and Accepted means the Owner acknowledges that the work for a Submittal has been completed and that the Submittal on its face conforms to the requirements of the Contract Documents. Acceptance does not mean confirmation by the Owner that the Submittal does not contain errors or omissions, defects, deficiencies or deviations from the Contract Documents. Wherever the words "acceptance" and "accepted" are used in the Contract Documents, they shall have the meaning set out in this definition even if the words are not capitalized.

Administration Costs means those costs and expenses incurred by the Owner as a result of carrying out a process or activity due to a delay in the performance of the Work by the Contractor and include:

- (a) additional fees payable by the *Owner* to a professional service provider required for the *Project* on a per diem basis according to the professional service provider's personnel rates;
- (b) the Owner's personnel costs associated with the delay, in an amount solely determined by the Owner, and
- (c) any additional costs or loss of revenue incurred by the Owner due to the delay.

Adjudication means construction dispute interim adjudication as defined under the Construction Act.

Arbitration Act means the Arbitration Act, 1991, S.O. 1991, c. 17, as amended.

As-Built Drawings means a set of drawings that are marked-up during construction by the Contractor that show how the structures and other parts of the Work were actually constructed versus how the structures and other parts of the Work were originally designed and "As-Built Record Drawings" means the As-Built Drawings prepared by the Contractor following completion of the Work that are Submitted to the Owner with the Close-Out Documentation.

Authority Having Jurisdiction or AHJ means the federal, provincial or municipal entity that is responsible for enforcing codes, standards and regulations relating to building construction, has the power to pass regulations to direct, specify and govern elements or activities of construction projects such as codes, safety, health or standards of manufacture or installation.

Close-out Documentation has the meaning given in GC 5.5.1.2.

Confidential Information means all information of the Owner that is confidential by its nature or in the circumstances in which it is received, including without limitation Personal Information and all confidential information in the custody or control of the Contractor, regardless of whether it is identified as confidential or not, which comes into the knowledge, possession or control of the Contractor in connection with this Contract, but Confidential Information does not include information that:

.1 is or becomes generally available to the public without fault or breach by the *Contractor*, but only after that information becomes generally available to the public;

- .2 the *Contractor* can demonstrate to have been rightfully obtained by the *Contractor* without any obligation of confidence from a third party who had the right to transfer or disclose it to the *Contractor* free of any obligation of confidence;
- .3 the *Contractor* can demonstrate to have been rightfully known to or in the possession of the *Contractor*, free of any obligation of confidence, when disclosed; or
- .4 is independently developed by the *Contractor* without the use of any of the *Owner's Confidential Information*.

Conflict of Interest includes, but is not limited to, any situation or circumstance where the interests, conduct, other commitments or relationships of a Contractor, a Contractor's family member or an officer, director or employee of the Contractor could or could be perceived to, directly or indirectly, compromise, impair or be in conflict with the interests of the Owner.

Construction Act means the Construction Act, R.S.O. 1990, c. C.30, as amended, including all regulations passed under it that are enforceable as of the date of execution of this Contract. For certainty, the first procurement process for the Project (i.e., the "improvement" as that term is defined in the Construction Act) was commenced on or after October 1, 2019 and Parts I.1 (Prompt Payment) and II.1 (Construction Dispute Interim Adjudication) of the Construction Act apply to this Contract.

Construction Schedule or construction schedule means the schedule for the performance of the Work Submitted by the Contractor and Accepted by the Owner pursuant to GC 3.4 – CONSTRUCTION SCHEDULE, including any amendments to the Construction Schedule made pursuant to the Contract Documents.

Dispute means all unresolved claims, disputes or controversies of any kind arising out of or in connection with this *Contract* or the carrying out of the *Work*.

Environmental Contaminants means any substance, material or waste defined, regulated, listed or prohibited by Environmental Laws;

Environmental Laws means all applicable federal, provincial, territorial, municipal and local laws, statutes, ordinances, by-laws and regulations, judgments, decrees, common laws and principles thereof, and orders, directives and decisions rendered or issued by any Authority Having Jurisdiction relating to Environmental Contaminants or the protection of human health, natural resources or the environment;

Estimate means a calculation of the quantity or cost of the Work or part of it depending on the context.

Excess Soil means "excess soil" as that term is defined under section 3 of the Excess Soil Regulation.

Excess Soil Regulation means O. Reg. 406/19: On-Site and Excess Soil Management to the Environmental Protection Act, R.S.O. 1990, c. E.19, as amended.

Extended Warranty means the extended warranties described in the Specifications and Extended Warranty Period means the period or periods described in the Specifications;

Force Majeure means an event or a cause beyond the control of a party, which may include war, interference by civil or military authorities, civil insurrection, local or national emergency, blockade, seizure, riot, sabotage, vandalism, terrorism, earthquake, flood, act of God, accident, fire, nuclear or other explosion, disease, epidemic, pandemic, quarantine restriction, strike, lockout or other labour disturbance, governmental embargo, or changes to any acts, orders, legislation, regulations, directives, or priorities of any Authority Having Jurisdiction; provided such event is not caused by the affected party's negligence, default, failure to exercise reasonable diligence, bankruptcy or insolvency. A Force Majeure event or cause does not include an inability to pay or a lack of financial resources unless it is due to a failure of the province to approve the appropriation from the Consolidated Revenue Fund for the Project.

Impact Assessment Reports means the impact assessment reports, if any, listed in the RFP related to the Fisheries Act; Navigable Waters Act; Lakes and Rivers Improvement Act; heritage reviews; Endangered Species Act and Species at Risk Act; terrestrial resources (vegetation, wildlife, other features); socio-economic impacts and Indigenous consultations.

Intellectual Property means any improvement, invention or discovery, whether or not patented or patentable, any technical data, know-how or trade secret, any design, any computer software or any work subject to copyright, whether or not such design or copyright is registered or registrable and all Intellectual Property rights contained, embedded or disclosed in the Work.

Notice of Non-Payment means a notice of non-payment of holdback (Form 6) or a notice of non-payment (Form 1.1) under the *Construction Act*, as applicable to the circumstances.

Payment Period or 'payment period' means the fixed segments of time for which the Contractor shall be entitled to claim payment for Work performed during such period, as set out in GC 5.2.2 or as otherwise agreed upon by the Owner and the Contractor at the first pre-construction meeting. To be effective, such agreement must be in writing or reflected in the final and approved pre-construction meeting minutes.

Personal Information means information that relates to an identifiable individual or that identifies or may identify an individual as defined in section 2 of the Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c.F.31, as amended.

Proper Invoice means a "proper invoice" as that term is defined in Section 6.1 of the *Construction Act* that complies with the minimum requirements set out in Schedule A to the Supplementary Conditions.

Proper Invoice Submission Date is the date referenced in GC 5.2.13.

Restricted Period (Adjudication) means the (inclusive) period of time between November 15 in one calendar year to January 2 in the next calendar year, in any given year throughout the duration of the Contract.

Restricted Period (Proper Invoice) means the (inclusive) period of time between December 10 to December 28 in any given year throughout the duration of the Contract.

RFP means the procurement documents used by the Owner for the procurement of the Contractor for the Project.

Statutory Declaration means the "Ontario Northland Statutory Declaration of Progress Payment Distribution by Contractor" form, attached to the Supplementary Conditions as Schedule "B".

Submittal(s) means all documentation prepared by the Contractor and submitted to the Owner for review and Acceptance in accordance with the Contract Documents.

Third-Party Property Owner means the owner, tenant or other person having the right to use a property.

Warranty Period means the period during which the Contractor provides a warranty for the Work described in GC 12.3.

Waste Management Plan means the plan to be submitted by the Contractor to the Owner described in GC 3.11.1 and Waste Management Report has the meaning described in the Specifications."

7.2 <u>Delete</u> the definition of "Consultant" and replace it with the following:

"The Consultant is the Owner's project manager designated by the Owner to be the Owner's representative for the purposes of the Contract. All references to the Consultant in the Contract Documents shall mean the Owner and, unless otherwise provided in the Contract Documents, any requirement for a decision or opinion, in writing or otherwise, by the Consultant shall mean a decision of the Owner. References to the "Engineer" in the Specifications or to the "Contract Administrator" in OPSS shall mean the Consultant as defined herein."

7.3 <u>Delete</u> the definition of "Contract Price" and replace it with the following:

"Contract Price is the amount payable by the Owner to the Contractor for Work to be completed under the Contract in accordance with the method and manner of payment stipulated in the Contract Documents and the lump sum Price submitted by the Contractor in its Proposal as stipulated in Article A-4.1 as amended by any Change Orders."

7.4 At the end of the definition of "Drawings", add the following words "and a Waste Management Plan."

- 7.5 Delete the definition of "Payment Legislation".
- 7.6 Amend the definition of *Ready-for-Takeover* by deleting all the words after "as verified" and replacing them with "and *Accepted* by the *Owner*."

AMENDMENTS TO THE GENERAL CONDITIONS OF THE UNIT PRICE CONTRACT

8. GC 1.1 CONTRACT DOCUMENTS

- Where a General Condition or paragraph of the General Conditions of the Stipulated Price Contract is deleted by these Supplementary Conditions, the numbering of the remaining General Conditions or paragraphs shall remain unchanged, and the numbering of the deleted item will be retained, unused.
- 8.2 Delete paragraph 1.1.3 and replace it with the following:
 - "1.1.3 "The Contractor shall review the Contract Documents and shall report promptly to the Owner any error, inconsistency or omission the Contractor may discover. Such review by the Contractor shall comply with the standard of care described in paragraph 3.12.1 of the Contract. Except for its obligation to make such review and report the result, the Contractor does not assume any responsibility to the Owner for the accuracy of the Contract Documents. Provided it has exercised the degree of care and skill described in this paragraph 1.1.3, 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 immediately notify the Owner and shall not proceed with the work affected until the Contractor has received corrected or missing information from the Owner. If the Contractor finds discrepancies in and/or omissions from the Contract Documents or has any doubt as to the meaning or intent of any part thereof, the Contractor must immediately notify the Owner by means of a written Request for Information ("RFI") and the Owner will provide written instructions or explanations. The Owner will not be responsible for oral instructions."
- 8.3 <u>Delete</u> paragraph 1.1.4 and <u>replace</u> it with the following:
 - "1.1.4 Notwithstanding the foregoing, errors, inconsistencies and/or omissions shall not include lack of reference on the drawings or in the specifications to labour and/or *Products* that are required or normally recognized within respective trade practices as being necessary for the complete execution of the *Work*. The *Contractor* shall not use RFIs, issued during execution of the *Work*, in and of themselves to establish a change and/or changes in the *Work* pursuant to Part 6 CHANGES IN THE WORK. In the event an RFI or the cumulative effect of RFIs leads to what the *Contractor* considers to be a change in the *Work*, then the procedure under Part 6 CHANGES IN THE WORK shall be followed."
- 8.4 Delete paragraph 1.1.5.1 in its entirety and replace it with new 1.1.5.1:

"the order of priority of *Documents*, from highest to lowest, shall be:

- Special Provisions, if any
- ONTC Special Supplementary Conditions, if any
- ONTC Supplementary Conditions to CCDC 2
- Agreement between the Owner and the Contractor
- Definitions
- General Conditions
- Addenda to the Request for Proposals ("RFP")
- Schedule 2-A to the RFP RFP Data Sheet
- Schedule 3-A-1 to the RFP Scope of Work
- RFP Part 4 Form 7 SCHEDULE OF MATERIALS, if accepted
- Schedule 3-A-2 to the RFP Technical Specifications
- Schedule 3-A-3 to the RFP Reference Documents
- Contractor's Proposal in Part 4 of the RFP in response to the RFP"
- 8.5 Add a new subparagraph 1.1.5.6 as follows:

- ".6 Schedules of Division 01 General Requirements of the Specifications shall form part of and be read in conjunction with the technical specification section."
- 8.6 Add a new sentence to the end of paragraph 1.1.9 as follows:

"The Specifications are divided into divisions and sections for convenience but shall be read as a whole and neither such division nor anything else contained in the Contract Documents will be construed to place responsibility on the Owner to settle Disputes among the Subcontractors and Suppliers in respect to such divisions."

8.7 Delete paragraph 1.1.10 in its entirety and replace it with new paragraph 1.1.10:

"All *Submittals* and *Intellectual Property* rights produced by or resulting from the *Work*, including all *Specifications*, *Drawings*, models and copies thereof, shall vest in the *Owner* and are the sole and absolute property of the *Owner* as and when created. The *Contractor* hereby irrevocably assigns and conveys and agrees to assign and convey, without further consideration, all right, title and interest in and to the *Intellectual Property* rights produced or resulting from the *Work*, in perpetuity and throughout the world, to the *Owner* and its successors and assigns. This paragraph 1.1.10 shall survive termination of the *Contract*."

- 8.8 Add new paragraphs 1.1.12, 1.1.13, 1.1.14, 1.1.15, 1.1.16, and 1.1.17 as follows:
 - "1.1.12 The Owner shall provide the Contractor, without charge, an electronic version of the Contract Documents.
 - 1.1.13 If an item is shown on one document, and it can be reasonably inferred that it was intended to include work not shown on other related *Documents*, the *Contract Price* shall nevertheless include for the cost of the item of work, unless the *Owner* agrees otherwise.
 - 1.1.14 Where a provision in the *Contract* is made for the giving or issuing of any *Notice in Writing*, consent, *Acceptance*, approval, certificate or determination by any person, unless otherwise specified such *Notice in Writing*, consent, *Acceptance*, approval certificate or determination shall be in writing and shall not unreasonably be withheld or delayed.
 - 1.1.15 The *Contractor* shall keep one copy of the current *Contract Documents*, Supplemental Instructions, Contemplated Change Orders, Change Orders, Change Directives, reviewed *Shop Drawings*, reports and records of meetings at the Place of *Work* in good order and available to the *Owner*.
 - 1.1.16 The *Contractor* shall keep one copy of current standards and manufacturers' literature specified in the *Contract Documents* at the Place of *Work* in good order and available to the *Owner* for the duration of the *Work*.
 - 1.1.17 The *Drawings* are, in part, diagrammatic and are intended to convey the scope of the *Work* and indicate general and appropriate locations, arrangement and sizes of materials. The *Contractor* shall obtain more accurate information about the locations, arrangement and sizes from study and coordination of the drawings and shall become familiar with conditions and spaces affecting these matters before proceeding with the *Work*. Where site conditions require minor changes in indicated locations and arrangements, the *Contractor* shall make such changes at no additional cost to the *Owner*."

9. GC 1.2 LAW OF THE CONTRACT

9.1 <u>Delete</u> paragraph 1.2.1 in its entirety and <u>replace</u> it with new paragraph 1.2.1:

"This *Contract* shall be governed by and constituted in accordance with the laws in force in the Province of Ontario excluding any conflict of laws principles. The parties hereby irrevocably attorn to the exclusive jurisdiction of the courts of the Province of Ontario for any legal proceedings arising out of this *Contract* or the performance of the obligations hereunder."

10. GC 1.4 ASSIGNMENT

10.1 <u>Delete</u> paragraph 1.4.1 in its entirety and <u>replace</u> it with new paragraph 1.4.1:

"Neither party to the *Contract* shall assign the *Contract* or a portion thereof without the written consent of the other, which consent, in the case of the *Owner*, is at the sole discretion of the *Owner*. In the event of an assignment of the *Contract* by the *Contractor*, such assignment shall require prior written consent of the *Owner* and shall not relieve the *Contractor* from its obligations and liabilities hereunder."

11. GC 2.1 AUTHORITY OF THE CONSULTANT

11.1 <u>Delete GC 2.1 in its entirety and replace</u> it with the following:

"The Owner's internal project manager shall have the authority to act on behalf of the Owner for all matters arising under the Contract."

11.2 <u>Delete</u> paragraph 2.2.2 in its entirety.

12. GC 2.2 ROLE OF THE CONSULTANT

- 12.1 <u>Delete</u> paragraph 2.2.3 in its entirety.
- 12.2 Amend paragraph 2.2.4 by adding the words "Within 7 calendar days of receipt of the *Contractor's Proper Invoice*," at the beginning of the paragraph.
 - and -

Add to the end of the paragraph the following words "If the *Owner* determines that the amount payable to the *Contractor* differs from the amount stated in a *Proper Invoice*, the *Owner* shall prepare the applicable Notice of Non-Payment for the amount in dispute."

12.3 Delete paragraph 2.2.7 in its entirety and replace with the following:

"If there is a *Dispute* between the *Owner* and the *Contractor* regarding the performance of the *Work* or the interpretation of the Contract Documents, the parties shall resolve the *Dispute* in accordance with PART 8 – DISPUTE RESOLUTION."

- 12.4 <u>Delete</u> paragraph 2.2.8 in its entirety.
- 12.5 Delete paragraph 2.2.9 in its entirety.
- 12.6 <u>Delete</u> paragraph 2.2.10 in its entirety.
- 12.7 <u>Delete</u> paragraph 2.2.11 in its entirety.
- 12.8 Amend paragraph 2.2.12 by adding the following to the end of that paragraph:

"The Supplemental Instruction is not a change in the *Contract Documents*. If, in the opinion of the *Contractor*, the Supplemental Instruction requires an adjustment in the *Contract Price* or in the *Contract Time*, it shall, within 3 *Working Days* after receipt of a Supplemental Instruction provide the *Owner* with *Notice in Writing* to that effect. Failure to provide the *Notice in Writing* within the time stipulated in this paragraph 2.2.12 shall be deemed an acceptance of the Supplemental Instruction by the *Contractor* without adjustment in the *Contract Price* or *Contract Time*."

12.9 Delete paragraph 2.2.18 in its entirety and replace it with the following:

"The *Owner* will receive and review written warranties and related documents required by the Contract and provided by the *Contractor* and advise the *Contractor* of any deficiencies in such warranties or related documents, or that the warranties and related documents are acceptable."

13. GC 2.3 REVIEW AND INSPECTION OF THE WORK

13.1 Add new paragraph 2.3.8 as follows:

"Where inspection and testing services are specified, the service provider employed for such services shall be the service provider named by the *Owner*."

13.2 Add new paragraph 2.3.9 as follows:

"Where standards of performance are specified and the *Work* does not comply with the specified standard of performance, the deficiency in the *Work* shall be corrected as directed by the *Owner*. Subsequent testing to ensure that the standard of performance has been attained (including re-testing by the *Owner*), shall be carried out at the *Contractor*'s expense and shall not be paid from the cash allowances described in GC 4.1."

14. GC 2.4 DEFECTIVE WORK

- 14.1 Add new paragraphs 2.4.1.1, 2.4.1.2, 2.4.1.3 and 2.4.1.4 as follows:
 - ".1 Without limiting the foregoing, the *Contractor* shall rectify, in a manner acceptable to the *Owner*, all defective work and deficiencies throughout the *Work*, whether or not they are specifically identified by the *Owner*.
 - .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*.
 - .3 All such corrections of defective work and deficiencies shall be at the *Contractor*'s expense.
 - .4 If the *Contractor* fails to do the work to correct the defective *Work* or deficiencies, the *Owner* may carry out such remediation work by its own forces or by other *Contractor*s and the *Owner* shall be entitled to recover from the *Contractor* the costs thereof or may deduct the same from any monies due or that become due to the *Contractor*."
- 14.2 Amend paragraph 2.4.3 by deleting the last sentence and replacing it with the following:

"If the *Owner* and the *Contractor* do not agree in the difference in value, they shall resolve the disagreement pursuant to Part 8 – DISPUTE RESOLUTION."

- 14.3 Add new paragraph 2.4.4 as follows:
 - "2.4.4 Neither the *Acceptance* of the *Work* by the *Owner*, nor any failure by the *Owner* to identify, observe or warn of defective *Work* or any deficiency in the *Work* shall relieve the *Contractor* from the sole responsibility for rectifying such defect or deficiency at the *Contractor*'s sole cost, even where such failure to identify, observe or warn is negligent."

15. GC 2.5 EMERGENCY SITUATIONS

- 15.1 Add new GC 2.5 EMERGENCY SITUATIONS as follows:
 - ".1 The Owner has the right to determine the existence of an emergency situation and, when such an emergency situation is deemed to exist, the Owner may instruct the Contractor to take action to remedy the situation. If the Contractor does not take timely action or, if the Contractor is not available, the Owner may direct others to remedy the situation. Any such action or direction taken by the Owner shall not relieve the Contractor of its responsibilities as the "constructor" pursuant to the Occupational Health and Safety Act (Ontario).
 - .2 If the emergency situation was the fault of the *Contractor*, the remedial work shall be completed at the cost of the *Contractor* and with no additional cost to the *Owner* and the *Owner* shall be entitled to seek reimbursements for all costs associated with the remedial work including the cost of work done by third parties.
 - .3 If the emergency situation was not the fault of the *Contractor*, the *Owner* shall pay for the remedial work."

16. GC 3.1 CONTROL OF THE WORK

16.1 Add new paragraph 3.1.3 as follows:

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

16.2 Add new paragraph 3.1.4 as follows:

"The Contractor shall perform the work in a good and workmanlike manner, using new materials, in accordance with all applicable laws and current best practices and standards in the construction industry at the Place of Work. The Contractor acknowledges that both time and quality are of the essence and the Contractor will perform the Work or cause the Subcontractors and Suppliers to perform the Work in accordance with the Construction Schedule, as amended from time to time, and in an expeditious and professional manner.

17. GC 3.2 CONSTRUCTION BY OWNER OR OTHER CONTRACTORS

17.1 Add new paragraph 3.2.3.5 as follows:

"Subject to GC 9.4 – CONSTRUCTION SAFETY, for the *Owner*'s own forces and for *Other Contractors*, assume overall responsibility for compliance with all aspects of the applicable health and safety legislation of the *Place of the Work*, including all of the responsibilities of the "Constructor" under the *Occupational Health and Safety Act* (Ontario)."

18.3 Add new paragraph 3.2.3.6 as follows:

"provide for the co-ordination of the activities and work of *Other Contractors* and *Owner's* own forces with the *Work* of the *Contract*."

18. GC 3.4 CONSTRUCTION SCHEDULE

18.1 Delete paragraph 3.4.1 in its entirety and replace it with the following:

"3.4.1 The Contractor shall:

- .1 within 10 Working Days from the date of Contract award, prepare for the Owner's review and Acceptance, a construction schedule, including identification of the critical path of the Work, the schedule of operations, the proposed methods of construction and sequence of Work, and the time the Contractor proposes to complete the various items of Work within the Contract Time. The schedule shall be designed to ensure conformity with the Contract Time. The schedule will be in a Gannt chart format in either .pdf or excel format and include:
 - (a) activity sequences and durations;
 - (b) process for obtaining any required permits;
 - (c) work block planning and track protection requested;
 - (d) special allocation of labour and *Products*;
 - (e) processing of Shop Drawings and samples;
 - (f) delivery of *Products* involving long lead time procurement;
 - (g) usage and occupancy requirements of the *Owner* of those portions of the *Work* having usage or occupancy priority;
 - (h) Substantial Performance of the Work, and Ready-for-Takeover reflecting that such milestones will be achieved by no later than the dates specified in Article A-1.3; and

(i) any other schedule requirements set out in the Contract Documents.

If the construction schedule submitted by the *Contractor* is not *Accepted* by the *Owner*, the *Contractor* shall make revisions to the construction schedule until it is accepted by the *Owner*. Once *Accepted* by the *Owner*, the schedule submitted by the *Contractor* shall become the "Construction Schedule." Notwithstanding any other terms of this *Contract*, the *Contractor* shall not be entitled to receive any payment from the *Owner* until a construction schedule has been submitted by the *Contractor* and *Accepted* by the *Owner*. The *Owner* may, at its sole discretion, not issue an order to commence work until the schedule has been received and *Accepted*.

- during performance of the *Work* and in accordance with the controls and reporting requirements in the *Contract Documents*, provide for the *Owner's* review and *Acceptance*, progress reports updating the *Construction Schedule*, reporting on the progress achieved, percentage of completion, schedule status and financial status with areas of immediate concern highlighted. If the schedule is affected by approved *Change Orders*, the *Contractor* shall submit an updated *Construction Schedule*, if requested by the *Owner* within 7 *Working Days* of the request. This updated schedule shall show how the *Contractor* proposes to perform the balance of the *Work*, so as to complete the *Work* within the *Contract Time*.
- .3 provide progress reports with each application for payment, in the form provided by the *Owner* attached as Schedule C, for review and *Acceptance*, including an update of the *Construction Schedule* referred to in paragraph 3.4.1."
- 18.2 Add new paragraphs 3.4.2 and 3.4.3 as follows:

"3.4.2 If.

- .1 at any time it should reasonably appear to the *Owner* that the actual progress of the *Work* is behind schedule or is likely to become behind schedule, based on critical path methodology, and *Notice in Writing* of such opinion is given to the *Contractor*; or
- .2 the *Contractor* becomes aware of or notices a slippage in the *Construction Schedule*,

then the *Contractor* shall take appropriate steps to cause the actual progress of the *Work* to conform to the Construction Schedule and shall produce and present to the *Owner*, for its review and *Acceptance*, within 5 *Working Days* after becoming aware of the schedule slippage, a recovery plan demonstrating how the *Contractor* will achieve the recovery of the Construction Schedule.

3.4.3 The Contractor is responsible for performing the Work within the Contract Time. Any schedule submissions revised from the Accepted baseline Construction Schedule or Accepted revised Construction Schedule pursuant to GC 3.4 CONSTRUCTION SCHEDULE, during construction are deemed NOT to be approved extensions to the Contract Time. Revisions to the Construction Schedule shall not be made without the prior written Acceptance of the Owner. All requests by the Contractor for a revision to the Construction Schedule that includes an extension to the Contract Time or adjustment to the date(s) for Substantial Performance of the Work or Ready-for-Takeover must be approved by the Owner through an executed Change Order."

19. GC 3.5 SUPERVISION

- 19.1 Amend paragraph 3.5.1 by adding at the end of that paragraph:
 - "..., and upon the *Contractor* obtaining the *Owner's* written consent, which consent will not be unreasonably withheld."
- 19.2 Add new paragraph 3.5.3 as follows:

"Notwithstanding paragraph 3.5.2, the representative of the *Contractor* attending a meeting with the *Owner* shall be deemed to have authority to act on behalf of the *Contractor* and bind the *Contractor* in matters related to this *Contract*."

19.3 Add new paragraph 3.5.4 as follows:

"The Owner may, at any time during the course of the Work, request the replacement of the appointed Contractor's representative(s), where the grounds for the request involve conduct on the part of the Contractor's representative(s) which jeopardizes the safety of the Owner's operations or the Work or the proper progress of the Work. Immediately upon receipt of the request, the Contractor shall make arrangements to appoint an Acceptable replacement. The Contractor shall indemnify and hold the Owner harmless from and against any damages, costs, expenses, claims, injuries and other liabilities suffered by the Owner arising from the conduct of the representative that is being replaced."

20. GC 3.6 SUBCONTRACTORS AND SUPPLIERS

20.1 Add new paragraph 3.6.1.4:

"ensure the *Subcontractors* and *Suppliers*, while working on the *Owner's* property, are aware of and comply with the *Owner's* policies, including its Fit for Duty Policy, and with the Ontario Northland Operating Manual, including the Current Summary Bulletin, the current Ontario Northland Time Table, C.R.O.R. 2022, Infrastructure Special Instructions, Dangerous Goods and Ontario Northland General Operating Instructions, as applicable."

20.2 <u>Delete</u> paragraph 3.6.2 in its entirety and <u>replace</u> it with new paragraph 3.6.2

"The *Contractor* shall not change *Subcontractors* or *Suppliers* identified in the *Contract Documents* without the prior written approval of the *Owner* which approval will not be unreasonably withheld."

- 20.3 Delete paragraphs 3.6.3 and 3.6.4 in their entirety and replace them with "Intentionally Left Blank".
- 20.4 Add new paragraph 3.6.7 as follows:

"The responsibility as to which Supplier and/or Subcontractor provides the specific labour, Products and services for each item of work rests solely with the Contractor, within and in accordance with the requirements and limitations listed in the Contract Documents with respect to approval of Suppliers and/or Subcontractors permitted to perform work on the Project."

21. GC 3.7 LABOUR AND PRODUCTS

- 21.1 Amend paragraph 3.7.1 by adding the words, "..., agents, *Subcontractor*s and *Suppliers* ..." after the word "employees".
- 21.2 Amend paragraph 3.7.2 by adding the following words at the beginning of the paragraph: "Except as otherwise provided in the Technical Specifications" and adding the following sentence at the end of that paragraph:

"The Contractor represents and warrants that the Products supplied by the Contractor in accordance with the Contract are not subject to any conditional sales contract and are not subject to any security rights obtained by any third party which may subject any of the Products to seizure and/or removal from the Place of the Work."

21.3 Add new paragraph 3.7.4 as follows:

"Upon receipt of a *Notice in Writing* from the *Owner*, the *Contractor* shall take action to rectify any situation involving its employee, agent, *Subcontractor* or *Supplier* whose work is unsatisfactory to the *Owner* or who are considered by the *Owner* to be unskilled or otherwise objectionable. If, after giving sufficient warning from the *Owner*, the *Contractor* is not able to reasonably rectify such situation, then such employee, agent, *Subcontractor* or *Supplier* shall be dismissed from the *Place of the Work* and the *Contractor* shall indemnify and hold the *Owner* harmless from and against any damages, costs, expenses, claims, injuries and other liabilities suffered by the *Owner* arising from the dismissal of such employee, agent, *Subcontractor* or *Supplier*."

21.4 Add new paragraph 3.7.5 as follows:

"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 identified by the Contractor and Accepted by the Owner. The Owner shall provide all relevant information on the Products to be supplied by the Owner or Other Contractors."

21.5 Add new paragraph 3.7.6 as follows:

"The *Contractor* shall not employ any persons to perform *Work* whose labour affiliation, or lack thereof, is incompatible with other labour employed in connection with the *Work*. Any costs arising from labour disputes, as a result of the employ of any such person by the *Contractor*, its *Subcontractor*s or *Supplier*s shall be at the sole expense of the *Contractor*."

21.6 Add new paragraph 3.7.7 as follows:

"The Contractor and the Owner and its representatives shall cooperate and shall take all reasonable and necessary actions to maintain stable and harmonious labour relations with respect to the Work at the Place of the Work, including cooperation to attempt to avoid work stoppages, trade union jurisdictional disputes and other labour disputes."

22. GC 3.8 SHOP DRAWINGS

- 22.1 <u>Delete</u> paragraph 3.8.7 and <u>replace</u> it with the following:
 - "3.8.7 The Owner will review and return Shop Drawings in accordance with the schedule agreed upon as described in paragraph 3.8.2, or, in the absence of such schedule, with reasonable promptness. If, for any reason, the Owner cannot process them within the agreed-upon schedule or with reasonable promptness, the Owner shall notify the Contractor and they shall meet to review and develop a revised schedule for processing such Shop Drawings that is Acceptable to the Owner. The Contractor shall update the Shop Drawings schedule to correspond to changes in the Construction Schedule. Changes in the Contract Price or Contract Time may be made only in accordance with GC 6.1, GC 6.2 and GC 6.3"
- 22.2 Add new paragraphs 3.8.8, 3.8.9, 3.8.10 and 3.8.11 as follows:
 - 3.8.8 The Contractor shall provide Shop Drawings and Submittals in the form specified, or if not specified, as directed by the Owner. Shop Drawings provided by the Contractor to the Owner shall indicate by stamp, date and signature of the person responsible for the review that the Contractor has reviewed each one of them. Certain Specifications sections require the Shop Drawings to bear the seal and signature of a professional engineer. Such professional engineer must be registered in the jurisdiction of the Place of the Work and shall have expertise in the area of practice reflected in the Shop Drawings.
 - 3.8.9 *Shop Drawings* which require approval of any *Authority Having Jurisdiction* shall be provided to such authority by the *Contractor* for the authority's approval.
 - 3.8.10 The *Contractor* shall provide revised *Shop Drawings* to correct those which the *Owner* rejects as inconsistent with the *Contract Documents*, unless otherwise directed by the *Owner*. The *Contractor* shall notify the *Owner* in writing of any revisions to the *Shop Drawings* other than those requested by the *Owner*.
 - 3.8.11 Reviewed Shop Drawings shall not authorize a change in the Contract Price and/or the Contract Time."

23. GC 3.9 USE OF THE WORK

23.1 Add new GC 3.9 – USE OF THE WORK as follows:

"GC 3.9 USE OF THE WORK

- 3.9.1 The Contractor shall confine Construction Equipment, Temporary Work, storage of Products, waste products and debris, and operations of employees and Subcontractors to limits indicated by laws, ordinances, permits, or the Contract Documents and shall not unreasonably encumber the Place of the Work.
- 3.9.2 The *Contractor* shall not load or permit to be loaded any part of the *Work* with a weight or force that will endanger the safety of the *Work*.

3.9.3 The Owner shall have the right to enter or occupy the Place of the Work in whole or in part for the purpose of placing fittings and equipment, or for other use before Ready-for-Takeover, if such entry and occupation does not prevent or substantially interfere with the Contractor in the performance of the Contract within the Contract Time. Such entry or occupation shall neither be considered as Acceptance of the Work by the Owner or in any way relieves the Contractor from its responsibility to complete the Contract."

24. GC 3.10 CUTTING AND REMEDIAL WORK

24.1 Add new GC 3.10 – CUTTING AND REMEDIAL WORK as follows:

"GC 3.10 CUTTING AND REMEDIAL WORK

- 3.10.1 The Contractor shall perform the cutting and remedial work required to make the affected parts of the Work come together properly. Such cutting and remedial work shall be performed by specialists familiar with the Products affected and shall be performed in a manner to neither damage nor endanger the Work.
- 3.10.2 The *Contractor* shall coordinate the *Work* to ensure all cutting and remedial work required is kept to a minimum."

25. GC 3.11 CLEANUP

25.1 Add new GC 3.11 – CLEANUP as follows:

"GC 3.11 CLEANUP

- 3.11.1 The Contractor shall comply with all requirements for cleanup at the Place of the Work as specified in the Contract Documents. The Contractor shall provide to the Owner for Acceptance a Waste Management Plan, and a waste reduction plan if required by Environmental Laws, for the waste products, debris and any Excess Soils generated by the Work, which plan shall comply with all Environmental Laws and the Specifications. The costs of disposing of all waste products and debris, including products and debris containing Environmental Contaminants, and Excess Soil resulting from the Work is included in the Contract Price.
- 3.11.2 Before applying for *Substantial Performance of the Work*, the *Contractor* shall remove waste products and debris and shall leave the *Place of the Work* clean and suitable for use or occupancy by the *Owner*. All products, tools, *Construction Equipment* and *Temporary Work* not required for the performance of any remaining *Work* shall be removed by the *Contractor*.
- 3.11.3 As a condition precedent to final payment, the *Contractor* shall remove any remaining products, tools, *Construction Equipment*, *Temporary Work*, waste products and debris from the *Place of the Work* to the satisfaction of the *Owner*.
- 3.11.4 In performing work to correct deficiencies or work under warranty following *Ready-for-Takeover* of the *Work*, the *Contractor* shall maintain the *Place of the Work* in a tidy condition and shall immediately remove waste products and debris.
- 3.11.5 The Contractor shall comply with all Environmental Laws in disposing of the waste products, debris and Excess Soil resulting from the Work. The Contractor shall assume all liability and responsibility for any waste products, debris and Excess Soil, including any such materials containing Environmental Contaminants, which are removed from the Place of the Work by the Contractor and during the transportation of the waste products, debris and Excess Soils to the appropriate waste disposal site. The Contractor shall submit landfill weigh bills from a waste disposal site as proof that all waste has been disposed of at a certified waste disposal site. The Contractor shall submit a Waste Management Report as part of the Close-Out Documentation described in paragraph 5.5.1.2 to be submitted with the application for verification of Ready-for-Takeover.
- 3.11.6 In the event that the *Contractor* fails to remove waste and debris as provided in this GC 3.11, then the *Owner* may give the *Contractor* twenty-four (24) hours' *Notice in Writing* to meet its obligations respecting clean up. Should the *Contractor* fail to meet its obligations pursuant to this GC 3.11 within the twenty-four (24) hour period next following delivery of the notice, the *Owner* may remove such waste and debris and

deduct from payments otherwise due to the *Contractor*, the *Owner*'s costs for such clean up, including a reasonable mark-up for *Administration Costs*."

26. GC 3.12 PERFORMANCE BY CONTRACTOR

26.1 Add new GC 3.12 – PERFORMANCE BY CONTRACTOR as follows:

"GC 3.12 PERFORMANCE BY CONTRACTOR"

- 3.12.1 In performing its obligations, duties and responsibilities under this *Contract*, the *Contractor* shall exercise the degree of care, skill and diligence that would normally be exercised by an experienced, skilled and prudent contractor supplying similar services for similar projects. The *Contractor* acknowledges and agrees that, throughout this *Contract*, the *Contractor*'s obligations, duties and responsibilities shall be judged, evaluated and interpreted in accordance with this standard. The *Contractor* shall exercise the same standard of care in respect of any *Products, Subcontractors, Suppliers*, personnel or procedures which it may recommend to the *Owner* or employ on the *Project*.
- 3.12.2 The Contractor further represents, covenants and warrants to the Owner that:
 - .1 The personnel and *Subcontractors* it assigns to the *Project* are appropriately experienced;
 - .2 It has a sufficient staff of qualified and competent personnel to replace its designated supervisor and project manager, subject to 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*."
- 3.12.3 The Owner has a Vendor Performance Policy which requires the Owner to complete an evaluation of the Contractor's performance of its obligations under this Contract. The performance evaluation of the Contractor for the supply of the Work will be used in the assessment of the Contractor's proposals in response to future procurements. The performance evaluation may also result in the Contractor being disqualified from submitting proposals in response to future procurements in accordance with the terms of the policy. The policy can be found at http://ontarionorthland.ca/en/requests-tenders."

27. 3.13 EXCESS SOIL MANAGEMENT

27.1 Add new GC 3.13 – EXCESS SOIL MANAGEMENT as follows:

"GC 3.13 EXCESS SOIL MANAGEMENT

- 3.13.1 The Contractor shall be solely responsible for the proper management of all Excess Soil at the Place of the Work and for performance of the Work in compliance with the rules, regulations and practices required by the Excess Soil Regulation until such time as Ready-for-Takeover is achieved. Without restricting the generality of the previous sentence, the Contractor's responsibility under this GC 3.13 includes the testing, designation, transportation, tracking, temporary and/or final placement, record keeping, and reporting of all Excess Soil in connection with the Work all in compliance with the Excess Soil Regulation.
- 3.13.2 The *Contractor* shall indemnify and save harmless the *Owner*, their agents, officers, directors, administrators, governors, employees, consultants, successors and assigns from and against the consequences of any and all infractions committed by the *Contractor*, or those for whom it is responsible at law, under the *Excess Soil Regulation*, or any environmental protection legislation, including the payment of legal fees and disbursements on a substantial indemnity basis."

27A GC 4.1 CASH ALLOWANCES

27A.1 Add the following at the end of paragraph 4.1.2:

"The maximum markup for the Contractor's overhead and profit on a cash allowance shall be five percent (5%)."

27A.2 Delete the last sentence in paragraph 4.1.4.

27A.3 Delete paragraph 4.1.5 in its entirety and replace it with the following:

"The Contract Price shall be adjusted by Change Order to provide for any difference in the total value of all cash allowances and the actual cost of the Work performed under all cash allowances."

28. GC 5.1 FINANCING INFORMATION REQUIRED OF THE Owner

28.1 <u>Delete</u> GC 5.1 – FINANCING INFORMATION REQUIRED OF THE *OWNER* in its entirety including all paragraphs thereunder and replace it with "Intentionally left blank."

28.2 GC 5.2 APPLICATIONS FOR PAYMENT

- 28.3 <u>Delete</u> paragraph 5.2.1 in its entirety and <u>replace</u> it with new paragraph 5.2.1:
 - "5.2.1 Subject to paragraph 5.2.11, applications for payment on account as provided in Article A-5 of the Contract PAYMENT may be made monthly as the *Work* progresses and must be delivered to the *Owner* in the same manner as a *Notice in Writing*. Unless otherwise directed in writing by the *Owner*, the applications for payment shall be delivered by email to pay.inv@ontarionorthland.ca and to the *Owner*'s representative listed in Article A-6 of the Contract RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING. If the *Contractor* fails to deliver its application for payment, at the interval prescribed in this GC 5.2.1, subject to written approval by the *Owner*, the *Contractor* shall not be entitled to submit its application for payment until the next prescribed interval. Should the *Owner* decide to accept an application for payment submitted after the applicable *Proper Invoice Submission Date* (which the *Owner* is under no obligation to do), such acceptance shall not be construed as a waiver of any of the *Owner*'s rights, or as a waiver or release of the *Contractor*'s obligations to strictly comply with the requirements prescribed in this GC 5.2 APPLICATIONS FOR PAYMENT."
- 28.4 <u>Delete</u> paragraph 5.2.2 in its entirety and <u>replace</u> it with new paragraph 5.2.2:
 - "5.2.2 Applications for payment shall be dated the last day of each *Payment Period* which is the last day of the month preceding the month in which the application for payment is submitted pursuant to GC 5.2.1."
- 28.5 Amend paragraph 5.2.3 by adding the following to the end of that paragraph:

"but no amount claimed shall include *Product*s delivered to the *Place of the Work* unless the *Product*s are free and clear of all security interests, liens, and other claims of third parties, subject to claims for lien pursuant to the *Construction Act.*"

- Amend paragraph 5.2.4 by deleting the words "the Consultant, at least 15 calendar days" and replacing them with "the *Owner*, at least 30 calendar days"
 - and -
 - add the words "in a form acceptable to the Owner," after the words "Contract Price".
- Amend paragraph 5.2.5 by deleting the word "Consultant" and replacing it with "Owner", in each instance it appears.
- 28.8 Delete paragraph 5.2.6 in its entirety and replace it with new paragraph 5.2.6:
 - "5.2.6 Each application for payment submitted pursuant to GC 5.2.1 shall:
 - .1 be in a form prescribed, or otherwise approved in writing, by the *Owner*;
 - .2 include a statement based on the schedule of values for the lump sum items of Work;
 - .3 quantity measurements and other evidence as requested by the *Owner* for each *Unit Price* item;
 - .4 include all of the requirements for a *Proper Invoice* prescribed by the *Construction Act* and the *Contract Documents*, including Schedule A to these Supplementary Conditions;

- .5 be delivered to the *Owner* and to the *Consultant* in the same manner as a *Notice in Writing*; and
- .6 unless otherwise directed in writing by the *Owner*, by email to pay.inv@ontarionorthland.ca and to the *Owner*'s representative listed in Article A-6."
- 28.9 Amend paragraph 5.2.8 by deleting the words "using document CCDC 9A 'Statutory Declaration'.
- 28.10 Amend paragraph 5.2.9 by adding the following new sentence at the end of that paragraph:

"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 the title has passed to the *Owner* pursuant to GC 13.1 – *OWNER*SHIP OF MATERIALS."

- 28.11 Add new paragraph 5.2.10, 5.2.11, 5.2.12 and 5.2.13 as follows:
 - "5.2.10 The Contractor shall prepare and maintain current As-Built Drawings which shall consist of the Drawings and Specifications revised by the Contractor during the Work, showing changes to the Drawings and Specifications, which current As-Built Drawings shall be maintained by the Contractor and made available for review with each application for payment. The Owner reserves the right to retain a reasonable amount for the value of the As-Built Drawings not presented for review.
 - 5.2.11 Notwithstanding any other provision of this Contract, the *Contractor* shall not deliver an application for payment, for consideration as a *Proper Invoice* by the *Owner* and the Consultant, during the *Restricted Period (Proper Invoice)*.
 - 5.2.12 The *Owner* shall prepare an *Estimate* of the quantity of *Work* immediately upon the conclusion of each payment period. The first *Estimate* shall be for the quantity of *Work* performed since the *Contractor* commenced the Contract, and every subsequent *Estimate* shall be of the quantity of *Work* performed since the preceding *Estimate* was made. The *Owner* shall provide the *Estimate* to the *Contractor* within 10 calendar days after the end of the payment period, or at such other time agreed to by the *Owner* and the *Contractor* in writing. If the *Owner* has not delivered an *Estimate* to the *Contractor* within the 10 calendar days' period, the *Contractor* shall deliver a *Notice in Writing* to this effect to the *Owner*.
 - 5.2.13 Within five (5) calendar days following the delivery of the *Estimate* to the *Contractor*, the *Contractor* shall deliver its application for payment to the *Owner* in accordance with GC 5.2.1 for *Work* performed during a *Payment Period* (the "*Proper Invoice Submission Date*"), provided that if the fifth (5th) calendar day following the delivery of the *Estimate* to which an invoice relates falls on a calendar day that is not a *Working Day*, the *Proper Invoice Submission Date* shall be deemed to fall on the next *Working Day*. The parties hereby consent to the giving and receiving of *Proper Invoices* electronically and in accordance with the requirements of GC 5.2.1.
 - 5.2.14 Upon receipt of an application for payment submitted for payment by the *Contractor* in accordance with GC 5.2 APPLICATIONS FOR PAYMENT, the *Owner* will assess whether all of the requirements for a *Proper Invoice* are satisfied and, if the application for payment does not meet the requirements, the *Owner* will return the application for payment to the *Contractor* with reasons setting out why the application for payment does not meet the requirements for a *Proper Invoice* and the *Contractor* may resubmit the application for payment with all required information within 3 *Working Days* of the *Contractor's* receipt of the *Owner's* or *Consultant's* reasons. For clarity,
 - .1 if an application for payment does not include all of the requirements for a *Proper Invoice* required by GC 5.2.6, it shall not be considered a "Proper Invoice" for the purposes of the *Construction Act* and the *Owner* shall have no obligation to make a payment and the time periods set out in GC 5.3 PAYMENTS and in Section 6.4 of the *Construction Act* shall not apply until the *Contractor* has submitted an application for payment that includes all information required by GC 5.2.6;
 - .2 if the *Contractor* fails, refuses, or neglects to resubmits its application for payment within 3 *Working Days* after it is returned in accordance with this GC 5.2.14, the *Contractor* shall be deemed to have failed to deliver its application for payment and GC 5.2.1 shall apply;
 - .3 where the *Contractor* disagrees with the *Owner's* assessment that some of the of the requirements for a *Proper Invoice* required by GC 5.2.6 are missing from its application for payment, nothing in

- this GC 5.2.14 shall prevent the *Contractor* from resubmitting the same application for payment without any additional or new information; and
- .4 the Owner reserves the right, in its sole, absolute and unfettered discretion, to waive an error or minor irregularity in any application for payment delivered by the Contractor for the purposes of deeming an application for payment a "Proper Invoice" within the meaning of the Construction Act, but the Owner shall be under no obligation to exercise this right."

29. GC 5.3 PAYMENT

- 29.1 Delete paragraph 5.3.1 in its entirety and replace it with new paragraph 5.3.1:
 - "5.3.1 After receipt by the *Owner* of an application for payment submitted by the *Contractor* in accordance with GC 5.2 APPLICATIONS FOR PAYMENT:
 - .1 the Owner will either:
 - (a) issue to the *Contractor*, a certificate for payment in the amount applied for in the *Proper Invoice*, or
 - (b) issue to the Contractor, a certificate for payment for an amount determined by the Owner to be properly due to the Contractor after applying any credits, withheld amounts, or other set-offs which the Owner has determined that the Owner is entitled to notwithstanding any notice of dispute or disagreement that the Contractor may have served, along with the Owner's reasons why an amount other than what is claimed in the Proper Invoice is properly due to the Contractor, and the Owner shall issue a Notice of Non-Payment, if any, in accordance with GC 5.3.3;
 - .2 the Owner shall make payment to the Contractor, on account as provided in Article A-5,
 - (a) in the amount stated in the certificate for payment, or
 - (b) in the amount stated in the certificate for payment less such amount stated in the *Owner's Notice* of *Non-Payment* issued pursuant to GC 5.3.3.

on the 28th calendar day after receipt of a *Proper Invoice*, unless such 28th calendar day lands on a day that is other than a *Working Day*, in which case payment shall be made on the next *Working Day* after such 28th day."

- 29.2 Add new paragraph 5.3.3 as follows:
 - "5.3.3 In the event that the application for payment delivered by the Contractor pursuant to GC 5.2 APPLICATIONS FOR PAYMENT does not include the requirements for a Proper Invoice or if the Owner disputes the amount claimed as payable in the Proper Invoice, then the Owner shall within 14 calendar days of receipt of the application for payment, issue a Notice of Non-Payment (Form 1.1)."
- 29.3 Add new paragraph 5.3.4 as follows:
 - '5.3.4 Where the *Owner* has delivered a *Notice of Non-Payment*, as specified under GC 5.3.3, the *Owner* and the *Contractor* shall first engage in good faith negotiations to resolve the *Dispute*. If within 10 calendar days following the issuance of a *Notice of Non-Payment*, the *Owner* and the *Contractor* cannot resolve the *Dispute*, either party may issue a notice of adjudication in the form prescribed under the *Construction Act*, in which case the *Owner* and the *Contractor* will agree to submit the *Dispute* to *Adjudication* as set out under PART 8 DISPUTE RESOLUTION. The amounts disputed and described under the *Notice of Non-Payment* shall be held by the *Owner* until all disputed amounts of the relevant *Proper Invoice* have been resolved pursuant to PART 8 DISPUTE RESOLUTION. Any portion of the *Proper Invoice* which is not the subject of the *Notice of Non-Payment* shall be payable within the time period set out in paragraph 5.3.1.2."
- 29.4 Add new paragraph 5.3.5 as follows:

- "5.3.5 Without limitation, the *Owner* shall be entitled to deduct from or, set off against, any payment of the *Contract Price* and any other amounts payable by the *Owner* to the *Contractor* under the *Contract*:
 - any amount expended by the *Owner* in exercising the *Owner*'s rights under this *Contract* to perform any of the *Contractor*'s obligations that the *Contractor* has failed to perform;
 - .2 any damages, costs or expenses (including, without limitation, reasonable legal fees and expenses) incurred by the *Owner* as a result of the failure of the *Contractor* to perform any of its obligations under the *Contract*; or
 - .3 any other amount owing from the *Contractor* to the *Owner* under this *Contract*."
- 29.5 Add new paragraph 5.3.6 as follows:
 - "5.3.6 The Contractor represents, warrants, and covenants to the Owner that it is familiar with its prompt payment and trust obligations under the Construction Act and will take all required steps and measures to ensure that it complies with the applicable prompt payment and trust provisions under the Construction Act including, without limitation, section 8.1 of the Construction Act. Evidence of the Contractor's compliance under this paragraph 5.3.6 will be made available to the Owner within 5 Working Days following receipt by the Contractor of a Notice in Writing making such request."

30. GC 5.4 SUBSTANTIAL PERFORMANCE OF THE WORK AND PAYMENT OF HOLDBACK

- 30.1 Delete paragraph 5.4.1 in its entirety and replace it with the following:
 - "5.4.1 The Owner and the Contractor will review the Work to jointly certify or verify the validity of the application for Substantial Performance of the Work and jointly state the date of Substantial Performance of the Work in a certificate.
- 30.2 Delete paragraph 5.4.2 in its entirety and replace it with the following:
 - "5.4.2 After the date of Substantial Performance of the Work is established, the Contractor and all Subcontractors who have completed their subcontracts shall complete on a commercially reasonable efforts basis within 30 days all deficient work including providing the required Close-Out Documentation, unless the reasons for any delay is Acceptable to the Owner. All deficient work not completed within the above time may be completed by the Owner and the cost of this work may at the option of the Owner be deducted from the Contractor's next application for payment, or otherwise recoverable upon written demand by the Owner to the Contractor."
- 30.3 Delete paragraph 5.4.3 and replace it with the following:
 - "5.4.3 Immediately following the issuance of a certificate of *Substantial Performance of the Work*, the *Contractor* shall publish the certificate referred to in paragraph 5.4.1 in the manner provided in the *Construction Act*. Failing valid publication by the *Contractor* within 3 *Working Days* following the issuance of the certificate, the *Owner* shall be at liberty to publish the certificate and back-charge the *Contractor* for its reasonable costs for doing so."
- 30.4 Delete paragraph 5.4.4 and replace it with the following:
 - '5.4.4 After publication of the certificate of the *Substantial Performance of the Work*, the *Contractor* shall submit an application for payment of the outstanding *Construction Act* holdback amount, which application for payment shall:
 - .1 include all of the requirements listed in Schedule A to these Supplementary Conditions, as applicable to the application for payment of the holdback amount; and
 - .2 include a statement that the *Contractor* has not received any written notices of lien or any claims for liens from any *Subcontractor* or *Supplier*.

After the receipt of a complete application for payment of the holdback amount from the *Contractor*, the *Owner* will issue a certificate for payment of the holdback amount, provided that such amount is subject to and will only become due and payable in accordance with GC 5.4.5 and the *Construction Act*."

- 30.5 <u>Delete</u> paragraph 5.4.5 and <u>replace</u> it with the following:
 - "5.4.5 The *Construction Act* holdback amount shall become due and payable the day immediately following the expiration of the holdback period prescribed by the *Construction Act*, subject to the occurrence of any of the following:
 - .1 the preservation of a lien in respect of the *Project* that has not been satisfied, discharged or otherwise provided for in accordance with the *Construction Act*;
 - .2 receipt by the *Owner* of a written notice of lien that has not been satisfied, discharged or otherwise provided for in accordance with the *Construction Act*; or
 - .3 prior to the expiry of 40 calendar days following the publication of the certificate of *Substantial Performance of the Work*, the *Owner* publishes a *Notice of Non-Payment* of holdback in accordance with the *Construction Act*, setting out the amount of holdback that will not be paid, which may include non-payment to secure the correction of deficiencies and/or the completion of the *Work*."
- 30.6 Add new paragraph 5.4.7 as follows:
 - "5.4.7 Where the *Construction Act* allows for release of *Construction Act* holdback on subcontract work which is 100% complete prior to the release of holdback contemplated under GC 5.4.5, the *Contractor* may make application to the *Owner* and the *Consultant* by written request for a review by the *Consultant* to determine the date of completion of the subcontract and shall submit such supporting material as the *Consultant* may in its discretion require, including:
 - .1 Description of the scope of *Work* included in the subcontract.
 - .2 Declaration of Last Supply by the *Subcontractor* as prescribed in subsection 31(5) of *the Construction Act* (Form 7).
 - .3 Certificate of Completion of Subcontract as prescribed in subsection 33(1) of *the Construction Act* (Form 10).
 - .4 Workplace Safety & Insurance Board Clearance Certificate for the Contractor, the Subcontractor concerned, and any other Subcontractors and Suppliers who have provided any services to the Subcontractor.
 - .5 Statutory declaration by an officer of the *Subcontractor* in the form CCDC Document 9B 2018.
 - .6 Contractor's written acknowledgement to the Owner that the requirements of the Contract Documents will not be altered by early release of the Construction Act holdback of the completed subcontracts.
 - .7 Confirmation by the bonding company that it has been notified of the intent to claim early release of holdback and does not object.
 - .8 Sufficient evidence to the *Owner's* reasonable satisfaction that, as of the date of the *Contractor's* application, no claims for lien have been preserved against the *Place of the Work* that have not been vacated by the posting of security, discharged, or otherwise addressed in accordance with GC 5.8 CONSTRUCTION LIENS."

31. GC 5.5 FINAL PAYMENT

- 31.1 <u>Delete</u> GC 5.5 FINAL PAYMENT in its entirety and <u>replace</u> it with the following:
 - "5.5.1 When *Ready-for-Takeover* has been achieved in accordance with GC 12.1 READY-FOR-TAKEOVER and the *Contractor* considers the *Work* is complete, the *Contractor* may submit an application for final payment to the *Owner* and the *Contractor* shall:

- .1 include all of the requirements set out in GC 5.2, including without limitation those requirements listed in Schedule A to these Supplementary Conditions that are specific to an application for final payment;
- .2 ensure that all warranties, Extended Warranties, records, operation and maintenance manuals, data books, literature maintenance sheets, list of outstanding work and deficiency list, Waste Management Report, keys, Certificate of Clearance from WSIB, proof of publication of the certificate of Substantial Performance of the Work and the As-Built Record Drawings are submitted to the Owner (collectively, the "Close-Out Documentation"). Such submissions shall constituent requirements for the Proper Invoice for final payment; and
- .3 if applicable, (a) written confirmation from the Owner that the deficiencies or incomplete Work waived by the Owner pursuant to GC 12.1.2 have been fully rectified as of the date of the Contractor's application for final payment, and/or (b) written confirmation, signed by the Owner and the Contractor, that the Contract Price has been reduced by a specified amount in exchange for the Owner releasing the Contractor of its obligation to rectify the certain outstanding deficiencies and/or incomplete Work waived by the Owner pursuant to GC 12.1.2, as detailed in such written confirmation."
- 5.5.2 After receipt by the *Owner* of an application for final payment submitted by the *Contractor* in accordance with paragraph 5.5.1:
 - .1 the Owner will either:
 - (a) issue to the *Contractor*, a certificate for payment in the amount applied for in the *Proper Invoice*, or
 - (b) issue to the Contractor, a certificate for payment for an amount determined by the Owner to be properly due to the Contractor after applying any credits, withheld amounts, or other set-offs that the Owner is entitled to notwithstanding any notice of dispute or disagreement that the Contractor may have served, along with the Owner's reasons why an amount other than what is claimed in the Proper Invoice is properly due to the Contractor and issue a Notice of Non-Payment, if any, in accordance with GC 5.3.3;
 - .2 the Owner shall make payment to the Contractor, on account as provided in Article A-5,
 - (a) in the amount stated in the certificate for payment, or
 - (b) in the amount stated in the certificate for payment less such amount stated in the *Owner's Notice* of *Non-Payment* issued pursuant to GC 5.3.3,

on the 28th calendar day after receipt of a *Proper Invoice*, unless such 28th calendar day lands on a day that is other than a *Working Day*, in which case payment shall be made on the next *Working Day* after such 28th day."

- 5.5.3 In the event that the application for final payment delivered by the *Contractor* does not include the requirements of GC 5.5.1 (including the requirements for a *Proper Invoice*) or where the *Owner* disputes the amount claimed as payable in the *Proper Invoice*, then the *Owner* shall within 14 calendar days of receipt of the application for payment, issue a *Notice of Non-Payment*. Where the *Owner* has delivered a *Notice of Non-Payment*, as specified under this GC 5.5.3, the *Owner* and the *Contractor* shall first engage in good faith negotiations to resolve the dispute. If within 10 calendar days following the issuance of a *Notice of Non-Payment*, the *Owner* and *Contractor* cannot resolve the dispute, either party may issue a notice of *Adjudication* in a form prescribed under the *Construction Act*. The *Owner* and *Contractor* will then submit the dispute to *Adjudication* as set out under PART 8 DISPUTE RESOLUTION.
- 5.5.4 The amounts disputed and described under the *Notice of Non-Payment* shall be held by the *Owner* until all disputed portions of the *Proper Invoice* for final payment have been resolved in accordance with PART 8 DISPUTE RESOLUTION. Any portion of the *Proper Invoice* which is not the subject of a *Notice of Non-Payment* shall be payable within the time period set out in paragraph 5.5.2.2.

- 5.5.5 Subject to the provision of paragraph 10.4.1 of GC 10.4 WORKERS' COMPENSATION, and any lien legislation applicable to the *Place of the Work*, the *Owner* shall make payment, to the *Contractor* in accordance with paragraph 5.5.2.2.
- 5.5.6 Notwithstanding anything else in this GC 5.5 FINAL PAYMENT the *Owner* shall retain a finishing holdback as provided for in the *Construction Act*, which shall be released to the *Contractor* upon expiry of the lien period provided for under the *Construction Act*, provided no construction liens have been registered.
- 5.5.7 As additional requirements for release of finishing construction lien holdback, the *Contractor* shall submit the following documentation:
 - .1 a written declaration that no claims for lien or written notices of lien have been received by it;
 - .2 a Statutory Declaration in the form set out in Schedule B that all accounts for labour, subcontracts, Products, construction machinery and equipment, and other indebtedness which may have been incurred by the Contractor and for which the Owner might in any way be held responsible have been paid in full up to the previous progress payment, except for amounts properly retained as a holdback or as an identified amount in dispute; and
 - .3 a Workplace Safety & Insurance Board Clearance Certificate."

32. GC 5.8 WITHHOLDING OF PAYMENT

32.1 Add new paragraph GC 5.8 WITHHOLDING OF PAYMENT as follows:

"GC 5.8 WITHHOLDING OF PAYMENT

- 5.8.1 Upon notice to the *Contractor*, the *Owner* may, subject to the *Owner*'s requirement to issue a *Notice of Non-Payment* under the *Construction Act*, withhold or retain all or any portion of any payment due to the *Contractor* under this *Contract* to ensure the performance of the *Work* or to protect the *Owner*'s rights in respect of the events set out in this paragraph 5.8.1, but only such portion of any payment as is reasonably necessary for such purpose. The *Owner* may make such withholding or retention upon the occurrence and continuance of any of the following events:
 - .1 the *Contractor* is in default of any of its material obligations under this *Contract*;
 - .2 all or any part of such payment is attributable to *Work* which is defective or not performed in accordance with the *Contract Documents*:
 - .3 the *Contractor* has improperly failed to make prompt payments to its *Subcontractor*s and *Suppliers* respecting *Work* for which the *Owner* has made payment to the *Contractor*; or
 - .4 the amounts described in section 17(3) of the Construction Act."
- 5.8.2 In the event of deficiencies or delays in the *Work* that the *Contractor* fails or refuses to address upon receiving notice of same in accordance with the requirements of the *Contract*, the *Owner* may, without limiting the remedies available to it under this *Contract* and subject to the *Owner*'s requirement to issue a *Notice of Non-Payment* under the *Construction Act*, retain and set off as against any payments that would otherwise be owing to the *Contractor*, the reasonable costs of rectifying such deficiencies or delays as determined by the *Owner*.
- 5.8.3 In addition to any rights the *Owner* has pursuant to the *Construction Act* and subject to the *Owner*'s requirement to issue a *Notice of Non-Payment* under the *Construction Act*, if a lien is registered against the *Place of the Work* or served upon the *Owner*, or an action commenced against the *Owner*, by any *Subcontractor*, the *Owner* having made all payments currently due in accordance with the payment terms of the *Contract Documents*, the *Owner* shall have the right to withhold from any money otherwise due to the *Contractor*, the full amount claimed in the lien action plus an additional amount sufficient to satisfy all of the *Owner* expenses relating to such lien action, including legal and consulting costs. These funds, less expenses incurred, shall be released to the *Contractor* upon the full discharge of all liens and dismissal of all actions against the *Owner*."

33. GC 5.9 CONSTRUCTION LIENS

33.1 Add new GC 5.9 – CONSTRUCTION LIENS as follows:

"GC 5.9 – CONSTRUCTION LIENS

- 5.9.1 Notwithstanding anything else in this PART 5 PAYMENT, in the event a claim for lien is registered against title to the *Place of the Work* by the *Contractor*, a *Subcontractor* or a *Supplier*, or served on the *Owner* with regard to the *Project* by a *Subcontractor* or a *Supplier*, or the *Owner* receives a written notice of or claim for lien from a *Subcontractor* or a *Supplier*, the *Owner* shall be entitled to withhold any payment otherwise due to the *Contractor* until such time as such claims have been dealt with as provided below.
- 5.9.2 In the event that a claim for lien or a written notice of a lien is received by the *Owner* in relation to the *Project*, the *Contractor* shall, within 10 calendar days, at its sole expense, arrange for the vacating or the discharge of the claim for lien and/or the withdrawal of the written notice of lien or have the lien vacated pursuant to the *Construction Act*. If the *Contractor* commences an application to the *Court* to have the lien vacated, the *Contractor* shall provide the *Owner* with copies of all court documents submitted by the *Contractor* and the Order issued by the Court. If the lien is only vacated, the *Contractor* shall, if requested, undertake the *Owner*'s defence of any subsequent action commenced in the respect of the lien at the *Contractor*'s expense.
- 5.9.3 If the *Contractor* fails or refuses to take such steps as required under paragraph 5.9.2, the *Owner* shall, at its option, be entitled to take all steps necessary to vacate and/or discharge the claim for lien or the withdrawal of the written notice of lien, and all costs incurred by the *Owner* in doing so (including, without limitation, legal fees on a full indemnity basis and any payment which may ultimately be made out of or pursuant to security posted to vacate the lien) shall be the responsibility of the *Contractor*, and the *Owner* may deduct such amounts from the amounts otherwise due or owing to the *Contractor*.
- 5.9.4 Without limiting any of the foregoing, the *Contractor* shall satisfy all judgments and pay all costs resulting from any liens or any actions brought by a *Subcontractor* or *Supplier* in connection with any liens, or in connection with any other claim or lawsuit brought against the *Owner* by any person that provided services or materials to the *Project* which constituted part of the *Work*, and the *Contractor* shall indemnify the *Owner* for any and all costs (including, without limitation, legal fees on a solicitor and client basis) the *Owner* may incur in connection with such claims or actions.
- 5.9.5 Section 20(1) of the Construction Act does not apply to this *Contract* and no general lien arises under or in respect of the *Work*, such that all liens shall arise and expire on a lot-by-lot basis."

34. GC 6.1 OWNER'S RIGHT TO MAKE CHANGES

34.1 Amend paragraph 6.1.2 by adding the following to the end of that paragraph:

"This requirement is of the essence and it is the express intention of the parties that any claims by the *Contractor* for a change in the *Contract Price* and/or *Contract Time* shall not be approved unless there has been compliance with PART 6 – CHANGES IN THE WORK. No course of conduct or dealing between the parties, no express or implied acceptance of alterations or additions to the *Work* and no claims that the *Owner* has been unjustly enriched by an alteration or addition to the *Work*, whether in fact there is any such unjust enrichment or not, should be the basis for a claim for additional payment under this *Contract* or a claim for any extension of the *Contract Time*."

34.2 Add new paragraph 6.1.3 as follows:

"The *Contractor* agrees that changes resulting from construction coordination, including but not limited to site surface conditions, site coordination, and *Subcontractor* and *Supplier* coordination, are included in the *Contract Price* and shall not entitle the *Contractor* to claim an addition to the *Contract Price* in relation to coordination."

35. GC 6.2 CHANGE ORDER

35.1 Add new paragraph 6.2.4 as follows:

"The Contractor shall not be entitled to any additional compensation arising out of changes to the Work aside from the amounts determined and agreed to under this GC 6.2, or as provided in GC 6.3 – CHANGE DIRECTIVE. The Contractor's fee for overhead and profit related to a Change Order or Change Directive shall be as set out in the Contract Documents."

35.2 Add new paragraph 6.2.5 as follows:

"Change Orders are not valid and binding upon the *Owner* unless approved and executed in accordance with the *Owner*'s internal approval processes."

36. GC 6.3 CHANGE DIRECTIVE

- 36.1 Amend paragraph 6.3.6 in the second line by adding the word "actual" before the word "cost".
- 36.2 <u>Delete</u> paragraph 6.3.6.3 in its entirety and <u>replace</u> it with the following:
 - ".3 The *Contractor*'s fee shall be as specified in paragraph 6.2.4 and the *Contractor*'s fee for overhead and profit shall be as set out in the *Contract Documents*."
- 36.3 Amend paragraph 6.3.7 by adding the word "actual" before the word "cost" in line 1.
- 36.4 Amend paragraph 6.3.7.10 by adding the following to the end of the paragraph:
 - ", provided that such amounts are not caused by negligent acts, omissions, or default of the *Contractor* or *Subcontractor*;"
- 36.5 Delete GC 6.3.7.17 in its entirety including all subparagraphs.
- 36.6 Amend paragraph 6.3.12 by deleting the words "the adjustment shall be referred to the Consultant for determination" and replacing them with "the *Dispute* shall be resolved in accordance with PART 8 DISPUTE RESOLUTION."

37. GC 6.4 CONCEALED OR UNKNOWN CONDITIONS

37.1 Delete paragraph 6.4.2 in its entirety and replace it with the following:

"The *Owner* will promptly investigate such conditions. If the *Owner* determines that the conditions differ materially and would cause an increase or decrease in the *Contractor*'s cost or time to perform the *Work*, the *Owner* will issue instructions for a change in the *Work* as provided in GC 6.2 – CHANGE ORDER or GC 6.3 – CHANGE DIRECTIVE. If the *Owner* determines that the conditions at the *Place of the Work* are not materially different or that no change in the *Contract Price* or the *Contract Time* is justified, the *Owner* will provide its reasons for this determination to the *Contractor* in writing."

37.2 Delete paragraph 6.4.3 in its entirety and replace it with the following:

"If the *Contractor* disputes the *Owner*'s determination in paragraph 6.4.2, the *Dispute* shall be resolved in accordance with Part 8 – DISPUTE RESOLUTION."

37.3 <u>Delete</u> paragraph 6.4.4 in its entirety and replace it with the following:

"The *Contractor* confirms that, prior to submitting its response to the *RFP* for the *Project*, it had the opportunity to carefully investigate the *Place of the Work* and applied to that investigation the degree of care and skill described in paragraph 3.12.1, given the amount of time provided between the issue of the *RFP* documents and the actual submission deadline for the *RFP*, the degree of access provided to the *Contractor* prior to submission of the response, and the sufficiency and completeness of the information provided by the *Owner*. 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 response."

37.4 Add new paragraph 6.4.5 as follows:

"The Contractor acknowledges that it has received the Impact Assessment Reports for the Project that are described in the RFP documents and that it has considered the mitigation measures described in the Impact Assessment Reports in the Contract Price. If the Impact Assessment Reports are not completed prior to the closing of the RFP submission deadline, any adjustments required to the Contract Price shall be determined in accordance with GC 9.6.2.3. The Impact Assessment Reports are provided for information only and the Owner shall not be liable for any errors or omissions in the reports."

37.5 Add new paragraph 6.4.6 as follows:

"If such concealed or unknown conditions relate to toxic and hazardous substances and materials, artifacts and fossils, or mould, the parties will be governed by the provisions of GC 9.2- TOXIC AND HAZARDOUS SUBSTANCES, GC 9.3 – ARTIFACTS AND FOSSILS, GC 9.5 – MOULD and GC 9.6 – IMPACT ASSESSMENT."

38. GC 6.5 DELAYS

38.1 <u>Delete</u> paragraph 6.5.1 in its entirety and <u>replace</u> it with the following:

"If the *Contractor* is delayed in the performance of the *Work* by an act or omission of the *Owner* or anyone employed or engaged by the *Owner* directly, contrary to the provisions of the *Contract Documents*, then the *Contract Time* shall be extended for such reasonable time as the *Owner* determines. The *Contractor* shall be reimbursed by the *Owner* for its reasonable direct costs directly flowing from the delay but excluding any indirect, consequential, or special damages."

38.2 Delete paragraph 6.5.2 in its entirety and replace it with the following:

"If the *Contractor* is delayed in the performance of the *Work* by a stop work order issued by a court or other *Authority Having Jurisdiction* on account of a breach, violation, contravention, or a failure to abide by any laws, ordinances, rules, regulations, or codes or the advice, recommendations and instructions of public health officials directly by the *Owner* or the *Owner's Other Contractor*(s) and relating to the *Work* or the *Place of the Work* and, providing that such order was not issued as the result of an act or fault of the *Contractor* or any person employed or engaged by the *Contractor* directly or indirectly, it results in the failure of the *Contractor* to attain *Ready-for Takeover* by the date stipulated in Article A-1 of the Agreement – THE WORK, then the *Contractor Time* shall be extended for such reasonable time as the *Owner* determines in consultation with the *Contractor*. The *Contractor* shall be reimbursed by the *Owner* for the reasonable direct costs directly flowing from the delay but excluding any indirect, consequential, or special damages."

- 38.3 <u>Delete</u> paragraph 6.5.3 in its entirety and <u>replace</u> it with the following:
 - "6.5.3.1 If the performance of the *Work* or the performance of any other obligation(s) of a party to this *Contract* is delayed by a *Force Majeure* event, then the *Contract Time* shall be extended for such reasonable time as the *Owner* and the *Contractor* shall agree. The extension of time shall not be less than the time lost as a result of the event causing the delay, unless the *Contractor* and the *Owner* agree to a shorter extension. Neither party shall be entitled to payment for its costs incurred by such delays. Upon reaching agreement on the extension of the *Contract Time* attributable to the Force Majeure event, the *Owner* and the *Contractor* shall execute a *Change Order* indicating the length of the extension to the *Contract Time* and confirming that there are no costs payable by either party to the other for the extension of *Contract Time*.
 - 6.5.3.2 Notwithstanding the foregoing, the Owner may issue a Change Directive requiring the Contractor to undertake those specific actions identified in the Change Directive as the Contractor can reasonably and safely initiate to remove or relieve either the Force Majeure event or its direct or indirect effects on the Project, in which case the Contract Price will be adjusted in accordance with paragraph 6.3.7. If the Contractor fails within the time period specified in the Change Directive to take such action, then the Owner may, at its sole and absolute discretion and after it has given Notice in Writing to the Contractor, take some or all of such actions to partially or wholly remove or relieve such Force Majeure event or its direct or indirect effects, and thereafter require the Contractor to resume the performance of the Work."
- 38.4 Delete paragraph 6.5.4 in its entirety and replace it with the following:

"No extension of the *Contract Time* will be approved unless the *Contractor* provides *Notice in Writing* to the *Owner* within 3 *Working Days* of the date upon which the *Contractor* ought reasonably to have been aware of the delay

contemplated in paragraphs 6.5.1, 6.5.2 or 6.5.3. For the *Notice in Writing* to be valid under this paragraph 6.5.4 it must include specific details about:

- .1 the cause of the delay;
- .2 the likely impact the delay will have on the *Contract Time* and details of the extension of time being requested; and
- .3 mitigation efforts, if any, undertaken by the *Contractor* or, where no mitigation efforts have been undertaken by the *Contractor*, the reasons why mitigation is either not possible or has not been undertaken by the *Contractor*."
- 38.5 Add new paragraph 6.5.6 as follows:

"If the Contractor delays the performance of the Work and such delay is for a cause within the Contractor's control, the Contractor shall pay to the Owner the per diem rate for liquidated damages specified in Article 10 of the Contract for each day of delay if Ready-for-Takeover is not achieved in accordance with the time specified in Article A-1.3. If the per diem rate for liquidated damages is not specified in the Contract Documents, the Contractor shall pay to the Owner the Administration Costs incurred by the Owner as a result of the delay."

38.6 Add new paragraph 6.5.7 as follows:

"If the *Contractor* is delayed in the performance of the *Work* due to the replacement of a representative, worker, *Subcontractor* or *Supplier* pursuant to GC 3.5.4, 3.6.2 or 3.7.4, the *Contractor* shall pay to the *Owner* the per diem rate for liquidated damages specified in Article 10 of the *Contract* for each day of delay if *Ready-for-Takeover* is not achieved in accordance with the time specified in Article A-1.3. If the per diem rate for liquidated damages is not specified in the *Contract Documents*, the *Contractor* shall pay to the *Owner* the *Administration Costs* incurred by the *Owner* as a result of the delay.

38.7 Add new paragraph 6.5.8 as follows:

"If the *Contractor* disputes the determination by the *Owner* in paragraph 6.5.1 or paragraph 6.5.2, the *Dispute* shall be resolved in accordance with Part 8 – DISPUTE RESOLUTION."

39. GC 6.6 CLAIMS FOR A CHANGE IN THE CONTRACT PRICE

- 39.1 Amend paragraph 6.6.1 by deleting the words "and to the Consultant."
- 39.2 Amend paragraphs 6.6.3 and 6.6.4 by deleting the word "Consultant" and replacing it with "other party."
- 38.3 <u>Delete</u> paragraphs 6.6.5 and 6.6.6 in their entirety and <u>replace</u> them with the following:

"The other party, with respect to a claim made by a party under paragraph 6.6.1, shall make a determination by providing *Notice in Writing* to the claiming party within 30 *Working Day*s after receipt of the claim by the other party, or within such other time period as may be agreed by the parties. If such determination is not acceptable to the claiming party, the claim shall be resolved in accordance with Part 8 – DISPUTE RESOLUTION."

40. GC 6.7 QUANTITY VARIATIONS

40.1 Delete paragraph 6.7.4 in its entirety and replace it with the following:

"The party that intends to request an adjustment to a *Unit Price* shall provide timely *Notice in Writing* to the other party. The parties shall make all reasonable efforts to agree on a revised *Unit Price*. The agreed revised *Unit Price* shall be recorded in a *Change Order*."

41. GC 7.1 OWNER'S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK OR TERMINATE THE CONTRACT

41.1 Amend paragraph 7.1.2 by adding the words "including failing or neglecting to comply with the requirements in GC 3.4 – CONSTRUCTION SCHEDULE..." immediately following the word "properly" in line one.

41.2 Amend paragraph 7.1.3.1 as follows:

Insert after the word "commences" the words "and is diligently proceeding with".

- 41.3 Revise paragraph 7.1.3.2 by substituting the words "an acceptable schedule" with "a schedule Acceptable to the *Owner*".
- 41.4 Amend paragraph 7.1.4.2 by adding to the end of the paragraph the words "and within 5 *Working Days* publish a notice of termination (form 8) in accordance with the *Construction Act*."
- 41.5 <u>Delete</u> paragraph 7.1.5.3 in its entirety and <u>replace</u> it with the following:

"charge the *Contractor* the amount by which the full costs of finishing the *Work* as determined by the *Owner*, including compensation to the *Owner* for *Administration Costs* and a reasonable allowance to cover the cost of corrections to work performed by the *Contractor* that may be required under GC 12.3 – WARRANTY, exceeds the unpaid balance of the *Contract Price*. If the cost of finishing the *Work* is less than the unpaid balance of the *Contract Price*, the *Owner* shall pay the *Contractor* on the expiry of the warranty period specified in paragraph 12.3.1 for that portion of the *Work* performed by the *Contractor*, provided that such payment shall be made only in accordance with the requirements set out in GC 5.5 – FINAL PAYMENT and GC 5.8 - WITHOLDING FROM PAYMENT".

- Amend paragraph 7.1.5.4 by substituting the words "the difference" at the end of paragraph 7.1.5.4 with the words "for that portion of the *Work* performed by the *Contractor*, provided that such payment shall be made only in accordance with the requirements set out in GC 5.5 FINAL PAYMENT and GC 5.8 WITHHOLDING FROM PAYMENT."
- 41.7 Add new paragraph 7.1.7 as follows:

"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* or terminate the *Contract* by giving *Notice in Writing* to that effect to the *Contractor* identifying the reason for the termination or the suspension and the expected length of the suspension. Such suspension or termination shall be effective in the manner specified in the *Notice in Writing* and shall be without prejudice to any claims which either party may have against the other."

41.8 Add new paragraph 7.1.8 as follows:

"The *Contractor* upon receiving notice of suspension or termination from the *Owner* shall suspend all operations as soon as reasonably possible except 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. In the event of such suspension, the *Contractor* shall be reimbursed by the *Owner* for the reasonable costs incurred by the *Contractor* for such protection. 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."

41.9 Add new paragraph 7.1.9 as follows:

"During the period of suspension, the *Contractor* shall not remove from the *Place of the Work* any part of the *Work*, or any *Product* or materials without the consent of the *Owner*."

41.10 Add new paragraph 7.1.10 as follows:

"If the *Work* should be suspended for a period of 30 days or less, the *Contractor*, upon the expiration of the period of suspension, shall resume the performance of the *Work* in accordance with the *Contract Documents*. If the suspension was not due to an act or an omission of the *Contractor*, there shall be an equitable adjustment to the *Contract Time* and the *Contract Price* as agreed upon by the *Owner* and the *Contractor*."

41.11 Add new paragraph 7.1.11 as follows:

"If, after 30 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 the terms and conditions agreed upon by the *Owner* and the *Contractor*."

41.12 Add new paragraph 7.1.12 as follows:

"The *Owner* may terminate this *Contract* at any time for any or no reason. Such termination shall be effective upon the date specified in the *Owner's Notice in Writing* advising of the termination of the *Contract* pursuant to this paragraph 7.1.12. In such event, the *Owner* shall pay for the actual and verifiable *Work* performed up to the effective date of termination, including demobilization costs, and for such additional costs, if any, directly flowing from and which are a reasonable consequence of the termination, but excluding any consequential, indirect or special damages, termination fees, penalties or levies, and any claims for loss of profit, lost deposits, or lost opportunity. The *Owner* shall not be liable to the *Contractor* for any other claims, costs or damages whatsoever arising from such termination of the *Contract*. Within 3 *Working Days* of termination by the *Owner*, the *Contractor* shall deliver a *Notice in Writing* to each of its *Subcontractors and Suppliers* confirming the effective date of the termination."

42. GC 7.2 CONTRACTOR'S RIGHT TO SUSPEND THE WORK OR TERMINATE THE CONTRACT

- 42.1 Amend paragraph 7.2.1 by adding to the end of the paragraph the words "and within 5 *Working Day*s publish a notice of termination (form 8) in accordance with the *Construction Act*."
- 42.2 Amend paragraph 7.2.2, by:
 - .1 adding the following after the words "public authority" in the second line:

"on account of a breach, violation, contravention, or a failure to abide by any laws, ordinances, rules, regulations, or codes of *Authorities Having Jurisdiction*, directly by the *Owner* or the *Owner's Other Contractor*(s) and relating to the *Work* or the *Place of the Work*,";

and,

.2 adding the following to the end of the paragraph:

"unless an acceptable arrangement for an extension of the *Contract Time* is agreed to by the *Contractor* and the *Owner*."

- 42.3 Amend paragraph 7.2.3 by:
 - .1 deleting the words "with a copy to the Consultant" in the first line;
 - .2 deleting paragraph 7.2.3.1 in its entirety and replace it with "Intentionally left blank";
 - .3 amending paragraph 7.2.3.2 by deleting the word "Consultant" and replacing it with "Owner";
 - .4 deleting paragraph 7.2.3.3 in its entirety and replacing it with the following:

"the *Owner* fails to pay the *Contractor* when due the amount certified by the *Owner* or awarded by arbitration or a Court, except where the *Owner* has a bona fide claim for set off or otherwise under GC 5.8 – WITHOLDING FROM PAYMENT; or"

and

- amending paragraph 7.2.3.4 by deleting all the words following the word "degree" and replacing them with "and the *Contractor* confirms by a detailed *Notice in Writing* to the *Owner* that sufficient cause exists. Such detailed *Notice in Writing* must contain particulars, including references to the *Contract Documents*, and supporting documentation demonstrating the alleged default by the *Owner*."
- 42.4 Amend paragraph 7.2.4 by adding to the end of the paragraph the words "and within 5 *Working Day*s publish a notice of termination (form 8) in accordance with the *Construction Act*."
- 42.5 <u>Delete</u> 7.2.5 in its entirety and <u>replace</u> it with the following:

"If the *Contractor* terminates the *Contract* under the conditions described in this GC 7.2, 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 costs associated with termination, including the costs of demobilization, losses sustained on *Products* and construction machinery and equipment. The *Contractor* shall not be entitled to any recovery for any indirect, special or consequential losses."

43. GC 8.1 AUTHORITY OF THE CONSULTANT

- 43.1 Amend paragraph 8.1.1 by deleting the words "which are not resolved in the first instance by findings of the Consultant as provided in GC 2.2 ROLE OF THE CONSULTANT".
- 43.2 Delete paragraph 8.1.2 in its entirety and replace it with "Intentionally left blank".
- 43.3 Amend paragraph 8.1.3 by deleting the word "Consultant" and replacing it with "Owner" in each instance where it occurs in the paragraph.

44. GC 8.2 ADJUDICATION

44.1 <u>Delete</u> GC 8.2 – ADJUDICATION in its entirety, including all subparagraphs thereunder.

45. GC 8.3 NEGOTIATION, MEDIATION, ARBITRATION AND ADJUDICATION

45.1 <u>Delete</u> GC 8.3 – NEGOTIATION, MEDIATION, AND ARBITRATION, including all paragraphs thereunder and <u>replace</u> it with the following:

"GC 8.3 - NEGOTIATION, MEDIATION, ARBITRATION AND ADJUDICATION

- "8.3.1 Save and except where the *Contractor* has given an undertaking, in accordance with the *Construction Act*, to refer a *Dispute* to *Adjudication*, prior to delivering a notice of *Adjudication* in a form prescribed by the *Construction Act*, the parties agree to first address all *Disputes* in a tiered approach as follows:
 - .1 A *Dispute* shall be referred to the *Owner's* project manager for the *Project* and a representative of the *Contractor* of the equivalent seniority or position for resolution within a period not to exceed 30 days.
 - .2 If unresolved, after following the process described in paragraph 8.3.1.1, the *Dispute* shall be referred to the *Owner's* Director or Vice President who is responsible for the *Project* and an employee of the *Contractor* of the equivalent seniority or position for resolution within a period not to exceed 30 days.
 - .3 If unresolved after following the process described in paragraph 8.3.1.2, and only at the election of the *Owner*, the *Dispute* shall be referred to the President and CEO of the *Owner* and the most senior executive employee of the *Contractor* for resolution within a period not to exceed 30 days. If the *Owner* does not elect, at its sole option, to proceed under this paragraph 8.3.1.3, the *Dispute* may proceed to under either step as described in paragraphs 8.3.2 or 8.3.3.
- 8.3.2 If the *Dispute* remains unresolved despite the parties' attempting to resolve it following the process in paragraph 8.3.1, a party may elect to proceed with the *Dispute* by way of an *Adjudication*. If a party elects to proceed by way of an *Adjudication*, the other party shall not be bound to proceed by way of an *Adjudication*, save and except where the parties are obliged under the *Construction Act*. The following procedures shall apply to any *Adjudications* the parties engage in under the *Construction Act*:
 - .1 any hearings shall be held in the offices of the *Owner*, or, if such offices are unavailable, another venue as the parties may agree and which is acceptable to the adjudicator;
 - .2 the Adjudication shall be conducted in English;
 - .3 each party may be represented by counsel throughout an *Adjudication*;
 - .4 there shall not be any oral communications with respect to issues in dispute that are the subject of an *Adjudication* between a party and the adjudicator unless it is made in the presence of both parties or their legal representatives; and

- .5 a copy of all written communications between the adjudicator and a party shall be given to the other party at the same time.
- 8.3.3 Any documents or information disclosed by the parties during an *Adjudication* are confidential and the parties shall not use such documents or information for any purpose other than the *Adjudication* in which they are disclosed and shall not disclose such documents and information to any third party, unless otherwise required by law, save and except the adjudicator.
- 8.3.4 In respect of any claim or dispute, if the *Contractor* fails to comply with any of the notice requirements set out in the *Contract Documents* then the *Contractor* shall be barred from advancing such claim(s) or dispute(s) and shall have no entitlement whatsoever in respect of such claim(s) or dispute(s) (including to an increase in payment under the *Contract*, or an extension of *Contract Time*) and by failing to comply with the notice requirements waives the right to make any such claim(s) or dispute(s) in an *Adjudication* or in any other form of dispute resolution available under this *Contract* or at law. This GC 8.3.4 shall operate conclusively as an estoppel and bar in the event such claims or disputes are brought in an *Adjudication* or other form of dispute resolution and the *Owner* may rely on this GC 8.3.4 as a complete defence to any such claims or disputes.
- 8.3.5 The parties hereby acknowledge and agree:
 - that counterclaims, claims of set-off or the exercise or use of other contractual rights that permit the Owner to withhold, deduct or retain from monies otherwise owed to the Contractor under the Contract may be referred to, and included as part of, Adjudications under the Construction Act;
 - .2 that disputes related to the termination or abandonment of the *Contract*, as well as any disputes that arise or are advanced following the termination or abandonment of the *Contract*, shall not be referred to *Adjudication* under the *Construction Act*;
 - .3 that notice(s) of *Adjudication*, with respect to any dispute or claim relating to the *Project*, shall not be given, and no *Adjudication* shall be commenced following *Ready-for-Takeover*, abandonment, or termination of the *Contract*;
 - .4 that any *Adjudication* between the *Contractor* and a *Subcontractor* or a *Supplier* that relates to an *Adjudication* between the *Owner* and the *Contractor* shall be joined together to be adjudicated by a single adjudicator, provided that the adjudicator agrees to do so, and the *Contractor* shall include a provision in each of its subcontracts that contain an equivalent obligation to this GC 8.3.5.4; and
 - that, other than where the *Contractor* is obliged to commence an *Adjudication* pursuant to an undertaking under the *Construction Act*, neither the *Owner* nor the *Contractor* shall commence an *Adjudication* during the *Restricted Period (Adjudication)*.
- 8.3.6 If the *Dispute* remains unresolved despite the parties attempting to resolve it following the process in paragraph 8.3.1 or, following a determination of the *Dispute* pursuant to an *Adjudication* under paragraph 8.3.2, a party may elect to proceed with the *Dispute* under a mediation model to be agreed upon by the parties. A party shall elect to proceed to mediation no later than: (i) 10 days following the expiry of the timeline set out in paragraphs 8.3.1.2 or 8.3.1.3, whichever is the later, or (ii) 10 days following the rendering of the adjudicator's determination following an *Adjudication*. Where a party elects to proceed with mediation within the timelines prescribed in this paragraph 8.3.6, the other party shall be bound to proceed to mediation. No later than 10 days after a party makes an election to proceed to mediation, or such longer period as may be mutually agreed between the parties, the parties shall enter into a mediation agreement which shall set out the mediation process and designate the mediator.
- 8.3.7 If neither party elects to proceed to mediation within the timelines outlined in paragraph 8.3.5 or 8.3.6, or the parties are unable to enter into a mediation agreement within the time limits, the matter shall proceed and be finally resolved by binding arbitration by a single arbitrator in accordance with the *Arbitration Act* by an arbitration agreement to be executed by the parties and the arbitrator. The parties shall mutually agree on the selection of the arbitrator, failing which the arbitrator shall be appointed in accordance with the *Arbitration Act*. The arbitration proceedings shall take place in Toronto, Ontario, Canada. The language of the arbitration shall be English. The parties agree that any arbitration award, including with respect to costs, shall be binding on the parties, may be enforced in any court of competent jurisdiction and shall be final and no appeals or judicial reviews shall be permitted as of right or by application to any

court of competent jurisdiction, except on errors of law. The parties shall each bear their own costs and their proportionate share of any joint costs of arbitration, subject to any award of an arbitrator.

8.3.8 The timelines in GC 8.3 may be amended by mutual agreement of the parties."

46. GC 8.4 RETENTION OF RIGHTS

- 46.1 Amend paragraph 8.4.1 by deleting all the words after "the party has" and replacing them with "complied with the provisions of GC 8.3."
- 46.2 Amend paragraph 8.4.2 by replacing "paragraph 8.3.6" with "paragraph 8.3.7".
- 46.3 Add new paragraph 8.4.3 as follows:
 - "8.4.3 If the parties proceed with an arbitration as described in paragraph 8.3.7, the *Contractor* agrees that this paragraph 8.4.3 shall be construed as a formal consent to the stay of any lien proceedings until an award is rendered in the arbitration or such dispute as otherwise resolved between the parties. In no event shall the *Contractor* be deprived of its right to enforce its lien against the *Project* should the *Owner* fail to satisfy any arbitral award against it in full on the dispute in respect of which the lien proceedings were commenced. Provided nothing in this paragraph 8.4.3 shall prevent the *Contractor* from taking the steps required by the *Construction Act* to preserve and/or perfect a lien to which it may be entitled."

47. GC 9.1 PROTECTION OF WORK AND PROPERTY

Amend paragraph 9.1.1.1 by adding the following words at the end of that paragraph:

- "...which the *Contractor* could not reasonably have discovered applying the degree of care and skill described in paragraph 3.4.1 to its review of the *Contract Documents*."
- 47.1 <u>Delete</u> paragraph 9.1.2 in its entirety and <u>replace</u> it with new paragraph 9.1.2:

"Before commencing any work, the *Contractor* shall determine the locations of all underground utilities and structures indicated in the *Contract Documents* or that are discoverable by applying to an inspection of the *Place of Work* the degree of care and skill described in paragraph 3.12.1."

47.2 Add new paragraph 9.1.5 as follows:

"The Contractor shall neither undertake to repair and/or replace any damage whatsoever to the work of Other Contractors, or to adjoining property, nor acknowledge the same was caused or occasioned by the Contractor, without first consulting the Owner and receiving written instructions as to the course of action to be followed from the Owner. However, where there is danger to life or public safety, the Contractor shall take such emergency action as it deems necessary to remove the danger."

48. GC 9.2 TOXIC AND HAZARDOUS SUBSTANCES

- 48.1 Amend paragraph 9.2.7.3 by deleting the words "Consultant may recommend" and replacing them with the words "Owner may determine in consultation with".
- 48.2 Add new paragraph 9.2.10 as follows:

"The Contractor shall indemnify and hold harmless the Owner, its agents and employees from and against claims, demands, losses, costs, damages, actions, suits or proceedings arising out of or resulting from exposure to, or the presence of, toxic or hazardous substances or materials which were either brought on to the Place of the Work by the Contractor, or anyone for whom the Contractor is in law responsible, and mishandled or handled negligently or improperly by the Contractor, or anyone for whom the Contractor is in law responsible, thereby creating exposure to toxic or hazardous substances or materials. This obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity set out in GC 13.1 – INDEMNIFICATION or elsewhere in the Contract or which otherwise exist respecting a person or party described in this paragraph."

49. GC 9.4 CONSTRUCTION SAFETY

- 49.1 <u>Delete</u> paragraph 9.4.1 in its entirety and <u>replace</u> it with the following:
 - 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. Without limiting the generality of the foregoing, the Contractor shall comply with the occupational health and safety laws and regulations and any orders, recommendations and restrictions made by the federal, provincial or municipal governments and the advice, recommendations and instructions of public health officials, as they apply to the Place of the Work. If the Place of the Work is located on the Owner's premises, the Contractor shall comply with all the Owner's policies and directions to ensure the health and safety of the Owner's employees and Other Contractors as well as the Contractor's employees, Subcontractors and Suppliers. The Contractor shall submit its Health and Safety Plan to the Owner for Acceptance prior to commencing the Work, which Plan shall include all the elements required by the Specifications for a Health and Safety Plan. The Contractor shall indemnify and hold harmless the Owner for any fines, penalties or other costs imposed or assessed on or incurred by the *Owner* arising from the *Contractor*'s failure to comply with the applicable health and safety laws, any orders, recommendations and restrictions of the federal, provincial or municipal governments or the advice, recommendations and instructions of public health officials."
- 49.2 Amend GC 9.4.2 by adding the following words after "and the *Contractor*":
 - ", Subcontractors and Suppliers".
- 49.3 Amend GC 9.4.3 by adding the following words after "and the Contractor":
 - ", Subcontractors and Suppliers".
- 49.4 <u>Delete</u> paragraph 9.4.4 in its entirety and <u>replace</u> it with the following:
 - "9.4.4 Prior to the commencement of the Work, the Contractor shall submit to the Owner:
 - .1 a current WSIB clearance certificate;
 - .2 copies of the *Contractor*'s insurance policies having application to the *Project* or certificates of insurance, at the option of the *Owner*;
 - .3 documentation of the *Contractor*'s in-house safety-related programs; and
 - .4 a copy of the Notice of *Project* filed with the Ministry of Labour naming itself as "Constructor" under the *Occupational Health and Safety Act.*"
- 49.5 Delete paragraph 9.4.5 in its entirety and replace it with the following:

"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 under the Occupational Health and Safety Act and any breaches of the Emergency Management and Civil Protection Act and related orders, recommendations or regulations, including the payment of legal fees and disbursements on a full indemnity basis."

- 49.6 Add new paragraph 9.4.6 as follows:
 - "9.4.6 The Contractor shall ensure that it and its employees, Subcontractors and Suppliers are aware of and, while being on the Owner's property, comply with the Owner's policies, including its Fit for Duty Policy, and with the Ontario Northland Operating Manual, including the Current Summary Bulletin, current Ontario Northland Time Table, C.R.O.R. 2022, Infrastructure Special Instructions, Dangerous Goods and Ontario Northland General Operating Instructions, as applicable."
- 49.7 Add new paragraph 9.4.7 as follows:

"9.4.7 In the event of an emergency threatening health, life or property, the *Contractor* shall take such action as may be necessary to save lives and protect persons from injury and to protect and preserve the property. The *Contractor* shall notify the *Owner* of such emergency as promptly as is practical under the circumstances."

50. GC 9.5 MOULD

Amend paragraph 9.5.3.3 by deleting the words "Consultant may recommend" and replacing them with the words "Owner may determine".

51. GC 9.6 IMPACT ASSESSMENT

51.1 Add new GC 9.6 – IMPACT ASSESSMENT as follows:

"GC 9.6 IMPACT ASSESSMENT

- 9.6.1 The *Contractor* shall be responsible for:
 - .1 ensuring that any potential impacts and areas of concern identified in the *Contract Documents* or Impact Assessment Reports, if provided, are mitigated during the *Work*; and,
 - .2 identifying any previously unknown impacts relating to fish, navigable waters, species at risk, vegetation, wildlife, socio-economic and heritage that arise prior to commencing the *Work* and during the *Work*.
- 9.6.2 If the *Contractor* or *Owner* observes or reasonably suspects the presence of any impacts described in paragraph 9.6.1.2 that are not mentioned or accounted for in the *Contract Documents* or Impact Assessment Reports, if any, and related mitigation plans,
 - .1 the observing party shall immediately report the circumstances to the other party;
 - .2 the *Contractor* shall immediately take reasonable steps, including stopping the *Work* if necessary, to ensure that any potential impacts are mitigated; and,
 - .3 if the *Owner* and *Contractor* do not agree on the existence, significance or mitigation measures for the impact, the *Owner* shall retain and pay for an independent qualified expert to investigate and determine the issue and the parties will enter into a Change Order if the mitigation measures will cause an increase or decrease in the *Contractor*'s cost or time to perform the *Work*.
- 9.6.3 If the *Contractor* fails to comply with the requirements in paragraph 9.6.2, the *Contractor* shall:
 - .1 be responsible for all costs incurred by the *Owner* or the *Contractor* to mitigate the damage caused due to the failure;
 - .2 not be entitled to request a Change Order relating to the failure to comply; and
 - .3 indemnify the *Owner* and hold it harmless from any claims, damages, costs, fines or other expenses, including reasonable legal fees and expenses, relating to or arising from the *Contractor's* failure to comply with paragraph 9.6.2."

52. GC 9.7 ENVIRONMENTAL PROTECTION FOR CONSTRUCTION IN AND AROUND WATERBODIES

52.1 Add new GC 9.7 – ENVIRONMENTAL PROTECTION FOR CONSTRUCTION IN AND AROUND WATERBODIES as follows:

"GC 9.7 ENVIRONMENTAL PROTECTION FOR CONSTRUCTION IN AND AROUND WATERBODIES

9.7.1 The *Contractor* shall comply with the environmental protection requirements and mitigation measures that apply to construction involving work in and around waterbodies and on waterbody banks as set out in OPSS.PROV 182.

- 9.7.2 Pursuant to section 38(4) of the *Fisheries Act*, the *Contractor* has an obligation to notify the Department of Fisheries & Oceans("DFO") when the *Work* results in the unauthorized death of fish or a harmful alteration, disruption or destruction ("HADD") of fish habitat or where there is imminent danger that the death of fish or HADD of fish habitat could occur. The notification shall be done using the form attached as Schedule D. The *Contractor* shall also notify the *Owner* of any such incidents. Failure to notify DFO of such incidents is a federal offence.
- 9.7.3 In accordance with the Fisheries Act, notification must be made without delay to DFO after the *Contractor* ensures the immediate health and safety risks are managed at the *Place of the Work*. Updates to DFO may be provided at a later time, if required.
- 9.7.4 All spills and sediment releases into a waterbody during the *Work* must be immediately reported by the *Contractor* to the *Owner* who must report the release to the Spills Action Centre ("SAC") operated by the Ministry of Environment, Conservation and Parks ("MECP") at 800-288-6060. If the *Owner* is not available, the *Contractor* shall report the incident to SAC. The *Contractor* shall take all reasonable measures to mitigate or remedy any adverse effects that result from the occurrence or might reasonably be expected to result from it."

53. GC 9.8 ENVIRONMENTAL SPILLS AND RELEASES

53.1 Add new GC 9.8 – ENVIRONMENTAL SPILLS AND RELEASES as follows:

"GC 9.8 ENVIRONMENTAL SPILLS AND RELEASES

- 9.8.1 All spills and releases of hazardous substances in the course of the *Work* must be immediately reported by the *Contractor* to the *Owner* who will report the spill or release to the MOECP SAC. If the *Owner* is not available, the *Contractor* shall report the incident to the MOECP SAC and the ONTC RTC at 800-558-4129 or Ext. 141.
- 9.8.2 The *Contractor* shall take immediate steps to mitigate the damage to the environment and contain the spill or release. If the *Contractor* does not take timely action or, if the *Contractor* is not available, the *Owner* may direct others to remedy the situation.
- 9.8.3 If the spill or release was the fault of the *Contractor*, the remedial work shall be completed at the cost of the *Contractor* and with no additional cost to the *Owner* and the *Owner* shall be entitled to seek reimbursements for all costs associated with the remedial work including the cost of work done by third parties.
- 9.8.4 If the spill or release was not the fault of the *Contractor*, the *Owner* shall pay for the remedial work.

54. GC 10.1 TAXES AND DUTIES

54.1 Amend paragraph 10.1.2 by adding the following sentence at the end of that paragraph:

"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 and the *Owner* shall not be entitled to any credit relating to mark up for overhead or profit on any decrease in such taxes."

54.2 Add new paragraph 10.1.3 as follows:

"Where an exemption or a recovery of sales taxes, customs duties, excise taxes or *Value Added Taxes*, rebates, or monies from incentive programs is applicable to the *Contract*, the *Contractor* shall, at the request of the *Owner*, assist, join in, or make application for any exemption, recovery or refund of all such taxes, duties, rebates and incentives and all amounts recovered or exemptions obtained shall be for the sole benefit of the *Owner*. The *Contractor* agrees to endorse over the *Owner* any cheques received from the federal or provincial governments, or any other *Authority Having Jurisdiction*, as may be required to give effect to this paragraph 10.1.3."

54.3 Add new paragraph 10.1.4 as follows:

"The *Contractor* shall maintain accurate records tabulating equipment, material and component costs reflecting the taxes, customs duties, excise taxes and *Value Added Taxes* paid."

54.4 Add new paragraph 10.1.5 as follows:

"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*."

54.5 Add new paragraph 10.1.6 as follows:

"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 rebates, incentives or refund or exemption of any taxes, which cooperation shall include, but not be limited to, making or concurring in the making of an application for any such rebates, incentives, 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. All such rebates, incentives or 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."

54.6 Add new paragraph 10.1.7 as follows:

"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 purposes of this GC 10.1."

55. GC 10.2 LAWS, NOTICES, PERMITS, AND FEES

55.1 <u>Delete</u> paragraph 10.2.2 in its entirety and <u>replace</u> it with the following:

"The Owner has Crown immunity from the Building Code Act and the Planning Act and may not be obtaining building permits or development approvals. The Owner shall obtain and pay for any permanent easements over Third Party Property required for the completion of the Work. The Contractor shall be responsible for all other permissions for access to Third Party Property."

55.2 Add to the end of paragraph 10.2.4. the following:

"Whenever standards of law, ordinances, rules, regulations, codes and orders relating to the *Work* differ, the most stringent standards shall govern."

- 55.3 Amend paragraph 10.2.5 by:
 - .1 adding the words, "Subject to paragraph 3.4.1" to the beginning of the paragraph;
 - .2 replacing the word "Consultant" with the word "Owner"
 - and
 - .3 adding the following to the end of the second sentence:
 - "...and no further *Work* on the affected components of the *Contract* shall proceed until these changes to the *Contract Documents* have been obtained by the *Contractor* from the *Owner*."
- 55.4 Amend paragraph 10.2.6 by:
 - .1 replacing the word "Consultant" with the word "Owner";

and

.2 adding the following sentence at the end of the paragraph:

"In the event the *Owner* suffers loss or damage as a result of the *Contractor*'s failure to comply with paragraph 10.2.5, and notwithstanding any limitations described in paragraph 13.1.1, the *Contractor* agrees to indemnify and to hold harmless the *Owner* from and against any claims, demands, losses, costs, damages, actions, suits or proceedings resulting from such failure by the *Contractor*."

- Amend paragraph 10.2.7 by adding the words "which changes were not or could not have reasonably been known to the *Owner* or the *Contractor*, as applicable, at the time of deadline for submission of responses to the RFP and which changes did not arise as a result of a public emergency or other *Force Majeure* event" to the second line, after the words "authorities having jurisdiction".
- 55.6 Add new paragraph 10.2.8 as follows:

"The *Contractor* shall furnish necessary certificates as evidence that the *Work* installed conforms with laws and regulations of authorities having jurisdiction, including certificates of compliance for *Owner's* occupancy or partial occupancy. These certificates are to be final certificates giving complete clearance of the *Work*."

56. GC 10.3 PATENT FEES

56.1 Delete paragraph 10.3.2 in its entirety.

57. GC 10.4 WORKERS' COMPENSATION

- 57.1 Add new paragraph 10.4.2 as follows:
 - "10.4.2 The Contractor shall be solely responsible for its employees and officers and for its Subcontractors and their officers and employees, including ensuring that all required employer filings, contributions, deductions, and payments are made or remitted, as the case may be, with respect to applicable employer health taxes and under the Employment Insurance Act, the Canada Pension Plan, the Ontario Workplace Safety and Insurance Act, 1997, and all equivalent legislation in any other applicable jurisdiction. Without limiting the generality of the foregoing, the Contractor shall indemnify, defend and hold harmless the Owner, its directors, officers, and employees from all claims, demands, actions, suits or proceedings arising from any health, medical, disability or similar claims which Contractor's employees or officers or any of its Subcontractors or their officers or employees may make against the Owner, its directors, officers, or employees during or after the Contract Time, whether or not such claims are attributable to the Contractor's or Subcontractor's performance of the Work or related to the Contractor's obligations under this Contract."

58. PART 11 INSURANCE

58.1 Amend the title of PART 11 to add the words "AND CONTRACT SECURITY" at end of title.

59. GC 11.1 INSURANCE

- 59.1 Delete all references to "the *Consultant*" in GC 11.1.
- 59.2 <u>Delete</u> items .1 to .8 in paragraph 11.1.1 and in CCDC 41 and replace it with the following:
 - "1. General Liability insurance shall be with limits of not less than \$10,000,000 per occurrence, an aggregate limit of not less than \$10,000,000 within any policy year with respect to completed operations, and a deductible not exceeding \$50,000. To achieve the desired limit, umbrella or excess liability insurance may be used. Subject to satisfactory proof of financial capability by the *Contractor*, the *Owner* may agree to increase the deductible amounts. The policy shall be endorsed to name the *Owner* as insureds and require the insurer to provide the *Owner* with Written Notice at least 30 days prior to the expiry or cancellation of the policy. The insurance coverage shall not be less than the insurance provided by IBC Form 2100 (including an extension for a standard provincial and territorial form of non-owned automobile liability policy) and IBC Form 2320 including but not limited to:
 - .1 Bodily injury, death, and property damage including loss of use thereof.
 - .2 Premises and operations liability.
 - .3 *Products* and completed operations liability.
 - .4 Blanket contractual liability.

- .5 Cross liability and severability of interest clauses.
- .6 Contingent employer's liability.
- .7 Personal injury liability.
- .8 Owner's and Contractor's protective coverage.
- .9 Broad form property damage.
- .10 Elevator and hoist liability, if applicable to the *Project*.
- .11 Liability for attached machinery, including loading and unloading.
- .12 Extension of coverage shoring; blasting; excavation; underpinning; demolition; on work; below ground surface work, including tunneling and grading, if applicable to the *Project*.

The General Liability Insurance shall not include any exclusion relating to working in the vicinity of railway operations

- 2. Automobile liability insurance in respect of vehicles that are required by law to be insured under a *Contract* by a Motor Vehicle Liability Policy, shall have limits of not less than \$5,000,000 inclusive per occurrence for bodily injury, death, and damage to property, covering all vehicles owned or leased by the *Contractor*.
- 3. Manned Aircraft and watercraft liability insurance with respect to owned or non-owned aircraft and watercraft (if used directly or indirectly in the performance of the *Work*), including use of additional premises, shall have limits of not less than \$10,000,000 inclusive per occurrence for bodily injury, death and damage to property including loss of use thereof and limits of not less than \$10,000,000 for aircraft passenger hazard. Such insurance shall be in a form acceptable to the *Owner*.
- 4. Unmanned aerial vehicle liability insurance with respect to owned or non-owned aircraft (if used directly or indirectly in the performance of the *Work*), shall have limits of not less than \$5,000,000 per occurrence or accident for bodily injury, death and damage to property or such amounts as required by any applicable law or regulation.
- 5. Contractors' equipment insurance coverage written on an "all risks" basis covering Construction Equipment used by the Contractor for the performance of the Work, shall be in a form Acceptable to the Owner and shall not allow subrogation claims by the insurer against the Owner. Subject to satisfactory proof of financial capability by the Contractor for self-insurance, the Owner may agree to waive the equipment insurance requirement.
- 6. Professional liability Insurance. This policy shall cover risks of errors, omissions or negligent acts in the performance of professional services for the *Project*. The named insureds are to be approved and accepted for coverage by the Insurer. This policy shall provide for a limit of liability of not less than \$1,000,000 per claim and \$2,000,000 in the aggregate (inclusive of defence costs and expenses).
- 7. Technology Liability Insurance for financial loss arising out of an error, omission, or negligent act in the rendering of services in an amount not less than \$5,000,000 per claim and \$5,000,000 aggregate. Such policy shall be on a claims made basis and shall provide coverage for damages and defense costs. The Technology Professional Liability policy will also include an insuring agreement for cyber or network security and privacy liability insurance, covering financial loss arising out of actual or potential unauthorized access, unauthorized use, and a failure to protect confidential information which results in loss or misappropriation of such information in both electronic and non-electronic format. Such insurance will have a limit of an amount not less than \$5,000,000 per claim and \$5,000,000 aggregate. The *Contractor* shall maintain said liability coverage in place for a three-year period after termination of the *Contract* by way of annual policy renewal, or purchase of extended reporting period.
- 8. "All Risks" Builders Risk and Boiler & Machinery Insurance shall have limits of not less than the sum of 1.1 times *Contract Price*, plus any property, including design services, the *Owner* provides for incorporation into the *Work*. This policy shall cover all risks of direct physical loss or damage to the *Project*, including but not limited to the perils of earthquake and flood, subject to policy sub limits, warranties and exclusions and shall

not be less than the insurance provided by IBC Forms 4042 and 4047 or their equivalent replacement. This insurance shall cover all property forming part of the *Project*, and goods and materials to be incorporated in the *Project* while at the *Place of the Work*, in transit, or while in off-site storage. It shall not provide coverage for the *Contractor's* or *Subcontractors'* equipment other than scaffolding, formwork, fences, shoring, hoarding, falsework, tarpaulins and temporary buildings in connection with the *Work*. The insurance shall not have a deductible greater than \$50,000.

9. Pollution Liability Insurance for an amount not less than \$5,000,000 per occurrence and in the aggregate and a deductible of not more than \$50,000. This policy shall be written on either an Occurrence or Claims Made Form and will provide coverage on a sudden and accidental, and gradual pollution events basis for on-site cleanup and remediation as well as on-site and off-site third party claims for bodily injury and property damage, cleanup and remediation."

60. GC 11.2 CONTRACT SECURITY

60.1 Add new GC 11.2 - CONTRACT SECURITY as follows:

"GC 11.2 CONTRACT SECURITY

- 11.2.1 If required by the RFP, the *Contractor* shall provide a performance bond and a labour and materials payment bond, each issued by a bonding company acceptable to *Owner* and licensed to issue such instruments in the *Place of the Work*, in the amounts and forms as follows:
 - .1 Amount of performance bond shall be equal to not less than 50% of the *Contract Price* in the form prescribed by the *Construction Act*.
 - .2 Amount of labour and material payment bond shall be equal to not less than 50% of the *Contract Price* in the form prescribed by the *Construction Act*.
- 11.2.2 The bonds provided in accordance with paragraph 11.2.1 shall guarantee the faithful performance of the *Contract* in accordance with the *Contract Documents*, including the requirements for warranties provided for the GC 12.3 WARRANTY, and the payment of all obligations incurred in the event of the *Contractor's* default, including but not limited to the following:
 - .1 the payment of legal, accounting, architectural, engineering and other professional services expenses incurred by the *Owner* in determining the extent of *Work* executed and any additional *Work* required as a result of the interruption of the *Work*, and its completion; and
 - .2 the payment of additional expenses to the *Owner* in the form of security guard services, light, heat, power, loss of use of premises, and other related costs, payable over the period between the default of the *Contract* and completion of the *Work*.
- 11.2.3 Without limiting the foregoing in any way, the bonds shall indemnify and hold harmless the *Owner* for and against costs and expenses (including legal and other professional services and court costs) arising out of or as a consequence of any default of the *Contractor* under this *Contract*.
- 11.2.4 The *Contractor* shall be responsible for notifying the surety company of any changes made to the *Contract Documents* or the *Contract Price* during the course of the *Work*.
- 11.2.5 The premiums for bonds required by the *Contract Documents* shall be included in the *Contract Price*.
- 11.2.6 Should the *Owner* require additional bonds by the *Contractor* or any of its *Subcontractors*, after the receipt of bids for the *Work*, the *Contract Price* shall be increased by the actual costs attributable to providing such bonds. The *Contractor* shall promptly provide the *Owner* with any such bonds that may be required."

61. GC 12.1 READY-FOR-TAKEOVER

61.1 <u>Delete</u> GC 12.1.1 in its entirety and <u>replace</u> it with the following:

- "12.1.1 Ready-for-Takeover shall be achieved when all of the following has occurred, as verified and Accepted by the Owner:
 - .1 Substantial Performance of the Work has been achieved, as jointly certified by the Owner and the Contractor:
 - .2 the appropriate permits (if any) for the *Place of the Work* have been obtained from the Authorities Having Jurisdiction;
 - 3 the *Work* to be performed under the *Contract* has satisfied the requirements for deemed completion in accordance with Section 2(3) of the *Construction Act*,
 - .4 final cleaning and waste removal, as required by the *Contract Documents*;
 - .5 the *Contractor* has delivered to the *Owner* all inspection certificates from authorities having jurisdiction with respect to any component of the *Work* which has been completed;
 - .6 subject only to GC 12.1.2, the entire Work has been completed to the requirements of the Contract Documents, including completion of all items on the punch list prepared at the time of Substantial Performance of the Work and the Work is being used for its intended purpose, and is so certified by the Consultant;
 - .7 subject only to GC 12.1.2, the *Contractor* has submitted to the *Owner* in a collated and organized matter, all *Close-Out Documentation* and any other materials or documentation required by the *Contract Documents*:
 - .8 subject only to GC 12.1.2, all *Products*, systems and components of the *Project* have been commissioned and certified for operation and accepted by the *Owner*, and
 - 9 subject only to GC 12.1.2, the *Contractor* has submitted to the *Owner* full and complete *As-built Drawings* and *Specifications* revised by the *Contractor* to reflect the as-built state of the *Work*, clearly showing changes to the *Drawings* and *Specifications* from the original *Contract Documents*, all of which have been *Accepted* by the *Owner* acting reasonably."
- 61.2 Delete GC 12.1.2 in its entirety and replace it with the following:
 - "12.1.2 The *Owner* may, in its sole, absolute, and unfettered discretion, waive compliance with a requirement, or a part thereof, for achieving *Ready-for-Takeover* set out in GC 12.1.1.6 to 12.1.1.9 (inclusive). Where the *Owner* exercises the discretion afforded under this GC 12.1.2, the *Contractor* shall be required to comply with GC 5.5.1.3 as part of its application for final payment and the *Owner* and the *Contractor* shall establish a reasonable date for completing the *Work*."
- 61.3 <u>Delete</u> GC 12.1.3 in its entirety and <u>replace</u> it with the following:
 - "12.1.3 When the *Contractor* considers the *Work* has attained *Ready-for-Takeover*, it shall submit a written application to the *Owner* for review."
- 61.4 In GC 12.1.4, delete the words "list and" from the second line.
- 61.5 <u>Delete</u> GC 12.1.5 in its entirety and <u>replace</u> it with the following:
 - "12.1.5 Following the confirmation of the date of *Ready-for-Takeover* by the *Owner*, the *Contractor* may submit a final application for payment in accordance with GC 5.5 FINAL PAYMENT."
- 61.6 Delete GC 12.1.6 in its entirety.
- 62. GC 12.2 EARLY OCCUPANCY BY THE OWNER
- 62.1 Delete GC 12.2 EARLY OCCUPANCY BY THE OWNER in its entirety.
- 63. GC 12.3 WARRANTY

- 63.1 Amend paragraph 12.3.2 by adding the words, "Subject to paragraph 1.1.3...." at the beginning of that paragraph.
- 63.2 <u>Delete</u> paragraphs 12.3.4 and 12.3.5 and <u>replace</u> them with the following paragraphs:
 - "12.3.4 The Contractor shall correct, at no additional cost to the Owner, defects or deficiencies in the Work that appear, prior to and during the Warranty Period. Any Work repaired or replaced during the Warranty Period shall be re-warranted for an additional 12 months from the date of completion of the repair or replacement. Notwithstanding the expiration of the Warranty Period, the Contractor shall not be relieved of its obligations to correct any defects or deficiencies in the Work of which Notice in Writing has been given to the Contractor prior to the expiration of the Warranty Period.
 - 12.3.5 The Owner shall provide Notice in Writing to the Contractor of defects and deficiencies in the Work discovered during the Warranty Period. The Contractor shall submit a remediation plan for the permanent rectification of the defects and deficiencies within 2 Working Days after delivery of the Notice in Writing, including the schedule for the remediation work to be completed. Upon Acceptance by the Owner of the remediation plan, the Contractor shall remediate the defects and deficiencies in accordance with the schedule set out in the Accepted plan. Acceptance by the Owner of a remediation plan does not prohibit the Owner from pursuing other remedies it may have against the Contractor arising from the defects and deficiencies in the Work.
- 63.3 Amend paragraph 12.3.6 by adding at the end of the paragraph the following:

"The Extended Warranty Period for each Extended Warranty described in the Specifications shall commence on the expiry of the Warranty Period described in paragraph 12.3.1. The Extended Warranties shall be submitted to the Owner as part of the Close-Out Documentation."

- 63.4 Add the following new paragraphs 12.3.7 to 12.3.12:
 - "12.3.7 The decision of the *Owner* shall be final as to the existence of such defects and deficiencies in the *Work*, the necessity of remedying same, and the remedial measures required.
 - 12.3.8 If the *Contractor* fails to do the work to correct the defects or deficiencies, the *Owner* shall be entitled to carry out such work by its own forces or by *Other Contractors*. If such work is work which the *Contractor* should have carried out at the *Contractor*'s own expense, the *Owner* shall be entitled to recover from the *Contractor* the cost thereof or may deduct the same from any monies due or that become due to the *Contractor*, including the warranty holdback, if any.
 - 12.3.9 Any insurance, contract security, surety or deposit required by the *Contract Documents* shall remain in full effect at the expense of the *Contractor* during the Warranty Period.
 - 12.3.10 The *Contractor* shall be responsible for the costs for inspection and testing for the correction of defects or deficiencies. The *Owner* shall have the right to deduct the cost of the inspection and testing from any monies owed to the *Contractor*.
 - 12.3.11 The *Owner* may hold back, if set out in the *Contract Documents*, on each application for payment, advance payment or progress draw, 2.5% of the total amount payable under each such application for payment, advance payment or progress draw as security for the *Contractor*'s performance of its warranty obligations. In the event the *Contractor* fails to correct a defect or deficiency during the warranty period within the required time and/or fails to pay for the redesign, reconstruction and other costs related to damages arising from a defect or deficiency, the *Owner* shall have the right to use the warranty holdback, or such part of it still being held by the *Owner* to pay for the costs of remedying the defect or deficiency and any redesign, reconstruction or other costs relating to the defect or deficiency. If the costs are greater than the amount of the warranty holdback, the *Contractor* shall pay the additional costs upon receipt of an invoice from the *Owner*. The *Contractor* shall have the right to invoice the *Owner* for the balance of the warranty holdback at the end of the *Warranty Period* or *Extended Warranty Period* as described in paragraph 12.3.4.
 - 12.3.12 The Contractor shall assign to the Owner all warranties, guarantees or other obligations for Work, services or Products performed or supplied by any Subcontractor, Supplier or other person in connection with the Work and such assignment shall be with the consent of the assigning party where required by law or by the terms of that party's contract. Such assignment shall be in addition to, and shall in no way

limit, the warranty rights of the *Owner* under the *Contract Documents*. Until the expiry of the relevant Warranty Periods enforceable against the *Contractor*, the *Owner* shall have in its custody all warranties, guarantees and other obligations to third parties respecting the *Work*.

12.3.13 The *Contractor*'s obligations under this GC 12.3 shall continue notwithstanding any withholding of payment made by the *Owner* under GC 5.8 – WITHOLDING OF PAYMENT or by performance by the *Owner* directly or through other forces of the *Contractor*'s obligations under this *Contract*, where the *Contractor* is in default in the performance of such obligations."

64. GC 13.1 INDEMNIFICATION

- 64.1 Delete GC 13.1 INDEMNIFICATION in its entirety and replace it with the following:
 - "13.1.1 The Contractor shall indemnify and hold harmless the Owner and its directors, officers, employees, contractors and agents (collectively the "Owner's Indemnitees") from and against all loss, liability, damage, fines, cost, legal cost and disbursement whatsoever arising out of or related to the Work or the Contract Documents ("Loss"), by whomever made, sustained, incurred, brought or prosecuted, arising out of, or in connection with, anything done or omitted to be done by the Contractor in the course of the performance of the Contractor's obligations under the Contract Documents or otherwise in connection with the Work. The Contractor shall, at the Owner's election, either assume the defence of every proceeding brought in respect of such Loss, or cooperate with the Owner in the defence, including providing Owner with prompt Notice of any possible Loss and providing the Owner with all information and material relevant to the possible Loss.
 - 13.1.2 GC 13.1 INDEMNIFICATION shall govern over the provisions of paragraph 1.3.1 of GC 1.3 RIGHTS AND REMEDIES.
 - 13.1.3 The *Contractor* shall make full and complete compensation for any bodily injury or death to any person and for any damage caused to the *Owner's* or a third party's physical property by the *Contractor*'s act or omission.
 - 13.1.4 The *Contractor* shall be liable for any claims arising from any personal injuries to or death of any of the *Contractor*'s employees, *Subcontractors* or *Suppliers* or from any loss of or damage to any property belonging to the *Contractor* or its employees, *Subcontractors* or *Suppliers* during the performance of the *Work* unless caused by the negligent act or omission of *Owner*.
 - 13.1.5 Notwithstanding any other provision of the *Contract Documents*:
 - (a) The Owner shall not be responsible for indirect, consequential, special, incidental or contingent damages of any nature whatsoever, including loss or revenue or profit or damages resulting from interruption of service or transmission. This limitation shall apply regardless of the form of action, damage, claim, liability, cost, expense or loss, whether in contract (including fundamental breach), statute, tort (including negligence), or otherwise, and regardless of whether the Owner has been advised of the possibility of such damages; and,
 - (b) Any express or implied reference to the *Owner* providing an indemnity or any other form of indebtedness or contingent liability that would directly or indirectly increase the indebtedness or contingent liabilities of the *Owner* or the Province of Ontario, whether at the time of execution of this *Contract* or at any time during the performance of the *Work* and the Warranty Period, shall be void and of no legal effect in accordance with s.28 of the Financial Administration Act, R.S.O. 1990, c. F.12.
 - 13.1.6 The *Contractor* shall indemnify the *Owner* and the *Owner's* Indemnitees and save them harmless from and against all Loss incurred by the *Owner* arising from:
 - (a) any decision or interpretation by any court or Authority Having Jurisdiction that: (i) any of the *Contractor*'s employees are an employee of the *Owner*; or (ii) the *Owner* is liable to pay statutory contributions or deductions in respect of any of the *Contractor*'s employees under any laws, including employment insurance, provincial health insurance, income tax or other employment matters;

- (b) any health, medical disability or similar claims which the *Contractor* or *Contractor*'s employees may have during or after the term of this *Contract*;
- (c) a claim by any third party against the *Owner* alleging that the *Submittals* and their use by the *Owner*, infringes any *Intellectual Property* rights;
- (d) safety infractions committed by the *Contractor* under the Occupational Health and Safety Act or any other laws, guidelines or public health orders regulating health and safety at the *Work Site*;
- (e) any claims against the Owner for the failure of the Contractor to protect the confidentiality of Confidential Information;
- (f) exposure to, or the presence of, toxic or hazardous substances or materials which were either brought on to the *Work Site* by the *Contractor* or the *Contractor* mishandled or handled negligently or improperly the substances or materials;
- (g) a claim from adjacent landowners or other third parties regarding damage to their property due to the Work; and
- (h) the release into the environment of materials resulting from the *Work* that contain *Environmental Contaminants* during the transportation of such materials from the *Work Site* to the approved waste disposal site.

65. GC 13.2 WAIVER OF CLAIMS

65.1 <u>Delete</u> GC 13.2 – WAIVER OF CLAIMS in its entirety and <u>replace</u> it with the following:

"13.2.1 WAIVER OF CLAIMS BY OWNER

As of the date of the final certificate for payment, the *Owner* expressly waives and releases the *Contractor* from all claims against the *Contractor* including without limitation those that might arise from the negligence or breach of contract by the *Contractor* except one or more of the following:

- .1 those made in writing prior to the date of the final certificate for payment and still unsettled;
- .2 those arising from the provisions of GC 13.1 INDEMNIFICATION or GC 12.3 WARRANTY;
- .3 those arising from the provisions of paragraph 9.6.1 of GC 9.6 IMPACT ASSESSMENTS and arising from the *Contractor* failing to comply with the mitigation plans in the *Impact Assessment Reports*or failing to assess impacts and implement mitigation plans for impacts that arise during the *Work*;
- .4 those arising from the provisions of paragraph 9.2.5 of GC 9.2 TOXIC AND HAZARDOUS SUBSTANCES and arising from the *Contractor* bringing or introducing any toxic or hazardous substances and materials to the *Place of the Work* after the *Contractor* commences the *Work*;
- .5 those arising from the provisions of paragraph 9.5.1 of GC 9.5 MOULD and arising from the *Contractor* bringing or introducing mould to the *Place of the Work*; or
- .6 those made in writing within a period of 6 years from the date of Substantial Performance of the Work, as set out in the certificate of Substantial Performance of the Work, arising from the Contractor's performance of the Contract with respect to material defects or deficiencies in the Work.

13.2.2 WAIVER OF CLAIMS BY CONTRACTOR

As of the date of the final certificate for payment, the *Contractor* expressly waives and releases the *Owner* from all claims against the *Owner* including without limitation those that might arise from the negligence or breach of contract by the *Owner* except:

.1 those made in writing prior to the *Contractor*'s application for final payment and still unsettled; and

.2 those arising from the provisions of GC 9.2 – TOXIC AND HAZARDOUS SUBSTANCES, GC 9.5 – MOULD, or GC 10.3 – PATENT FEES.

13.2.3 GC 13.2 – WAIVER OF CLAIMS shall govern over the provisions of paragraph 1.3.1 of GC 1.3 – RIGHTS AND REMEDIES."

66. PART 14 OTHER PROVISIONS

66.1 Add new PART 14 as follows:

"PART 14 OTHER PROVISIONS

GC 14.1 OWNERSHIP OF MATERIALS

14.1.1 Unless otherwise specified, all materials existing at the *Place of the Work* at the time of execution of the *Contract* shall remain the property of the *Owner*. All work and *Product*s delivered to the *Place of the Work* by the *Contractor* shall be the property of the *Owner*. The *Contractor* shall remove all surplus or rejected materials as its property when notified in writing to do so by the *Owner*.

GC 14.2 CONTRACTOR DISCHARGE OF LIABILITIES

14.2.1 In addition to the obligations assumed by the *Contractor* pursuant to GC 3.6 – SUBCONTRACTORS AND SUPPLIERS, the *Contractor* agrees to discharge all liabilities incurred by it for labour, materials, services, *Subcontractors* and *Products*, used or reasonably required for use in the performance of the *Work*, except for amounts withheld by reason of legitimate *Dispute* which have been identified to the party or parties, from whom payment has been withheld.

GC 14.3 DAILY REPORTS/DAILY LOGS

- 14.3.1 The *Contractor* shall cause its supervisor, or such competent person as it may delegate, to prepare a daily log or diary reporting on weather conditions, work force of the *Contractor*, *Subcontractors*, *Suppliers* and any other forces on site and also record the general nature of *Project* activities. Such log or diary shall also include any extraordinary or emergency events which may occur and also the identities of any persons who visit the *Place of the Work* who are not part of the day-to-day work force.
- 14.3.2 The *Contractor* shall also maintain records, either at its head office or at the *Place of the Work*, recording manpower and material resourcing on the *Project*, including records which document the activities of the *Contractor* in connection with GC 3.4 CONSTRUCTION SCHEDULE, and comparing that resourcing to the resourcing anticipated when the most recent version of the schedule was prepared pursuant to GC 3.4 CONSTRUCTION SCHEDULE.

GC 14.4 CONFIDENTIAL INFORMATION

- 14.4.1 The *Contractor* must not advertise or issue any information, publication, document or article (including photographs or film) for publication or media releases or other publicity relating to the *Work* or the *Owner's Confidential Information* without the prior written approval of the *Owner*.
- 14.4.2 The *Contractor* must not, and must ensure that the *Contractor*'s personnel do not, without the prior written approval of ONTC:
 - .1 use *Confidential Information* other than as necessary for the purposes of fulfilling the *Contractor's* obligations under this *Contract*; or
 - .2 disclose the *Confidential Information*, other than to the *Contractor*'s personnel who need the information to enable the *Contractor* to perform its obligations under this *Contract*, to the *Contractor*'s legal advisors, accountants or auditors, or where disclosure is required by law (including disclosure to any stock exchange).
- 14.4.3 The *Contractor* must, within 10 *Working Day*s (or any other period agreed in writing by ONTC) after a direction by the *Owner* to do so, return or destroy all *Confidential Information* in the *Contractor*'s possession, custody or control.

- 14.4.4 If the *Owner* or the *Contractor* is required by law to disclose *Confidential Information*, it shall promptly notify the other party so that that party may intervene to prevent the disclosure.
- 14.4.5 The Contractor specifically acknowledges that Owner is subject to the Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. F. 4, and that the Owner may be compelled by law to disclose certain Confidential Information.
- 14.4.6 The rights and obligations under this Part continue after the termination of this Contract.

GC 14.5 CORRUPTION, FORCED LABOUR, SANCTIONS

14.5.1 The *Contractor* warrants that:

- .1 no bribe, gift or other inducement has been paid, promised or offered to any official or employee of the *Owner*, the Ministry of Transportation, the Government of Ontario or any other government official relating to the *Owner* entering into this *Contract* with the *Contractor*.
- .2 it will take reasonable steps to ensure that its officials and employees do not extort, accept or pay bribes or illicit payments, charge or accept fees that are not legally due or are in excess of those legally due, or unreasonably delay or obstruct the granting of permits, licences, or other such approvals in relation to the project. If the *Contractor* becomes aware of an actual or attempted bribe, extortion, delay or obstruction relating to this *Contract*, the *Contractor* shall report the incident to the *Owner* immediately.
- .3 it is unaware of any forced labour or child labour being used at any step of the production of goods produced, purchased or distributed by it in Canada or elsewhere or for the production of goods imported by the *Contractor*.
- .4 it has undertaken the appropriate due diligence to ensure its business and its supply chains do not use forced labour or child labour, including an assessment of its business and supply chains that may carry a risk of forced labour or child labour being used and the management of the risk. If applicable, the *Contractor* shall comply with the reporting requirements under the *Fighting Against Forced Labour and Child Labour in Supply Chains Act*, S.C. 2023 c.9.
- 14.5.2 In compliance with its international obligations or with United Nations obligations, Canada imposes restrictions on trade, financial transactions or other dealings with a foreign country or its nationals. These sanctions may be implemented by regulation under such acts as the *United Nations Act*, the *Special Economic Measures Act (SEMA)*, or the *Export and Import Permits Act*. The text of any such regulations is published in the Canada Gazette, Part II. It is the only text which is authoritative. The *Contractor* shall comply with any such regulations that are in force on the effective date of the *Contract* and will require such compliance by its first-tier *Subcontractors*. The *Owner* relies on such undertaking from the *Contractor* to enter into this *Contract*, and any breach of such undertaking shall entitle the *Owner* to terminate this *Contract* for default and to recover damages from the *Contractor*, including excess re-procurement costs.

GC 14.6 COMMUNICATIONS

14.6 The *Owner* or the Government of Ontario will lead and make any announcements relating to this *Contract* and the *Work*. The *Contractor* shall not make any announcement of any kind, including press releases, social media posts, public declarations, or any form of publication or announcement, in relation to this *Contract* or the *Work* unless prior written consent is given by the *Owner*. Should the *Contractor* be contacted by any media outlet or other person or entity wishing to make any form of publication or announcement, or seeking any information, in relation to this *Contract* or the *Work*, the *Contractor* shall provide no comment and shall immediately notify the *Owner*. The *Contractor* shall immediately notify the *Owner* if it becomes aware of any publication or announcement relating to the *Contract* or the *Work*

GC 14.7 AUDIT

14.7 The Contractor shall keep proper and accurate financial accounts and records, including but not limited to its contracts, invoices, statements, receipts, and vouchers in respect of the Project for a least six (6) years after the date that Ready-for-Takeover of the Project was achieved (the "Audit Period"). The Owner has the right to audit all such financial accounts and records associated with the Project and the Contract Documents, including Submittals, timesheets, reimbursable out of pocket expenses, materials, goods and Construction Equipment claimed by the Contractor, at all reasonable times during the term of the Contract and the Audit Period by providing Notice in Writing of its intention to conduct the audit. The Contractor shall provide full access to the records to the Owner for the purpose of the audit.

GC 14.8 GENERAL

- 14.8.1 Nothing contained in this *Contract* shall be deemed or construed by the parties nor by any third party as creating the relationship of principal and agent, landlord and tenant, or of partnership or of joint venture between the parties.
- 14.8.2 In addition to those provisions which are expressly stated to survive the termination or expiration of this *Contract*, the provisions of this *Contract* that are by their nature intended to survive termination or expiration of this *Contract* shall continue in full force and effect subsequent to and notwithstanding termination or expiration until or unless they are satisfied.
- 14.8.3 This *Contract* may be executed with electronic signatures or may be executed and delivered by electronic transmission and the parties may rely upon all such signatures as though they were original signatures. This *Contract* may be executed in counterpart and all such counterparts shall, for all purposes, constitute one agreement binding on the parties."

Schedule A to the Supplementary Conditions

Requirements for a "Proper Invoice"

To satisfy the requirements for a *Proper Invoice*, the *Contractor*'s application for payment must satisfy the following criteria:

- .1 is in the form of a written bill, invoice, application for payment, or request for payment;
- .2 is in writing;
- .3 contains the *Contractor*'s name, telephone number and mailing address and contact information of the *Contractor*'s project manager;
- .4 contains the title of the *Project* and the *Owner*'s contract number or purchase order number under which the work was performed and the related request for qualification, tender, or request for proposal number, as applicable;
- .5 contains the date the written bill, invoice, application for payment, or request for payment is being issued by the *Contractor*:
- .6 identifies the period of time in which the *Work*, labour, services, *Product*s and/or materials were supplied to the *Owner*;
- .7 reference to the provisions of the *Contract* under which payment is being sought (e.g. progress payment / milestone, holdback, final payment, etc.);
- .8 a description, including quantities where appropriate, of the labour, services, *Product*s, or materials, or a portion thereof, that were supplied and form the basis of the *Contractor*'s request for payment;
- .9 the amount the *Contractor* is requesting to be paid by the *Owner*, set out in a statement, based on the schedule of values *Accepted* under paragraph 5.2.5, separating out any statutory or other holdbacks, set-offs and HST;
- .10 with each application for payment after the first, a written statement that all accounts for labour, services, subcontracts, materials, equipment, *Products*, and other indebtedness which may have been incurred by the *Contractor* and for which the *Owner* might in any way be held responsible have been paid in full up to the previous application for payment, except for amounts properly retained as a holdback or as an identified amount in dispute;
- .11 with the applications for payment of holdback and for final payment, a *Statutory Declaration* in the form provided by the *Owner* attached as Schedule B stating that all accounts for labour, services, subcontracts, materials, equipment, *Products*, and other indebtedness which may have been incurred by the *Contractor* and for which the *Owner* might in any way be held responsible have been paid in full up to the previous application for payment, except for amounts properly retained as a holdback or as an identified amount in dispute;
- .12 a current *Work*place Safety Insurance Board clearance certificate;
- .13 the progress report required under GC 3.4 CONSTRUCTION SCHEDULE, in the form provided by the *Owner* attached as Schedule C;
- .14 an updated Construction Schedule in native and .pdf formats;
- if requested by the *Owner*, a current and valid certificate(s) of insurance for the insurance required under GC 11.1 INSURANCE;
- the following statement: "Provided this *Proper Invoice* complies with the requirements of the *Contract* and provided no *Notice of Non-Payment* is issued by the *Owner*, payment is due within 28 days from the date this *Proper Invoice* is received by the *Owner*.";
- .17 the name, title, telephone number and mailing address of the person at the place of business of the *Contractor* to whom payment is to be directed;
- .18 in the case of the *Contractor's* application for final payment;
 - (a) sufficient evidence that the *Contractor* has delivered all warranties to the *Owner*;

- (b) sufficient evidence that the *Place of the Work* has been left in a clean and tidy condition, including evidence that any remaining materials, tools, equipment, temporary work, and waste products and debris have been removed from the *Place of the Work*;
- (c) landfill waybills for the disposal of the waste products, debris and excess soil removed from the Place of Work in accordance with the Waste Management Plan; and
- (d) an executed, original, full and final release of all claims that may arise as a result of the *Work*, which full and final release executed by the *Contractor* shall be in a form approved by the *Owner*;
- information identifying the authority, whether in the *Contract Documents* or otherwise, under which the services or materials were supplied;
- .20 any other information that is prescribed in Article A-3, if any, or identified by the *Owner* as required;
- .21 the amount invoiced to date;
- .22 the percentage of the Contract Price invoiced; and
- .23 the individual value of Change Orders approved during the invoice period and the cumulative value of Change Orders for the *Project*.



Statutory Declaration of Progress Payment Distribution by <i>Contractor</i>		
To be made by the <i>Contractor</i> prior to payment	The last application for progress	
as a condition for release of holdback.	payment for which the Declarant has	
ao a containe.		
	received payment is No	
	dated	
Identification of Contract:		
Name of <i>Contract</i> (Location and description of the <i>Work</i> as it appears in t	he Contract Documents)	
Date of Contract : Day : Month : Ye	ear:	
Name of <i>Owner</i> : Ontario Northland Transportation Commission		
Name of Contractor:		
Name of Declarant : Position or Title : (c	of office held with Contractor)	
Declaration		
I solemnly declare that, as of the date of this declaration, I am an authorized signing officer, partner or sole proprietor of the <i>Contractor</i> named in the <i>Contract</i> identified above, and as such have the authority to bind the <i>Contractor</i> , and have personal knowledge of the fact that all accounts for labour, subcontracts, products, services, and construction machinery and equipment which have been incurred directly by the <i>Contractor</i> in the performance of the work as required by the <i>Contract</i> , and for which the <i>Owner</i> might in any way be held responsible, have been paid in full as required by the <i>Contract</i> up to and including the latest progress payment received, as identified above, except for:		
Holdback monies properly retained,		
Payments deferred by agreement, or		
Amounts withheld by reason of legitimate dispute which have been identified to the party or parties, from who payment has been withheld.		

I make this solemn declaration conscientiously be if made under oath.	elieving it to be true, and knowing that it is of the same force and effect as
Declared before me in	
City/Town Prov	ince
on	
Date	
Signature of Declarant	A Commissioner for Oaths or Notary Public

Schedule "C" to the Supplementary Conditions

Project Status Report
Project Title:
Reporting Period: Date:
Project Details:
Planned Budget: Indicate the original <i>Contract</i> value Current Approved Budget: Indicate the original <i>Contract</i> value plus approved change orders
Planned Completion: Indicate the <i>Contract</i> scheduleCurrent <i>Project</i> Completion: Fill in revised date if schedule completion date extension approved through change order
Planned <i>Project</i> Percent Complete: How far should theyActual <i>Project</i> Percent Complete: What is their actual percent have progressed by this date? complete?
Executive Summary
Provide a summary of what happened during the period, any concerns, risks or wins and plans for the upcoming period.
Work Completed in the Period
List
Work Planned for Next Period
List
List
List
List
Issues and Concerns
Use this area to identify any concerns related to the project.
Status of Progress

Include a graph to show progress or eliminate this section.		

SCHEDULE D

DUTY TO NOTIFY/EMERGENCY WORKS NOTIFICATION FORM

ONTC DUTY TO NOTIFY / EMERGENCY WORKS NOTIFICATION FORM		
SUBMISSION REQUIREMENTS		
Contact DFO By Phone 1-855-852-8320 AND submit th	is form to fisheriesprotection@dfo-mpo.gc.ca	
Submit this form to the consultant and the ONTC <i>Project</i> and to ONTC Legal : legal@ontarionorthland.ca	ct Manager: Esmail Zougari, <u>esmail.zougari@ontarionorthland.ca</u>	
MNRF Office: Contact Area MNRF Office		
PART 1: NOTIFICATION DETAILS		
Type of Notification: □ DUTY TO NOTIFY □ EME	ERGENCY WORK	
Date of Notification:	Time of Notification:	
ONTC Contract #:	DFO PATH File # (if applicable):	
PART 2: REPORTING INFORMATION		
Name of Person Reporting:	Name of Field Contact:	
Telephone #:	Telephone #:	
Email:	Email:	
PART 3: INCIDENT INFORMATION		
Bank failure □ Culvert failure		
Erosion and Sediment Control Measures Failure ☐ Bea	ver dam breach	
Other (specify): □ Hwy shoulder failure		
Date of Incident:	Time of Incident:	
Location of Site:	Geographic Coordinates (Lat/Long):	
Nearest Community (city/town):	Name of Waterbody(ies):	
	Type (watercourse, lake/pond, ditch):	
Indicate if any of the following impacts have occurred or	are about to occur:	
Fish Kill (if yes, approximately how many):	□ Sediment deposition in channel	
Bank failure ☐ Obstruction of fish passage through:		
Modification of flows □ Channel □	Culvert	
Other (specify):		

Immediate Actions Taken:		
(Describe the activities/works that are being / have been immediately implemented. e.g. mitigation measures, damming pumping etc.)		
Photos: □ Attached		
(Where feasible, it is recommended that the photos be submitted with the form or as follow up)		
PART 4: EMERGENCY WORKS		
Description of Proposed Emergency Works:		
(Be as specific as possible. Describe what work will be under	taken within the next two weeks.	
E.g. culvert replacement (include existing and new culvert diameter / length / type), slope restoration (include material / method),:		
Mitigation measures:		
(Describe what measures have been or will be implemented to address the immediate issue. E.g. sediment fence, turbidity curtain, check dam, fish salvage etc.):		
Indicate which of the works will be followed (if applicable):		
Beaver Dam Removal □ Culvert Maintenance		
Bridge Maintenance		
Ditch maintenance within 30 m of a □ Temporary waterc	course crossing waterbody	
Riparian vegetation maintenance in existing right-of-way		
The Emergency <i>Work</i> s are (check one):		
Temporary (additional work will be required) □ Final (no additional work required)		
Proposed Start Date: (YYYY/MM/DD)	Proposed End Date: (YYYY/MM/DD)	
PART 5: OTHER AGENCIES NOTIFIED		
Other Agency(ies) Notified: Yes □ No □	Agency(ies) Notified:	
Date Notified:	Incident Report No. (if issued by notified Authority):	

END OF SUPPLEMENTARY CONDITIONS