



Ministry of Transportation

PROGRESSIVE DESIGN-BUILD FOR HIGHWAYS

REQUEST FOR PROPOSALS

**PART F:
ATTACHED CONSTRUCTION PHASE
SPECIFICATIONS**

**| ENTER HIGHWAY PROJECT
ENTER DISTRICT(S)/REGIONS |**

Group Work Project Number: #####-##-## |

Design Phase Agreement Number: #####-E-##### |

Date Issued: | Month DD, YYYY |

Table of Contents

Progressive Design-Build Special Provisions (PDBSP):

1. PDBSP0100 Amendment to OPSS.PROV 100 MTO General Conditions of Contract
2. PDBSP0001 Construction Phase Project Administration for PDBH Contracts
3. PDBSP0002 Design Liaison Services Tender Item
4. PDBSP0003 Construction Phase Field Office Tender Item
5. PDBSP0004 Progressive Performance Requirements for PDBH Contracts

Progressive Design-Build Performance Specifications (PDBPERF):

1. PDBPERF1072 - Performance Requirements for Environmental Management
2. PDBPERF1075 - Performance Requirements for Information Management
3. PDBPERF1077 - Performance Requirements for Traffic and Mobility Management

Design-Build Special Provisions (DBSP):

[Note to Proponent: Applicable Design-Build Special Provisions (DBSPs) for the Construction Phase Agreements of Progressive Design-Build for Highways projects will be provided to the Preferred Proponent.]

AMENDMENT TO OPSS.PROV 100, APRIL 2026, MTO GENERAL CONDITIONS OF CONTRACT

Special Provision No. PDBSP0100

Modifications for Progressive Design-Build for Highways Construction Contracts

SECTION GC 1.0 – INTERPRETATION

GC 1.02 Abbreviations

Subsection GC 1.02, Abbreviations, is amended by the addition of the following to clause 1.02.01:

DFO	-	Department of Fisheries and Oceans
MNRF	-	Ministry of Natural Resources and Forestry
MOL	-	Ministry of Labour
OHSa	-	Occupational Health and Safety Act
PDB	-	Progressive Design Build

GC 1.07 Definitions

Subsection GC 1.07, Definitions, is amended by the following modifications:

Contract Documents means the Agreement, Tender, RFP, Progressive Design-Builder's Proposal, MTO General Conditions of Contract, Standard Specifications and Standard Drawings, Special Provisions, Contract Drawings, Issued for Construction Drawings, Addenda incorporated into any aforementioned document, documents referenced in the aforementioned documents, and subsequent amendments to any of these documents made pursuant to the provisions of the Agreement.

Contractor means the person, partnership, corporation undertaking the Work as identified in the Agreement and includes the **Progressive Design-Builder**.

Issued For Construction Drawings means drawings stamped by an Engineer as final documents to construct the Work.

MTO Insurance Program means the Owner-provided insurance program described in G.C. 6.035 of the PDBSP0100 Amendment to OPSS.PROV 100, April 2026, MTO General Conditions of Contract, forming part of the Contract Documents.

Record Drawings means marked-up drawings and documentation prepared by the Contractor that show all differences, design changes, and deviations from the Issued for Construction Drawing(s) which shall be verified and stamped by an Engineer.

Total Bid Price means the price submitted by the Contractor at tender closing and is the same as the Construction Phase Bid Price.

Work means the total design, construction and related services required by the Contract Documents.

SECTION GC 2.0 – CONTRACT DOCUMENTS

GC 2.01 Reliance on Contract Documents

Clause GC 2.01, Reliance on Contract Documents, is amended by deleting subsection .01 and .02 in their entirety and replacing them with the following:

.01 The Owner makes no representation or warranty, express or implied, as to the accuracy, completeness, or suitability of any information contained in the Contract Documents, except with respect to information provided by the Owner where the Contract expressly permits the Contractor to rely on such information. Any review, comment, or approval by the Owner or its representatives is solely for general conformity with Contract requirements and shall not relieve the Contractor of its obligations nor constitute an assumption of responsibility by the Owner. Except with respect to information provided by the Owner where the Contract expressly permits the Contractor to rely on such information, the Contractor acknowledges that it cannot rely on the Owner to verify or validate the Contract Documents and remains fully responsible and liable for their adequacy, accuracy, coordination, and performance. The Owner's responsibility is limited solely to the accuracy and completeness of information provided by the Owner, and only to the extent the Contract expressly permits the Contractor to rely on such information.

.02 The Owner does not warrant interpretations of data, omissions, recommendations or opinions expressed in any subsurface report provided by the Owner.

GC 2.02 Order of Precedence

Clause GC 2.02, Order of Precedence, is amended by deleting subsection .01 in its entirety and replacing it with the following:

.01 In the event of any inconsistency or conflict in the contents of the following documents, such documents shall take precedence and govern in the following order:

- .1 Agreement
- .2 Addenda
- .3 Performance Specifications
- .4 Progressive Design-Build Special Provisions (excluding PDBSP 0100)
- .5 Special Provisions
- .6 OPSSs
- .7 Issued for Construction (IFC) Packages(s)
- .8 Standard Drawings
- .9 Tender
- .10 PDBSP 0100 Amendment to OPSS.PROV 100
- .11 OPSS.PROV 100, April 2026, MTO General Conditions of Contract
- .12 RFP Part B
- .13 Progressive Design-Builder's Proposal
- .14 RFP (excluding Part B)
- .15 Working Drawings

Later dates shall govern within each of the above categories of documents. Notwithstanding the above order of precedence, if the Progressive Design-Builder's proposal includes a specific commitment, feature, functionality, performance standard, deliverable or requirement that meet or exceed the requirements of the RFP or Contract Documents in the Owner's sole opinion acting reasonably, the Contractor shall be bound to deliver such commitment, feature, functionality, performance standard, deliverable or requirement and they shall form part of the Contractor's obligations under the Contract and shall not be diminished by any conflict.

SECTION GC 3.0 – ADMINISTRATION OF THE CONTRACT

GC 3.07 Delays

Clause 3.07 Delays, is amended by deleting subsection 3.07.01 c) and replacing it with the following:

c) Subject to GC 2.01.01 errors in the Contract Documents; or

Clause 3.07 Delays, is further amended by adding the following after the last paragraph of subsection 3.07.01:

Notwithstanding the foregoing and where specified in the Construction Risk Register as a responsibility of the Contractor, no extension of Contract Time or reimbursement of costs shall be granted for any delay, disruption, or impact that was known or ought to have been known prior to the Tender Closing Date. The Contractor assumes full responsibility for identifying and mitigating foreseeable conditions, constraints, and risks inherent in the design and construction operations.

GC 3.11 Change Proposals After Contract Award

GC 3.11.02 Sharing of Cost Savings

Subsection 3.11.02 Sharing of Cost Savings is deleted in its entirety and replaced with the following:

- .01 The Contractor may propose cost-reducing Change Proposals after Contract award. If a Change Proposal is acceptable to the Owner, as determined by an Owner Change Proposal review team, the Contractor shall:
 - a) Be reimbursed 100% for the agreed upon design/redesign cost as agreed upon at acceptance by the Owner in principle of a Change Proposal; and
 - b) Receive no additional payment of the net construction cost savings

Item a) is in addition to payment for the tendered cost for construction of a Change Proposal.
- .02 Standard submission forms and guidelines for their completion are available from the Contract Administrator.

GC 3.11.05 Accepted Change Proposal Payment

Clause 3.11.05 Accepted Change Proposal Payment, is amended by deleting subsection .01 in its entirety and replacing it with the following:

- .01 If a Change Proposal is acceptable to the Owner, the changes and payment related thereto shall be authorized by means of a Change Order to the Contract. Compensation to the Contractor shall be made as follows:

- a) The Contractor's costs for development work (e.g., any preliminary work up to Owner acceptance in principle of a Change Proposal related to the Change Proposals) shall not be eligible for reimbursement.
- b) The items for a Change Proposal shall become guaranteed maximum price items.

SECTION GC 4.0 – OWNER’S RIGHTS AND RESPONSIBILITIES

GC 4.01 Working Area

Subsection 4.01.01 Working Area, is deleted in its entirety and replaced with the following:

- .01 The Owner shall acquire all property rights which are deemed necessary by the Owner for the construction of the Work, including temporary working easements, and shall indicate the full extent of the Working Area in the Contract Documents.

GC 4.02 Management of Excess Materials

Clause GC 4.02, Management of Excess Materials, is amended by deleting subsection .01 and replacing it with the following:

The Contract Documents shall identify the materials to be moved within or removed from the Working Area, and any characteristics of those materials which shall necessitate special materials management and disposition.

SECTION GC 6.0 – INSURANCE, PROTECTION, AND DAMAGE

GC 6.01 Protection of Works, Persons and Property

Subsection 6.01.04 c) is deleted and replaced with the following:

- c) Subject to GC 2.01.01 errors in the Contract Documents; or

GC 6.02 Indemnification

Clause 6.02 is amended by adding subsections 6.02.03 and 6.02.04:

GC 6.02.03 Limits of Liability or Indirect Losses Suffered by the Parties

- .01 Subject to the Contractor's indemnities and obligations in GC 6.02 as they may relate to Claims by third parties, including third-party claims for Indirect Losses, as between the Contractor and the Owner exclusively, neither party shall have the right to claim damages for breach of the Contract Documents, in tort or on any other basis whatsoever, to the extent that any loss claimed by either party is:
 - (a) for punitive, exemplary or aggravated damages;
 - (b) for loss of profits, loss of use, loss of production, loss of business or loss of business opportunity, in each case suffered or allegedly suffered by either party; or
 - (c) a claim for consequential loss or for indirect loss of any nature, in either case suffered or allegedly suffered by either Party,

(collectively, “**Indirect Losses**”).

6.02.04 Maximum Liability

- .01 Notwithstanding anything to the contrary in the Contract Documents (other than the exclusions to the Construction Maximum Liability amount below in this Section GC 6.02.02), the maximum aggregate liability of either party to the other party arising under or relating to the Contract Documents, including in respect of any delay by the Contractor in the performance or provision of the Contract Documents, any indemnity provided under the Contract Documents, or as a consequence of any termination of this Agreement shall not exceed [\$_____] (the “**Construction Maximum Liability Amount**”).

[Note to Service Provider: The Construction Maximum Liability Amount shall be an amount equal to ##% of each Contract’s Total Bid Price; and is to be inserted by the Ministry before Contract execution.]

[Note to Draft: Consult with MTO Legal Services Branch and Contract Innovations Office (CIO) to determine applicability of the Maximum Liability provision and the Design Maximum Liability Amount.]

The Construction Maximum Liability Amount shall:

- (a) be exclusive of any insurance or performance security proceeds received or which will be received pursuant to insurance policies or performance security maintained pursuant to the Contract Documents or which would have been received if the Contractor and/or the Subcontractors had obtained and maintained insurance in accordance with the Contract Documents;
- (b) be exclusive of any proceeds received from the surety pursuant to any Statutory Bonds;
- (c) not apply in cases of wilful misconduct, deliberate acts of wrongdoing, fraud, gross negligence or material misrepresentation;
- (d) not apply to breach of confidentiality requirements under the Contract Documents;
- (e) in the case of the Contractor, shall not apply:
 - i. to any claims for (I) death, (II) personal injury or (III) other loss or damage of any third party (including loss or damage to property) pursuant to GC 6.02;
 - ii. to any breach of representation or warranty by the Contractor under the Contract Documents;
 - iii. to the enforcement by the Ministry of any of any performance security for which the Contractor is responsible under the Contract Documents;
 - iv. to the exercise by the Ministry of any rights under the Contract Documents to assume assignment of subcontracts as a result of a Contractor event of default;
 - v. related to any third-party Intellectual Property rights misappropriation or infringement by the Contractor or a Subcontractor;

- vi. in respect of the Contractor abandoning the project, provided that any suspension of the Work by the Contractor in accordance with the terms of the Contract Documents shall not be considered abandonment;
 - vii. to any fines or penalties payable by the Contractor or a Subcontractor resulting from a breach of any applicable laws and regulations by the Contractor or a Subcontractor;
 - viii. to any costs or expenses incurred by Ministry in enforcing a claim under the Contract Documents, or in relation to recovering any insurance related to a failure by the Contractor to perform the Work and/or the Contract Documents; and
 - ix. to any liabilities arising under any encumbrance created or caused by the Contractor or any Subcontractor in connection with the performance of the Work and/or the Contract Documents; and
- (f) in the case of Ministry, shall not apply in respect of:
- i. any amount paid or owing to the Contractor by the Ministry for the performance of the Work in accordance with the Contract Documents.

GC 6.03 Contractor's Insurance

Clause 6.03 Contractor's Insurance is amended by deleting Clause 6.03 in its entirety and replacing it with the following:

GC 6.03 Contractor's Insurance

GC 6.03.01 General

.01 Without restricting the generality of subsection GC 6.02, Indemnification, and subject to receiving the notice from the Owner contemplated in G.C. 6.035.0.1, the Contractor shall, during the term of this Agreement, purchase at its own cost and expense, with insurers having a secure A.M. Best rating of B + or greater, or the equivalent, all the necessary and appropriate insurance that a prudent person in the business of the Contractor would maintain with respect to the performance of the Work in accordance with the Contract Documents including, but not limited to, the following: "

- (a) Commercial General Liability - Commercial general liability insurance insuring the Contractor and naming the Owner as an additional insured, and any other person who the Owner or the Contractor may reasonably require to be added as additional insureds. Such general liability insurance shall provide coverage in respect of property damage and/or bodily injury (including death) arising out of any and all Work and shall include property damage if the damaged work or the work out of which the damage arises was performed on behalf of the Contractor by a Subcontractor or Sub-subcontractor and shall include bodily injury (including death) if the bodily injury (or death) arises out of work performed on behalf of the Contractor. Such insurance shall contain a cross liability endorsement.

The policy limit shall be no less than Twenty Million Dollars (\$20,000,000.00) per occurrence. **[NTD: Confirm project specific limit (\$20M - \$50M) with the Insurance and Claims Services Branch (ICSB)]** The coverage under the policy shall be maintained continuously with respect to the performance of any aspect of the Work during the term of this Agreement, provided that if the Owner provides the Contractor notice that the MTO Insurance Program set out in G.C. 6.035 is in effect and applies to the Work undertaken by the Contractor the coverage required under this section will be limited to offsite activities.

- (b) Professional Liability (Errors and Omissions) – The Contractor, the Subcontractors and the Sub-subcontractors that are performing any design, engineering or other professional services under the Contract Documents shall provide and maintain, professional liability insurance covering such Work with a limit of liability of not less than Ten Million Dollars (\$10,000,000.00) per claim and in the annual aggregate. [NTD: Confirm project specific limit (\$10M - \$25M+) with ICSB]

All coverage required under GC 6.03.01.02 (b) shall be maintained for thirty-six (36) months after the termination or expiration of this Agreement, or until such time that the Owner provides the Contractor notice that the MTO Insurance Program set out in GC 6.035.05 is in effect and applicable to the Work undertaken by the Contractor.

- (c) Environmental Insurance – covering claims for bodily injury (including death), property damage, clean-up costs and related legal defense expenses for pollution conditions that result from, or are disrupted by, the Work of the Contractor, Subcontractors and Sub-subcontractors or the work performed by or on behalf of the Owner. Such policy shall have limits of liability as deemed appropriate given the exposure of not less than Five Million Dollars (\$5,000,000.00) per occurrence and in the annual aggregate. [NTD: Confirm applicability and limits of project-specific coverages with ICSB] The policy shall remain in force for the duration of this Agreement or until the Owner provides the Contractor notice that the MTO Insurance Program set out in G.C. 6.035 is in effect and applicable to the Work undertaken by the Contractor.
- (d) Automobile Insurance – as per statutory requirements in Ontario and/or other jurisdictions, Ontario Automobile Policy (OAP 1) Owner's Policy Sections 3 and 4, auto liability for a limit not less than Twenty Million Dollars (\$20,000,000.00) per occurrence including Accident Benefits and where applicable Section 7, Loss or Damage Coverage. [NTD: Confirm whether higher limit is required (\$2M - \$5M) based on field exposure to live traffic with ICSB]
- (e) Crime Insurance - The Contractor shall provide and maintain, throughout the term of this contract, employee dishonest (crime) insurance protecting against the fraudulent/dishonest acts of its employees, including coverage for broad form money and securities, money orders and counterfeit papers, depositors' forgery, computer fraud and funds transfer fraud, audit expenses and credit card forgery. The limit of liability for such insurance shall be no less than One Million Dollars (\$1,000,000.00) per occurrence and in the annual aggregate. [NTD: Confirm applicability and limits of project-specific coverages with ICSB]
- (f) Cyber Insurance - The Contractor shall provide and maintain, throughout the term of this contract, cyber insurance with a limit of liability not less than Five Million Dollars (\$5,000,000.00) per claim and in the annual aggregate. [NTD: Confirm applicability and limits of project-specific coverages with ICSB] The cyber insurance policy shall insure against the following risks:
 - i) Privacy Liability: liability arising from the theft, dissemination, and/or unauthorized disclosure or use of third-party confidential information and personally identifiable information. Such insurance shall also include coverage for credit monitoring, notification expenses, and other related first party costs associated with mitigating a data security or privacy breach; and
 - ii) Network Security Liability: liability arising from the introduction of a computer virus into, or otherwise causing damage to, a third-party computer, computer system, network, or similar computer-related property and the data, software, and program

used

thereon.

- (g) Contractor's Equipment Insurance - The Contractor shall maintain an all-risk insurance policy covering all construction equipment, mobile equipment, miscellaneous equipment, tools, office contents and other miscellaneous property whether owned, leased or rented or for which the Contractor may be responsible, that is used in any way in connection with the Contract Documents. The policy shall remain in force for the duration of this Agreement or until the Owner provides the Contractor notice that the Owner-provided insurance set out in G.C. 6.035 is in effect and applicable to the Work undertaken by the Contractor.
 - (h) Aircraft Liability Insurance – Aircraft liability insurance with respect to owned or non-owned aircraft if used directly or indirectly in the performance of the Work, including use of additional premises, shall be subject to limits of not less than Ten Million Dollars (\$10,000,000.00) inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof, and limits of not less than Ten Million Dollars (\$10,000,000.00) for aircraft passenger hazard. [NTD: Confirm applicability and limits of project-specific coverages with ICSB] Such insurance shall be in a form acceptable to the Owner. The policy shall be endorsed to provide the Owner with not less than 30 Days written notice in advance of cancellation, change or amendment restricting coverage.
 - (i) Watercraft Liability Insurance – Watercraft liability insurance with respect to owned or non-owned watercraft if used directly or indirectly in the performance of the Work, including use of additional premises, shall be subject to limits of not less than Five Million Dollars (\$5,000,000.00) inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof, and limits of not less than Five Million Dollars (\$5,000,000.00) for watercraft passenger hazard. [NTD: Confirm applicability and limits of project-specific coverages with ICSB] Such insurance shall be in a form acceptable to the Owner. The policy shall be endorsed to provide the Owner with not less than 30 Days written notice in advance of cancellation, change or amendment restricting coverage.
 - (j) Other Insurance - Any other type or form of insurance (e.g., Contractors Equipment, Aircraft, and Marine Insurance), that the Owner, determines is required based on the nature of the services, the risks associated with the Work, applicable laws, industry practice, or changes to the scope of the project. Such requirement may be identified at any time during the term of this Agreement. If the Contractor determines that any additional type or form of insurance may be needed from time to time, the Contractor may obtain such additional insurance for the required duration at Contractors sole cost and expense. [NTD: Confirm applicability and limits of project-specific coverages (e.g., environmental, aircraft (\$5M - \$25), marine (\$2M - \$10)), etc. with ICSB]
- .02 The Contractor, the Subcontractors and any contractor of any Subcontractor (the "Sub-subcontractors") shall be entitled to satisfy their applicable insurance obligations under this section through the use of their respective annual corporate insurance policies.

G.C. 6.03.02 Waivers of Subrogation

- .01 Each of the policies of insurance required to be maintained pursuant to this **G.C. 6.03** shall contain a waiver of subrogation in favour of the insureds subject to the availability in accordance with insurance industry practice.

G.C. 6.03.03 Premiums

- .01 The Contractor shall duly and punctually pay or cause to be duly and punctually paid all premiums and other sums of money payable for maintaining any insurance required to be maintained

pursuant to this **G.C. 6.03** and shall, if required from time to time by the Owner, provide or cause to be provided to the Owner evidence of payment of premiums.

G.C. 6.03.04 Non-Cancellation

- .01 Each of the policies of insurance required to be maintained pursuant to this **G.C. 6.03** shall contain an agreement by the insurer to the effect that it will not cancel such policy prior to its expiration (whether by reason of non-fulfilment of conditions or otherwise except for non-payment) except upon the annual anniversary of each such policy and only upon thirty (30) Days' prior written notice to the Owner.

G.C. 6.03.05 Evidence of Insurance

- .01 The Contractor shall deliver or cause to be delivered to the Owner evidence of the insurance required to be maintained pursuant to **G.C. 6.03.01.02 (a), (b) and (c)** on or before the execution of this Agreement, including confirmation of required limits, additional insureds, and applicable endorsements. The Contractor shall deliver or cause to be delivered to the Owner evidence of the insurance required to be maintained pursuant to **G.C. 6.03.01.02 (d)** within a reasonable period of time following the identification of its need, and Approval as to form and content by the Owner, all in accordance with **G.C. 6.03.01.02 (d)**. The Contractor shall provide or cause to be provided evidence of the extension of such insurance to the Owner forthwith upon its receipt by the Contractor and prior to the expiration of any then current policy and shall deposit or cause to be deposited promptly with the Owner a certificate of insurance and subsequent renewals of such insurance (or, at the option of the Owner, a certified copy thereof). Delivery to and examination by the Owner of any policy of insurance or certificate thereof or other evidence of insurance shall in no way relieve the Contractor of any of its obligations pursuant to the provisions of this **G.C.6.03** and shall in no way operate as a waiver by the Owner of any of its rights.

G.C. 6.03.06 Co-Insurance

- .01 If any policies of insurance shall contain any co-insurance clause, the Contractor shall maintain or cause to be maintained at all times a sufficient amount of such insurance to meet the requirements of any such co-insurance clause so as to prevent the Contractor or the Owner from becoming a co-insurer under the terms of such policy or policies and to permit full recovery up to the amount insured in the event of loss, less any deductible.

G.C. 6.03.07 Approvals

- .01 All insurance required to be maintained by this **G.C. 6.03** shall be Approved by the Owner, from time to time as to terms, form, premium, amounts, deductibles, loss payees, named and additional insureds and insurers. Each policy of insurance shall be signed by the insurer or insurers responsible for the risks insured against.

G.C. 6.03.08 Liabilities of the Contractor

- .01 The Contractor's liabilities and obligations shall not be restricted to any sums mentioned in any of the insurance clauses contained herein and such insurance amounts provided for herein shall not be construed so as to relieve or limit the liability of the Contractor in excess of such coverage and shall not preclude the Owner from taking such other actions as are available to it under any provision of this Agreement or otherwise at law or in equity.

G.C. 6.03.09 Owner's Right to Insure

- .01 The Contractor shall immediately advise the Owner of any cancellation, material alteration or lapse of any policies of insurance required to be provided hereunder. If the Contractor fails to obtain and maintain or cause to be obtained and maintained such insurance or if such insurance is in an

amount less than the amount required under this Agreement, the Owner shall have the right (without any obligation to do so), upon two (2) Days' notice to the Contractor in a non-emergency situation or forthwith in an emergency situation and without assuming any obligation in connection therewith, to effect such insurance and all costs, expenses and other outlays by the Owner in connection therewith together with interest at the Rate of Interest shall be payable by the Contractor to the Owner upon demand without prejudice to any other rights and recourse of the Owner hereunder. No such insurance taken out by the Owner shall relieve the Contractor of its obligations to insure hereunder and the Owner shall not be liable for any loss or damage suffered by the Contractor in connection therewith.

G.C. 6.03.10 Cooperation

- .01 The Owner and the Contractor covenant and agree with each other to do all acts, matters and things as may be reasonably necessary or required to expedite the adjustment of any loss or damage covered by insurance hereunder so as to expedite the release and dedication of proceeds of such insurance in the manner and for the purposes herein contemplated.

G.C. 6.03.11 Deductibles

- .01 The Contractor shall be responsible for paying any deductible or self-retention amounts under the policies of insurance maintained by the Contractor.

G.C. 6.03.12 General

- .01 Each policy of insurance required to be obtained and maintained by the Contractor within section G.C. 6.03 shall:
 - i) except the workplace safety/employer's liability, automobile and professional liability policies, name the Owner, its affiliates, His Majesty the King in Right of Ontario, any minister of the Crown, and any other parties as required by contract or agreement as additional insureds; and
 - ii) be primary insurance with respect to any similar coverage hereunder and without any right of contribution of any insurance maintained by the Owner other than insurance as set out within Section GC 6.035 - MTO Insurance Program.
- .02 The Contractor shall cause the Subcontractors and Sub-subcontractors of any tier engaged on the Work to purchase and maintain insurance coverage equivalent to those set out in the insurance policies purchased by the Contractor, provided that if it is not commercially reasonable for such Subcontractors and Sub-subcontractors to purchase and maintain such equivalent insurance, taking into account the nature and complexity of the Work to be performed, then the Contractor shall cause such Subcontractors and Sub-subcontractors to purchase and maintain insurance coverage that is commercially reasonable in the applicable circumstances. The failure of any Subcontractors and Sub-subcontractors to obtain and maintain the required insurance shall not in any way impact the obligations of the Contractor under the Agreement.
- .03 If a claim is made on another project that could jeopardize the coverage available for the Work required to be done in accordance with the Contract Documents, the Contractor shall provide prompt written notice of such claim to the Owner.
- .04 Prior to the commencement of the Agreement and within thirty (30) Days of any placement, renewal, amendment or extension of all or a part of the required insurance, the Contractor shall promptly provide the Owner with confirmation of coverage through a signed certificate of insurance.

In the event of a termination of the Agreement if any portion of any policy of insurance required to be obtained and maintained by the Contractor:

- i) on an occurrence basis, the Contractor shall maintain such insurance for an additional period of two (2) years following the date of such termination; and
- ii) on a claims-made basis, the Contractor shall maintain such insurance for an additional period of three (3) years following the date of such termination.

.05 The retroactive date of any claims-made policy shall be no later than the Contract Award date.

G.C. 6.035 MTO Insurance Program

[Note To Service Provider: Confirm applicability and limits of an MTO Insurance Program with ICSB & CIO]

[Note to Draft: Consult with ICSB & CIO to determine applicability of an Owner Controlled Insurance Program (MTO Insurance Program).]

G.C. 6.035.01 General

- .01 The Owner may, in its sole discretion, elect to implement an MTO Insurance Program which may apply to components of the Work undertaken by the Contractor. If the Owner so elects, the Owner shall purchase and maintain the types of insurance policies described in this G.C. 6.035, which shall be issued by insurance companies registered in and licensed to carry on business in Ontario with a financial rating of "A-" or better as rated by AM Best or similar. The Owner shall provide notice to the Contractor if the MTO Insurance Program contemplated herein is obtained, and if it applies to any component of the Work undertaken by the Contractor. Upon receipt of such notice from the Owner, the Contractor shall be relieved of its obligation to maintain the corresponding insurance required of the Contractor under G.C. 6.03, where specified under G.C. 6.03.
- .02 The Owner's obligation to purchase and maintain the insurance coverage on the terms and conditions outlined herein are subject to such coverage being commercially available at the time of placing the insurance. In the event the Owner has given notice under G.C. 6.035.01.01, and subsequently the Owner determines, in its sole and absolute discretion that any such coverage is not commercially available, the Owner shall notify the Contractor of such unavailability within a reasonable time, and the parties shall engage in collaborative discussions to determine a resolution. In such scenario, the Contractor shall reinstate the required insurance policies set out in G.C. 6.03.
- .03 Unless specified otherwise, each such insurance policy required of the Owner shall be maintained as soon as practicable from the date of commencement of any insurable exposure associated with the performance of the Work. If any insurable exposure is commenced under the Contract Documents, the insurance policies required by the Owner hereunder may be supplemented by the placement of early works policies, if it is commercially reasonable in the applicable circumstances taking into account the nature and the complexity of the Work to be performed. Subject to the foregoing, the Owner shall endeavour to purchase and maintain such early works policies with terms and conditions substantially similar to those set out in this G.C. 6.035.
- .04 The Contractor shall be responsible for paying any deductible amounts under the policies of insurance provided by the Owner, to the extent of the Contractor liability under the Contract Documents.

- .05 The Owner reserves the right to have each insurance policy required of the Owner contain aggregates, sub-limits, endorsements, extensions, restrictions, and exclusions not described herein, which are customary for the relevant type of insurance.

G.C. 6.035.02 “All Risks” Property – Course of Construction Insurance

- .01 The policy under this G.C. 6.035.02 shall cover “All Risks” of direct physical loss or damage to the Work located in the Working Area during the course of construction, off-site prefabrication areas specifically dedicated to the Work and products while in offsite storage or inland transit, or in the Working Area awaiting erection or installation, testing or completion, subject to customary exclusions. Such policy shall not provide coverage for Contractor Equipment but shall provide coverage for temporary Equipment (including scaffolding, formwork, fences, shoring, hoarding, falsework, tarpaulins and temporary buildings).
- .02 Such policy shall be written in the names of the Owner, the Contractor, Subcontractors and Sub-subcontractors of any tier (including architects and engineers) engaged in activities in the Working Area in connection with the performance of the Work, excluding any such entities whose only function is to supply and/or transport materials, machinery or supplies to the Working Area and who do not perform any installation or construction work at the Working Area.
- .03 Such policy shall:
- i) provide for a limit of loss equal to the value of the probable maximum loss (as determined by the Owner in its discretion) of the Work;
 - ii) have an all-perils deductible of no more than Five-Hundred Thousand Dollars (\$500,000.00) per occurrence, except for the following insurable events:
 - a. water damage and flood; LEG 2 defects exclusion (provided that if LEG 3 is obtained, a higher market-imposed deductible may apply); and testing and commissioning, each of which shall have a deductible of no more than One Million Dollars (\$1,000,000.00) per occurrence; and
 - b. earthquake, which shall have a deductible of three percent (3%) of the value of the probable maximum loss (as determined by the Owner in its discretion) of the Work at the time of the loss (subject to a minimum of Five-Hundred Thousand Dollars (\$500,000.00) per occurrence);
 - iii) contain a waiver of the insurer’s subrogation rights against:
 - a. all named insureds and their respective officers, employees, servants, and agents, with the exception of architects, engineers, manufacturers and consultants for their respective errors or omissions in the performance of professional services;
 - b. His Majesty the King in Right of Ontario as represented by the Minister of Transportation (“**His Majesty**”) and any Minister of the Crown;
 - c. all executives, directors, officers, servants, agents and employees or any department of the Government of Ontario;
 - d. any other Person for whom His Majesty may be responsible in law; and

- e. any Person who has a right to claim a right of contribution as against His Majesty;
and
- 2. provide that, in the event of loss or damage, payment shall be made to the Owner as their respective interests may appear on their own behalf and as trustees for the benefit of any and all insureds.

.04 Such policy shall be maintained until the date of Certificate of Substantial Performance.

G.C. 6.035.03 Project specific contractor's Pollution Liability

- .01 The policy under this G.C. 6.035.03 shall cover claims for bodily injury (including death), property damage, clean-up costs and related legal defense expenses for pollution conditions that result from, or are disrupted by, the Work of the Contractor, Subcontractors and Sub-subcontractors or the work performed by or on behalf of the Owner. Such policy shall have limits of liability as deemed appropriate given the exposure of not less than Twenty-Five Million Dollars (\$25,000,000.00) per occurrence and in the aggregate, and a deductible of no more than Two-Hundred-Fifty Thousand Dollars (\$250,000.00) per occurrence. Coverage shall include extensions for transported cargo and off-site disposal.
- .02 Such policy shall be maintained until not less than twenty-four (24) months after the Contract Completion Certificate date.

G.C. 6.035.04 Wrap-Up Liability Policy

- .01 The policy under this G.C.6.035.04 shall cover against claims for bodily injury (including death), personal injury and property damage, and products and completed operations arising from the Work, subject to customary exclusions. It shall be written in the name of the Owner with the following parties included as additional named insureds, Contractor, Subcontractors and Sub-subcontractors of any tier (including architects and engineers) engaged on the Work, excluding any such entities whose only function is to supply and/or transport materials, machinery or supplies to the Working Area. Without restricting the generality of subsection G.C. 6.02.01, such policy shall provide for a limit of liability of no less than One-Hundred Million Dollars (\$100,000,000.00) per occurrence for bodily injury (including death) and property damage, including loss of use thereof, with an aggregate limit for products liability and completed operations (or a limit as deemed appropriate given the exposure).
- .02 This policy shall include the following coverage features:
 - i) premises and operations liability;
 - ii) MTO and contractors' protective liability;
 - iii) products and completed operations liability;
 - iv) blanket contractual liability;
 - v) cross-liability and severability of interests clause;
 - vi) contingent employer's liability;
 - vii) personal injury liability;
 - viii) "occurrence" basis coverage for bodily injury (including death) and property damage;
 - ix) "broad form" property damage coverage, including "broad form" completed operations coverage;

- x) “broad form” loss of use of property coverage;
- xi) coverage for shoring, blasting, excavating, underpinning, demolition, pile driving, caisson work, grading, tunnelling, and all work below ground surface;
- xii) non-owned automobile liability insurance, including third party liability arising from use and operation of hired vehicles; and
- xiii) sudden and accidental limited pollution coverage – IBC 2313 Form 240-hour detection and reporting.

The above coverage features are subject to amendment upon changes to the insurance market conditions.

- .03 The Wrap-Up Liability Insurance shall have a deductible of no more than Two-Hundred-Fifty Thousand Dollars (\$250,000.00) per occurrence, inclusive of all legal fees and associated expenses incurred in the investigation, defense, settlement, arbitration or litigation of claim.
- .04 This insurance shall be maintained continuously until following the date of Contract Completion Certificate. The completed operations coverage shall be for twenty-four (24) months reporting period following the date of Contract Completion Certificate. This insurance policy shall be primary once in effect and for the duration of such insurance policy.

G.C. 6.035.05 Project Specific Professional Liability (Errors and Omissions)

- .01 The policy under this G.C.6.035.05 shall cover errors, omissions or negligent acts in the performance of design, engineering, and professional services for the Work. It shall include as named insureds architects, engineers, and professional consultants engaged in providing professional services for the Work that are usual and customary to a design firm. The policy will not include coverage for contractors and subtrades of any tier, and it will also not cover the design and execution of construction means and methods. This policy shall provide a limit of liability appropriate for the insurable exposure of not less than Fifty-Million Dollars (\$50,000,000.00) per each claim and in the aggregate for the duration of the policy period, and a deductible of no more than One-Million Dollars (\$1,000,000.00) per claim.
- .02 The policy shall commence at the time there is an insurable exposure and shall be maintained with a twenty-four (24) months reporting period following the date of Contract Completion Certificate. Once in effect, such policy shall be primary with respect to the professional liability insurance coverage required to be maintained by the Contractor under section G.C. 6.03.01.02(b) and shall include a retroactive date to the date of first design and an insured vs. insured exclusion.

G.C. 6.035.06 Evidence of Project-Specific Policies to be provided

- .01 The Owner shall promptly provide a certificate of insurance and summary of policies to any insured party upon written request as evidence of the Work-specific policies placed and maintained by the Owner.

G.C. 6.035.07 Supplementary Insurance

- .01 The Owner does not represent that the Work-specific insurance policies described herein will be sufficient to protect the Owner or any other insured parties against all of their responsibilities under the Contract Documents. The Contractor and any other insured parties may obtain such additional insurance as they may consider necessary at their own expense.

- .02 The Owner and the Contractor shall, cooperate and shall provide each other with such assistance and materials as is required to support the placement of insurance and to substantiate such damages or losses for the purposes of claim recoveries sought under insurance coverage maintained by the Owner herein. Insurance maintained by the Owner shall not be cancelled without thirty (30) Days prior written notice being furnished to the Contractor. The Contractor shall cause all Subcontractors to cooperate and provide such assistance and materials as is contemplated in this section.

G.C. 6.035.08 Project-Specific Insurance Premiums to be excluded from Contracts and Subcontracts

- .01 In the event the Owner has provided notice in accordance with GC 6.035.01.01, prior to the execution of this Agreement, the Contractor shall certify and require Subcontractors to certify that their respective contract prices or compensation have taken into consideration the existence of the MTO Insurance Program and as such do not include any allowance for insurance premiums, whether payable by the Contractor or Subcontractors in respect of risks covered by such insurance policies provided by the Owner hereunder.
- .02 In the event the implementation of the MTO Insurance Program results in any cost saving of insurance premium to the Contractor, the Contractor shall promptly reimburse and compensate the Owner for an amount equal to such cost saving.

G.C. 6.035.09 Policy Term and Extensions

- .01 The terms and conditions applicable to the insurance policies described in G.C. 6.035 are for the current anticipated construction period as of the Contract execution date and if such construction period is extended such terms and conditions will be subject to change based on market conditions at that time.
- .02 The overall term of any insurance policy described in G.C. 6.035 will be subject to an overall term of ten (10) years from the date such policy is bound, inclusive of the completed operations or extended reporting period as applicable.

G.C. 6.035.10 Incident Reporting and Claims Procedure

- .01 The Contractor shall, at its own cost, implement and maintain procedures for the reporting, investigation, monitoring, and resolution of all incidents, claims, and losses arising from or related to the Work, and shall:
- a) maintain a written register of all damages, events, losses, circumstances, situations, claims, occurrences, and incidents that may result in a claim under any insurance policy required pursuant to Contract Documents, as well as all third-party claims involving bodily injury, illness, death, personal injury, or property damage in connection with the Work (each, an **"Incident"**). The register shall include, at a minimum:
 - i. the date of the Incident;
 - ii. the date the Incident was reported to the Contractor;
 - iii. the nature and type of Incident;
 - iv. the circumstances giving rise to the Incident;
 - v. assigned Control Adjuster;
 - vi. assigned counsel, where required;

- vii. investigation status;
 - viii. litigation activity;
 - ix. settlement and closure information; and
 - x. ongoing monthly and/or quarterly update reports regarding the status and development of the Incident until such Incident has been fully resolved and designated as closed;
- b) permit the Owner to inspect the Incident register at any reasonable time and provide a copy of the Incident register to the Owner's upon request;
- c) identify and maintain current contact information for all individuals responsible for claims management on behalf of the Contractor, including a designated claims representative and a dedicated email address for receipt and management of all Incident reports, claims notices, and claims-related communications, and provide such information to the Owner upon commencement of the Work and whenever such information changes;
- d) attend and participate in monthly meetings requested by the Owner to review the status, developments, and resolution of any Incident;
- e) in collaboration with the Owner, appoint an independent claims adjuster (the "**Control Adjuster**") to investigate and assess Incidents, adjudicate claims, and provide recommendations regarding liability and quantum, whether such claims fall below, within, or exceed any applicable insurance deductible. The Contractor shall be solely responsible for all fees and costs of the Control Adjuster;
- f) arrange and attend quarterly claims review meetings with the Owner, the Control Adjuster, any insurance claims adjuster appointed by an insurer, and insurer representatives, as required, to review the status of Incidents and any related claims, including disputed, denied, or unresolved claims;
- g) comply with the Owner's reasonable requests regarding communication, including communication with claimant(s) and members of the public, in respect of any such Incident and claim arising therefrom;
- h) where a claim is denied, disputed, or otherwise not resolved, document and provide to the Owner the reasons supporting such position together with any supporting investigation findings, evidence, legal opinions, or recommendations received from the Control Adjuster;
- i) upon receiving recommendations on liability and quantum from Control Adjuster, settle any claims (subject to the Owner's consent, not to be unreasonably withheld) falling within the deductibles, self-insured retentions or waiting periods of the policies of insurance required under the Contract Documents, using a release on terms reasonably required by the Owner, and including the Contractor, Owner and any parties reasonably required by Owner, as releasees thereunder;
- j) ensure that the Control Adjuster, shall provide recommendations on liability and quantum in respect of such Incidents to the Contractor, the insurers (for losses in excess of the policy deductible) and to the Owner;
- k) where responsibility for an Incident or claim is uncertain, disputed, or subject to further investigation, continue to administer, investigate, and respond to the Incident or claim pending final determination of responsibility and shall not refuse or delay claims handling solely on the basis that liability remains unresolved; and

- l) provide the Control Adjuster and any insurance claims adjuster assigned by an insurer with all reasonable access, assistance, records, documents, information, and cooperation required to inv
- m) notify the Control Adjuster and the applicable insurer's claims representatives of the full particulars of an Incident promptly upon becoming aware of the Incident and, in any event, no later than five (5) Days after first becoming aware of the Incident. Without limiting the foregoing, the Contractor shall provide immediate notice to the Owner, the Control Adjuster, and applicable insurers upon becoming aware of any fatality, amputation, critical injury, serious bodily injury, environmental release, major property damage event, or any other incident reasonably likely to result in a significant claim, regulatory investigation, adverse media attention, or reputational risk to the Owner. The Contractor shall be solely responsible for and shall indemnify the Owner for any loss, damage, deductible, self-insured retention, uninsured amount, or denied insurance claim incurred by the Owner as a direct result of the Contractor's failure to comply with the reporting obligations set out in this Section;
- n) acknowledge, investigate, and respond to all notices of Incidents, complaints, demands, and claims, whether formal or informal, and shall not defer investigation or response until commencement of litigation, issuance of a statement of claim, or receipt of other formal legal process;
- o) investigate an Incident as soon as practicable after becoming aware of the Incident, and in any event no later than seven (7) Days after becoming aware of the Incident;
- p) acknowledge that nothing in this Section prohibits the Owner from electing to assume control over the investigation, settlement or defense of any incident by notifying the Contractor in writing of such election, without prejudice to any other rights or remedies of the Owner; and
- q) acknowledge that, where the Contractor fails to comply with any requirement of this Section G.C. 6.035.10, or where the Owner incurs any loss, damage, cost, expense, claim payment, settlement amount, deductible, or other amount arising from or related to an Incident for which the Contractor is responsible under the Contract Documents, the Owner may set off such amount against any monies owing to the Contractor in respect of the Work, provided the Owner delivers written notice of such non-compliance, loss, damage, claim, or amount at least three (3) Days prior to setting off any such amount.

.02 Any notices to be given under G.C. 6.03.12 shall be in writing and shall be given by email to the address as follows:

- A. To the Owner at: to Proponent: To be provided by the Owner at the time of Contract award.]
- B. To the Contractor: At the address and contact information as provided for in the Contract Documents

Such notices shall be deemed to have been received by the party to whom it is emailed on the day of delivery, provided that if an above day deemed for receipt is not a business day, such notice or other communication shall be deemed to have been received on the following business day.

G.C. 6.035.11 Project Insurance Manual

.01 The parties shall comply with any project insurance manual (including any amendments thereto) provided by the Owner to the Contractor following execution of the construction Contract. The Owner shall use commercially reasonable efforts to deliver a draft of any such project insurance manual and any amendments thereto to the Contractor prior to providing the final version to the Contractor.

GC 6.04 Bonding

Clause 6.04.02 Performance Bond is amended by deleting subsection .01 in its entirety and replacing it with the following:

GC 6.04.02 Performance Bond

- .01 If the Total Bid Price is less than One-Billion Dollars (\$1,000,000,000.00), the Contractor shall furnish a Performance Bond using the most current version of Form 32 of Ontario Regulation 303/18 under the *Construction Act* that is conditioned on the due performance of the terms of the Contract in an amount equal to the lesser of Fifty Percent (50%) of the Total Bid Price or Two-Hundred-Fifty Million (\$250,000,000.00).
- .02 If the Total Bid Price is greater than One-Billion Dollars (\$1,000,000,000.00), the Contractor shall furnish a Performance Bond using the most current version of Form 32 of Ontario Regulation 303/18 under the *Construction Act* that is conditioned on the due performance of the terms of the Contract in an amount equal to Twenty-Five Percent (25%) of the Total Bid Price.
- .03 Notwithstanding the foregoing, the Owner may in its sole discretion determine the required bond amount having regard to the nature of the Work, project risks, other security provided under the Contract and the requirements of the *Construction Act*.

Clause 6.04.03 Labour and Material Payment Bond is amended by deleting subsection .01 in its entirety and replacing it with the following:

GC 6.04.03 Labour and Material Payment Bond

- .01 If the Total Bid Price is less than One-Billion Dollars (\$1,000,000,000.00) the Contractor shall furnish a Labour and Material Payment Bond using the most current version of Form 31 of Ontario Regulation 303/18 under the *Construction Act* that extends or guarantees payment protections to Subcontractors and persons supplying labour and materials to the Project in an amount equal to the lesser of Fifty Percent (50%) of the Total Bid Price or Two-Hundred-Fifty Million (\$250,000,000.00).
- .02 If the Total Bid Price is greater than One-Billion Dollars (\$1,000,000,000.00), the Contractor shall furnish a Labour and Material Payment Bond using the most current version of Form 31 of Ontario Regulation 303/18 under the *Construction Act* that extends or guarantees payment protections to Subcontractors and persons supplying labour and material to the Project is conditioned on the due performance of the terms of the Contract in an amount of at least Twenty-Five Percent (25%) of the Total Bid Price.
- .03 Notwithstanding the foregoing, the Owner may in its sole discretion determine the required bond amount having regard to the nature of the Work, project risks, other security provided under the Contract and the requirements of the *Construction Act*.

SECTION GC 7.0 – CONTRACTORS RESPONSIBILITIES AND CONTROL OF THE WORK

GC 7.01.07.02 General

Clause GC 7.01.07.02, General, is amended by deleting subsection 7.01.07.02.02 in its entirety and replacing it with the following:

.02 Schedules shall be prepared and submitted using the latest version of Primavera P6.

Clause GC 7.01.07.02, General, is amended by adding the following subsections:

- .10 The Critical Path schedule shall be a fully resource-loaded schedule showing the resources necessary for the proper completion of such activities.
- .11 Activities shall not exceed forty-five (45) Working Days in duration unless otherwise approved by MTO.
- .12 The Critical Path schedule shall not contain any open-ended activities, including activities with open start or open finish activities. Positive lag between activities shall be used only if specifically driven by a waiting duration associated with the predecessor activity.
- .13 The Critical Path schedule shall use unconstrained sequencing logic and shall not use imposed date constraints in place of, or to limit sequencing logic for any activity or milestone, except where required by contractual obligation or external constraints.

GC 7.01.08 Errors Relating to the Contract

Subsection GC 7.01.08 Errors Relating to the Contract, is amended by deleting subsection .01 in its entirety and replacing it with the following:

- .01 Where the Contractor is in the opinion that they have found any errors, inconsistency, ambiguity, or omissions, relating to the Contract, the Contractor shall immediately notify the Contract Administrator on MTO standard form PH-CC-755, Information Request, and shall not proceed with the activity affected until receiving direction from the Contract Administrator. The Contractor shall be fully responsible, for any errors, inconsistency, ambiguity, or omissions that were known or ought to have been known by the Tender Closing Date unless specified in the Construction Risk Register as a responsibility of the Owner.

SECTION GC 8.0 MEASUREMENT AND PAYMENT

GC 8.01.01 Quantities

Subsection GC 8.01.01 Quantities, is amended by deleting subsection .02 in its entirety and replacing it with the following:

- .02 Measurement of the quantities of the Work shall be as follows:
 - a) Those items identified on the tender by the notation (P) in the unit column shall be paid according to the Plan Quantity.
 - b) Items where the notation (P) does not occur shall be paid according to Actual Measurement or lump sum.
 - c) Lump Sum Items shall be by percent completion of the item.

When required, the Contract Administrator will adjust Plan Quantities by modifying boundary lines and grades of the work on the plans to calculate new adjusted Plan Quantities. Alternatively, where appropriate, the Contract Administrator may determine the new adjusted quantities by Actual Measurements.

Clause GC 8.01.01 Quantities, is further amended by the addition of the following subsection:

.03 Measurement of the mobilization item shall be according to the following schedule:

- a) Upon commencement of mobilization for construction operations, 25% of the total amount bid for mobilization or 2.5% of the total construction value (excluding mobilization), whichever is less.
- b) Upon completion of 5% of total construction value, 37.5% of the total amount bid for mobilization or 5% of the total construction value (excluding mobilization), whichever is less.
- c) Upon completion of 10% of total construction value, 37.5% of the total amount bid for mobilization or 10% of the total construction value (excluding mobilization), whichever is less.
- d) Upon substantial performance – the remaining amount of the mobilization item.

The mobilization item shall consist of all preparatory work necessary for the movement of personnel and equipment to the Working Area (the "mobilization"). This item shall be exclusive of all labour, equipment, and material to be paid under other items.

GC 8.01.02 Variations in Tender Quantities

Clause GC 8.01.02 Variations in Tender Quantities, is amended by deleting subsection.01 in its entirety and replacing it with the following:

- .01 When it appears that the quantity of work to be done or Material to be supplied by the Contractor or both under a unit price tender item may exceed or be less than the tender quantity, the Contractor shall proceed to do the work or supply the Material or both required to complete the tender item and payment shall be made for the actual amount of work done or Materials supplied or both at the unit prices stated in the tender and as may be specified elsewhere in the Contract Documents, except as provided below:
- a) In the case of a Major Item, when the quantity of work performed or Material supplied by the Contractor or both exceeds the tender quantity by more than 15%, either party to the Contract may make a written request to the other party to negotiate a revised unit price for that portion of the Work performed or Material supplied or both which exceeds 115% of the tender quantity. The negotiation shall be carried out as soon as reasonably possible. Any revision of the unit price shall be based on the actual cost of doing the work or supplying the Material or both under the tender item plus a reasonable allowance for profit and applicable overhead.
 - b) In the case of a Major Item, when the quantity of work performed or Material supplied by the Contractor or both is less than 85% of the tender quantity, the Contractor may make a written request to negotiate payment for the portion of actual overheads and fixed costs applicable to the amount of the underrun in excess of 15% of the tender quantity. For purposes of the negotiation, the overheads and fixed costs applicable to the item are deemed to have been prorated uniformly over 100% of the tender quantity for the item. Overhead costs shall be confirmed by a statement certified by the Contractor's senior financial officer or auditor and may be audited by the Owner.

Alternatively, where both parties agree, an allowance equal to 10% of the unit price on the amount of the underrun in excess of 15% of the tender quantity shall be paid. Written

requests for compensation shall be received no later than 180 Days after Contract Completion.

GC 8.02.04.01 Progress Payment Certificate

Clause 8.02.04.01, Progress Payment Certificate, is deleted in its entirety and replaced with the following:

- .01 The Contractor shall submit an application for progress payment monthly after starting the Work on the Contract. The application for progress payment shall be for Work completed at the agreed to monthly Cut-off Date.

Within 7 Days following the agreed to monthly Cut-off Dates, the Contractor shall submit an updated application to the Contract Administrator.

GC 8.02.04.01.02 Progress Payment Certificate – Tender Item Bid

- .01 Where the Construction Phase Bid Price uses Tender Item Bid, the application for progress payment shall be submitted on a monthly basis and contain the following two parts::

Part 1 - A Proper Invoice which shall contain:

- a) Contractor's name and address;
- b) The date of the Proper Invoice and the period, milestone or other contractual payment entitlement to which the invoice relates
- c) Information identifying the Owner and Contract number for Work performed;
- d) A description, including quantity where appropriate, of Work performed;
- e) The amount payable for the Work performed and the payment terms;
- f) The name, title, telephone number, and mailing address of the Person to whom payment is to be sent; and
- g) Tender item numbers, description, unit of measurement, original tender quantity, agreed upon changes to the tender quantity, total quantity completed to date, quantity completed previous Proper Invoice, quantity completed this period, unit price, dollars this period, and total dollars to date.

Subtotals shall be detailed for tender items, approved Change Orders, and payment adjustments as specified in the Contract Documents.

The tender item information appearing on the Proper Invoice shall conform exactly with those specified in the bid tender document.

Part 2 - Quantity of Work Completed Sheets detailing:

- a) Tender item numbers, sub-item numbers, unit of measurement, location description, original tender quantity, agreed upon changes to the quantity, total quantity completed to date, quantity completed previous Proper Invoice, quantities completed and reconciled with the Contract Administrator for this period.

The tender item information appearing on the quantity of Work completed sheets shall conform exactly with those provided in the bid tender document. The quantity of Work completed sheet information shall be sufficient to allow the Contract Administrator to verify and confirm the Work on the Proper Invoice for payment.

Proper Invoices and quantity of Work completed sheets shall be submitted in hard-copy or digital

format. For payment purposes, the Contract Administrator shall review the updated application for progress payment within 7 Days of receipt for completeness and to verify the quantities of Work have been completed as specified in the Contract Documents.

Subject to the Construction Act, applications for progress payments containing deficiencies, errors, or non-compliance with the Contract Documents shall be deemed to contain an invoice that does not meet the requirements of a Proper Invoice and shall be returned to the Contractor for correction.

The Owner shall pay the Proper Invoice no later than 28 Days after receiving the Proper Invoice.

GC 8.02.04.01.03 Progress Payment Certificate – Lump Sum Bid

.01 Where the Construction Phase Bid Price uses a **Lump Sum Bid**, the application shall be made by supplying the Contract Administrator with a Proper Invoice detailing the progress of each item at the agreed monthly cut-off date. The Proper Invoice shall be submitted on Owner's Standard Form PH-CC-882, Design Build (DB) Progress Payment Certificate.

- a) Subtotals shall be detailed for tender items to match the Itemized Bid Form, and a subtotal for Change Orders.
- b) The item information appearing on the Proper Invoice shall agree exactly with those as shown in the Itemized Bid and Evaluation Form.

Proper invoices shall be submitted in hard-copy and digital format. The Contract Administrator shall review the Proper Invoice for completeness and subsequent approval for payment within 7 Days.

.02 Subject to the Construction Act applications for progress payments containing deficiencies, errors, or non-compliance with the Contract Documents shall be deemed to contain an invoice that does not meet the requirements of a Proper Invoice and shall be returned to the Contractor for correction.

The Owner shall not process for payment any changes less than \$1,000 from the amount shown on the previous payment certificate.

GC 8.02.04.02 Payment Adjustment for Changes in the Fuel Price Index

Clause GC 8.02.04.02, Payment Adjustment for Changes in the Fuel Price Index, is deleted in its entirety and replaced with the following:

GC 8.02.04.02.01 General

Where a Tender Item Bid is used for the Construction Phase Bid Price, payment adjustment for changes in the Fuel Price Index shall be according to GC 8.02.04.02.02 Payment Adjustment for Changes in the Fuel Price Index – Tender Item Bid.

Where a Lump Sum Bid is used for the Construction Phase Bid Price, payment adjustment for changes in the fuel price index shall be according to GC 8.02.04.02.03 Payment Adjustment for Changes in the Fuel Price Index – Lump Sum Bid.

GC 8.02.04.02.02 Payment Adjustment for Changes in the Fuel Price Index – Tender Item Bid

- .01 The Owner will adjust the payment to the Contractor based on changes to the Owner's fuel price index. The fuel price index shall be calculated by the Ontario Ministry of Energy and shall be based on the rack price, including taxes, of diesel fuel. The fuel price index shall be published monthly in the Owner's Contract Bulletin for each calendar month and shall reflect the previous month's prices. The Contractor shall use this index when calculating flow through to truckers, Subcontractors, and shippers and suppliers.
- .02 A payment adjustment, excluding any payments for Changes in the Work and Additional Work, shall be calculated monthly and applied to the monthly progress payment.
- .03 It is agreed by the parties to the Contract that it is impracticable and difficult to ascertain actual fuel consumed on the Contract, and the parties hereto agree that for the purpose of calculating the total fuel price adjustments, the amount of fuel consumed shall be determined using the rates in Table 8.02.04.021. The payment provided for the items listed in Table 8.02.04.02-1 shall be deemed to be for all Work.
- .04 Payments provided under clause GC 8.02.04.02, Payment Adjustment for Changes in the Fuel Price Index, shall be used to compensate all trucks, Subcontractors, and shippers and suppliers performing any Contract Work or delivering material for the Contract including items not listed in Table 8.02.04.021.
- .05 The compensation provided through this provision shall also be used for the purpose of providing fuel price adjustment compensation to suppliers and shippers. Should the Contractor be required by a supplier to negotiate and provide fuel price adjustment compensation to any party providing Materials to the Contract, the Owner will not provide any compensation for this purpose in addition to that provided through these MTO General Conditions of Contract.
- .06 Fuel Price Adjustment Calculation

- a) The Contractor's payment adjustment for each month shall be calculated using the following formula:

$$Cfpa = (Ctem) \times \frac{(I - Bc)}{100}$$

Where:

Cfpa = fuel price adjustment paid to Contractor or Owner, in dollars
Ctem = total estimated monthly fuel consumption
I = progress payment month fuel price index (for the month that the work was completed in)
Bc = fuel price index in the month prior to tender closing.

- b) The progress payment month fuel index shall be published the first Friday of every month in the Owner's Contract Bulletin.
- c) The total estimated monthly fuel consumption shall be calculated by multiplying the consumption rates in Table 8.02.04.02-1 by the work accomplished in the current month for each applicable item and totaling the volume in litres.
- d) Only tender item quantities or work done at the tender item price shall be included in the calculation.

- .07 Payment Certificate Documentation

- a) When $(I - Bc)$ (progress payment month fuel price index - month prior to tender closing fuel price index) is positive, the Contractor shall receive a payment.
- b) When $(I - Bc)$ (progress payment month fuel price index - month prior to tender closing fuel price index) is negative the Owner shall receive a credit.
- c) The Contractor shall show the fuel price adjustment as a line item on each progress payment certificate and the final payment certificate. The item shall be called fuel price adjustment.

.08 Fuel Price Adjustment Flow Through

- a) The Contractor agrees to adjust the payment to each trucker hired directly by the Contractor for execution of part of the Work according to the following formula:

$$Tfpa = (Tmpp) \times \frac{(I - Bt)}{Bt} \times 0.17$$

Where:

- $Tfpa$ = fuel price adjustment paid to trucker, in dollars
- $Tmpp$ = monthly payment to trucker, in dollars
- Bt = fuel price index in the month that the Contract with the trucker was entered into either verbally or in writing
- I = progress payment month fuel price index (for the month that the work was completed in)

The fuel price adjustment paid to each trucker ($Tfpa$) shall be calculated for each calendar month and may be positive or negative.

- b) The Contractor agrees to adjust the payment to each Subcontractor according to the following formula:

$$Sfpa = (Smpp) \times \frac{(I - Bs)}{Bs} \times \frac{Fn}{100}$$

Where:

- $Sfpa$ = fuel price adjustment paid to the Subcontractor, in dollars
- $Smpp$ = monthly progress payment to the Subcontractor, in dollars
- Bs = fuel price index in the month that the Contract with the Subcontractor was entered into either verbally or in writing
- I = progress payment month fuel price index (for the month that the work was completed in)
- Fn = fuel consumption factor as negotiated between the Contractor and the Subcontractor as a percentage of the value of the subcontract

- c) The Contractor shall report the negotiated fuel consumption factor (Fn) on MTO form PH-CC-744, Fuel Consumption Listing Subcontractor, listing all subcontracts, and the corresponding negotiated fuel consumption factor. The form shall be updated monthly or as changes and additions arise.
- d) The Contractor also agrees that each subcontract shall contain a requirement that the Subcontractor shall make a fuel price adjustment to each trucker hired directly by the Subcontractor for execution of part of the work according to the same formula and conditions used by the Contractor to make fuel price adjustments to truckers, and provide

such confirmation on MTO form PH-CC-745, Fuel Consumption Tracking Subcontractor, for each trucker.

GC 8.02.04.02.03 Payment Adjustment for Changes in the Fuel Price Index – Lump Sum Bid

- .01 Payment adjustments for changes in the Fuel Price Index shall not apply and no adjustment, escalation, or compensation shall be made to the lump sum price as a result of changes in the Fuel Price Index.
- .02 The Lump Sum Bid shall be deemed to have included all costs, risks, contingencies, and allowances associated with actual or anticipated changes in the index. The Contractor shall have no entitlement to additional payment, claim, or relief arising from fluctuations in the index.

WARRANT: Always with Progressive Design-Build for Highway Construction Contracts.

CUSTODIAN: Contract Innovations Office.

CONSTRUCTION PHASE PROJECT ADMINISTRATION FOR PROGRESSIVE DESIGN-BUILD FOR HIGHWAYS CONTRACTS

Special Provision No. PDBSP0001

1.0 SCOPE

This Special Provision covers the requirements for project administration and the Progressive Design-Builder's responsibilities and obligations during the Construction Phase.

The Progressive Design-Builder shall undertake and deliver the Work, comprising the **[NTD: insert project description, length, and location (including limits)]** and associated Work, including:

[NTD: List all components of Work being completed under separate bullets.

• ...]

2.0 PROJECT PRINCIPLES

The Works shall be completed in accordance with all applicable laws, standards, and specifications including but not limited to the most recent version (at the time of Construction Phase Bid) of the applicable documents. The construction of the Works shall not negatively impact future maintenance or future construction.

The following principles shall apply, at all times, with respect to a determination of the requirements of the RFP. In the event of any ambiguity, conflict, or inconsistency between or among any of the provisions of the RFP, such principles shall apply in the order set out below, solely to the extent necessary, to resolve the ambiguity, conflict, or inconsistency:

- a) A provision or requirement for a higher standard of safety, reliability, durability, performance, or service shall take precedence over a provision or requirement for a lower standard of safety, reliability, durability, performance, or service.
- b) In the event of a discrepancy between any parts of the RFP, in which one requirement would, in the opinion of the Ministry, provides the Ministry a lower quality of a material, equipment, fixture, or feature than another requirement listed within the RFP, then the higher quality requirement shall govern.
- c) To support a specification focused on performance, if Part B: Design Phase, Part C: Construction Phase, or a specification describes Component A and C of a system that also requires a Component B to be functional then Component B must also be provided by the Progressive Design-Builder to provide a fully functional A-B-C system.

- d) To support a specification focused on performance, if Part B: Design Phase, Part C: Construction Phase, or a specification describes an installation of a system that also requires specific reviews by authorities, permits, pre- installation services, and commissioning in order for the installation to be functional then those specific reviews by authorities, permits, pre- installation services, and commissioning must also be provided by the Progressive Design-Builder to provide a fully functional system and a fully functional road.

3.0 PROGRESSIVE DESIGN-BUILDER'S RESPONSIBILITIES AND OBLIGATIONS

The Progressive Design-Builder is responsible for undertaking the Construction Phase Works in conformance with the requirements of this Special Provision, the Contract Documents, and the RFP.

3.01 Communications

The Progressive Design-Builder shall include the Ministry and its representatives, including the Contract Administrator, in all issues with stakeholders. As deemed appropriate by the Contract Administrator or the Ministry, messaging shall be reviewed by the Ministry prior to responding.

The Ministry shall be the sole point of contact for any media enquiries (i.e. newspaper, radio, TV). The Progressive Design-Builder is the first point of contact for all other communications. Recognizing that communications may be a shared responsibility, the Progressive Design-Builder and the Ministry shall work collaboratively to determine an appropriate and timely approach for addressing any issues.

The Progressive Design-Builder shall prepare a Construction Phase Communications Plan that includes the Progressive Design-Builder's approach to communication with its Project Team, the Ministry and its agents, stakeholders, regulatory agencies, the public, and the media throughout the Construction Phase.

The Construction Phase Communications Plan shall include the Progressive Design-Builder's approach to compliance with requirements of *Accessibility for Ontarians with Disabilities Act*, *Personal Information Protection and Electronics Documents Act*, and *French Language Services Act* during the Construction Phase.

The Communications Lead shall be responsible for developing and overseeing the Communications Plan and shall work collaboratively with other Progressive Design-Build team members (e.g. Project Manager, Quality Manager, Project Superintendent, Environmental Lead) to respond to project-specific questions and inquiries.

3.02 Meeting / Presentation Requirements

[NTD: Discuss the requirements for attendance at meetings during the Design Phase]

All meetings related to the Construction Phase shall be held at the Contractor's Project Office. All meetings shall be scheduled such that all issues are adequately covered and discussed between 9:00 am and 4:00 pm.

All meetings shall be arranged and chaired by the **[Progressive Design-Builder / Contract Administrator]**.

3.02.01 Attendance at Meetings

The following Progressive Design-Build Project Team Members shall attend all meetings (in person or as directed by the Ministry):

[NTD: Update list based on project-specific requirements]

- *Project Manager*
- *Project Superintendent*
- *Lead Scheduler*
- *Risk Lead*
- *Design Manager*
- *Lead Design Engineer*
- *Environmental Lead*
- *Communications Lead*
- *Quality Manager*
- *[Other ...]*

Remaining Project Team Members shall attend meetings (in person or hybrid) as required based on the agenda items to be discussed.

Invitations shall be sent to each member of the Ministry's Project Team. An agenda and a copy of the documents and plans to be discussed shall be supplied to each invitee a minimum of five (5) Business Days prior to the meeting.

All material submitted to the Ministry for meetings shall be in accordance with the requirements of this specification and as specified elsewhere in the Contract Documents.

Minutes shall be prepared by the Progressive Design-Builder for all meetings (including teleconferences, on-site, and ad-hoc meetings) within **[five (5)]** Business Days and distributed by e-mail to all invitees. The Progressive Design-Builder shall make the appropriate changes, additions, and deletions to the minutes as requested by the Ministry within **[five (5)]** Business Days.

The Progressive Design-Builder shall organize and provide all necessary meeting details (teleconference number, platform information (MS Teams), location/venue details, etc.) to all invitees.

Third parties (Emergency Services, OPP, MLITSD, etc.) shall be invited at the Ministry's discretion to the start-up and progress meetings.

3.02.02 Construction Phase Meetings

The Progressive Design-Builder shall schedule the following Construction Phase meetings:

[NTD: Insert any additional "Special Meeting" requirements. Modify to suit Project requirements.]

- Collaboration Session(s) **[NTD: MTO Project Manager to determine if this required]**
- Construction Pre-Start Meeting
- Presentation Meetings
- Progress Meetings
- Risk Review Meetings
- Pre-Pave Meeting(s) (initial)
- Pre-Pave Meeting Refresher (for carry-over contracts)
- Pre-Start Meeting(s) for Concrete
- Pre-Placement Meeting(s) for Concrete
- Pre-Removal Meeting(s) for Concrete
- Pre-Fabrication Meeting(s) for Precast Concrete Elements
- Pre-Start Meeting(s) for Electrical, ITS, and ATMS
- Highway Turnover Walkthrough Meeting(s)
- Pre-Seasonal Shutdown Meeting(s)
- Highway Commissioning Meeting(s)
- Specialty meetings with utilities, municipal authorities, and 3rd parties
- Pre-start Railway and Railway Meeting(s)
- Final Completion Meeting(s)
- Construction Turnover Meeting
- Any other meetings (including on-site and ad-hoc meetings) necessary to ensure the successful delivery of the Project.

The Progressive-Design Builder shall schedule all appropriate meetings prior to Construction Phase Works proceeding. Construction Pre-Start Meeting and other meetings shall be scheduled and chaired by the Progressive-Design Builder at the start of each construction season and/or after seasonal shutdown.

3.02.03 Collaboration Session

[NTD: If a collaboration session is required by the Ministry include the paragraph below (insert location and modify requirements as required); otherwise use N/A]

The Progressive Design-Builder shall host **[NTD: Specify number and frequency of Collaboration Sessions]** Collaboration Session(s) at the **[NTD: Specify location where Collaboration Session(s) will be held]** and shall be responsible for all costs associated with

the Collaboration Session(s), for the costs of facilitation, and for the costs of its own attendees, the Ministry staff, and Ministry representatives, as mutually agreed to and included in the Attendees list below. Any additional Ministry staff and representatives shall attend at no cost to the Progressive Design-Builder.

[NTD: Consult with the Project Team and Contract Innovations Office on format and process for Collaboration and Partnering sessions. Based on the approach, modify previous paragraph to specify the Host and responsible party for associated costs.]

Attendees (in person or as directed by the Contract Administrator) shall include:

- **[NTD: Insert list of attendees – refer to CAIS Meeting Template]**

3.02.04 Construction Pre-Start Meeting

The Progressive Design-Builder shall schedule a Construction Pre-Start Meeting at the Project Office, or such other space that can accommodate all participants, prior to start of Construction Works.

In addition to the agenda items listed in the CAIS Pre-Start Meeting Agenda template, the following agenda items shall be discussed at the Construction Pre-Start Meeting, as a minimum:

- Project Team Introductions
- Progressive Design-Builder Organization Chart
- Roles and Responsibilities
- Project Scope and Contract Requirements
 - Progressive Performance Requirements
- Project Schedule
- Progress Meetings
- Environmental Management (including Class EA)
- Quality Management
 - SP 199S66
 - PDBPERF Specifications
- Communication Protocol
 - Key Contacts
 - Emergency Contacts
 - Instruction Notices
 - Information / Compensation Requests
- Records Management
 - Contract Management System
- Contractor Performance (Form Bs and Contractor Performance Rating)
- Occupational Health and Safety
- **Other ...**

The Progressive Design-Builder shall submit an updated Critical Path schedule prior to the meeting in accordance with the requirements of Section 5 of this RFP and OPSS.PROV 100 – MTO General Conditions of Contract and its amendments.

Attendees (in person or as directed by the Contract Administrator) shall include:

- **[NTD: Insert list of attendees – refer to CAIS Meeting Template]**

3.02.05 Presentation Meetings

The Progressive Design-Builder shall present the following to the Ministry, as a minimum:

- a) Update on the Construction Phase schedule.
- b) Findings of technical reports (At the request of the Ministry, the author of a technical submission / report shall present the findings).
- c) Update on the Environmental Assessment process, including status of consultations, result of impact assessments, and conformance / compliance with Contract Documents, standards, regulations, and legislation.
- d) Update on construction activities.

The presentation shall be in PowerPoint format.

The Progressive Design-Builder shall distribute copies of all relevant meeting materials, Project Status Report, and agenda to the attendees a minimum of **[five (5)]** Business Days prior to the meeting.

Attendees (in person or as directed by the Contract Administrator) shall include:

- **[NTD: Insert list of attendees – refer to CAIS Meeting Template]**

3.02.06 Progress Meetings

In addition to the CAIS Contract Progress / Site Meeting Agenda template, the following agenda items shall be discussed at Progress Meetings, as a minimum:

- Review Minutes of Last Meeting(s)
- Lessons Learned in the last month, if any
- Project Status Report
- Design Related Issues
- Construction Related Issues
- Progressive Performance Requirements
- Schedule and Cost Forecasts
- Change Orders / Change Proposals

- Quality Management
 - SP 199S66
 - PDBPERF Specifications
- Delay / Claims, if any
- Environmental Management
- Traffic Management
- Communication Protocol
 - Key Contacts
 - Emergency Contacts
 - Instruction Notices
 - Information / Compensation Requests
- Records Management
 - Contract Management System
- Contractor Performance (Form Bs and Contractor Performance Rating)
- Occupational Health and Safety

Additional agenda items may be requested by the Ministry to be added to the regular agenda.

The Progressive Design-Builder shall submit an updated Critical Path schedule prior to the meeting in accordance with the requirements of Section 5 of this RFP and OPSS.PROV 100 – MTO General Conditions of Contract and its amendments.

Attendees (in person or as directed by the Contract Administrator) shall include:

- **[NTD: Insert list of attendees – refer to CAIS Meeting Template]**

3.02.07 Risk Review Meetings

The Progressive Design-Builder shall use the Design & Construction Risk Register to update the project risk profile through the Construction Phase.

The Construction Risk Register shall contain all Project Risks irrespective of risk allocation and/or ownership for purposes of joint-management and transparency of the risk management process. The Construction Risk Register shall be updated on an ongoing basis, and the results of each update shall be discussed as part of the Risk Review Meetings.

The Progressive Design-Builder shall provide a current/interim version of the Construction Risk Register to the Ministry for review no fewer than five (5) Business Days in advance of each Risk Review Meeting and shall provide to the Owner an updated version of the Construction Risk Register no more than five (5) Business Days following each Risk Review Meeting, revised to reflect the output of such Risk Review Meeting.

The Construction Risk Register shall be submitted as part of each Project Status Report.

The Ministry may, at its sole discretion, at any time require Progressive Design-Builder to promptly provide the current or live version of the Construction Risk Register for the Ministry's review.

The Construction Risk Register shall be primarily focused on mitigating risks that will transpire during the Construction Phase. The Construction Risk Register shall be used to proactively manage and mitigate risks during the Construction Phase via a collaborative approach between the Parties.

3.02.08 Contract Completion Handover Meeting

Upon completion of each construction contract, the Progressive Design-Builder shall plan, coordinate, and facilitate an in-person Contract Completion Handover meeting with the Ministry.

The purpose of the Contract Completion Handover Meeting is to ensure the effective transfer of project knowledge, design information, and project records to Ministry's Project Delivery Office, and to facilitate the long-term management and maintenance of the corridor with Ministry's Maintenance Office. The Ministry may request additional attendees to participate in the Contract Completion Handover Meeting(s) at no cost to the Ministry.

At each Contract Completion Handover Meeting, the Progressive Design-Builder shall present and transfer all relevant project files and supporting documentation in an organized and accessible format. At a minimum, the information shall include:

- a) The correspondence affecting the design changes;
- b) As-built drawings and record drawings and documentations;
- c) As-built DTM, B-Plans and C-Plans in acceptable digital format;
- d) A summary of significant revisions made during the Design Phase and the Construction Phase;
- e) As-built Highway Inventory Sheets in Excel format (as per the Highway Maintenance Guideline for Highway Inventory Details);
- f) A list of all extended warranty Works and associated requirements; and
- g) Any other documents required to support the operation, maintenance, and future management of the highway corridor.

The Progressive Design-Builder shall identify and explain all changes, addenda, design revisions, field changes, and other modifications incorporated in the final constructed highway to the Ministry. The Progressive Design-Builder shall also prepare and submit an

indexed inventory of all project records, file locations, and key project information to facilitate the Ministry's future retrieval, interpretation, and use of the project documentation.

In addition to uploading all project records to the Ministry's Contract Management System, the Progressive Design-Builder shall provide the Ministry with two (2) physical storage devices containing a complete copy of all project documentation and a comprehensive index of the contents.

Attendees (in person or as directed by the Ministry) shall include:

- **[NTD: Insert list of attendees]**

3.03 Project Status Report

The Progressive Design-Builder shall prepare and submit to the Contract Administrator project status reports (the "**Project Status Report**") on a [weekly / monthly] basis. The Project Status Report shall be submitted no less than three (3) Business Days prior to the regularly scheduled progress meetings.

The Project Status Report shall be a detailed summary (in writing) of the status of the Project with the following headings:

- a) Design and Construction Status
- b) Design and Construction Risk Register
- c) Environmental Status
 - (i) Environmental schedule
 - (ii) Status of field investigations and data gathering
 - (iii) Status of environmental permits and approvals
 - (iv) Consultation with regulatory agencies
 - (v) Design and impact assessment
 - (vi) Environmental technical reports
 - (vii) Consultation undertaken to date including comments, concerns, and commitments, as well as any outstanding or unresolved issues
 - (viii) Status of the environmental assessment process and adherence to the Provincial Class EA

- d) Design Schedule
- e) Construction Schedule
- f) Construction Phase Constructability Log

The Project Status Report shall include the following, as a minimum:

- a) Summary of the previous status report activities
- b) Summary of anticipated activities for the upcoming status report
- c) Summary of changes, amendments, or modifications to the design
- d) Summary of all resolved and unresolved issues pertaining to the Works, including but not limited to Information Requests, Change Orders, Change Proposals, etc.

3.03.01 Project Risk Summary

The Progressive Design-Builder shall prepare and submit a project risk summary (the **“Project Risk Summary”**) as a part of the Project Status Report.

The Project Risk Summary shall:

- a) Highlight top risks for upcoming milestones and presented at the monthly Progress Meetings. Risks can be prioritized by proximity, cost and schedule impacts, or any other identified factors that would contribute to the escalation of said risks. The Progressive Design-Builder shall disclose the means used to identify top risks per reporting period.
- b) Highlight the critical risks to schedule and cost performance of the Project.
- c) Identify those risks that require the direct attention of the Ministry to assess and manage.

3.04 Proposed Changes to the Design Submission – During Construction Phase

Proposed changes to the Contract Documents during the Construction Phase shall require the Progressive Design-Builder to follow the requirements outlined in this Special Provision.

The Progressive Design-Builder shall immediately notify, in writing (e-mail), the Contract Administrator of the following:

- a) Identify and describe the issue.

- b) Provide justification on why the original design cannot be constructed.
- c) Provide a plan and schedule for developing a revised design to resolve the issue, including schedule and cost impacts.
- d) Confirm that the Lead Design Firm has been contacted and are reviewing the issue.
- e) Relevant photographs or supporting details.

Following the initial review, and at the discretion of the Ministry and the Contract Administrator, the Progressive Design-Builder shall be required to submit a technical memorandum to the Contract Administrator within two (2) Business Days detailing the following:

- a) Identify and describe the issue.
- b) Provide justification on why the original design cannot be constructed.
- c) Provide details on the proposed revised design to resolve the issues, including the following:
 - (i) Details of the Lead Design Firm's logic and decision-making process to arrive at the proposed revised design. The proposed revised design shall be in accordance with requirements of the RFP, be defensible, and based on sound engineering principles.
 - (ii) Impacts to the Class EA process.
 - (iii) Reference to design standards, Ministry guidelines, and standards used.
 - (iv) Technical report(s) to support the proposed revised design. All technical reports shall be signed and sealed by Professional Engineer(s).
- d) Provide details on why this issue was not identified / addressed in the original design and what countermeasures will be implemented to prevent future occurrences.
- e) Provide an updated Critical Path schedule with a schedule to implement the proposed revised design.
- f) Describe impacts to other components of the Project and the overall Construction Phase schedule.

The technical memorandum shall be signed and sealed by the Lead Design Firm's Professional Engineer(s).

If the Progressive Design-Builder cannot demonstrate the change complies with the requirements of the Agreement, the Progressive Design-Builder shall construct a compliant design at no additional cost.

At the discretion of the Ministry and the Contract Administrator, a meeting may be held to have the Progressive Design-Builder explain the items described above. At this meeting, the Project Manager, Quality Manager, Project Superintendent, Lead Scheduler, Design Manager, and Lead Design Engineer shall be present (in person). The meeting shall be held at the Project Office.

The Contract Administrator shall review the technical memorandum. The actual duration shall depend on the complexity of the proposed design change although within five (5) Business Days of receipt of the technical memorandum, the Owner shall notify the Progressive Design Builder in writing:

- a) If the technical memorandum requires clarification or further supporting information;
- b) Of the expected time period for review.

The Progressive Design-Builder shall be responsible for all aspects of the change, including all associated design, consultation, and construction costs. Unless approved as per **Section 1.5.1.2 Project Team and Organization Plan of the RFP**, the Engineer(s) signing and stamping the proposed revised design shall be the same who signed and stamped the original design.

4.0 CONSTRUCTION PHASE WORKS

4.01 General

“Environmental Clearance – Construction Start” shall be issued by the Ministry before construction can begin, when the Ministry is satisfied that the requirements of the Class EA has been met, and following receipt of a letter from the Progressive Design-Builder indicating the Project is Eligible for “Environmental Clearance – Construction Start”.

The Progressive Design-Builder shall be responsible for the following:

- a) Performance of all Construction Phase Works in accordance with the Contract Documents and be solely responsible for all requirements of the Work during the Construction Phase and throughout the warranty period.
- b) Coordination of required Utility relocations (temporary and permanent).
- c) As part of the application for Contract Completion, the Progressive Design-Builder’s Lead Design Engineer shall provide a signed and sealed Certificate of Design and Construction (see Appendix E.5 Certificate of Design and Construction).

- d) Upon request, the Progressive Design-Builder shall provide the Ministry access to the Work, and any associated production facilities, for any testing, investigation, audit, and access to all inspection records, test results, and testing facilities to enable the Ministry to audit the Progressive Design-Builder's adherence to the Contract Documents. By conducting testing, investigation, and/or audits the Ministry shall not thereby be considered to have waived compliance with any duties or obligations, or liability, of the Progressive Design-Builder under this Contract.
- e) The Progressive Design-Builder shall stop construction of the Work that is not in conformance with the Contract Documents or any Work which may impede the correction of Work that is not in conformance with the Contract Documents, until such time as the Progressive Design-Builder corrects the Work so that it conforms to the Contract Documents at no cost to the Ministry.
- f) The Progressive Design-Builder shall identify design changes during construction to the Contract Administrator and manage changes according to the Progressive Design-Builder's quality management plan and all other Contract requirements.

4.02 Construction Phase Requirements

4.02.01 ATMS

The Progressive Design-Builder shall provide a written memo that the ATMS Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.02 Bridge Engineering

The Progressive Design-Builder shall carry out OSIM inspection of each Structure in accordance with the Ontario Structural Inspection Manual (OSIM), Ontario Bridge Management System (OBMS), and the requirements of this RFP. The Progressive Design-Builder shall prepare and submit completed inspection reports to the Ministry. The OSIM inspection shall be completed by staff qualified under the Bridge Engineering (Bi-ennial Inspection) Category in RAQS. The Progressive Design-Builder shall provide all geometric and element quantity data for each new and rehabilitated Structure.

The Progressive Design-Builder shall provide a written memo that the structural Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.03 Drainage and Hydrology Engineering

The Progressive Design-Builder's Drainage Engineer(s) shall visit the drainage infrastructure rehabilitated / constructed as part of this Assignment and shall conduct inspections to identify any deficiencies. The inspection shall include recommendations for remediation / repair to ensure conformance with the requirements of this RFP, including all applicable standards, regulations, and legislation.

The Progressive Design-Builder shall provide a written memo that the drainage Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.04 Electrical Engineering

The Progressive Design-Builder shall provide a written memo that the electrical Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.04.01 Order of Precedence

The following Reference Documents shall apply in descending order of precedence to the extent necessary to resolve identified deficiencies:

- a) The provisions set out in the RFP
- b) Ontario Electrical Safety Code, Electrical Safety Authority
- c) MTO – Electrical Engineering Bulletins
- d) MTO Electrical Engineering Manual
- e) ANSI/IES RP-8 – Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting
- f) Roundabout Lighting Policy
- g) Illumination Warrant Policies PLNG-B-05 & PLNG-B-06
- h) Ontario MTO Provincial Highway Directives
- i) MTO accepted luminaire Photometric list
- j) Draft Policy for spill light beyond MTO Right-of-way and for Light Trespass onto the MTO Right-of-way
- k) *Accessibility for Ontarians with Disabilities Act* (AODA) and Ontario Regulation 413/12
- l) MTO Drawings (MTOD)
- m) OPSS
- n) PHM Legal Drawings Memo
- o) Traffic Signal Timing and Operation Policy 2016-06
- p) Portable Temporary Traffic Signals PTTS Policy 2016-01
- q) Pedestrian Signals Guideline 2017-01
- r) Ontario Traffic Manual
- s) Operational Performance Review Guidelines

- t) Traffic signal Bulletin 2009-01
- u) Arc Flash Draft Policy – Provincial Engineering Memorandum
- v) Carpool Parking Lot Lighting Policy (Policy Number 2010-04)
- w) TAC and MTO TAC Supplement
- x) MTO Roadside Design Manual
- y) DSM
- z) NCHRP Report 498: Illumination Guidelines for Highway Nighttime Work
- aa) Relevant municipal and transit standards
- bb) High Mast Lighting Pole Inspection Report Requirements
- cc) Special Provisions

4.02.05 Engineering Materials Investigations

[NTD: Include project-specific requirements or N/A]

4.02.06 Engineering Materials Testing and Evaluation Services

[NTD: Include project-specific requirements or N/A]

4.02.07 Environmental

4.02.07.01 Environmental Monitoring During Construction

The Progressive Design-Builder shall provide Environmental Monitoring during the Construction Phase of the Project.

In addition to the commitments outlined in the RFP, all other Project specific commitments summarized in the TESR, the PDR/DBR Report, including the related Summary of Environmental Concerns and Commitments Tables, shall be implemented.

4.02.07.02 Staffing

4.02.07.02.01 Environmental Inspector (Construction)

The Environmental Inspector (Construction) shall have the following minimum qualifications:

- a) Be registered in RAQS for “Environmental Inspection During Construction Specialty”.
- b) Academic and experience requirements necessary to meet the obligations set out in this RFP.
- c) University degree or College diploma in an environmental specialization.
- d) Demonstrated experience in environmental monitoring and inspection on construction sites of similar scope and complexity, including compliance with environmental legislation and contract requirements.

- e) Experience working in and around watercourses.
- f) Certification or courses in erosion and sediment control implementation and monitoring.

The Environmental Inspection (Construction) shall inspect and monitor construction activities on a regular basis, and shall submit a written report summarizing ongoing construction activities, implementation of ESC measures, conformance

4.02.07.02.02 Erosion and Sediment Control Monitoring Specialist

The Erosion and Sediment Control Monitoring Specialist shall have the following minimum qualifications:

- a) A post-secondary degree or technical diploma with a focus in:
 - (i) civil, environmental, geotechnical, drainage, or water resources engineering; or
 - (ii) natural resource management; or
 - (iii) earth or environmental sciences.
- b) Successful completion of one (1) or more recognized training or certification courses in Erosion Sediment Control (ESC) installation / inspection, environmental construction monitoring, including the VOI Training Group – Erosion and Sediment Control Practitioner (or equivalent) AND at least one (1) of the following two courses:
 - (i) VOI Training Group: Environmental Monitoring for Construction Projects Practitioner; or
 - (ii) Certified Inspector of Sediment and Erosion Control (CISEC) (IT- Level 1 or higher).
- c) Demonstrated knowledge of how to read and understand ESC plans, contract drawings, specifications, and technical reports directing the project.
- d) **[NTD: MTO PM/EP to select an bullet option from the following based on the erosion risk/project complexity determined during Detail Design]**

Option 1:

A minimum of 2 years of demonstrated ESC inspection and monitoring experience on transportation projects of a similar scope and complexity to this Project with MTO, municipalities, or other similar jurisdictions in Canada or USA.

Option 2:

A minimum of 5 years of demonstrated ESC inspection and monitoring experience on

a minimum of three (3) low or medium complexity projects of similar scope and size with MTO, municipalities, or other similar jurisdictions in Canada or USA.

Option 3:

A minimum of 5 years of demonstrated ESC inspection and monitoring experience on a minimum of three (3) medium or high complexity projects of similar scope and size with MTO, municipalities, or other similar jurisdictions in Canada or USA.]

4.02.07.03 Scope of Work

4.02.07.03.01 Environmental Inspection

The Environmental Inspector (Construction) shall undertake the following:

- a) Monitor the Construction Phase Works for compliance with the contract documents, special provisions, and all relevant environmental and related occupational health and safety legislation, policies and guidelines.
- b) Identify and notify the Contractor and CA of any deviations, deficiencies, or non-conforming work/operations, spills, or other environmental non-compliance situations.
- c) Assist in dealing with emerging situations relative to environmental legislation, compliance with contract related requirements, spills, and other potential environmental emergencies.
- d) Liaise with Contractor personnel, CA, Ministry (including the MTO Environmental Planner) and, as well as applicable officials from the Ministry of Natural Resources (MNR), Ministry of the Environment, Conservation and Parks (MECP), Fisheries and Oceans Canada (DFO) and the Canadian Wildlife Service (CWS), or any other agencies as required.
- e) Provide input into ongoing and final report requirements outlined below.
- f) Undertake on-site monitoring as required by the most current Construction Administration and Inspection Specification (CAIS), including monitoring of environmental protection measures, time constraints, erosion and sediment control, fisheries protection measures, the installation, operation and removal of temporary flow passage and dewatering systems, water quality and aquatic habitat, and management and disposal of excess materials.
- g) Oversee the monitoring by field staff of all environmental and the environmental specialties for requirements associated with the contract.
- h) Assess the effectiveness of environmental approaches and the adequacy and effectiveness of the environmental measures throughout the project, with particular emphasis on the measures in and around all watercourses and the identified

Environmentally Sensitive Areas (ESA's), considering the established timing constraints, fisheries, water quality, and aquatic habitat protection related to all watercourses, erosion and sediment control, excess material management, and seeding and establishment of cover throughout the project

- i) Note deficiencies where mitigation measures or designs are not in compliance with the contract specifications and provide recommendations for deficiencies.
- j) Notify agencies such as MNRF and applicable conservation authorities, if required, in advance of the proposed scheduling of construction and the initiation of construction operations.
- k) Immediately advise the Contractor and CA regarding any repairs and modifications to environmental protection measures that may be necessary.
- l) Ensure that applicable water taking permits are obtained by the Contractor and that the Contractor submits any required monitoring records to MECP for any temporary flow passage systems requiring a PTTW and for any 'consumptive use' PTTW's which may be obtained by the Contractor.
- m) Review topsoil preparation and seeding and cover operations to confirm they are in compliance with the Contract requirements.

The Environmental Inspector (Construction) shall at a minimum visit the work site once every two (2) weeks during the construction phase. The Environmental Inspector (Construction) shall and provide a written report to the Contractor, CA, and Ministry within five (5) Business Days of any site visit. The report shall include discussion that includes observations during the visit and noted non-compliances from the Contract Documents or Environmental standards that were noted and photos.

4.02.07.03.02 Erosion and Sediment Control Monitoring

The ESC Monitoring Specialist shall work with the Contract Administration Staff to verify and document compliance with the ESC Strategy Summary Report and any Erosion and Sediment Control Plan(s) (ESCP), as applicable, in accordance with the MTO Environmental Guide for Erosion and Sediment Control during Construction of Highway Projects (as amended), and with the Contract Documents.

The ESC Monitoring Specialist shall be responsible for undertaking and documenting construction monitoring including, but not limited to:

- a) Effectiveness of erosion and sediment control methods and measures.
- b) Identification of any deficiencies with the condition and function of ESC measures and/or where modifications or additional measures are required by the contractor for erosion and sediment control mitigation/protection.

- c) Details of any corrective measures undertaken by the contractor to address erosion and sediment control issues.
- d) Details of non-compliance with the contract documents related to erosion and sediment control.
- e) Undertaking any additional erosion and sediment control monitoring tasks specified under conditions of any permits or approvals obtained for the project.

If monitoring identifies areas where erosion and sediment control methods and measures have failed or may imminently fail, the ESC Monitoring Specialist shall immediately notify the Contract Administrator in order for corrective actions to be undertaken in a timely manner.

4.02.07.03.03 Construction Site Meeting(s)

During the Construction Phase, the Progressive Design-Builder's Senior Environmental Planner, as a minimum, shall attend up to **[NTD: Include number of meetings]** construction progress meetings per year as well as the Design Package Evaluation Meeting upon completion of construction to receive feedback on the working of the design package during construction.

4.02.08 Indigenous Consultation and Duty to Consult

4.02.08.01 Indigenous Community Field Liaison

[NTD: CFL Work Order Wording – to be used after award and CFL details are known]

MTO recognizes Indigenous communities' interest in monitoring the potential impacts of MTO projects on the environment and on cultural heritage and resources.

A Community Field Liaison (CFL) is any person(s) from or representing an Indigenous community who will participate in on-site observation of potential environmental or archaeological impacts during field activities in the planning and the Design Phase or during the Construction Phase of a MTO project.

Work Orders shall be required to accommodate the participation of CFL(s) from **[list Indigenous community(ies)]** in **[archaeological, environmental or both]** activities as described below.

CFL agreement(s) shall be executed between **[Progressive Design-Builder]** and the Indigenous community(ies). CFL agreement(s) should reflect the following requirements and parameters of MTO's CFL policy. **[Progressive Design-Builder]** shall copy the MTO Project Manager or Environmental Planner on all correspondence with Indigenous communities related to the development of a CFL agreement.

[Progressive Design-Builder] shall accommodate the presence and performance of CFL(s) from **[community name(s)]** to engage in on-site observation of agreed upon activities of **[Progressive Design-Builder]**. **[Progressive Design-Builder]** shall ensure CFL(s) comply with the **[relevant health and safety plan]**. Where required, **[Progressive Design-Builder]** shall ensure that CFL(s) attend safety meetings in order to perform their activities safely in compliance with all applicable laws, regulations and guidelines. Information on the appropriate contacts for **[Progressive Design-Builder]**, MTO and the Indigenous community(ies) should be outlined in the CFL agreement.

MTO will indemnify **[Progressive Design-Builder]** for any claims that arise from the work any CFL persons performs under this Change Order.

[Progressive Design-Builder] shall pay CFL(s) in accordance with the following:

- a) CFLs will be paid a maximum of **\$125.00** per hour for as of **May 1, 2026**.
- b) **[Progressive Design-Builder]** shall also provide a 10% administrative markup to the Indigenous community, applied to the total compensation for CFL hours, excluding travel costs.
- c) CFLs may be reimbursed for mileage in accordance with the rates in the Ontario [Travel, Meal and Hospitality Expenses Directive](#) (the "Directive"): \$0.40/km for Southern Ontario and \$0.41/km for Northern Ontario. For information on the boundary see #15 [here](#). Mileage should be measured from the community or band office.
- d) CFLs may be reimbursed for meals, upon request, when the CFL must travel 24km or more in one direction to the work site and is required to be on site or to travel over a normal meal period. Meals should be reimbursed at Directive rates: Breakfast: \$10.00; Lunch: \$12.50; Dinner: \$22.50; Total: \$45.00/day.
- e) CFLs may be reimbursed for overnight accommodation, upon request, when the CFL must travel 125km or more in one direction to the work site. Any accommodation costs reimbursed should be for a standard room only.
- f) For meal and accommodation expenses to be reimbursed, the eligibility of the community for meal and accommodation expense reimbursement must be agreed upon in advance through the CFL agreement.
- g) **(Planning and Design phase:)** A maximum of one CFL per community shall be paid for their presence on-site for up to the full number of hours for which the **[environmental/archaeological or both]** field work in question is undertaken. Hours should not exceed 10 hours per day or, where flexibility is needed, 50 hours per week. One additional CFL per community may be included upon request in a 'Supervisor' role, and paid the same maximum rate, for up to a maximum of 10 hours per week for work that requires four or more days of field work for completion. Where there are health and safety concerns related to working alone for the fieldwork in question, one

additional CFL per community can be included for up to the same number of hours as the first CFL (10 hours per day or 50 hours per week), where requested.

- h) **(Construction phase:)** A maximum of one CFL per community shall be paid for their presence on-site for up to a maximum of 25 hours per week or, where flexibility is needed, 100 hours per month. Where there are health and safety concerns related to working alone for the field work in question, one additional CFL per community can be included for up to the same number of hours as the first CFL (25 hours per week or 100 hours per month), where requested.
- i) Payment of **[Indigenous community(ies)]** is dependent on CFL attendance on site. If CFLs do not attend when scheduled, payment should not be made by **[Progressive Design-Builder]**.
- j) **[Progressive Design-Builder]** will be paid a **[10%]** markup for administering and coordinating CFL participation. This **[10%]** will be applied to the total amount of CFL compensation provided to the Indigenous community(ies), not including travel costs or the administrative markup provided to the community(ies). **[Progressive Design-Builder]** will be reimbursed by the Ministry for these costs upon an invoice for such.

[Progressive Design-Builder] will have no responsibility or liability to the Ministry over the services being provided by **[Indigenous community(ies)]**.

4.02.08.02 Indigenous Participation

[NTD: Update list in consultation with MTO Project Manager, Environmental Planner, and IREPB representative. If not require, use N/A.

The Progressive Design-Builder shall:

- a) Request that their Sub-Service Providers, subcontractors, and supply chain companies seek opportunities to hire and procure locally, including from Indigenous businesses in alignment with the Indigenous Procurement Policy (IPP).
- b) Post job opportunities associated with the project at trade schools and other educational institutions with targeted outreach to Indigenous training organizations, where feasible.
- c) Other]

4.02.09 Foundation Engineering

The Progressive Design-Builder shall provide a written memo that the foundations Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.10 Highway Engineering

The Progressive Design-Builder shall provide a written memo that the highway Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.11 Pavement Engineering

The Progressive Design-Builder shall provide a written memo that the pavement Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.12 Property / Corridor Management

The Progressive Design-Builder shall provide a written memo that the property / corridor management Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

4.02.13 Rockfall Engineering

[NTD: Delete this Section if Rockfall Engineering is NOT included in the Contract]

A qualified Rock Mechanics Engineer may be required to provide construction inspection services, for example, review the condition of newly constructed rock slopes. While these rock cuts are constructed using smooth wall blasting techniques, inspections are periodically required, to ensure that a safe rock face is properly constructed. An unstable rock face resulting from overblasting, inappropriate blast design, or adverse geological conditions may require an experienced Rock Mechanics Engineer to review and provide recommendations to mitigate potential rock slope failures.

As part of this project, the Progressive Design-Builder's Rock Mechanics Engineer shall provide the following:

- a) Inspection services during the remediation of the rockfall hazards to ensure that the recommendations are properly implemented to achieve the desired effect or recommend modification of the remediation, if new information is obtained during the inspection.
- b) Investigate geological conditions pertinent to the construction and make recommendations for changes to rock excavation design parameters where

necessary.

- c) Review the Contractor's blast design and provide comments to the Contract Administrator in regard to the appropriateness of the design.

In all cases, the Rock Mechanics Engineer shall not direct any of the Contractor's operations. On-site communications shall be with the Ministry's Contract Administrator.

The on-site inspection services will likely be on a part-time basis. However, this will be dictated by the scope of the remedial work and the Contractor's operations. Where scaling is recommended, full-time inspection is typically required since decisions on the locations to be scaled must be revised at the time of the work as the scaling operation progresses.

Upon completion of the construction, review services for each Work Item, a follow-up report must be prepared and submitted. The report should contain the following:

Documentation of the construction operations undertaken, including the effectiveness of the construction services and any problems encountered.

Photographs of the remediated site.

Determine the updated RHRON hazard rating in accordance with Part 4 of the MTO's 'RHRON: Ontario Rockfall Hazard Rating System – Field Procedures Manual (MERO-043)'.

4.02.14 Surveying & Plan Preparation

Upon completion of the project, the Progressive Design-Builder shall provide post construction plan and profile Record Drawings within the project limits. Drawing detail shall include, but is not limited to, new construction features, drainage information, soffit clearances and underground utilities.

4.02.15 Traffic Engineering

The Progressive Design-Builder shall provide ongoing traffic engineering support throughout the Construction Phase to monitor, assess, and optimize traffic operations associated with construction staging, detours, temporary traffic control devices, and temporary traffic signals.

The Progressive Design-Builder shall:

- a) Prepare and submit a detailed permanent signing and pavement markings report for the Ministry review and approval before any sign footings are constructed and signs are fabricated.
- b) Monitor traffic queues, delays, travel times, and traffic operations at locations affected by construction activities.

- c) Review traffic performance following implementation of each major construction stage and identify any operational or safety concerns.
- d) Monitor and adjust temporary and permanent traffic signal timing, phasing, and coordination as required to maintain efficient traffic operations.
- e) Update traffic operational analyses and microsimulation models, as required, to support staging modifications, traffic management changes, and mitigation measures.
- f) Investigate operational issues, public complaints, excessive delays, or queue spillback and recommend corrective actions.
- g) Attend meetings with the Ministry, municipalities, emergency services, and other stakeholders when requested to discuss traffic operations during the Construction Phase.
- h) Maintain records of monitoring activities, traffic performance issues, mitigation measures, and signal timing changes.

4.02.16 Utilities

[NTD: N/A if relocation is completed prior to construction. If relocation is not completed, we need NSSP about time and space separation to avoid MTO becomes the contractor or worst case MTO will have to be the contractor to meet the construction timeline.]

The Progressive Design-Builder shall provide a written memo that the utility Works has been completed in accordance with the requirements of this RFP, including all applicable standards, regulations, and legislation and is ready for acceptance by the Ministry. Upon receiving the written memo, the Ministry or its representative shall conduct a final inspection and any / all deficiencies identified shall be repaired immediately.

6.0 RECORD DRAWINGS AND DOCUMENTATION

Further to the requirements for Record Drawings specified elsewhere in the Contract Documents, the Progressive Design-Builder shall prepare and submit to the Ministry one (1) complete set of drawings and documents, including any changes from previous submissions. The information is also to be provided in digital format with drawings in **AutoCAD “.DWG”** format (Ministry approved version) and other documents in Adobe (PDF) format.

6.01 Record Drawing Deliverables

[NTD: Modify/delete the information below as applicable for the Project]

Digital Terrain Model (DTM)

The final deliverables do not require a DTM.

Plans – General

B & C Plans (plan & profile) shall be created and shall be to a horizontal scale of 1:1000 when plotted full size (22" x 34").

- **B-Plans for Record Drawings**

The Progressive Design-Builder shall provide B-Plans within the Project limits. ETR plate(s) drawings (11x17) shall be created.

- **C-Plans for Record Drawings**

The Progressive Design-Builder shall provide Record Drawings with profiles for all new exit/entrance ramps, Highway XXX (CL median, EBL, WBL) and [NTD: insert other Roads as applicable] (centreline).

All profiles shall show applicable drainage features (CB, MH, DI, Crossing Culverts, etc.) and new bridge structures.

Site Plans

The Design-Builder shall determine whether site plans are required for this Project.

WARRANT: Always with Progressive Design-Build for Highway Construction Contracts.

CUSTODIAN: Contract Innovations Office

DESIGN LIAISON SERVICES - Item No.

Special Provision No. PDBSP0002

1.0 SCOPE

This special provision covers the requirements of providing design liaison services during the Construction Phase, including coordination with the design team and provision of technical support to the Contract Administrator for issues related to the Contract Documents.

2.0 REFERENCES - Not Used

3.0 DEFINITIONS – Not Used

4.0 DESIGN AND SUBMISSION REQUIREMENTS

4.1 General

All work under this item shall be carried out only when authorized by the Contract Administrator.

The services provided are advisory in nature only and shall not supersede the authority of the Contract Administrator or the requirements of the Contract Documents.

4.2 Submission Requirements

4.2.1 Design Liaison Services

Design liaison services shall be determined by the Contract Administrator.

Design liaison services may involve, but are not limited to the following:

- Confirming the need for design revisions,
- Providing recommendations and supporting documentation for design-related decisions,
- Identifying potential impacts of design clarifications or changes to construction staging, schedule, and/or cost,
- Supporting the resolution of discrepancies between field conditions and Contract Documents,
- Attending site visits, inspections, and coordination meetings, and
- Liaising between the Contractor, Contract Administrator, and Owner.

Notwithstanding the above, design liaison services shall not include providing clarification of Contract Documents, design intent, or take advantage of any errors or omissions to the design that were known, or ought to have been known in the Design Phase.

The Contractor shall provide supporting documentation for all recommendations, including but not limited to, sketches, marked-up drawings, or calculations where applicable.

No design liaison services shall be undertaken until a written estimate has been submitted to and authorized in writing by the Contract Administrator.

The estimate of the work shall include:

- a) the personnel involved (including position)
- b) the hourly rate and hours required for each individual to perform the work,
- c) any additional costs to perform the work, and
- d) the anticipated completion date of the work

4.2.2 Submissions

All clarifications, reviews and recommendations shall be provided in writing to the Contract Administrator.

Any clarifications, assessments, recommendations, or design revision that involves or may involve doing work or an act that is within the practice of professional engineering shall be designed by an Engineer from the Lead Design Firm or Sub-Service Provider that was responsible for the design of that element of Work, and shall bear the seal and signature of the Engineer.

All clarifications, assessments, recommendations, and design revisions, shall include supporting documentation including sketches, marked-up drawings, or calculations where applicable.

The Contractor shall maintain detailed records of all services performed under this item, which shall be submitted to the Contract Administrator on a weekly basis or as requested by the Contract Administrator. The records shall contain, as a minimum, the following information:

- Date and duration of work
- Personnel involved (including discipline and classification)
- Description of tasks performed
- Progress of work and incurred costs

5.0 MATERIALS - Not Used

6.0 EQUIPMENT - Not Used

7.0 CONSTRUCTION – Not Used

8.0 QUALITY ASSURANCE - Not Used

9.0 MEASUREMENT FOR PAYMENT – Not Used

10.0 BASIS OF PAYMENT

10.01 Design Liaison Services - Item

Payment shall be made at the actual invoiced costs authorized by the Contract Administrator.

Payment for the above tender item shall be full compensation for all labour, Equipment, and Material to do the work.

The Progressive-Design Builder shall provide clarifications of contract documents, design intent, and address errors or omissions to the design that were known, or ought to have been known in the Design Phase, at no additional cost to the Owner.

The Contractor shall submit supporting invoices and documentation.

WARRANT: On Progressive Design-Build for Highways Construction Contracts with a Tender Item Bid, this Design Liaison Services Tender Item shall be included when required by the Ministry.

CUSTODIAN: Contract Innovations Office

CONSTRUCTION PHASE FIELD OFFICE – Item No.

Special Provision No. PDBSP0003

1.0 SCOPE

The Contractor shall supply, furnish, maintain, secure, and remove a Construction Phase field office (the “**Field Office**”) for the sole use of Ministry staff and the Contract Administration team for a period of time beginning **[X days / weeks / months]** before mobilization of Construction Phase Works to Contract Completion.

[NTD: If co-location with the Progressive Designer-Builder is required, including the following:

The Field Office shall be co-located with the Progressive Design-Builder’s Project Office.

The Progressive Design-Builder shall establish a project office (the “Project Office”) for the purpose of managing and directing the Works, including hosting the Project meetings outlined in the RFP.

The Project Office shall be finished and furnished with minimum one boardroom with a projector and/or TV that seats **[X]** people and is large enough to host Project meetings outlined in the RFP.]

The Field Office shall be fully operational **[X days / weeks / months]** prior the mobilization for Construction Phase Works. If the Field Office is not fully operational by this date, no Work will be permitted on site unless previously agreed to by the Contract Administrator.

2.0 REFERENCES – Not Used

3.0 DEFINITIONS – Not Used

5.0 DESIGN AND SUBMISSION REQUIREMENTS – Not Used

6.0 MATERIALS – Not Used

7.0 EQUIPMENT – Not Used

8.0 CONSTRUCTION

8.01 Location

Prior to commencement of work on this tender item, the Contractor shall receive approval from the Contract Administrator for the location of the Field Office which shall be located within **[X km]** of the work site and be fully accessible by motor vehicle.

[Notes to Draft: If a mobile Field Office is permitted, including the following paragraph:

Where a mobile Field Office is utilized, the mobile Field Office shall be installed level (including all required blocking) with adequate stairs to provide proper access. The Contractor shall provide a compacted granular surface 10.0m x 6.0m x 0.3m (minimum) adjacent to the Field Office that is suitable for parking.]

If a rental property is provided it shall be suitable for an office with sufficient parking and accessibility.

8.02 Field Office Requirements

The Field office shall have a minimum floor area of [XX] square metre and shall be in general compliance with Ministry of Labour requirements.

[Notes to Draft: If a mobile Field Office is permitted, including the following paragraph:

Where a mobile Field Office is utilized, the mobile Field Office shall have a minimum floor area of 25 m2 with a minimum inside clearance of 2.0 meters and have a minimum width of 2.5 metres. All exterior doors shall be solid core including passage sets and a 25mm dead bolt capable of being locked. The office shall have a minimum of 2 windows, each a minimum of 0.5 m2 in size, with horizontal sliders capable of opening (shall including insect screens), and shall be secure.]

The Office Space shall have a partitioned space that has a walled separation and a lockable door between other tenants and/or the Progressive Design-BUILDER and Ministry personnel, including a separate entrance for Ministry personnel and other tenants and/or the Progressive Design-BUILDER.

[X] keys or access cards shall be supplied to the Contract Administrator. Additional keys / access cards may be requested by the Contract Administrator, acting reasonably.

The inside of the of the Field Office shall be moisture tight and shall have adequate heating/cooling and ventilation equipment capable of maintaining the working area at 21°C during all seasonal conditions. The Field Office shall be equipped with overhead lighting capable of providing a well-lit work area satisfactory to the Contract Administrator (typical lighting of an office setting).

8.03 Field Office Equipment

The Office Space shall be finished and furnished with minimum one boardroom with a projector and/or TV that seats [X] people, [X] separately partitioned offices, [X] workstations, and appropriate number of filing / storage cabinets for an office space **[Notes to Draft: Update numbers based on project needs.]**

The Office Space shall have a separate kitchenette with minimum of [X] microwave, [X] electrical kettle / water boiler, [X] fridge, [X] water dispenser with ongoing replacement of drinking water supply, office kitchenette supplies, and cleaning supplies. **[Notes to Draft: Update numbers based on project needs.]**

The Contractor shall ensure that the Field Office is furnished with fire extinguishers mounted at each entrance and a complete hanging wall board, with all current health and safety bulletins requirements. The Office Space shall also be furnished with a First Aid kit, including portable eye wash kit.

8.04 Utilities and Sanitary Facilities

The Contractor shall provide and maintain within the Field Office adequate hydro facilities for the sole use of the Ministry and the Contract Administrator. It is expected that the Field Office will be operational at all times.

[Notes to Draft: If a mobile Field Office is permitted, including the following:

Where a secure a connection with hydro is unachievable, the Contractor shall provide and maintain (including fuel) a generator large enough to provide continuous power to all field office equipment.]

It is the responsibility of the Contractor to provide and maintain adequate sanitary facilities for the exclusive use of the Ministry's Contract Administration staff. The facility shall be fully accessible and located in close proximity of the Field Office and shall comply with the Occupational Health and Safety Act. A disposal bin for garbage removal shall be provided on-site and maintained by the Contractor.

The contractor shall ensure that all utility and service connections required, including, but not limited to, high speed internet, shall be maintained at all times during the period described in Section 1.0.

All phone systems and IT networks shall be separate between the Ministry and the Progressive Design-Builder. Administrative access shall be provided to the Ministry.

The Contractor shall be responsible for associated monthly services, with specific requirements to be agreed in consultation with the Ministry.

8.05 Maintenance and Insurance

The Contractor shall service, maintain, and carry insurance on the Field Office and contents and provide evidence of insurance to the Ministry before Construction Phase Works commence.

8.06 REMOVAL OF FIELD OFFICE

[Notes to Draft: If a mobile Field Office is permitted, include the following, otherwise use N/A:

Where a mobile Field Office is utilized, the Contractor shall remove the Field Office and associated facilities, clean-up and reinstate the area(s) affected by the work included within this tender item as directed by the Contract Administrator.]

9.0 MEASUREMENT FOR PAYMENT – Not Used

10.0 BASIS OF PAYMENT

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment, and materials required to do the work. Payment at the contract price for the above tender item shall also cover maintenance, service connections (including monthly utility fees), and supplies required to do the work.

Progress payments shall be made on the following basis:

20%	Supply and installation
70%	Pro-rated over the length of the project
10%	Final payment and/or removal (field office)

WARRANT: On Progressive Design-Build for Highways Construction Contracts with a Tender Item Bid, this Construction Phase Field Office Tender Item shall be included when required by the Ministry.

CUSTODIAN: Contract Innovations Office

SCHEDULE 2 – PROGRESSIVE PERFORMANCE REQUIREMENTS (PPR) FOR PROGRESSIVE DESIGN-BUILD FOR HIGHWAYS CONTRACTS

Special Provision No. PDBSP0004

Definitions

"Contract", "the Contract", "this Contract", "Agreement" means the Progressive Design-Build for Highways Contract ~~####-####~~ OR ~~####-C-####~~ to which this Progressive Performance Requirements is attached and of which this Progressive Performance Requirements forms a part.

1.0 DOCUMENT PURPOSE AND USE

The Progressive Performance Requirements (PPR) establishes the scope of the Lump Sum Bid, including the design and construction requirements, performance expectations, and scope parameters that were mutually understood and accepted at the time the Lump Sum Bid price was established for the **[Notes to Draft: Insert project location and description]**.

The PPR serves as the formal record of the Owner's and Progressive Design-Builder's shared understanding of the design and construction outcomes, functional obligations, and minimum performance criteria that define the Design Phase and Construction Phase Works before the design is fully developed.

In addition to the requirements of this PPR, the requirements of RFP Part C: Construction Phase Section and Part D: Appendices shall also apply to the Lump Sum Bid.

The PPR:

- (a) Defines the scope envelope for which the Lump Sum Bid price applies, using functional categories, such as highway engineering, drainage, pavement, structures, electrical, traffic management, foundations, utilities, signing/markings, environmental, and surveying as detailed in the RFP.
- (b) Identifies design-dependent elements that were not yet known at the time of the Lump Sum Bid to be progressively populated as detail design advances.
- (c) Captures the construction-relevant requirements known at the time of Lump Sum Bid, including performance expectations, constraints, and Owner commitments.

- (d) Documents early-stage assumptions and the final construction requirements, reducing ambiguity regarding what was priced.
- (e) Ensures continuity between early project documentation, the design evolution, and the ultimately constructed Works.
- (f) Confirms the performance-based expectations that guide detail design development while preserving the construction commitments made at the Lump Sum Bid phase.

2.0 GENERAL REQUIREMENTS

2.1 Project Principles

The Progressive Design-Builder shall design and construct the Project in accordance with the requirements of the RFP and in general conformance with the Project Goals. The infrastructure systems shall be fully functional, safe, durable, and compliant. The Work shall be completed in accordance with all applicable laws, standards, and specifications, including but not limited to the documents listed under Part C: Construction Phase and Part D: Appendices and this PPR.

The following principles shall govern the interpretation and application of this PPR. In the event of any ambiguity, conflict, or inconsistency between or among the provisions of this PPR, such principles shall be applied, in the order set forth below, solely to the extent necessary to resolve the ambiguity, conflict, or inconsistency:

- (a) A provision or requirement for a higher standard of safety, reliability, durability, performance, or service shall take precedence over a provision or requirement for a lower standard of safety, reliability, durability, performance or service.
- (b) In the event of a discrepancy between any parts this PPR in which one requirement would, in the opinion of the Ministry, provide the Ministry a lower quality of a material, equipment, fixture, or feature than another requirement listed within this PPR then the higher quality requirement shall govern.
- (c) To support a specification focused on performance, if this PPR or a specification describes Component A and C of a system that also requires a Component B to be functional, then Component B must also be provided by the Progressive Design-Builder to provide a fully functional A-B-C system.
- (d) To support a specification focused on performance, if this PPR or a specification describes an installation of a system that also requires specific reviews by authorities, permits, pre-installation services, and commissioning in order for the

installation to be functional then those specific reviews by authorities, permits, pre-installation services, and commissioning must also be provided by the Progressive Design-Builder to provide a fully functional system and/or a fully functional road.

2.2 Basis of Lump Sum Bid Price

The Lump Sum Bid price for the **[Notes to Draft: Insert project location and description]** has been established based on the level of design maturity, information, assumptions, performance obligations, and scope definition available at the time of Agreement. The Lump Sum Bid price represents the Progressive Design-Builder's undertaking to deliver the Work in accordance with the Contract Documents and the agreed project requirements, as understood and disclosed at the Date the Lump Sum Bid price was submitted.

The following subsections define the inputs, assumptions, constraints, and accepted commitments that form the commercial and technical basis for the Lump Sum Bid price.

2.2.1 Assumptions at Lump Sum Bid

The Lump Sum Bid is premised on the assumptions, constraints, and clarifications identified below, which represent the conditions known and relied on by the Progressive Design-Builder at the time of pricing.

These may include, but are not limited to:

[Notes to Draft: Identify all assumptions made for the design.]

- Applicable standards in effect at Construction Phase Bid
(PDBH RFP requires compliance with "the most recent version of laws, standards, and specifications as of the Construction Phase Bid")
- Design development and design maturity
- Design and construction integration with Main and/or other Advance Contract(s)
- Development of the Design and Construction Risk Register (DCCR)
- Anticipated permit timing windows
- Known geotechnical baseline information
- Assumed traffic volumes, staging constraints, and closure windows
- Assumed third-party coordination timelines (utilities, municipalities)
- Environmental commitments known at time of Lump Sum Bid
- Availability of property or access
- Weather or seasonal work constraints]

If actual conditions materially differ from the assumptions listed, adjustments shall follow the change management provisions of the Construction Phase Agreement.

2.2.2 Scope Boundaries

The Lump Sum Bid price includes all Work required to provide a fully functional system, in accordance with the requirement of Part B: Design Phase Section 7, Detail Design Terms of Reference of this RFP.

The RFP explicitly requires that if any system requires additional components, permits, services, or commissioning activities to be functional, the Progressive Design-Builder must provide them, even if not explicitly listed.

Work at the Lump Sum Bid price is mutually understood and agreed to include:

[Notes to Draft: Identify any other items/terms that is included in the Lump Sum Bid Price

- In-scope work elements the Lump Sum explicitly covers
- Any partially defined elements requiring further development]

Work at the Lump Sum Bid price will not include:

[Notes to Draft: Identify any Work not to included in the Lump Sum Bid price. Examples can include:

- Work outside property limits unless explicitly identified
- Future phases of the project that are not part of this Lump Sum Bid (describe)
- Owner-requested enhancements not priced into the Lump Sum Bid
- Undefined third-party requirements not known at Lump Sum Bid]

2.2.3 Accepted Innovations

The following Innovations were accepted by the Owner prior to the Lump Sum Bid and are included in the Lump Sum Bid price:

[Notes to Draft: Include any innovations and their descriptions]

The Progressive Design-Builder acknowledges that only Innovations approved by the Owner shall be priced into the Lump Sum Bid. Innovations not listed above shall not be used to form the Lump Sum Bid price.

2.3 Proposed Changes to the Design Submission – During Construction Phase

Proposed changes to submissions during the Construction Phase shall require the Progressive Design-Builder to follow the requirements outlined in this Special Provision.

The Progressive Design-Builder shall immediately notify, in writing (e-mail), the Contract Administrator of the following:

- (a) Identify and describe the change.
- (b) Provide justification on why the original design cannot be completed.
- (c) Provide a plan and schedule for developing a revised design to resolve the issue, including schedule and cost impacts.

Following the initial review, and at the discretion of the Ministry and the Contract Administrator, the Progressive Design-Builder shall be required to submit a technical memorandum to the Contract Administrator within two (2) Business Days detailing the following:

- (a) Description of the change.
- (b) Why the change is required.
- (c) Why this was not captured in the original submission and what countermeasures will be implemented to prevent future occurrences.
- (d) Impact to the Class EA Process.
- (e) Impacts to schedule.
- (f) Impacts to other components of the Project.

The technical memorandum shall be signed and sealed by the Lead Design Firm's Professional Engineer(s).

The Contract Administrator shall review the technical memorandum. The actual duration shall depend on the complexity of the proposed design change although within five (5) Business Days of receipt of the technical memorandum, the Owner shall notify the Progressive Design Builder in writing:

- (a) If the technical memorandum requires clarification or further supporting information;
- (b) Of the expected time period for review.

The Progressive Design-Builder shall submit an addendum to all affect technical reports and drawings within three (3) Business Days of submitting the technical memorandum. These submissions shall be subject to the requirements detailed elsewhere in the Contract, including being signed and sealed by Professional Engineer(s).

At the discretion of the Ministry and the Contract Administrator, a meeting may be held to have the Progressive Design-Builder explain the items described above. At this meeting, the Project Manager, Quality Manager, Project Superintendent, Lead Scheduler, Design Manager, and Lead Design Engineer shall be present (in person). The meeting shall be held at the Project Office.

The Progressive Design-Builder shall be responsible for all aspects of the change, including all associated design, consultation, and construction costs. Unless approved as per **Section 1.5.1.2 Project Team and Organization Plan of the RFP**, the Engineer(s) signing and stamping the proposed revised design shall be the same who signed and stamped the original design.

2.4 Schedule

Time shall be the essence of this Contract.

The Progressive Design-Builder shall complete this Contract in its entirety by **[Month day, year]**.

If this time limit above specified is not sufficient to permit completion of the Work by the Progressive Design-Builder working a normal number of hours each Day or week on a single daylight/night shift basis, it is expected that additional and/or augmented daylight and night shifts shall be required throughout the life of the Contract to the extent deemed necessary by the Progressive Design-Builder to ensure that the Work shall be completed within the time limit specified. Any additional costs occasioned by compliance with these provisions shall be considered to be included in the Lump Sum Bid for the various items of work and no additional compensation shall be allowed therefore.

Liquidated Damages

It is agreed by the parties to the Contract that in case all the Work called for under the Contract is not finished or completed within the date of completion specified aforementioned or as extended according to subsection GC3.06, Extension of Contract Time or Interim Completion Dates, of **OPSS.PROV 100, MTO General Conditions of Contract**, a loss or damage shall be sustained by the Owner. Since it is and shall be impracticable and extremely difficult to ascertain and determine the actual loss or damage which the Owner shall suffer in the event of and by reason of such delay, the parties hereto agree that the Progressive Design-Builder shall pay to the Owner the sum of **[\$XX]** as liquidated damages for each and every Day of delay in finishing the work beyond the date of completion prescribed. It is agreed that this amount is an estimate of the actual loss or damage to the Owner which shall accrue during the period in excess of the prescribed date of completion.

[Notes to Draft: Value of Liquidated Damages to be determined in consultation with the Regional Construction Management Office]

The Progressive Design-Builder shall incur interest on Liquidated Damages and pay such interest according to GC 7.19. For greater certainty, the Owner may also retain interest charges from monies owing to the Progressive Design-Builder under GC 8.02.04.11 (Owner's Set-Off).

2.5 Quality Management System

The Progressive Design-Builder shall develop, implement, and maintain a project-specific Quality Management System (QMS) to manage its own processes and those of the Sub-Service Providers engaged by the Progressive Design-Builder for the purposes of undertaking the Work, in accordance with the requirements of the RFP throughout the life of this Contract.

The Progressive Design-Builder's Quality Management System shall include all necessary Quality Management Plans (Design Quality Management Plan, Construction Management Plan, etc.) and, as a minimum, shall document the processes and activities that the Progressive Design-Builder shall follow during the life of the Contract to:

- (a) Ensure design and construction integration and continuity during all phases of the Work;
- (b) Manage design changes during construction and any required amendments to the Contract Documents, including Issued for Construction Drawings;
- (c) Issue the Certificate of Design and Construction as provided in Appendix E, including the identification and organization of the personnel responsible for verifying compliance with the Contract Documents to enable Professional Engineer(s) to sign and seal the certificate;
- (d) Document conformances and non-conformances with the requirements in the Contract Documents;
- (e) Address Quality Control (QC) non-conformances (design and construction); including communication to the ministry, proposing remedial action prior to implementation, and improving processes to prevent future occurrences;
- (f) Address quality related checking, verifications, validations, inspections and testing activities to be conducted during all phases of the Work including design, construction and commissioning

The Progressive Design-Builder shall develop and implement all necessary Quality Management Plans associated with its Quality Management System prior to initiating any design and construction activities.

Upon request, the Progressive Design-Builder shall provide a copy of the Design-Builder's Quality Management Plans to the Ministry and/or Contract Administrator within two (2) Business Days of the request for auditing purposes.

2.1.6 Other Work in the Area

[Notes to Draft: Describe Projects in the vicinity and any special requirements or insert "Not applicable"]

The Progressive Design-Builder shall coordinate the Work with other contractors working within and/or adjacent to the Project limits to ensure that they do not perform work in the same area at the same time, or adversely affect each other's work. The Progressive Design-Builder shall provide written confirmation that time and distance separation of contractors is maintained between the operations included in this Contract and work within and/or adjacent to this Project completed by others. The Progressive Design-Builder shall be required to place, cover, relocate, and remove their construction signing as required to prevent any overlap with the construction signing on adjacent Projects.

GWP XXXX-XX-XX – Highway XX, From X to Y
Brief description of field work planned
Estimated timeframe / completion of field work

Contract XXXX-XXXX – Highway XX, From X to Y
Brief description of work planned
Estimated timeframe / completion of contract

3.0 OUTPUT SPECIFICATIONS

3.1 General

The Progressive Design-Builder shall:

- (a) Perform all design required in Part B: Design Phase of the RFP according to the Specifications defined in the RFP and be solely responsible for design adequacy, accuracy, constructability, appropriateness regarding environmental requirements, and conformance to all requirements of the Work.

- (b) Perform all work required to secure any required approval(s) resulting from the Progressive Design-Builder's design.
- (c) Confirm locations of all utilities and provide all required documents to the Contract Administrator for any required utility relocations arising from the Progressive Design-Builder's design. The Progressive Design-Builder shall be responsible for managing all scheduling impacts arising from utility relocations arising from the Progressive Design-Builder's design or those identified in the Contract.
- (d) Ensure that all final design, design reports, drawings and calculations are sealed and signed by a Professional Engineer(s).
- (e) Ensure that all final Structural or Foundations drawings and design reports are sealed and signed by two Professional Engineers.
- (f) Ensure that all design work under the Contract is covered by appropriate Professional Liability insurance.
- (g) Ensure that all Working Drawings and procedures are prepared in consultation with the Professional Engineer(s) that signed the Issued For Construction Drawings.
- (h) Submit to the Ministry the final version of all relevant design submissions noted in the RFP, within ten (10) Business Days, unless specified elsewhere in this RFP, prior to construction of that portion of the Work. The Ministry shall not be approving the design submissions.

Under no circumstances shall construction start or continue in the absence of Issued for Construction Drawings for that element of the Work.

If, in the sole opinion of the Ministry, design submissions are not in conformance, or contain significant errors, then the Progressive Design-Builder shall be required to correct the Work so that it conforms to the Contract Documents.

3.1.1 Contract Preparation System

The Contract Preparation System is a ministry program that provides guidance and assists Designers in building a standard ministry construction package. This includes a database of master item lists, ministry approved specifications and drawings, etc.

CPS includes the Contract Design, Estimating and Documentation (CDED) Manuals that provides standard methods to document items and quantities.

The Progressive Design-Builder shall use Contract Preparation System to develop the Issued for Construction Drawing submission.

If the Progressive Design-Builder does not currently have access to Contract Preparation System, the Progressive Design-Builder shall submit a request for access to the Ministry via the Contract Administrator at the Start-Up Meeting – Design Phase. The Progressive Design-Builder is advised that it may take up to three (3) months to provide a new user access to Contract Preparation System. The Progressive Design-Builder shall be responsible for any impacts, including schedule, related to securing Contract Preparation System access for this Project.

3.1.2 Design Criteria

Any proposed deviation from the approved Design Criteria shall be submitted by the Progressive Design-Builder in writing to the Contract Administrator.

The Progressive Design-Builder shall submit all required information requested by the Ministry in order to generate a Design Criteria (DC) Addenda. No work deviating from the Design Criteria shall be carried out prior to the Progressive Design-Builder receiving an approved Design Criteria Addendum for the proposed work from the Ministry. Approvals for DC Addenda may take up to six (6) weeks.

3.1.3 Environmental Impact Assessment Report

This project is subject to environmental legislative requirements under the *Highway 413 Act, 2024*. The Progressive Design-Builder shall ensure any recommendations and/or commitments are carried forward from the final EIAR into the final design. The Progressive Design-Builder shall also undertake any addendums if a “significant change” is required under the **[Notes to Draft: Insert any environmental legislative requirements that are applicable to the project (e.g. *Highway 413 Act, 2024*. Delete if not applicable.)]**

3.1.4 List of Designated Substances

In accordance with the *Occupational Health and Safety Act, R.S.O. 1990, c. 0.1*, the Progressive Design-Builder is advised of the presence of the following Designated Substance(s):

[Notes to Draft: Complete table below with information collected in Preliminary Design / Detail Design regarding known presence of designated substances within the Project Limits.]

Designated Substance	Location or Work Activity
Silica	Handling sand or gravel. Handling road sweeping materials. Silica will be present on all projects. Present throughout the working area including, but not limited to, asphalt, concrete, and granular materials.
Lead	Lead is assumed to be present in the epoxy coating on the reinforcing steel within the concrete deck and the work shall be performed as though lead is present.
Asbestos on Construction Projects and in Buildings and Repair Operations (O. Reg. 278/05)	Patrol yard building materials (i.e., pipe insulation, ceiling/beam insulation, ceiling tiles, acoustic wallboards, floor tiles, ducts in bridges, etc.). Located on the X Bridge in the Bearings identified as Transite Board. Material is non-friable. Reference report "Asbestos Analysis for the X Bridge" dated May 2013 and included elsewhere in the Contract Documents. The conduit in the sidewalk of the bridge is assumed to contain asbestos and is assumed to be non-friable; however, it shall be re-assessed when the material is exposed. Asbestos may be found in some pavements, bridges, culverts, buildings, and electrical works: • Asbestos may be found in conduits/ducts, bearings as well as in coatings found on structures and culverts. • Asphalt Coated Asbestos Protected Corrugated Steel Culverts have been used in some projects. • Asbestos may also be present as insulation and in numerous other building materials in existing buildings. Examples include: caulking, drywall joint compound, tiles, etc. • Asbestos was used as a hot mix additive in some trials. • Asbestos cement pipes may also have been used.
Mercury	Manometers, thermometers or other pressure or temperature sensing devices may contain mercury. Steel Structure coatings may contain small concentrations of mercury. Mercury is not likely to be encountered as mercury vapour lamps have been replaced with high pressure sodium and LED for illumination. However, mercury may be present in some electrical equipment and mercury vapour is present in fluorescent light tubes and other types of light fixtures in buildings.

Designated Substance	Location or Work Activity
Arsenic	Steel Structure coatings may contain small concentrations of arsenic. May be found in pressure treated lumber (e.g. sign supports and some guiderail posts) and some steel structure coatings.
Benzene	Benzene may be present in certain coating materials such as coal tar epoxy. Benzene may also be encountered in or adjacent to abandoned fuel storage facilities.
Vinyl Chloride, Coke Oven Emissions, Ethylene Oxide, Acrylonitrile and Isocyanates	Vinyl Chloride, Coke Oven Emissions, Ethylene Oxide, Acrylonitrile and Isocyanates are not normally present on MTO construction projects.

HSB DCSO 2014-05 provides guidance for Designated Substances.

[Notes to Draft: The following Sections shall be populated by the Ministry and the Progressive Design-BUILDER working collaboratively to specify the scope envelope for which the Lump Sum Bid price applies. This section will form the basis of the design and construction requirements and performance expectations that were mutually understood and accepted at the time of the Lump Sum Bid. The scope and requirements for Design Phase and Construction Phase shall be commensurate of the design maturity.

Include scope for all functional categories that are required to successfully design and construct the Works. Do not delete headings – write “N/A” next to the title if the functional category is not applicable.]

3.1.5 Aggregate Source List (ASL)

[Notes to Draft: Insert Project Specific wording]

Prior to December 31 for each calendar year and as part of the application for Contract Completion, the Progressive Design-BUILDER shall submit form PH-D-046 Pit and Quarry After Use Report for all sources used on the contract for both non-commercial and commercial sources. Any tonnages derived from ROW production of aggregates shall also be reported.

3.1.6 Management of Excess Materials

[Notes to Draft: Consider and list any Project specific usage or management requirements related to excess materials as necessary]

Management of excess materials shall be in accordance with the requirements of the RFP and this Schedule.

3.2 Project Specific Output Specifications

The Progressive Design-Builder shall work collaboratively with the Ministry to develop and populate the Project Specific Output Specifications. The scope and project-specific requirements shall be reflective of the progressively developed design during the Design Phase Stages and shall be in accordance with the requirements of the RFP and this Schedule.

The Lump Sum Bid shall include the full scope of work required to complete design and construction of the Works in conformance with the Contract.

- 3.2.1 ATMS – N/A**
 - 3.2.1.1 Order of Precedence**
 - 3.2.1.2 Parameters and Required Outputs**
 - 3.2.1.3 Deliverables**
- 3.2.2 Bridge Engineering – N/A**
 - 3.2.2.1 Order of Precedence**
 - 3.2.2.2 Parameters and Required Outputs**
 - 3.2.2.3 Deliverables**
- 3.2.3 Drainage and Hydrology Engineering – N/A**
 - 3.2.3.1 Order of Precedence**
 - 3.2.3.2 Parameters and Required Outputs**
 - 3.2.3.3 Deliverables**
- 3.2.4 Electrical Engineering – N/A**
 - 3.2.4.1 Order of Precedence**

3.2.4.2	Parameters and Required Outputs
3.2.4.3	Deliverables
3.2.5	Engineering Materials and Investigations – N/A
3.2.5.1	Order of Precedence
3.2.5.2	Parameters and Required Outputs
3.2.5.3	Deliverables
3.2.6	Engineering Materials Testing and Evaluation Services – N/A
3.2.6.1	Order of Precedence
3.2.6.2	Parameters and Required Outputs
3.2.6.3	Deliverables
3.2.7	Environmental – N/A
3.2.7.1	Order of Precedence
3.2.7.2	Parameters and Required Outputs
3.2.7.3	Deliverables
3.2.8	Indigenous Consultation and Duty to Consult – N/A
3.2.8.1	Order of Precedence
3.2.8.2	Parameters and Required Outputs
3.2.8.3	Deliverables
3.2.9	Foundations Engineering – N/A
3.2.9.1	Order of Precedence
3.2.9.2	Parameters and Required Outputs
3.2.9.3	Deliverables

3.2.10 Highway Engineering – N/A

Highway [XX], within the Project Limits, is classified as a [insert highway classification] – King's Highway at a design speed of [XX] km/h.

3.2.10.1 Order of Precedence

The design and construction of all aspects of highway engineering shall be in accordance with the criteria contained in Section 3.1, the reference documents (most recent edition) identified below, and Part B: Design Phase Section 7, Detail Design Terms of Reference. If there is any conflict between the criteria contained in Section 3.1 and any of the reference documents below, the criteria in Section 3.1 shall take precedence. If there is any conflict between the reference documents, the provisions set out in Section 2.1, Project Principles, shall also apply:

- a) The approved project-specific Design Criteria
- b) MTO Provincial Engineering Memorandums, Design Bulletins and Directives
- c) MTO Roadside Design Manual
- d) MTO Design Supplement for the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads
- e) Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads
- f) MTO Drawings (MTOD)
- g) Ontario Provincial Standards, Specifications and Drawings (PROV and COMM)
- h) Ontario Traffic Manuals (OTM)

[Notes to Draft: Project team shall identify any additional mandatory design references and include in above list sorted by precedence]

3.2.10.2 Parameters and Required Outputs

[Notes to Draft: List general parameters for highway engineering, this can include but is not limited too:

- Design speed(s)
- Cross-section elements (lanes, shoulders, medians)
- Vertical and horizontal alignment constraints
- Roadside safety/treatments
- Property limits]

3.2.10.2.1 Horizontal Alignment

The Highway [XX] horizontal alignment shall be design and constructed to meet the following parameters:

[Notes to Draft: Define MANDATORY parameters / requirements for the horizontal alignment. Parameters to include may be:

- Design Speed
- Tie-in points
- Prescriptive areas based on commitments (including EA)
- Prescriptive areas based on constraints]

3.2.10.2.2 Vertical Alignment

The Highway **[XX]** vertical alignment shall be constructed to meet the following parameters:

[Notes to Draft: Define MANDATORY parameters / requirements for the vertical alignment. Parameters to include may be:

- Design Speed
- Tie-in points
- Prescriptive areas based on commitments (including EA)
- Prescriptive areas based on constraints]

3.2.10.2.3 Cross Section

[Notes to Draft: Select and or modify below statements as necessary]

The required cross section for the section of Highway **[XX]** that shall be reconstructed shall match the existing cross section with the addition of **[Notes to Draft: Insert any additional requirements such as speed change lanes for new ramps].**

[Notes to Draft: Include necessary parameters from the Design Criteria here as required.

- Lane width
- Shoulder width
- Rounding width
- Side slopes and back slopes
- Median widths
- Multi-use pathways
- Pavement widening on curves (include vehicle type)
- Etc.]

A minimum side clearance on **[intersecting road]** under the structure from the through lane edge of pavement to the abutment wall shall comply with the minimum clear zone width of **[X m]** for a design speed of **[XX km/h]**.

Crossfall and Superelevation

[Notes to Draft: Modify statements below as required for the Project.]

The crossfall shall be designed and constructed to meet current standards.

The superelevation shall be designed and constructed to meet current standards.

Sidewalks

[Notes to Draft: Modify the requirements below as applicable for the Project or insert "N/A"]

All existing sidewalks within the Project Limits shall be replaced. In addition to Ministry requirements, all sidewalks constructed under this Contract (permanent and temporary) shall be designed and constructed to meet all requirements for *Accessibility for Ontarians with Disabilities Act (AODA)*. All permanent sidewalks shall be concrete.

The minimum width of the sidewalk shall be 1.5 m. The width of the sidewalk shall not include any part of a curb and gutter or boulevard.

A temporary sidewalk shall be constructed and maintained on the temporary detour. The surface of this temporary sidewalk shall be asphalt or concrete.

Fully Paved Shoulders

[Notes to Draft: Identify the needs for fully paved shoulders for this project (including potential cycling considerations). Provide design parameters.]

3.2.10.2.4 Roadside Design Requirements

The design and construction of all roadside and median barrier systems shall be according to the criteria contained in this Section and Section 3.10.

All roadside (including median) barrier hardware shall be installed as shown in the MTO standard drawings and shall not be modified.

Any modifications to Ministry standards or consideration of any non-standard system shall be subject to the Change Proposal process as outlined in OPSS.PROV 100 and its amendments. A minimum of four (4) months shall be provided for Ministry review and response. The Progressive Design-Builder shall also submit all documentation that confirms the proposed modification or non-standard system has been successfully tested in accordance with the American Association of State Highway Transportation Officials Manual For Assessing Safety Hardware (AASHTO MASH) 2016.

Roadside barriers and sign support systems shall be reviewed together to ensure compatibility and compliance with appropriate safety standards (refer to Section 2.4.8 of the Roadside Design Manual).

All sign support systems shall be in accordance with the Roadside Design Manual, MTO Sign Support Manual, and applicable OTM Books.

Existing Barrier Systems

Mounting Height

The Progressive Design-Builder shall review all existing barrier systems, in conjunction with the proposed pavement strategy, and identify barrier systems that require adjustment to the mounting height of the rail or cable to ensure compliance for the existing barrier system type.

All barrier systems identified as requiring adjustment to the mounting height of the rail or cable shall be completed. Terminals and end treatments affected by mounting height adjustments shall be replaced with a system meeting current Ministry standards.

For existing barrier systems that cannot accommodate the mounting height adjustment, the barrier system shall be replaced with a system meeting current Ministry standards.

Conflicts with Proposed Works

[Notes to Draft: Review impacts to existing barrier systems (including grading at terminals) during Preliminary Design / DB Ready to determine the scope of work.

Consult with Ministry for non-standard treatment options based on the affected cross-section. Customize for project needs / scope.]

Existing barrier systems, terminals, and end treatments affected (in whole or in part) as a result of the Progressive Design-Builder's design (e.g. culvert replacement requiring barrier system removal, staging, detour, temporary access, pavement strategy, etc.) shall be replaced to meet current Ministry standards. Where an appropriate transition between two barrier systems does not exist or is not permitted by the current Ministry standards, the entire barrier system shall be replaced with a system meeting the current Ministry standards.

Additional Requirements

All high-tension cable guide rail shall have the proper cable tensioning at all times.

Barrier Systems – Treatment

[Notes to Draft: Resource: Guide Rail Evaluation Report (From Preliminary Design / DB Ready)

OPSD reference to help identify whether existing system is NCHRP 350 or AASHTO MASH. Consult Standards and Contracts Branch for assistance if required.

Identify if non-standard drawings (i.e. transitions) may be required, consult SCB for appropriate Head Office Drawings to be included in the contract (add text reference in Section 7).

Identify treatments to barrier systems. May include:

- NEW - Installation of barrier system at a new location
- REPLACE - Installation of an upgraded barrier system at an existing location
- REMOVE - Removal of an existing barrier system (no barrier system warranted)
- EXTEND – Include extension length (in metres)

MTO PM to secure approvals for this work. Retain Approval Documentation in Project Files. For highway rehabilitations, consider the following:]

The following table summarizes treatments to barrier systems in addition to the requirements described under Section 3.10.2.4. Replacement, new, and extension of barrier systems including terminals and end treatments for these barrier systems shall be systems that meet current standards.

Location		Existing Barrier System Type	Treatment Category
Approx. Sta.	LT / RT		

Grading requirements for the barrier system, terminals, and end treatments shall be designed and constructed in accordance with the Roadside Design Manual guidelines and Ministry standards.

[Notes to Draft: For new alignment / re-alignment whereby new barrier systems would be required, consider the following and/or develop scope to suit the project.]

All barrier systems, terminals, and end treatments on the new alignment shall meet current Ministry standards. This shall include all grading and cross-sectional requirements to facilitate proper function of the systems.

Removal of all existing barrier systems, terminals, and end treatments shall occur only after the new alignment is open to traffic.

The following elements shall be salvaged and delivered to the address identified below:

[Notes to Draft: Identify elements to be salvaged. Identify destination address.]

Barrier Design Report

A Barrier Design Report shall be completed in accordance with the Roadside Design Manual guidelines and include design decisions with rationale pertaining to:

- All proposed permanent installations
- All adjustments to existing barrier systems (mounting height, tensions, etc.)

This report shall be submitted a minimum of three (3) months prior to the Presentation of Final Design submission.

[Notes to Draft: Adjust above timelines according to scope. Timelines need to account for:

- Consider the state of the Design-Builder's design (MTO estimated project schedule) – Would the Design-Builder have sufficient design information to complete this Report?
- Risk for needing support from DSSO for non-standard treatments (MTO internal timelines – account for possible jurisdictional review / search for compatible treatment)]

3.2.10.2.5 Property Limits

3.2.10.3 Deliverables

3.2.11 Pavement Engineering – N/A

3.2.11.1 Order of Precedence

3.2.11.2 Parameters and Required Outputs

3.2.11.3 Deliverables

3.2.12 Property / Corridor Management – N/A

The Progressive Design-Builder shall design and construct the Work to fit within the available property limits. Permanent Works shall not be constructed within the areas identified as Temporary Limited Interest.

[Notes to Draft: MTO to provide REDACTED Property Request Plan (PR Plan). This provides Proponents information on the available property for the Work. Do NOT include PR Form / Summary.]

The Ministry takes possession of the lands required for the Project on **[Month day, 20xx]**. The Progressive Design-Builder has access to the site after this date.

The Progressive Design-Builder shall be responsible for installing highway fence (MTOD 971.101) along the new Project right-of-way.

[Notes to Draft: Modify the above based on Project scope. Add in detailed Project specific requirements if applicable.]

Property Agreement Commitments

[Notes to Draft: Provide details of Ministry commitments as part of the Property Agreements with the property owner (if any). Consult with Property Section to ensure this is accurate.]

3.2.12.1	Order of Precedence
3.2.12.2	Parameters and Required Outputs
3.2.12.3	Deliverables
3.2.13	Rockfall Engineering – N/A
3.2.13.1	Order of Precedence
3.2.13.2	Parameters and Required Outputs
3.2.13.3	Deliverables
3.2.14	Surveying and Plan Preparation – N/A
3.2.14.1	Order of Precedence
3.2.14.2	Parameters and Required Outputs
3.2.14.3	Deliverables
3.2.15	Traffic Engineering – N/A
3.2.15.1	Order of Precedence
3.2.15.2	Parameters and Required Outputs
3.2.15.3	Deliverables
3.2.16	Utilities – N/A

The Progressive Design-Builder shall undertake design and coordinate construction Works with existing Utilities or Utilities identified in this RFP to ensure uninterrupted utility service, proper protection, and relocations as required.

Without limitation to the Progressive Design-Builder's obligations in respect of Utility work elsewhere in the Agreement, the Progressive Design-Builder shall comply with the following general provisions in respect of Utility work:

Utility relocation required due to the Progressive Design-Builder's design shall be completed by the Progressive Design-Builder at the Progressive Design-Builder's cost. The Progressive Design-Builder shall be required to secure all necessary arrangements, with respect to Utility relocations, and account for the relocations in the Project schedule. The Progressive Design-Builder shall initiate Utility relocation procedures according to the Ministry's Utility Relocation Guidelines in effect at the time of award document. This document has been prepared to provide a consistent approach in dealings between major Utility companies (i.e. Bell Canada, Ontario Hydro, Enbridge Gas and Union Gas), Ministry staff and its consultants.

For other Utility owners, similar processes and procedures shall apply. Individual Utility companies shall be contacted by the Progressive Design-Builder to determine the time requirements associated with any relocation.

The following Utility Companies are known to be present within the Working Area. Contacts include:

[Notes to Draft: List utility contacts known within the Working Area.]

The Ministry's "Utility Relocation Guidelines" are available online at:

<https://www.library.mto.gov.on.ca/SydneyPLUS/TechPubs/Portal/tp/TechnicalPublications.aspx>

[Notes to Draft: Add or modify as applicable for Utility companies above.]

[Notes to Draft: If there is a Region-specific relocation process, identify in sentence below. Otherwise, adjust following sentence accordingly:]

The Design-Builder shall work closely with MTO Engineering Program Delivery Office staff and follow the **[insert Region]** Region Utility Relocation Process in effect for the area/region.

[Notes to Draft: Include the language below if the work was not completed in design.]

The Design-Builder shall identify existing Utility alignment and elevation during the design phase. The Progressive Design-Builder shall verify/obtain all existing and proposed Utility information from Utility owners, arrange for and complete test pits, and attend any on-site meetings with Utility companies as necessary to complete the Work.

The Progressive Design-Builder, in conjunction with the Utility owners, shall prepare a composite plan illustrating all existing Utilities within the Project area based on information provided by the Utility owners and the results of field investigations. The Progressive Design-Builder shall develop Utility relocation plans in conjunction with the Utility owners and the Ministry. Underground utilities shall be mapped according to CSA S250-11, *Mapping of underground utility infrastructure*, to accuracy level 3 or better.

The Progressive Design-Builder shall submit to the Ministry the following information:

- a) The composite plan (digital and hard copy);
- b) The plan of proposed relocations (digital and hard copy);
- c) A letter stating that the Progressive Design-Builder has reviewed the proposed relocation in conjunction with the detailed design, and that the proposal shall not conflict with the proposed construction; and
- d) A written request for EA Clearance for Utility relocation with the final Utility relocation plans attached.

The Progressive Design-Builder shall be responsible for:

- a) Protecting, isolating and/or relocating Utilities as required to carry out the work, including coordinating the work with Utility owner;
- b) Utility test pits are required when work is within 1m of an underground Utility;
- c) Maintaining separation from primary power lines as specified by Utility owners; and
- d) Coordinating and scheduling the physical relocation of all Utilities.

MTO Engineering Program Delivery Office and Construction Management Office staff shall be invited to attend all meetings with the Utility companies and be copied on all correspondence and minutes of Utility meetings.

The relocation work shall not commence until the written request for Environmental Assessment (EA) Clearance for Utility relocations has been issued by the Ministry. The relocation work shall be scheduled and carried out such that proper separation from the construction work is provided to avoid any Constructor issues.

The Ministry shall be responsible for:

- a) Preparing a modified Letter 4 to the Utility Companies identifying the Design-Builder for this Project; and
- b) Processing of the Moving of Utility order(s) and processing of payments to Utility owners for relocation work shall be the responsibility of the Ministry. Any payments required for Utility relocation required due to the Design-Builder's design, shall be deducted from the Design-Builder's payment certificate.

3.2.16.1 Order of Precedence

3.2.16.2	Parameters and Required Outputs
3.2.16.3	Deliverables
3.2.17	Value Engineering – N/A
3.2.17.1	Order of Precedence
3.2.17.2	Parameters and Required Outputs
3.2.17.3	Deliverables
3.2.18	Additional Biddable Work – N/A
3.2.18.1	Order of Precedence
3.2.18.2	Parameters and Required Outputs
3.2.18.3	Deliverables

WARRANT: On Progressive Design-Build for Highways Construction Contracts with a Lump Sum Bid, this Progressive Performance Requirements PDBSP shall be completed collaboratively by the Service Provider and Ministry, to the Ministry's satisfaction, and shall be attached as Schedule 2 to the Construction Phase Agreement.

CUSTODIAN: Contract Innovations Office

PERFORMANCE REQUIREMENTS FOR ENVIRONMENTAL MANAGEMENT

Special Provision No. PDBPERF 1072

1072.01 SCOPE

This performance specification identifies the responsibilities and the obligations of the Progressive Design-Builder for environmental management associated with the delivery of all the Work.

1072.02 REFERENCES

This Work requires the mandatory use of the following documents in addition to those specified elsewhere in the Contract Documents:

- Class Environmental Assessment for Provincial Transportation Facilities and Municipal Expressways
- MTO Environmental Standards and Practices
- MTO Environmental Reference for Highway Design
- Statement of Environmental Values – Ministry of Transportation
- MTO Environmental Guide for Fisheries
- MTO Environmental Guide for Fisheries – Best Management Practices Manual

1072.03 DEFINITIONS

For the purpose of this specification, the following definitions apply:

Detect, Detected, or Detection means observed, should have been observed, or has been informed.

Environmental Management Plan means a project or site-specific plan developed and implemented to ensure that all necessary measures are identified and implemented in order to meet all environmental protection, regulatory and legislative requirements, contract requirements, and Ministry obligations including adherence to the Progressive Design-Builder's Environmental Management System policy, programs, and procedures.

Environmental Management System means the part of a Progressive Design-Builder's management system used to develop and implement its environmental policy, manage its environmental impacts, and to ensure compliance with all environmental legal requirements. It is a set of interrelated elements (organizational structure, planning activities, responsibilities, practices, procedures, and resources) used to establish and achieve environmental objectives.

Immediate or Immediately means the initiation of an activity as soon as possible after Detection and no later than two (2) hours from the time of Detection.

1072.04 PROGRESSIVE DESIGN-BUILDER'S RESPONSIBILITIES AND OBLIGATIONS

The Progressive Design-Builder is responsible for undertaking the Work in a manner that protects the environment to meet the Contract requirements.

1072.04.01 Environmental Management

The Progressive Design-Builder has responsibility to meet all obligations for environmental protection during the Work and shall ensure that performance of all Work is carried out in compliance with all Environmental Laws, MTO Environmental Standards and Practices, and the requirements for the Environmental Management System (EMS).

1072.04.01.01 Environmental Management System

The Progressive Design-Builder shall be responsible for the complete environmental management of and environmental protection planning for the Work and shall have a functioning Environmental Management System (EMS) in accordance with the requirements of this Section and generally consistent with CAN/CSA-ISO 14001:04 (ISO 14001:2004). The Progressive Design-Builder's EMS shall ensure that all Work undertaken during the term of the Assignment shall consistently meet all environmental protection, regulatory and legislative requirements, and Ministry obligations.

1072.04.01.02 Environmental Management System Requirements

The Progressive Design-Builder shall develop an Environmental Management System (EMS) with sufficient detail, outlining its understanding and approach to the key EMS activities described below. The Progressive Design-Builder's Environmental Lead will be responsible for the coordination of all issues related to the EMS.

- Develop a documented process to ensure environmental legislative, environmental assessment commitments, and other environmental requirements in relation to the Work are undertaken and monitored throughout the duration of the Work. The process shall also explain the intended method of reporting and communicating identified changes in these requirements to the Progressive Design-Builder personnel, subcontractors, consultants, and suppliers.
- Document how approvals/permits and bylaw exemptions will be obtained, how requirements and commitments in environmental assessment documentation will be addressed, where applicable to contract activities, and how verification will take place that the requirements and commitments will be and have been met.
- Document and demonstrate how environmental protection / mitigation / compensation measures will be implemented during design and construction of the Work and confirm that the environmental protection / mitigation / compensation measures have been implemented during design and construction of the Work.
- Documented procedures and processes to monitor and measure, on a regular basis, the Progressive Design-Builder's activities that can have significant environmental impacts and ensure appropriate corrective or preventative measures are taken to correct any actual or potential deficiencies revealed by monitoring activities.
- Documented procedures for environmental emergency preparedness and response to ensure that corrective action is taken to address environmental incidences. The Progressive Design-Builder shall be in strict compliance with the requirements of legislation regarding

Environmental Incidents under the control of the Progressive Design-Builder or that are a result of the Progressive Design-Builder's operations during the Work.

- Ensure all employees, Sub-Service Providers, subcontractors and, as applicable, other involved parties working for or on behalf of the Progressive Design-Builder, have the appropriate competence, training, and awareness in regard to the potential environmental impact of their activities, the Progressive Design-Builder's Environmental Management System, environmental protection / mitigation / compensation measures, contract responsibilities and obligations, environmental protection, regulatory and legislative requirements, requirements of permits and approvals, and any other environmental requirements.

1072.04.02 Environmental Information Management

The Progressive Design-Builder is responsible for all information management requirements identified in this Section or elsewhere in the Contract Documents. The associated performance requirements and consequences for non-conformance related to information management are documented in the PDBPERF 1075 – Performance Requirements for Information Management, included in the Contract.

1072.04.02.01 Environmental Management System Records

The Progressive Design-Builder shall create and maintain records to provide evidence of compliance with Environmental Laws, Contract environmental requirements, and the Environmental Management System. The Progressive Design-Builder shall provide the Ministry access to environmental records, upon request within 24 hours.

1072.04.02.02 Permits and Approvals

The Progressive Design-Builder shall provide copies to the MTO Contract Administrator of all draft and final environmental permits, approvals, bylaw exemptions, and authorizations and documentation, including Design and Construction Report (DCR) and technical reports, prior to starting construction on the related element of the Work.

1072.04.02.03 External Consultation

A minimum of five (5) weeks prior to any external consultations taking place, the Progressive Design-Builder shall submit a consultation plan and schedule for completing the appropriate level of consultation to meet the requirements of the Class EA, including any commitments made during preliminary design as described in the TESR and Class EA study, as may have been amended by the Progressive Design-Builder during detail design. Any changes to the consultation plan or schedule shall be submitted immediately to the MTO Contract Administrator.

Drafts of all public notices, letters, Public Information Centre (PIC) materials, and environmental assessment process documentation (including but not limited to the DCR, technical reports, project mailing list, responses to stakeholders, permit applications, etc.) will be provided to the MTO Contract Administrator for review, at least five (5) weeks prior to completion, distribution, event or 30-day public review period. No draft documents shall be made available for public review.

The Progressive Design-Builder shall notify the MTO Contract Administrator of any public notifications at least two (2) weeks prior to when the public notification is to occur. PIC notification is to be provided to the public two (2) weeks prior to the PIC date. Copies of all written submissions

are to be provided to MTO within three (3) Working Days of their receipt. A PIC summary report is to be provided to the MTO Contract Administrator within ten (10) Working Days after the deadline for written submission.

1072.04.02.04 During Design

During the Design Phase of the Work, the Progressive Design-Builder shall submit the following documentation to the MTO Contract Administrator:

- a) Description of changes to the Work compared to Work as described in the environmental assessment process documentation or any changes to permits, approvals, bylaw exemptions, or authorizations previously obtained during design, submitted prior to further advancing design on the related element of the Work. The submission will include a detailed assessment of “significance” of the change per the Class EA principles and, if applicable, a detailed description and schedule for any required amendments to the original EA.
- b) Any additional or revised permits, approvals, bylaw exemptions, and authorizations that were obtained submitted upon receipt.
- c) Any continual improvement initiatives made to the EMS, or any revisions made to the Environmental Management Plan, submitted prior to implementation of change.

1072.04.02.05 Prior to Construction

Prior to start of construction, the Progressive Design-Builder shall submit to the MTO Contract Administrator a letter of confirmation, signed by the Environmental Lead, that assures that all Class Environmental Assessment commitments and requirements of permits and approvals have been met and that the project is eligible for Environmental Clearance-Construction Start, as per the Class EA for Provincial Transportation Facilities and Municipal Expressways.

1072.04.02.06 During Construction

During the Construction Phase, the Progressive Design-Builder shall submit the following documentation to the MTO Contract Administrator:

- a) Description of changes to the Work compared to work as described in the Environmental Assessment Process Documentation or any changes to permits, approvals, bylaw exemptions, or authorizations previously obtained during design, submitted prior to starting construction on the related element of the Work.
- b) Any additional or revised permits, approvals, bylaw exemptions, and authorizations that were obtained submitted upon receipt.
- c) Any complaints, warnings, directions, orders, or charges received from regulatory agencies during the Work submitted upon receipt.
- d) Immediate notification to MTO of any Environmental Incidents and any contacts with regulatory agencies and resulting actions.
- e) Update on Environmental Incidents reported, including a summary of actions taken and actions scheduled, submitted monthly.
- f) Drafts and final copies of Monitoring Reports required by Environmental Permits or authorizations (e.g.: for Fisheries Act Authorizations or Endangered Species Act Permits, etc.) submitted as required by the applicable Permit or authorization.

- g) Update report on items identified in monitoring requiring corrective / preventative action (e.g., non-conformances), including resolution status of each, submitted monthly.
- h) Any continual improvement initiatives made to the EMS, or any revisions made to the Environmental Management Plan, submitted prior to implementation of change.

1072.04.02.07 Completion of Work

Upon completion of the Work, the Progressive Design-Builder shall submit to the MTO Contract Administrator a letter of confirmation, signed by the Environmental Lead, that assures that all Class Environmental Assessment commitments, Contract requirements and obligations, environmental protection, regulatory, legislative requirements, requirements of permits and approvals, and any other environmental requirements have been met during the course of the Work.

1072.05 PERFORMANCE REQUIREMENTS

1072.05.01 Performance Requirements

The Progressive Design-Builder shall ensure that Performance Requirements identified in Table 1 are met or exceeded.

Table 1: Environmental Management Performance Requirements

Feature	Performance Requirement
Protection of the environment during Work as required by the Contract within the Contract Area	Work meets all requirements of environmental legislation and Contract requirements 100% of the time.
Immediate corrective action of a non-conformance	Progressive Design-Builder undertakes required notifications and corrective actions for non-conformance Immediately upon identification through monitoring, or upon Detection 100% of the time.

1072.05.03 Performance Indicators

The Ministry, at its discretion, may collect performance indicators. The collection may consist of up to 100% of the contract area and the exact location will be at the Ministry's discretion. A more thorough data collection may be carried out if there is evidence of non-conformance. The additional data collection may include a review of the Progressive Design-Builder's records, plans and actions taken.

The performance indicators that the Ministry collects will be shared with the Progressive Design-Builder and will be the only indicators used by the Ministry to apply consequences for non-conformance.

1072.05.04 Conformance to the Performance Requirements

Upon completion of the collection of performance indicators, the Ministry will make an assessment of conformance or non-conformance to the performance requirements.

The Ministry will have the complete discretion in the choice of performance indicators to use in determining conformance. The assessment, however, will include consideration of events that are beyond the care and control of the Progressive Design-Builder. The Ministry will examine all relevant factors involved with the situation including the Progressive Design-Builder's rationale as to why the situation occurred.

If, after completing the collection of performance indicators, assessing all the relevant data, including data provided by the Progressive Design-Builder, a non-conformance is determined, a Notice of Non-Conformance may be issued to the Progressive Design-Builder for features that do not conform to the performance requirements.

1072.05.05 Consequences for Non-Conformance to the Performance Requirements

The Progressive Design-Builder shall be responsible for performing all specified consequences for any non-conformance to the performance requirements.

1072.05.04.01 Consequence Tables

The consequences for non-conformance to the performance requirements are described in Table 2:

Table 2: Consequences for Non-Conformance to the Performance Requirements

Feature	Consequences for Non-Conformance	
	Initial	Subsequent
Protection of the environment during Work as required by the Contract	\$5,000 for each instance where there has been a violation of environmental legislation or Contract requirements.	\$1,000 for each 12-hour period or part thereof beyond the first 12-hour period after Detection that the violation remains uncorrected.
Immediate corrective action of a non-conformance	\$5,000 for each instance where notifications or corrective actions were not undertaken Immediately upon Detection.	\$1,000 for each 12-hour period or part thereof beyond the first 12-hour period after Detection that the notification or corrective action are not undertaken.

WARRANT: Always with Progressive Design-Build for Highway Construction Contracts.

CUSTODIAN: Contract Innovations Office

PERFORMANCE REQUIREMENTS FOR INFORMATION MANAGEMENT

Special Provision No. PDBPERF 1075

1075.01 SCOPE

This performance specification covers the responsibilities and obligations of the Progressive Design-Builder for information management associated with all of the Progressive Design-Builder's activities required to complete the Work in accordance with the Contract.

1075.02 REFERENCES – Not Used

1075.03 DEFINITIONS

For the purpose of this specification, the following definitions apply:

Accurate means the information provided is a true representation of an actual situation, accomplishment or occurrence.

Complete means that all required and relevant information has been provided.

Contentious means an issue, complaint or inquiry which has the potential to create media attention, result in legal action against the Government, Ministry, or Progressive Design-Builder or may position the Government or Ministry as less informed than the public.

Reasonable means a sound judgement or action that is not excessive or extreme nor insufficient.

Timely means that all required information is provided within the prescribed or Reasonable timeframe.

1075.04 PROGRESSIVE DESIGN-BUILDER'S RESPONSIBILITIES AND OBLIGATIONS

1075.04.01 General

As the owner, the Ministry requires access to Timely, Accurate, and Complete information to employ sound asset management and to defend itself against potential litigation. For Progressive Design Build for Highways contracts, the amount of information required to be submitted by the Progressive Design-Builder is less than in conventional contracts, however, the Ministry may request additional information at anytime during the contract or warranty period. The Progressive Design-Builder shall maintain effective information management practices throughout the duration of the contract and warranty period.

1075.04.02 Public Notifications

The Progressive Design-Builder shall be responsible for notifying the Contract Administrator of any operations that might require public notification based on their potential impact on the travelling public or local residents. The Contract Administrator will determine the appropriate course of action for notifying the public and will advise the Progressive Design-Builder of any required action.

Notification to the Contract Administrator shall be provided at least one (1) week in advance of the planned operation unless otherwise specified in the Contract. Some examples of operations that may require public notification include lane and ramp closures, detours, night work, and operations with high noise volumes. Failure to provide notification to the Contract Administrator will result in the Progressive Design-Builder being subject to consequences for non-conformance as outlined in Table 2.

1075.04.03 Contract Information Management Requirements

There are several contract information management requirements contained within the specifications, project requirements, and General Conditions of the Contract. The general performance requirements and consequences for non-conformance specified for contract information management requirements specified in Tables 3 and 4 of this performance specification shall also apply to the information management and submission requirements outlined in all other specifications and elsewhere in the Contract. A few key information management requirements are highlighted below:

Design Submissions: The Progressive Design-Builder shall submit all relevant design submissions as outlined in the Contract prior to starting construction of that element of the work. Submissions that are deemed to be late, incomplete, or inaccurate in accordance with the Contract will be subject to consequences for non-conformance as outlined in Table 2.

Record Drawings: The Progressive Design-Builder shall submit Record Drawings of the as-constructed completed Project as specified elsewhere in this RFP, within twenty (20) Days of issuance of the Certificate of Completion in accordance with the General Conditions of Contract and its amendments. Submissions that are deemed to be late, incomplete, or inaccurate in accordance with the Contract will be subject to consequences for non-conformance as outlined in Table 2.

Certifications and Confirmations: The Progressive Design-Builder shall submit all relevant certifications and confirmations according to the Contract. Certifications and confirmations that are deemed to be late, incomplete, or inaccurate will be subject to consequences for non-conformance as outlined in Table 2.

1075.04.04 Ministry and Public Inquiries

The Progressive Design-Builder shall respond to requests with information that is Accurate, Timely, and Complete. The Progressive Design-Builder will typically receive information requests from the Ministry; however, they may also receive requests from the public. Ministry-initiated requests will typically involve information related to work accomplishments, asset conditions, or information that is not readily available to the Ministry through other means. Timelines for providing the information are dependant on the nature of the request and therefore can not be determined in advance. The Ministry will make every effort to set timelines that are Reasonable for the Progressive Design-Builder to respond to.

Public-initiated complaints / inquiries will be in the form of direct contact with the public (e.g., property owners, other Ministries, municipalities, EMS, travelling public, etc.) by telephone or written correspondence. The Progressive Design-Builder shall document and record all complaints / inquiries and actions taken and submitted to the Ministry throughout the duration of the Assignment or upon request. The Ministry shall be notified immediately of any Contentious issues. Public-initiated complaints / inquiries will typically include information on specific work activities and impact to the travelling public. The Progressive Design-Builder shall notify the Contract Administrator of

any public information requests, and the Contract Administrator will determine if the information requested is appropriate to be provided by the Progressive Design-Builder. The Progressive Design-Builder shall not respond to any public information requests prior to consulting with the Contract Administrator.

Information that is deemed to be late, incomplete, or inaccurate in accordance with the Contract will be subject to Consequences for non-conformance as outlined in Table 2.

1075.05 PERFORMANCE REQUIREMENTS

1075.05.01 Performance Requirements

The Progressive Design-Builder shall ensure that all performance requirements described in Table 1 are met or exceeded.

Table 1: Information Management Performance Requirements

Feature	Performance Requirements
Public Notifications	• 100% of requirements of Public Notifications identified in section 1075.04.02 met.
Information Requests	• 100% of information provided within the specified timeframe for the request. • 100% of information is Complete and Accurate. • 100% of public complaints / inquiries responded to within 48 hours. • Complaint logs submitted to Ministry.
Contract Information Requirements	• 100% of information provided within the specified timeframe in the Contract. • 100% of information is Complete and Accurate. • 100% of design submissions submitted to the Ministry prior to beginning construction of that element of the work. • Record Drawings submitted within twenty (20) Days after issuance of Certificate of Completion. • 100% of the required certifications and confirmations submitted as specified in the Contract.

1075.05.03 Performance Indicators

The Ministry, at its discretion, may collect performance indicators. The collection may consist of up to 100% of the contract area and the exact location will be at the Ministry's discretion. A more thorough data collection may be carried out if there is evidence of non-conformance. The additional data collection may include a review of the Progressive Design-Builder's records, plans and actions taken.

The performance indicators that the Ministry collects will be shared with the Progressive Design-Builder and will be the only indicators used by the Ministry to apply consequences for non-conformance.

1075.05.04 Conformance to the Performance Requirements

Upon completion of the collection of performance indicators, the Ministry will make an assessment of conformance or non-conformance to the performance requirements.

The Ministry will have the complete discretion in the choice of performance indicators to use in determining conformance. The assessment, however, will include consideration of events that are beyond the care and control of the Progressive Design-Builder. The Ministry will examine all relevant factors involved with the situation including the Progressive Design-Builder's rationale as to why the situation occurred.

If, after completing the collection of performance indicators, assessing all the relevant data, including data provided by the Progressive Design-Builder, a non-conformance is determined, a Notice of Non-Conformance may be issued to the Progressive Design-Builder for features that do not conform to the performance requirements.

1075.05.05 Consequences for Non-conformance to the Performance Requirements

The Progressive Design-Builder shall be responsible for performing all specified consequences for any non-conformance to the performance requirements.

1075.05.05.01 Consequence Tables

The consequences for non-conformance to the performance requirements are described in Table 2:

Table 2: Consequences for non-conformance to the Performance Requirements

Feature	Consequences for Non-conformance to the Performance Requirements
Public Notifications	• Construction delayed or ceased if Contract Administrator is not notified of operations requiring public notifications as required by section 1075.04.02. • \$5,000 per occurrence for proceeding with an operation where public notification was required.
Information Requests	• \$1,000 per occurrence of information not submitted within the Ministry specified time and \$1,000 per additional day until received. • \$1,000 per occurrence of the information not being Complete or Accurate.
Contract Information Requirements	• \$1,000 per occurrence of information not provided within the specified timeframe in the Contract. • \$1,000 per occurrence of the information not being Complete or Accurate. • Construction delayed or ceased if applicable design submission not submitted to the ministry or if submission is incomplete or not in accordance with mandatory design standards. • The Contract Completion Certificate will not be issued until all certifications and confirmations fully comply with the Contract.

WARRANT: Always with Progressive Design-Build for Highway Construction Contracts.

CUSTODIAN: Contract Innovations Office

PERFORMANCE REQUIREMENTS FOR TRAFFIC AND MOBILITY MANAGEMENT

Special Provision No. PDBPERF 1077

1077.01 SCOPE

This performance specification covers the responsibilities and obligations of the Progressive Design-Builder for Traffic and Mobility Management through all Highway Sections impacted by the Work performed under this Contract, as described elsewhere in the Contract Documents.

1077.02 REFERENCES

This Work requires the mandatory use of the following documents:

- Ontario Traffic Manual
- MTO Traffic Signal Timing Policy
- MTO Policy on Use of Portable Temporary Traffic Signals
- *Highway Traffic Act* and Regulations
- *French Language Services Act*

1077.03 DEFINITIONS

For the purpose of this specification, the following definitions apply:

Actual Travel Time means the time required for a road user to travel from one end of a Highway Section to the other end of the same Highway Section without exceeding the posted speed limit, as measured in the field.

Baseline Travel Time means the time to travel from one end of a Highway Section to the other end of the same Highway Section, as given in Table 5.

Delay means the difference in time between the Baseline Travel Time for a Highway Section and the Maximum Allowable Travel Time for the same Highway Section.

Highway Section means a portion of the highway network affected by the Work performed under this Contract, as given in Table 5.

Incident Report means a report created by the Progressive Design-Builder when a Traffic Incident or any other event occurs near or within the limits of the work zone, which results in Maximum Allowable Travel Time being exceeded, to record details of the event as described elsewhere in the Contract Documents.

Maximum Allowable Travel Time (MATT) means the longest Actual Travel Time permitted under the Contract as given in Table 5, unless authorized elsewhere in the Contract Documents.

Mobility means the ease with which traffic can travel from one end to the other end of a Highway Section.

Traffic Incident means an unplanned event impacting the Actual Travel Time, such as a collision or vehicle breakdown.

Traffic Management means a planned course of action intended to control traffic and to influence driver behaviour to allow drivers to safely manoeuvre through a work zone.

Traffic Management Plan means a document produced by the Progressive Design-Builder that outlines the overall traffic management strategy for the Work performed under the Contract.

1077.04 PROGRESSIVE DESIGN-BUILDER'S RESPONSIBILITIES AND OBLIGATIONS

1077.04.01 General

The Progressive Design-Builder is responsible for meeting the Maximum Allowable Travel Time and Traffic Management performance requirements and other contract requirements, unless stated elsewhere in the Contract.

1077.04.02 Traffic Management Plan

The safety of all road users is paramount to the Ministry. The Progressive Design-Builder is responsible for planning and implementing traffic operations that meet all legal requirements and protect the safety of workers and road users while meeting Maximum Allowable Travel Time performance requirements.

The Progressive Design-Builder is required to develop a Traffic Management Plan for all stages of the Work. The Traffic Management Plan shall be submitted to the Ministry for information purposes. The Traffic Management Plan may be requested by the Ministry of Labour and must be kept on site when workers are present.

The Progressive Design-Builder's Traffic Management Plan shall describe how the Progressive Design-Builder intends to address the following non-exhaustive list of items, as applicable to the Work, to meet the performance requirements:

- a) Identify how emergency service vehicles will be guaranteed undelayed passage through the work area or identify how the Progressive Design-Builder will communicate with local emergency response services to identify alternative routes that will not unduly delay them.
- b) Staging sequences.
- c) Detours.
- d) Work vehicle access to and egress from work zones.
- e) Selection and planned implementation of typical layouts for traffic control, including temporary condition signs, variable message signs, and delineation devices.
- f) Use of temporary regulatory speed reductions, including information on where and when the reductions will be used.
- g) Use of temporary traffic signals.
- h) Use of temporary barriers.
- i) Removal of old pavement markings.
- j) Use of temporary pavement markings.

1077.04.03 Traffic-Related Communications

The Progressive Design-Builder is responsible for providing Ministry traveller information systems with requisite traffic impact information to meet the performance requirements. The Progressive Design-Builder shall provide information to the Ministry's Traffic Operations Centre and MTO Info in accordance with MTO corporate and regional protocols regarding any planned lane closures or other expected events at least two (2) Business Days in advance of the event. The Progressive Design-Builder shall notify the TO of any full lane, ramp, or highway closures, a minimum of two (2) weeks in advance of the event. Local emergency services shall also be alerted to the expected event.

[Notes to Draft: Insert name, details, i.e. TOC, TRIS, RCWIS, Radio rooms Communication Centres, MTO Info, and modify to suit regional practice.]

The Progressive Design-Builder is responsible for providing immediate verbal notification to the Ministry upon becoming aware of any planned or unplanned event that result in the Maximum Allowable Travel Time being exceeded. The verbal notification shall include the description of the incident, the time the incident occurred, any personal injury or fatality information, the damage that has occurred, any impacts to Mobility at the site, and the agencies notified or to be notified.

Preliminary written summary must be submitted to the Ministry within one (1) hour of a request being made. The preliminary written summary shall document the information provided in the verbal notification.

The Progressive Design-Builder shall provide the Ministry with a follow-up written Incident Report for each verbal notification within two (2) Business Days following the occurrence. The Incident Report shall include a description of the incident, the date and time of the incident, vehicles involved, any personal injury or fatality information, state of traffic control and signing at the time of the incident, the damage that occurred, impact on Actual Travel Time at the site, the agencies notified or to be notified, a list of all remediation actions taken at the site, and any outstanding matters including anticipated dates for the completion of the outstanding matters. The Incident Report shall include photographic documentation appropriate to supplement the report and the photographic documentation shall be in a format suitable for use as evidence in a court of law.

1077.04.04 Emergency Services

The Progressive Design-Builder is responsible for maintaining safe, unimpeded passage for all emergency service vehicles, including police, fire, and ambulance service. The Progressive Design-Builder is responsible for effective communication with the emergency services that may be impacted by the Work.

1077.04.05 Temporary Traffic Signals

If the Progressive Design-Builder intends to use temporary traffic signals during performance of the Work, the Progressive Design-Builder shall:

- a) Be responsible for obtaining, from the Ministry, traffic volume data and turning movement counts, as applicable.

- b) Be responsible for the design, installation, operation, and maintenance of any temporary traffic signals to be used by the Progressive Design-Builder to control traffic through the work zone.
- c) Design the signal layout and positioning of signal heads and related electrical design according to design standards in accordance with the *Highway Traffic Act* and Regulations, and the Ontario Traffic Manual.
- d) Develop signal timing using OTM Books and Ministry policies with respect to signal timing, while meeting the Maximum Allowable Travel Time performance requirements.
- e) Prepare a PHM-125 signal layout drawing for each set of temporary traffic signals in preparation for Ministry approval.
- f) Submit six (6) copies of the new PHM-125, with the Progressive Design-Builder's signature in the "Recommend for Approval" box, to the Ministry for approval prior to start of construction (see note below).
- g) Construct temporary traffic signals as per approved PHM-125 drawings.
- h) Notify the Ministry after installation but prior to turning on the signals.
- i) Turn over completed timing sheets to the Ministry.

Note: The Ministry will return the approved PHM-125 signal layout drawings or will provide details of why the Ministry will not approve the design within fifteen (15) Business Days of receiving them from the Progressive Design-Builder.

1077.04.06 Traffic Control, Signing and Operations

The Progressive Design-Builder shall:

- a) Be responsible for obtaining, installing, maintaining, and removing all temporary condition signs, variable message signs, and delineation devices required to control traffic in advance of and through the work zone as per Ontario Traffic Manual Book 7.
- b) Install Contract Identification Signs (TC-81's) a minimum of **[five (5)]** Business Days and a maximum of **[ten (10)]** Business Days prior to start of construction. **[Designer to insert # of days or delete this bullet if not applicable]**
- c) Install any Temporary Advance Information Signs (TC-64's) a minimum of **[five (5)]** Business Days and a maximum of **[ten (10)]** Business Days prior to any lane reductions or closures. **[Designer to insert # of days or delete this bullet if not applicable]**
- d) Maintain a daily sign diary of the traffic control and signing measures that are in place during each stage of the Work and throughout the term of the Contract, including schematics and time of daily sign inspections. These records are essential in providing defence in case of litigation, and therefore it is important that the diary is accurate and complete. The Progressive Design-Builder shall submit the diary to the Ministry at a minimum prior to contract completion, and within 24 hours after a request is made in writing.
- e) Ensure that any missing or damaged signs are replaced within 24 hours of the Progressive Design-Builder being made aware.
- f) Ensure that any temporary signing meets the requirements of the *French Language Services Act* if the work zone is within a French Language Services Designated Area.

The Progressive Design-Builder shall also:

- a) Schedule the Work so that there is no open excavation adjacent to a lane carrying traffic overnight and on non-working days except where a traffic barrier designed to restrain errant vehicles is located between the traffic and the excavation.
- b) Ensure that any excavation within 4 m of lanes carrying traffic is backfilled with appropriate material up to profile grade and compacted prior to closing down operations each day.
- c) Ensure that no equipment is stored within **[4 m]** of the travelled portion of any roadway.
- d) Ensure that no material is stored within **[4 m]** of the travelled portion of any roadway except in the medians where the minimum clearance required is **[2.5 m]**.
- e) Ensure that any vehicle, equipment or material which, in the opinion of the Contract Administrator, constitutes a traffic hazard or obstruction to maintenance operations, is removed immediately at the Progressive Design-Builder's expense.
- f) Provide access to and from the highway right-of-way only on ramps at the interchanges unless otherwise provided for in the Contract. **[Designer to delete this bullet if not applicable]**
- g) Ensure that median cross-overs are not used except where single axle vehicles are entering a passing lane that is closed to traffic. **[Designer to delete this bullet if not applicable]**

If the Progressive Design-Builder intends to use temporary regulatory speed reductions during performance of the Work, the Progressive Design-Builder shall:

- a) Not impose a temporary regulatory speed reduction without the approval of the Ministry.
- b) Not impose a temporary regulatory speed reduction where the existing regulatory speed limit is 60 km/h or lower.
- c) Make a formal request to the Ministry for the approval of a temporary regulatory speed reduction at least **[XX]** weeks **[Designer to adjust number of weeks as appropriate]** prior to the date on which the Progressive Design-Builder intends to start the speed reduction; notification shall include the start and end locations of the speed reduction zone, the temporary speed limit, justifications for the speed limit reductions, and the number of temporary signs required – refer to Section 9.7.3.5 Construction Zone (Regulatory) Speed Reduction.
- d) Use temporary regulatory speed signs provided by the Ministry and paid for by the Progressive Design-Builder (Note: If the use of regulatory speed signs is approved by the Ministry, \$200 per sign board will be deducted from payment).
- e) Ensure that all temporary regulatory speed signs are oversized by 50%.
- f) Install temporary regulatory speed signs at their own cost.
- g) Ensure that all temporary regulatory speed signs are in conformance with the requirements of Ontario Traffic Manual Book 5 and Book 7.
- h) Notify the Ministry after temporary regulatory speed signs have been installed and prior to uncovering the signs.
- i) Carry out any removal, covering, temporary placement, or replacement of existing regulatory speed signs that is necessary due to use of the temporary regulatory speed reduction.

- j) Return existing regulatory speed signs to their original condition and location upon ceasing construction activities (i.e., at shutdown of daily operations, or completion of staging or detours, or completion of the contract).

1077.04.07 Traffic Counting Loops/Equipment

The Progressive Design-Builder is responsible for replacement of any counting loops or any other traffic counting equipment negatively impacted or damaged by the Work.

1077.04.08 Mobility

The Progressive Design-Builder is responsible for performing or causing to perform the Work to meet the Maximum Allowable Travel Time performance requirement.

1077.04.08.01 Special Cases

For extraordinary maintenance or construction work that the Progressive Design-Builder knows will result in the Maximum Allowable Travel Time being exceeded, such as rock blasting, bridge / structure component replacement, or delivery of major components, the Progressive Design-Builder shall submit a supplemental Traffic Management Plan to the Ministry for consideration at least two (2) weeks prior to performing the Work. The supplemental Traffic Management Plan must detail the duration of the Work, impact on Maximum Allowable Travel Time, and how vehicles will be safely controlled / queued. Work shall not proceed until the supplemental Traffic Management Plan has been submitted to the Ministry for review and endorsement.

1077.04.08.02 Operational Constraints

[Notes to Draft: When applicable, the Designer may choose to insert other operational constraints based on knowledge of the traffic patterns and flows in the area impacted by the Work. There may be instances where the volume is so great that night work will be the only feasible option to be able to achieve the Maximum Allowable Travel Time targets. This will most likely happen around large urban centres.

For example: "There shall be no Work causing traffic delay beyond 13:00 on the last Business Day before a long weekend. Work shall not begin again until 00:01 of the first Business Day following the long weekend." When no additional operational constraints are necessary, insert "Not applicable." under the heading.

Alternatively, reference to SSP 199F01 can be added here.]

1077.05 PERFORMANCE REQUIREMENTS

1077.05.01 Mobility

The Progressive Design-Builder shall ensure that all performance requirements described in Table 1 are met. The Progressive Design-Builder shall also ensure that, should the Progressive Design-Builder be found to be in non-conformance with the requirements in Table 1, the Progressive Design-Builder shall take immediate corrective action to meet the requirements in Table 1.

Table 5: Travel Time Performance Requirements

Highway Section			Baseline Travel Time	Maximum Allowable Travel Time (MATT)
#	From	To		
1	Point A	Point B	[xx minutes]	[= Baseline + yy? minutes]
2	Point C	Point D	[xx minutes]	[= Baseline + yy? minutes]
3	Point E	Point F	[xx minutes]	[= Baseline + yy? minutes]

[* Designer Fill-In for Table 1, See Notes to Designer]

1077.05.02 Traffic Management

The Progressive Design-Builder shall ensure that all performance requirements described in Table 2 are met.

Table 2: Traffic Management Performance Requirements

Feature	Performance Requirements
Each set of temporary traffic signals	- Submit six (6) signed copies of PHM-125 signal layout drawings prior to start of construction for Ministry approval. - Notify the Ministry after installation and prior to turning on the signals. - As built signals conform to approved PHM-125 drawings.
Replacement of missing or damaged temporary signs	Within 24 hours of becoming aware.
Temporary regulatory speed reduction zones	- Notify the Ministry [XX] weeks prior to intended speed reduction start date. - Notify the Ministry after sign installation and prior to uncovering the signs.
Installation of Temporary Advance Information Signs (TC-64s)	A minimum of [five (5)] Business Days and a maximum of [ten (10)] Business Days prior to any lane reductions or closures.
Installation of Contract Identification Signs (TC-81s)	A minimum of [five (5)] Business Days and a maximum of [ten (10)] Business Days prior to start of construction.
Temporary signing meets the requirements of the <i>French Language Services Act</i> if the work zone is within a French Language Services Designated Area	At all times.

[Notes to Draft: Edit and/or remove items as applicable/appropriate.]

1077.05.03 Performance Indicators

The Ministry, at its discretion, may collect performance indicators. The collection may consist of up to 100% of the contract area and may include any or all of the Highway Sections defined in Table 5.

The exact location will be at the Ministry's discretion. More thorough data collection may be carried out if there is evidence of non-conformance. The additional data collection may include a review of the Progressive Design-Builder's records, plans, and actions taken.

The performance indicators that the Ministry collects will be shared with the Progressive Design-Builder and will be the only indicators used by the Ministry to apply consequences for non-conformance.

[Notes to Draft: Several types of automated travel time software are available that the Ministry may wish to consider utilizing for collecting Actual Travel Time (e.g. BluFax, ITREK).]

1077.05.04 Conformance to the Performance Requirements

Upon completion of the collection of performance indicators, the Ministry will make an assessment of conformance or non-conformance to the performance requirements.

The Ministry will have the complete discretion in the choice of performance indicators to use in determining conformance. The assessment, however, will include consideration of events that are beyond the care and control of the Progressive Design-Builder. The Ministry will examine all relevant factors involved with the situation including the Progressive Design-Builder's rationale as to why the situation occurred.

If, after completing the collection of performance indicators, assessing all the relevant data including data provided by the Progressive Design-Builder, a non-conformance is determined, a Notice of Non-Conformance will be issued to the Progressive Design-Builder for features that do not conform to the performance requirements.

1077.05.05 Consequences for Non-Conformance to the Performance Requirements

The Progressive Design-Builder shall be responsible for performing all specified consequences for any non-conformance to the Performance Requirements as described in Table 3.

Table 7: Consequences for Non-conformance

Feature	Consequences
Maximum Allowable Travel Time (MATT) on any Highway Section on a 400 Series Highway	• On each occasion when the MATT is exceeded, an initial consequence of \$1,000, increasing by \$500 per each 5-minute interval while the MATT is in non-conformance and until the MATT is brought into conformance.
Maximum Allowable Travel Time (MATT) on any Highway Section on a King's Highway	• On each occasion when the MATT is exceeded, an initial consequence of \$500, increasing by \$250 per each 5-minute interval while the MATT is in non-conformance and until the MATT is brought into conformance.
Temporary Traffic Signals	• \$10,000 per occurrence of starting construction without Ministry-approved PHM-125 drawings. • \$10,000 per occurrence of turning on signals without notifying the Ministry. • \$10,000 per occurrence of as built signals not in conformance with approved PHM-125 drawings.

Feature	Consequences
Replacement of Missing or Damaged Temporary Signs	\$1,000 per occurrence of missing or damaged temporary signs not replaced within 24 hrs of the Progressive Design-Builder becoming aware.
Temporary Regulatory Speed Reduction Zones	\$5,000 per occurrence of failure to provide the Ministry with [XX] weeks notice of intention to impose a speed reduction zone. \$5,000 per occurrence of failure to notify the Ministry prior to uncovering the speed reduction signs. \$5,000 per existing regulatory speed sign that is not restored to its original condition and location upon ceasing construction activities.
Installation of Temporary Advance Information Signs (TC-64s)	\$5,000 per occurrence for proceeding with lane reductions or closures without the installation of TC-64s.
Installation of Contract Identification Signs (TC-81s)	\$5,000 per occurrence for proceeding with start of construction without the installation of TC-81's.
Temporary signing meets the requirements of the <i>French Language Services Act</i> if the work zone is within a French Language Services Designated Area	\$5,000 per occurrence of temporary signing not in conformance with the <i>French Language Services Act</i> requirements.
Excavations	\$5,000 per occurrence of an open excavation adjacent to a lane carrying traffic overnight or on a non-working day without a traffic barrier. \$5,000 per occurrence for failure to backfill as required.
Storage of Material and Equipment	\$5,000 per occurrence for storing material or equipment within [4 m] of the travelled portion of any roadway. \$5,000 per occurrence for failure to immediately remove vehicles, equipment, or material as directed by the Contract Administrator.
Freeway Access	\$5,000 per occurrence for providing access to and from the highway right-of-way at locations other than interchange ramps.
Median Cross-Overs	\$5,000 per occurrence of misuse of cross-overs.

[Notes to Draft: Edit above table to delete rows as appropriate, including whether Work is on a King's Highway or 400 Series Highway, on a freeway, and for appropriate notice period for regulatory speed limit reduction.]

1077.06 CONSTRUCTION ZONE (REGULATORY) SPEED REDUCTION

[Notes to Draft: When applicable include the form on the following page. If not applicable, delete the form and insert "Not applicable." under the heading above.]

CONSTRUCTION ZONE (REGULATORY) SPEED REDUCTION

CONTRACT NO:	
LOCATIONS:	
POSTED SPEED REDUCTION:	Reduced from ____ km/h to ____ km/h
REQUESTED DURATION:	From: _____ to _____
RATIONALE:	
RECOMMENDED: _____ Representative Progressive Design Build Contractor Title: _____ RECOMMENDED: _____ Head, Traffic Engineering, Ministry of Transportation APPROVED: _____ Manager of Engineering, Ministry of Transportation	

NOTES TO DESIGNER:

- * The Region shall identify section of highway adjacent to, intersecting with or on the highway where Work is being performed by the Progressive Design-Builder that may be impacted by the Work. Limits of each Highway Section may be beyond the actual project limits. Baseline travel time needs to be determined by the Region.

Considerations:

- a) Whether highway is divided or undivided, and thus whether each direction of travel will have different requirements.
- b) Potential of the Work to impact on intersecting roadways and whether portions of the intersecting roadway(s) should be captured within a Highway Section
- c) Theoretical Travel Time: The length of a Highway Section divided by the posted speed limit. The time allowance for traffic control signals should be calculated as $\frac{1}{2}$ the cycle length.
- d) Baseline Travel Time: For mainline Level of Service (LOS) A, B & C – Determined by performing 2 travel time runs (1 in each direction - performed during good road conditions at the posted speed limit and in off-peak hours) and calculating the Theoretical Travel Time. The highest of these values will become the Baseline Travel Time.
- e) For mainline Level of Service (LOS) D & E – Determined by performing 2 travel time runs (1 in each direction - performed during good road conditions, at the posted speed limit and in off-peak hours as determined using traffic volumes from 3 different times during a year (spring, summer, fall) and calculating the Theoretical Travel Time).

WARRANT: Always with Progressive Design-Build for Highway Construction Contracts.

CUSTODIAN: Contract Innovations Office