

DESIGN-BUILD AGREEMENT

AMONG

**HER MAJESTY THE QUEEN
IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA,
AS REPRESENTED BY THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE**

- and -

BC TRANSPORTATION FINANCING AUTHORITY

- and -

KICKING HORSE CANYON CONSTRUCTORS (GP)

November 6, 2020

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DESIGN-BUILD AGREEMENT

THIS DESIGN-BUILD AGREEMENT dated as of November 6, 2020 is entered into:

AMONG:

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF
BRITISH COLUMBIA**, as represented by the **MINISTER OF
TRANSPORTATION AND INFRASTRUCTURE**

(the “**Province**”)

AND:

BC TRANSPORTATION FINANCING AUTHORITY

(“**BCTFA**”)

AND:

KICKING HORSE CANYON CONSTRUCTORS (GP)

(the “**Design-Builder**”)

WHEREAS:

- A. The Design-Builder has been retained by the Province to carry out the Project and the Project Work; and
- B. The rights and obligations among the parties with respect to the Project shall be governed by the terms and conditions set forth in this Agreement.

NOW THEREFORE in consideration of the covenants and agreements of the parties contained in this Agreement and other good and valuable consideration, the receipt and sufficiency of which are hereby expressly acknowledged by each of the parties hereto, the parties hereto covenant and agree as follows:

**PART 1
INTERPRETATION**

1.1 Definitions and Interpretation

This Agreement shall be interpreted and construed in accordance with the provisions set out in Schedule 1 [Definitions and Interpretation].

1.2 Governing Law

This Agreement is governed exclusively by, and is to be enforced, construed and interpreted exclusively in accordance with, the laws of British Columbia and the laws of Canada applicable in British Columbia, and the laws of British Columbia and the laws of Canada applicable in British Columbia are the proper law of this Agreement.

1.3 Submission to Jurisdiction

Where in accordance with this Agreement, including the Dispute Resolution Procedure, a particular matter is referred to Court, or a party may initiate a proceeding in Court, the Court, subject to applicable Laws, has exclusive jurisdiction to entertain and determine such matter or proceeding, and each of the parties irrevocably submits to the exclusive jurisdiction of the Court.

1.4 No Fettering of Province’s Rights, Powers and Authority

- (a) Nothing in this Agreement or the other Province Project Documents fetters or otherwise interferes with or limits, or shall be construed to fetter or otherwise interfere with or limit, the rights, powers and authority of the Province or BCTFA or any minister (including the Minister), ministry (including the Ministry), agency, board, commission, corporation or other entity of the Province, including with respect to the development or application of government policy and including any right, power or authority to:
 - (i) enact, amend, repeal or replace any enactment or regulation made under any enactment;
 - (ii) exercise or refrain from exercising any power, authority, duty, function or discretion conferred under Laws; or
 - (iii) administer, apply and enforce Laws.
- (b) Except as expressly provided for in this Agreement, the Design-Builder is not entitled to claim or receive any compensation or other relief whatsoever as a result of anything described in any of Sections 1.4(a)(i) to (iii) inclusive.

1.5 Schedules

The Schedules to this Agreement are incorporated into and form part of this Agreement. Obligations of the parties set out in the Schedules are included in the obligations of the parties under this Agreement.

1.6 Language

The language of this Agreement is English. All communications, documents and information provided pursuant to or in connection with this Agreement must be entirely in English.

PART 2 GENERAL PROJECT TERMS

2.1 The Project

The Design-Builder shall:

- (a) provide, perform and carry out the Project Work:
 - (i) in accordance with and subject to the terms and conditions of this Agreement; and

- (ii) in accordance with the Proposal Extracts (provided that the Design-Builder acknowledges that the Proposal Extracts shall be in addition to and not in substitution for any terms, conditions, requirements, criteria and specifications set out in this Agreement, including Schedule 4 [Design and Construction] or any other Project Requirements); and
- (b) perform and observe all other obligations for which it is responsible under this Agreement,

(collectively, the “**Project**”) at its own cost and risk and without recourse to the Province, BCTFA, public funds, or guarantees by the Province or any other Governmental Authority, except as expressly provided otherwise in, or to the extent the Design-Builder otherwise has rights arising out of or in respect of, this Agreement or any of the other Province Project Documents.

2.2 Term

This Agreement shall take effect on the Effective Date and, except as expressly provided otherwise in this Agreement, shall expire and terminate at the end of the Term.

2.3 Assumption of Risk and Responsibility

- (a) Except to the extent provided otherwise pursuant to the express provisions of this Agreement or any other Province Project Document, all risks, costs and expenses in relation to the performance by the Design-Builder of its obligations under this Agreement and the other Province Project Documents are allocated to, and accepted by, the Design-Builder as its entire and exclusive responsibility.
- (b) As between the parties, the Design-Builder shall be solely responsible for the selection, pricing and performance of all Subcontractors and other persons for whom the Design-Builder is in law responsible, and for the acts, defaults, omissions, breaches and negligence of all Subcontractors and any other persons for whom the Design-Builder is in law responsible, as fully as if such acts, defaults, omissions, breaches and negligence were those of the Design-Builder.

2.4 Financial Administration Act

The Design-Builder acknowledges that it is aware of the provisions of the *Financial Administration Act* (British Columbia).

2.5 Access to and Responsibility for Project Site

- (a) For the duration of the Access Period in respect of each part of the Project Site:
 - (i) subject to and in accordance with the terms and conditions of this Agreement, including the provisions of Schedule 8 [Lands] and the Conditions of Access, the Province and BCTFA agree to make such part available to the Design-Builder, on a non-exclusive basis in common with all persons identified in Section 4.7 [Access to Site and Project Infrastructure by Others] as having the right to access, for the Design-Builder, the Subcontractors, and any other person engaged or involved in the performance of the Project Work, and their respective

representatives, agents, employees and contractors, and any other persons for whom the Design-Builder is in law responsible engaged or involved in the performance of the Project Work to enter upon and use such part and the Infrastructure located on such part as may be reasonably required from time to time to permit the Design-Builder to carry out the Project Work; and

- (ii) the Design-Builder shall assume all risk and responsibility for, and custody and control of, such part, save to the extent expressly provided otherwise in this Agreement.
- (b) Without prejudice to any rights of the Province or BCTFA that may have accrued during, or may accrue in respect of, the Access Period in respect of any part of the Project Site as a result of or in connection with the Design-Builder's obligations under this Agreement (including under Section 2.5(a)(ii)), on the date of expiry or termination of the Access Period in respect of such part, the Design-Builder's risk and responsibility for, and custody and control of, such part shall cease, provided that such cessation shall not relieve the Design-Builder of any obligations that relate to the Project Site or the performance of Project Work on the Project Site (or the part thereof that was subject to such cessation) that are, notwithstanding such cessation, applicable to the performance of Project Work thereon by the Design-Builder at such times as it has access thereto pursuant to Section 2.5(c).
- (c) To the extent permitted by, and subject to and in accordance with the Conditions of Access, after the date of expiry or termination of the Access Period in respect of any part of the Project Site, the Province and BCTFA shall, on terms and conditions determined by the Province and BCTFA, acting reasonably, provide access to such former part of the Project Site to the Design-Builder and the persons for whom the Design-Builder is in law responsible engaged or involved in the performance of the Project Work, to the extent necessary to enable the Design-Builder to perform any of its obligations under this Agreement after such date that are required to be carried out after such date.

2.6 Bonds

- (a) The Design-Builder shall purchase and deliver to the Province the Bonds in accordance with Section 2.17 [Execution and Delivery of Project Documents] and shall pay for and maintain in force the Bonds until the Substantial Completion Date.
- (b) If the surety notifies any party that the Bonds are or are going to be terminated or cancelled for any reason whatsoever, the Design-Builder shall obtain and provide the Province with valid Bonds effective from the date of termination or cancellation of the original Bonds that comply with the bonding requirements of this Agreement.
- (c) The Design-Builder shall, if required by the surety, obtain the written consent of the surety to any amendment of this Agreement and shall, upon request of the Province, provide confirmation from the surety of such consent or confirmation from the surety that such consent is not required.
- (d) For greater certainty, the amount of the Bonds and any claim under the Bonds will not limit the Province or BCTFA from seeking additional claims, damages or remedies the

Province or BCTFA may be entitled to by reason of the Design-Builder's failure to successfully carry out the Project Work in accordance with the terms of this Agreement.

- (e) Upon entering into a Subcontract with a Subcontractor, the Design-Builder will advise the Subcontractor that a labour and materials payment Bond is in effect, will supply a copy of that Bond to the Subcontractor on request, and shall post and maintain copies of the labour and materials payment Bond at the Project Site.

2.7 Limited Use

- (a) During the Term, and without prejudice to any access rights of any such person as a member of the general travelling public, the Design-Builder shall not make any use of, or allow or authorize the Subcontractors, or any other person engaged or involved in the performance of the Project Work, or their respective representatives, agents, employees or contractors, to make any use of, the Project Site or the Project Infrastructure or any part thereof, except for the purposes of carrying out the Project Work in accordance with this Agreement and the other Project Documents.
- (b) Without limiting the generality of the foregoing, except as permitted by or pursuant to Section 2.8 [Business Opportunities], the Design-Builder shall not use or occupy or allow or authorize any person to use or occupy, for any commercial purpose, all or any part of the Project Site or the Project Infrastructure.

2.8 Business Opportunities

Except as otherwise agreed by the Province in its discretion, the Province reserves the right to all commercial and other opportunities for, or related to, the Project Facilities except for the commercial opportunity for the Design-Builder as represented by this Agreement.

2.9 Location of Project Facilities

The Design-Builder covenants and agrees that no part of the New Project Infrastructure shall be constructed or located on any lands that are not Project Lands or on any Project Lands that constitute, or are held by the Province or BCTFA by means only of, Temporary Land Rights.

2.10 Title to Infrastructure and Improvements

Except to the extent that title to any Plant has not passed to the Province or BCTFA, as applicable, in accordance with Section 2.12(a), and except for Project Intellectual Property or Background IP that is owned by the Design-Builder and licensed to the Province in accordance with Section 15.3 [Ownership of Intellectual Property and License to Province]:

- (a) the Design-Builder shall not acquire or have any interest in land or any other property or proprietary interest in or title to the Project Site or any Project Infrastructure, or any other improvements on or to the Project Site from time to time; and
- (b) as between the Province and BCTFA, and the Design-Builder, title to and ownership of the Project Site and the Project Infrastructure and all other improvements on or to the Project Site from time to time shall vest in the Province or BCTFA, such other person as the Province may direct, or the owner of the relevant lands, as applicable.

2.11 No Registration

The Design-Builder shall not register or attempt to register in any land title office this Agreement or any rights under this Agreement or any instrument, claim or notice in respect thereof.

2.12 Transfer of Title

- (a) As between the Province and BCTFA, and the Design-Builder, title to all Plant shall pass to and vest absolutely in the Province or BCTFA, such other person as the Province may direct or the owner of the relevant lands, as applicable, at the earlier of:
 - (i) title to the Plant being acquired by the Design-Builder; and
 - (ii) the Plant being affixed to or incorporated into the Project Site or the Project Infrastructure,

provided that all testing applicable to such Plant shall have been completed in accordance with Schedule 7 [Quality Management] prior to such passing of title.

- (b) Title to any property (whether real or personal, tangible or intangible) not referred to in Section 2.12(a) that is or is to be transferred to or acquired by the Province or BCTFA or any other person from the Design-Builder pursuant to the terms of this Agreement shall pass to the Province, BCTFA or such other person, as applicable, at the time of the transfer or acquisition as contemplated by this Agreement.
- (c) Without limiting the provisions of Section 18.7 [Further Assurances], the Design-Builder shall, at the written request of the Province from time to time, execute and deliver to the Province, BCTFA or to such other person as the Province may direct, and cause the Subcontractors with which the Design-Builder has contracted directly to execute and deliver to the Province, BCTFA or such other person as the Province may direct, all such bills of sale and other documents as the Province shall reasonably request for transferring rights in or title to property (whether real or personal, tangible or intangible) or confirming the transfer of rights in or title to any such property, as contemplated by this Section 2.12.
- (d) The Design-Builder covenants that the Subcontracts to which the Design-Builder is a party shall contain a provision imposing on the Subcontractor thereunder the same obligation to execute and deliver bills of sale and other documents as is imposed on the Design-Builder under Section 2.12(c).
- (e) Notwithstanding the passage to the Province, BCTFA or such other person as the Province may direct of rights in or title to Plant as provided above in this Section 2.12, the Design-Builder, the Subcontractors shall be entitled to make use of such Plant for the purposes of carrying out the Project Work subject to and in accordance with this Agreement.

2.13 Review, Approval, Inspection and Audit by the Province

- (a) If any review, approval, inspection, examination, audit, Quality Audit, testing, determination, acceptance, certificate, certification, permission, consent, comment or

objection is provided, performed or made by or on behalf of the Province or BCTFA or the Province's Representative under, pursuant to, or in respect of, this Agreement or any of the other Project Documents, whether pursuant to the Review Procedure or the Consent Procedure or otherwise, or if no comment or objection is made by the Province, BCTFA or the Province's Representative pursuant to the Review Procedure or the Consent Procedure or otherwise:

- (i) such review, approval, inspection, examination, audit, testing, determination, acceptance, certificate, certification, permission, consent, comment or objection, or lack of comment or objection, shall be for assessment by the Province or BCTFA or the Province's Representative of general compliance by the Design-Builder with its obligations under this Agreement or the other Project Documents only;
- (ii) notwithstanding any other provisions of this Agreement or any of the other Project Documents, no such review, approval, inspection, examination, audit, testing, determination, acceptance, certificate, certification, permission, consent, comment or objection, or lack of comment or objection, now or in the future, and whether or not involving any negligent act or negligent omission or error on the part of the Province or BCTFA or the Province's Representative or any person for whom the Province is in law responsible:
 - (A) shall relieve or exempt or be deemed to relieve or exempt the Design-Builder or any other person for whom the Design-Builder is in law responsible from any of its obligations and liabilities under this Agreement or any other Province Project Document or at law or in equity, except in the circumstances and to the extent expressly provided in Section 2.13(b);
 - (B) shall constitute a waiver or release or be deemed to be a waiver or release by the Province or BCTFA of any duty or liability owed by the Design-Builder or any other person to the Province or BCTFA, or of any indemnity given by the Design-Builder to the Province or any Province Indemnified Person under this Agreement or any other Province Project Document, except in the circumstances and to the extent expressly provided in Section 2.13(b);
 - (C) shall create or impose or be deemed to create or impose any requirement, liability, covenant, agreement or obligation on the Province or BCTFA, except to the extent expressly set out in this Agreement as a consequence of the review, approval, inspection, examination, audit, testing, determination, acceptance, certificate, certification, permission, consent, comment or objection, or lack of comment or objection; or
 - (D) shall entitle or be deemed to entitle the Design-Builder to make any Claim against the Province or BCTFA for, or to recover from the Province or BCTFA, any Losses, except to the extent expressly set out in this Agreement; and

- (iii) any decision so made by the Province under the Review Procedure or the Consent Procedure shall, once all applicable disputes arising in respect thereof have been resolved in accordance with Schedule 2 [Representatives, Review Procedure and Consent Procedure], be final, subject only to being opened up, reviewed or revised by the Province in its discretion if errors or further relevant facts are revealed after the decision has been made.

At the request of the Province from time to time, the Design-Builder shall obtain from the Key Individuals and any other person identified by the Province, acting reasonably, prior to any such party carrying out any part of the Project Work, waivers of liability substantially on the terms of this Section 2.13(a) in favour of the Province, BCTFA and the Province's Representative and in form and substance satisfactory to the Province.

- (b) If any consent, approval, acceptance, certification, determination or other permission of, or review, inspection, examination, audit or testing by, the Province or BCTFA or the Province's Representative is expressly required under this Agreement or any other Province Project Document in order for any specific act or conduct of the Design-Builder to be in compliance with (or not in breach of) any provision of this Agreement or any other Province Project Document, and if such consent, approval, acceptance, certification, determination or other permission is given by, or review, inspection, examination, audit or testing is carried out by, the Province or BCTFA or the Province's Representative (as the case may be) in any particular circumstance, the Design-Builder shall be relieved of the obligation under this Agreement or other Province Project Document to obtain the specific consent, approval, acceptance, certification, determination or other permission given, or to have the review, inspection, examination, audit or testing carried out, but only for the purposes and in the particular circumstances in which it was given or carried out and to which it applied.

2.14 Site Inspection and Investigations

- (a) The Design-Builder represents and warrants to the Province and BCTFA and agrees with the Province and BCTFA that the Design-Builder shall be deemed to have:
 - (i) been afforded the opportunity prior to executing this Agreement to inspect and examine all lands that will become the Project Site and their surroundings, and all existing Infrastructure in, on, over or under such lands, and inspected and examined the same and to have satisfied itself with respect thereto;
 - (ii) satisfied itself prior to executing this Agreement as to:
 - (A) the structural, geotechnical, geological, climatic, hydrological, ecological, environmental and general condition of the lands that will become the Project Site and all Infrastructure thereon, the form and nature thereof, and the nature of the ground and subsoil thereof, the risk of injury or damage to property adjacent to or in the vicinity of such lands, and to occupiers of such property, the nature of the materials (whether natural or otherwise) to be excavated, and the nature of the design, work, plant and materials necessary for the execution of the Project Work;

- (B) any effect the condition of soils, including the presence of weak and compressible soils underlying the lands that will become the Project Site, may have on the performance of the Design and the achievement of the Design Life of the Project Infrastructure (to the extent to be constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work) as contemplated by Schedule 4 [Design and Construction];
 - (C) the adequacy of the lands that will become the Project Site and the Land Rights in such lands for the performance of Project Work and the performance by the Design-Builder of all of its other obligations under this Agreement;
 - (D) the means and methods of communication with the various parts of, and access to and through, the lands that will become the Project Site, the accommodation it may require and the adequacy and sufficiency of the rights of access and use and occupation provided by Section 2.5 [Access to and Responsibility for Project Site] and Schedule 8 [Lands] for the purposes of performing the Project Work, including the means and methods of coordination and implementation of such communication, access, use and occupation;
 - (E) the possibility of interference by third parties, including members of the public, with access to or use of the lands that will become the Project Site, and the Infrastructure thereon, with particular regard to the Requirements of Interested Parties;
 - (F) the precautions and times and methods of working necessary to minimize any nuisance or interference, whether public or private, being caused to any third parties in the performance of the Project Work; and
 - (G) any other contingencies, restrictions, conditions or constraints which would or might interfere with, limit or affect the ability of the Design-Builder to carry out the Project Work in accordance with the terms of this Agreement;
- (iii) reviewed and satisfied itself, prior to executing this Agreement, with respect to:
- (A) the Design-Builder's Environmental Obligations;
 - (B) the Indigenous Requirements;
 - (C) the Project Requirements, and that the Project Requirements are in compliance with the requirements of Sections 4.1(a) (save to the extent that the Project Requirements impose obligations on the Design-Builder to carry out and perform the Project Work to a higher standard than would be required to enable the Design-Builder to carry out and perform the Project Work in accordance with Good Industry Practice), (b), (c), (e) and (f); and

- (D) the nature and extent (and that such nature and extent is adequate having regard to the Design-Builder's obligations under this Agreement) of all work that could reasonably have been anticipated from any analysis of all relevant information available to the Design-Builder (including the Disclosed Data) as at the Financial Submittal Date carried out or to be carried out by, or by other contractors on behalf of, the Province, BCTFA, Utility Suppliers, Railways or others in connection with the Project or the Project Infrastructure or otherwise on or in the vicinity of the lands that will become the Project Site, and the impact of the conduct of such work on the carrying out of the Project Work;
- (iv) obtained for itself prior to executing this Agreement all necessary information as to:
 - (A) the risks, contingencies and all other circumstances which may influence or affect the Project Requirements, the Design-Builder's Environmental Obligations or the Indigenous Requirements or its obligation to carry out the Project Work in accordance with the provisions of this Agreement; and
 - (B) all other factors which would affect its decision to enter into this Agreement or the terms on which it would do so; and
- (v) conducted prior to executing this Agreement its own analysis and review of all materials, documents and data referred to in Section 2.15 [Disclosed Data] that bear on any of the matters referred to in Sections 2.14(a)(i) through (iv) inclusive.
- (b) The Design-Builder agrees with the Province and BCTFA that:
 - (i) the Design-Builder accepts and will accept the Project Site and all existing Infrastructure thereon on an "as is, where is" basis;
 - (ii) neither the Province nor BCTFA has made and does not hereby make any representation or warranty with respect thereto; and
 - (iii) the Province and BCTFA shall have no responsibility or liability for the structural, geological, geotechnical, climatic, hydrological, ecological, environmental and general condition of the Project Site and all Infrastructure thereon, and the Design-Builder assumes and will assume any and all risk with respect to the structural, geotechnical, geological, climatic, hydrological, ecological, environmental and general conditions thereof and any and all risk that all or any part or parts thereof may not be suitable for the Project Infrastructure (to the extent to be constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work) or any Project Work.
- (c) For greater certainty, the Design-Builder shall be solely and wholly responsible for, and hereby accepts responsibility for, investigation, assessment and evaluation of and all risks associated with any and all surficial and sub-surface geotechnical and geological conditions or characteristics of the lands that will become the Project Site and any other

lands, including any adjoining lands, or geotechnical or geological features which may in any way affect either directly or indirectly the design, construction, operation or use of the Project Infrastructure or any of its component parts.

The representations, warranties and agreements of the Design-Builder in this Section 2.14 shall not constitute an actionable representation, warranty or agreement by the Design-Builder in favour of the Province or BCTFA or give rise to a right of termination on the part of the Province or BCTFA, but the Province and BCTFA may rely on such representations, warranties, and agreements for the purpose of defending any action brought against the Province and BCTFA, or either of them, or any Claim by the Design-Builder for damages, Losses, extensions of time, additional compensation or any other relief, provided that no such representation, warranty or agreement shall prejudice an otherwise valid Claim by the Design-Builder:

- (d) pursuant to any other express provision of this Agreement or of any other Province Project Document; or
- (e) in respect of any breach of any express obligation of the Province or BCTFA under this Agreement or under any other Province Project Document.

The provisions of any of paragraphs (a) to (c) of this Section 2.14 do not limit the provisions of any other such paragraph of this Section 2.14.

2.15 Disclosed Data

- (a) Except as otherwise expressly provided in any other provisions of this Agreement, including Section 2.15(d) and Section 2.15(e), or as a result of any breach of any express obligation of the Province under this Agreement, neither the Province nor BCTFA shall have any liability to the Design-Builder (whether in contract, tort, by statute or otherwise howsoever and whether or not arising out of any negligent act or negligent omission on the part of the Province or BCTFA or any person for whom the Province is in law responsible) in respect of any inaccuracy, error, omission, unfitness for purpose, defect or inadequacy of any kind whatsoever in the Disclosed Data.
- (b) Neither the Province nor BCTFA gives or makes, has given or made or shall be deemed to have given or made, any representation, warranty or undertaking that the Disclosed Data represents or includes all of the information in its possession or control (either during the procurement process for the Project or at or after the date of execution of this Agreement) relevant or material to the Project, the Project Infrastructure, the Project Site or the obligations undertaken by the Design-Builder under this Agreement. Without limiting the generality of the foregoing, neither the Province nor BCTFA shall have any liability to the Design-Builder (whether in contract, tort, by statute or otherwise howsoever and whether or not arising out of any negligent act or negligent omission on the part of the Province or BCTFA or any person for whom the Province is in law responsible) in respect of any failure to disclose or make available (whether before or after the execution of this Agreement) to the Design-Builder any information, documents or data, any failure to keep the Disclosed Data up to date, or any failure to inform the Design-Builder (whether before or after execution of this Agreement) of any inaccuracy, error, omission, unfitness for purpose, defect or inadequacy of any kind whatsoever in the Disclosed Data, except for any otherwise valid Claim by the Design-Builder:

- (i) pursuant to any other express provision of this Agreement or of any other Province Project Document; or
 - (ii) in respect of any breach of any express obligation of the Province under this Agreement or under any other Province Project Document.
- (c) The Design-Builder acknowledges, represents, warrants and confirms that, without prejudice to its express rights under any other provisions of this Agreement, including Section 2.15(d), and subject to Section 2.15(e):
- (i) the Design-Builder shall be deemed to have conducted prior to executing this Agreement its own investigations, examinations, interpretations, analysis and review of the Disclosed Data and to have satisfied itself as to the accuracy, completeness and adequacy of all such Disclosed Data which it has relied upon, adopted or made use of or intends to rely upon, adopt or make use of in carrying out the Project Work; and
 - (ii) the Design-Builder shall not be entitled to make, and shall not make, any Claim against the Province or BCTFA, whether in damages or for Losses or for extensions of time, compensation or additional payments or other relief, and whether under this Agreement or otherwise, and shall not be released from any risks or obligations imposed on or undertaken by it under this Agreement or any other Province Project Document, on any grounds relating to the Disclosed Data, including:
 - (A) on the grounds of any misunderstanding or misapprehension in respect of the Disclosed Data or any of the matters referred to in Section 2.14 [Site Inspection and Investigations] or Section 2.15(c)(i); or
 - (B) on the grounds that incorrect, insufficient or incomplete information relating to the Disclosed Data or to the Project Site or the Infrastructure thereon was given to it by any person (whether or not in the employ of the Province or BCTFA) including any person for whom the Province is in law responsible, or any other Governmental Authority, except for an otherwise valid Claim by the Design-Builder:
 - (1) pursuant to any other express provision of this Agreement or of any other Province Project Document; or
 - (2) in respect of any breach of any express obligation of the Province or BCTFA under this Agreement or under any other Province Project Document.

The provisions of any paragraph of this Section 2.15(c) do not limit the provisions of any other paragraph of this Section 2.15(c).

- (d) Notwithstanding the foregoing provisions of this Section 2.15 or any other provision of this Agreement, if a delay is caused to the progress of the Project Work or any additional costs are incurred by the Design-Builder in performing the Project Work during the Term that in either case would not otherwise have been experienced or incurred by the Design-

Builder in performing its obligations under this Agreement, and such delay and/or costs are a direct result of an error in the Factual Geotechnical Data (as at the currency date of the relevant Factual Geotechnical Data) upon which the Design-Builder has reasonably and in accordance with Good Industry Practice relied in the design and construction of the Project Infrastructure, then such error in the Factual Geotechnical Data shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply. For greater certainty, the Design-Builder shall not be entitled to relief under this Section 2.15 if and to the extent that it was not, in all the relevant circumstances and having regard to any other information known to the Design-Builder at the relevant time, reasonable in accordance with Good Industry Practice for the Design-Builder to rely on the Factual Geotechnical Data containing the error or to rely on such Factual Geotechnical Data without further investigation or site examination.

- (e) The provisions of this Section 2.15 will not apply with respect to any baseline top of bedrock information provided by the Province with respect to Geotechnical Baseline Areas to the extent such information is used for the design of Foundations for Structures only, and not to the extent such information is used for rock cut design, overburden slope design, rock cut volume estimates or any other purposes.

2.16 Project Name and Project Marks

- (a) There is hereby reserved exclusively to the Province all rights to:
 - (i) name and rename from time to time the Project and the Project Facilities, and parts thereof; and
 - (ii) determine the names, branding, logos, domain names and other marks associated with the Project Work, the Project, the Project Facilities, the Website or other components of the Project as designated by the Province from time to time (collectively, the “**Project Marks**”).
- (b) In accordance with Section 15.4(a)(iii) but without limiting the right of each of the Design-Builder and any Subcontractor to identify itself and its role in the Project using its own names, marks and logos reasonably and in accordance with standard industry practice, the Design-Builder:
 - (i) shall, in association with the Project and all Project Work performed with respect to the Project, use only the Project Marks and shall not use any other names, branding, logos, domain names or other marks in association with the Project Work, the Project, the Project Facilities, the Website or other components of the Project without the prior written consent of the Province in its discretion;
 - (ii) agrees that its use of the Project Marks will at all times be under the control of the Province;
 - (iii) acknowledges the validity of the Project Marks and the Province’s interest in the Project Marks and all goodwill associated with or appurtenant to the Project Marks, and the Design-Builder further acknowledges and agrees that all use of the Project Marks by the Design-Builder will be deemed to be use by the

Province and all the benefit and goodwill associated with such use will at all times, as between the Design-Builder and the Province, enure entirely to the Province;

- (iv) will not do anything or omit to do anything that might impair, jeopardize, violate or infringe the Project Marks or the Province's interest in the Project Marks, including:
 - (A) opposing, contesting or in any other manner challenging the validity of the Project Marks or the Province's interest in the Project Marks; and
 - (B) claiming, using, displaying, reproducing or applying to register any trade mark, trade name, copyright or design that is identical to or confusing with any of the Project Marks, or that is derived from or based on any of the Project Marks;

and the Design-Builder will not assist, permit or encourage any other person or entity to do any of the foregoing; and

- (v) will not use, display, reproduce, register or attempt to register any of the Project Marks, or any words, designs, characters or symbols that are confusing with or are derived from the Project Marks, as part of any internet domain name, universal resource locator, telephone number, address, firm name, corporate name or any other designator.

2.17 Execution and Delivery of Project Documents

On or before the Effective Date:

- (a) the Design-Builder shall deliver to the Province and BCTFA the documents described in Part 1 [Documents to be Delivered by the Design-Builder] of Schedule 19, executed and delivered by the signatories specified or contemplated in such Part; and
- (b) the Province and BCTFA shall deliver to the Design-Builder the documents described in Part 2 [Documents to be Delivered by the Province and BCTFA] of Schedule 19, executed and delivered by the signatories specified or contemplated in such Part.

2.18 No Agency

- (a) The Design-Builder acknowledges that no provision of this Agreement shall be construed as a delegation to the Design-Builder by the Province, BCTFA, the Minister or any other person to whom a power, discretion or right has been conferred by Law to make a decision deciding or prescribing the legal rights, powers, privileges, duties or liabilities of a person, or the eligibility of a person to receive or to continue to receive a benefit or license (whether or not the person is legally entitled to it), of any power, authority, duty, function, right or discretion conferred under Laws.
- (b) Except to the extent (if any) that any provision in this Agreement expressly constitutes the Design-Builder the "agent" of the Province or BCTFA, the Design-Builder shall not be or be deemed to be or hold itself out as being an agent of the Province or BCTFA and

the Design-Builder shall not hold itself out as having authority or power to bind the Province or BCTFA in any way.

- (c) The Design-Builder acknowledges and agrees that neither the Province nor BCTFA has made any representation or warranty that the Design-Builder or any Subcontractor shall have the benefit of any Crown immunity.
- (d) Subject to Sections 2.18(a), (b) and (c) and the other provisions of this Agreement, the parties acknowledge that the Design-Builder is carrying out the Project Work at the request of the Province and BCTFA.

2.19 Province’s Representative and Design-Builder’s Representative

The parties acknowledge that:

- (a) the Province has appointed the Province’s Representative as set out in Section 1.1(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure]; and
- (b) the Design-Builder has appointed the Design-Builder’s Representative in accordance with Section 3.1(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure].

2.20 Community Benefits

The Design-Builder will carry out the Community Benefits Requirements in accordance with Schedule 21 [Community Benefits Requirements].

2.21 Interface Requirements

In addition to the obligations of the Design-Builder under this Agreement, the Design-Builder covenants and agrees to observe, perform and be bound by all the obligations of the Design-Builder contained in Schedule 18 [Interface Requirements].

2.22 Limited Notice to Proceed Agreement

The parties acknowledge and agree that:

- (a) the Limited Notice to Proceed Agreement ended effective as of the Effective Date and the terms of this Agreement supersede the Limited Notice to Proceed Agreement;
- (b) all Approved Activities (as defined in the Limited Notice to Proceed Agreement) undertaken under the Limited Notice to Proceed Agreement in advance of the Effective Date are deemed to have been undertaken by the Design-Builder as Project Work pursuant to this Agreement and the Design-Builder accepts and assumes the risk, responsibility and liability for such Approved Activities as Project Work in accordance with the terms of this Agreement;
- (c) no party shall be entitled to make any Claim against another party or such other party’s respective advisors, consultants, contractors or agents:
 - (i) under the Limited Notice to Proceed Agreement; or

- (ii) in connection with, or arising out of, the Limited Notice to Proceed Agreement, (whether for damage, Losses, extensions of time, compensation, additional payment or any other benefit) unless such Claim is permitted under this Agreement, and provided that, for such purpose only, and notwithstanding Section 9.5(c), negligent acts or negligent omissions of the Province occurring prior to the Effective Date but arising pursuant to or in connection with the Limited Notice to Proceed Agreement shall not be excluded from the Province's indemnity in Section 9.5 [Indemnification by the Province]; and
- (d) any dispute in connection with or arising out of the Limited Notice to Proceed Agreement existing at the Effective Date shall, unless otherwise agreed in writing between the parties, be resolved in accordance with the Dispute Resolution Procedure.

PART 3 GENERAL OBLIGATIONS OF PROVINCE

3.1 Mitigation By Province

- (a) In all cases where the Province or BCTFA is entitled under this Agreement to receive from the Design-Builder any compensation (including pursuant to Schedule 13 [Compensation on Termination]), costs, damages or other Direct Losses incurred by the Province or BCTFA (including by way of indemnity), any extension of time or any relief from performance, or any combination thereof, but not in any other case, each of the Province and BCTFA shall have a duty to use all reasonable efforts to mitigate and reduce the amount required to be paid by the Design-Builder to the Province or BCTFA, as the case may be, the length of the extension of time and/or the relief to be provided, provided that such duty shall not require the Province or BCTFA to:
 - (i) take any action which is contrary to the public interest, as determined by the Province or BCTFA in its discretion;
 - (ii) exercise or refrain from exercising any power, authority, duty, function, right or discretion conferred on the Province or BCTFA under Laws as a consequence of its status as the Crown, Crown agent or Crown corporation or as a legislative or public body and that is not conferred on a private commercial party;
 - (iii) undertake any mitigation measure that might be available arising out of its status as the Crown, Crown agent or Crown corporation or as a legislative or public body that would not normally be available to a private commercial party; or
 - (iv) alter the amount of any Province Payments or Performance Incentive Payments determined in accordance with Schedule 10 [Payment and Performance Mechanism]; or
 - (v) breach or act in a manner that could be inconsistent with the obligations of the Province or BCTFA under this Agreement.
- (b) Neither the Province nor BCTFA shall be entitled to receive those parts of any compensation, costs, damages or other Direct Losses incurred by the Province or

BCTFA, as the case may be, or those parts of any extensions of time or other relief from performance, that the Province could have mitigated against, reduced or otherwise avoided by the exercise of all reasonable efforts, to the extent of the duty of the Province to do so in accordance with the provisions of Section 3.1(a).

- (c) The Design-Builder shall not be liable for any compensation, costs, damages or other Direct Losses to the extent suffered or incurred as a result of any Province Indemnified Person failing to mitigate to the same standard as is required of the Province under this Section 3.1.

3.2 Representations and Warranties of the Province and BCTFA

- (a) The Province represents and warrants to the Design-Builder, and acknowledges that the Design-Builder is relying upon such representations and warranties in entering into this Agreement, that, at the date of this Agreement, this Agreement has been duly authorized, executed and delivered on behalf of the Province by an authorized representative of the Minister of Transportation and Infrastructure.
- (b) BCTFA represents and warrants to the Design-Builder, and acknowledges that the Design-Builder is relying upon such representations and warranties in entering into this Agreement, that, at the date of this Agreement:
 - (i) all necessary corporate action has been taken by BCTFA to execute and deliver this Agreement; and
 - (ii) this Agreement has been duly authorized, executed, and delivered on behalf of BCTFA by an authorized representative of BCTFA.

3.3 Without Prejudice

Any covenant, representation, warranty or undertaking made or given by the Province or BCTFA under any provision of this Agreement is without prejudice to or limitation of any covenant, representation, warranty or undertaking made or given by the Province or BCTFA under any other provision of this Agreement.

3.4 Survival of Representations and Warranties

The representations and warranties made or given by the Province or BCTFA under any provision of this Agreement or in any certificate or other document delivered by or on behalf of the Province or BCTFA at the time of execution of this Agreement are given at the date of execution of this Agreement and shall, unless expressly provided otherwise, survive the execution and delivery of this Agreement and are not mitigated or affected by any investigation by or on behalf of the Design-Builder.

PART 4 GENERAL OBLIGATIONS OF DESIGN-BUILDER

4.1 Design-Builder to Carry Out Project Work

The Design-Builder shall carry out and perform the Project Work, and cause such Project Work to be carried out and performed:

- (a) in an efficient, effective, safe and good and workmanlike manner, and in accordance with Good Industry Practice;
- (b) in a manner that is not injurious to health and does not cause damage to property or the environment, provided that damage to property or the environment to the extent such damage is a reasonable consequence of performing such Project Work in accordance with this Agreement and in compliance with all other obligations of the Design-Builder hereunder will not constitute a breach of the obligation in this Section 4.1(b);
- (c) in compliance with all Requirements of Interested Parties; and
- (d) in accordance with all Project Requirements,

in each case subject to and in accordance with the provisions of this Agreement, and otherwise:

- (e) in a manner so as not to prevent the Province from exercising rights, powers and discretions and discharging duties and functions as a highway and/or transportation authority, and so as not to prevent the Province, BCTFA or any other Governmental Authority from exercising any other rights, powers and discretions or discharging any other lawful duties and functions; and
- (f) in compliance with all applicable Laws and Permits, all lawful and other proper instructions of the Police and all lawful and other proper requirements of Relevant Authorities and other Governmental Authorities.

4.2 Informational Rights

Without limiting any other obligation of the Design-Builder to provide notification to the Province of the occurrence of any event or circumstance in accordance with this Agreement, the Design-Builder shall provide to the Province's Representative promptly, and in any event within five Business Days following the date on which the Design-Builder becomes aware of the same:

- (a) true and complete copies of any notices, complaints or orders (including directives and work orders) of violation or non-compliance or liability received by the Design-Builder or any of its Subcontractors from any Governmental Authority or any other person in respect of any matter relating to the Project, the Project Work, the Project Site or the Project Infrastructure;
- (b) a notice describing any fact, development, event or other matter of which the Design-Builder has become aware that could reasonably be expected to prevent the achievement of either or both of the Substantial Completion Date on or before the Substantial Completion Target Date and the Total Completion Date on or before the Total Completion Target Date;
- (c) a notice describing any litigation or other proceeding or Claim which has been commenced or threatened, or any event or occurrence which is reasonably likely to give rise to a Claim against any of the Design-Builder, a Subcontractor or the Province in respect of or relating to the Project;
- (d) a notice describing any proposal to suspend or abandon the Project or the Project Work;

- (e) a notice describing any material default or event of default of any party (including the Design-Builder) under any Project Document to which the Design-Builder is a party;
- (f) a notice describing any expropriation of any property or assets of the Design-Builder or comprising part of the Project Site or the Project Infrastructure; and
- (g) a notice of any discrepancy, error, omission, conflict, inconsistency or ambiguity in this Agreement, including the Project Requirements, of which the Design-Builder has become aware.

4.3 No Adverse Reflection

Without limiting the Design-Builder's obligations under Section 4.1 [Design-Builder to Carry Out Project Work], in the performance of the Project Work the Design-Builder shall not knowingly do or omit to do, or suffer or permit to be done or omitted, anything that might reasonably be expected to detract, or that the Province gives notice to the Design-Builder would detract, from the image and reputation of the Province as a highway and/or transportation authority or otherwise or the reputation of the Province or BCTFA, provided that any action taken or not taken in the course of performing the Project Work that is expressly required to be taken or not taken pursuant to this Agreement, a direction or instruction issued by the Province or a specific provision of the Project Requirements, will not constitute a breach of the Design-Builder's obligations under this Section 4.3, and provided that this Section 4.3 shall not prejudice an otherwise valid Claim by the Design-Builder:

- (a) pursuant to any other express provision of this Agreement or of any other Province Project Document; or
- (b) in respect of any breach of any express obligation of the Province or BCTFA under this Agreement or any other Province Project Document.

4.4 No Conflicts of Interest

- (a) The Design-Builder shall ensure that no conflict of interest arises between any other matter in which it or any of the Partners may be interested whether directly or indirectly, and the Design-Builder's performance of the Project, the Project Work and the obligations of the Design-Builder under this Agreement.
- (b) The Design-Builder:
 - (i) shall not knowingly admit to any share or part of this Agreement or any benefit to arise herefrom to any member of the Legislature of British Columbia or the House of Commons or the Senate of Canada;
 - (ii) shall ensure that no person for whom the Design-Builder is in law responsible is a current or former public servant or public office holder to whom any post-employment, ethics and conflict of interest legislation, guidelines, codes or policies of Canada applies shall derive any direct benefit from this Agreement unless the provisions or receipt of such benefits is in compliance with such legislation, guidelines, policies or codes; and

- (iii) shall not make any payment to any individual required to be registered under the *Lobbying Act* (Canada) that is, in whole or in part contingent on the outcome of arranging a meeting between a public office holder and any other person, or communicating with a public office holder in the awarding of any grant, contribution or other financial benefit by or on behalf of the Federal Government.

4.5 Prohibited Acts

- (a) The Design-Builder covenants that neither the Design-Builder nor any of its agents or Subcontractors nor the employees of any of the aforementioned persons, nor any person for whom the Design-Builder is in law responsible, shall offer or give or agree to give any person in the service of the Province or BCTFA any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this Agreement or for showing or forbearing to show favour or disfavour in relation to this Agreement.
- (b) The Design-Builder covenants that it shall not enter into this Agreement or any other agreement with the Province or BCTFA in connection with which a commission, fee, payment or benefit has been paid or agreed to be paid by the Design-Builder or on behalf of the Design-Builder or to the knowledge of the Design-Builder, other than to any person for whom the Design-Builder is in law responsible, unless before such agreement is made particulars of any such commission, fee, payment or benefit and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to and consented to by the Province.
- (c) Without limiting Section 4.5(b), the Design-Builder covenants that no person for whom the Design-Builder is in law responsible shall enter into any agreement with the Province or BCTFA in relation to the Project in connection with which a commission, fee, payment or benefit has been paid or agreed to be paid by such person or on its behalf or to its knowledge, other than to any person for whom the Design-Builder is in law responsible, unless before such agreement is made particulars of any such commission, fee, payment or benefit and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to and consented to by the Province.

4.6 Public Use

- (a) The Design-Builder shall keep open for public use at all times from and after they are made available to the Design-Builder for the purposes of the Project Work pursuant to Section 1.3 [Commencement of Access to Project Site] of Schedule 8 to the Substantial Completion Date, all parts of the Project Facilities that are open for public use as at the date they are made available to the Design-Builder for the purposes of the Project Work pursuant to Section 1.3 [Commencement of Access to Project Site] of Schedule 8, except for temporary or permanent lane closures or diversions of traffic flow instituted:
 - (i) by the Design-Builder in accordance with the provisions of the Traffic Management Plan or any other provision of Schedule 4 [Design and Construction];

- (ii) by the Minister or any other Governmental Authority under the *Transportation Act* (British Columbia), the *Motor Vehicle Act* (British Columbia), the *Community Charter* (British Columbia) or any other Laws; or
- (iii) by the Police or fire, ambulance or other emergency services authorities,

and, except as otherwise expressly provided in this Agreement, the Design-Builder shall not have any Claim whatsoever against the Province, BCTFA, any Governmental Authority, the Police or any fire, ambulance or other emergency services authority for or in respect of the exercise of any such rights or powers or the discharge of any such duties or functions by any such authority affecting all or any part of the Project Site or the Project Infrastructure at any time.

- (b) The Design-Builder may not charge tolls or any other user charges for the use of the Project Facilities.
- (c) Subject to temporary and permanent closures or diversions of traffic flow with respect to the Project Facilities permitted by Sections 4.6(a)(i) to 4.6(a)(iii), the Design-Builder shall cause all Project Work to be carried on so as not to interfere unnecessarily with, and so as to minimize any necessary interference with, the convenience of the public in respect of, and the access of the public to and use of, any public or private streets, roads and highways other than the Project Facilities, whether under the control or in the possession of the Province, BCTFA or any other person.

4.7 Access to Project Site and Project Infrastructure by Others

The Design-Builder shall, subject to and in accordance with the health and safety procedures established by the Design-Builder pursuant to Section 4.13 [Health and Safety Program] and Section 4.14 [Design-Builder's Occupational Health and Safety Obligations] for the time being in force in relation to the relevant parts of the Project Site, ensure that at all times:

- (a) the Province, BCTFA and the Province's Representative, the Federal Government, and any contractors, consultants or other persons authorized by any of them, including Third Party Contractors, have access to the Project Site and the Project Infrastructure in accordance with Section 11.1 [Province Access], and BCIB has access to the Project Site in accordance with the BCIB-Contractor Agreement;
- (b) the Province and BCTFA have access to the Project Site and the Project Infrastructure to fulfil any statutory, public or other duties or functions;
- (c) the Owner's Engineer and the Independent Engineer have access to the Project Site and the Project Infrastructure as reasonably required to carry out their respective responsibilities in respect of the Project in accordance with this Agreement;
- (d) inspectors and other persons authorized to act on behalf of the Province and BCTFA have access to the Project Site for inspection and acceptance purposes prior to the Total Completion Date, subject to reasonable notice being given to the Design-Builder;
- (e) the owners or operators of any Third Party Facilities and their employees, agents and contractors have unrestricted access to the Project Site and the Project Infrastructure at

all reasonable times during the Access Period in respect of the applicable part of the Project Site, subject to reasonable notice being given by such persons to the Design-Builder, to install, operate, manage, maintain, repair, rehabilitate or reconstruct such Third Party Facilities, provided that, subject to the applicable requirements of Laws and the requirements of this Agreement, the Design-Builder may limit such access so as to not unnecessarily impede or restrict traffic flows or any Project Work being carried out by the Design-Builder;

- (f) all Relevant Authorities, Railways and Utility Suppliers have access to the Project Site and the Project Infrastructure throughout the Access Period in respect of the applicable part of the Project Site in order to carry out any work (including surveys and inspections) in accordance with or to exercise any right or power or perform any duty or obligation under any Laws, the Railway Agreements or the Utility Agreements, subject to reasonable notice being given by such Relevant Authority, Railway or Utility Supplier to the Design-Builder, and provided that, subject to the applicable requirements of the Relevant Authority, Railway, Utility Supplier or Laws and the requirements of this Agreement (as the case may be), the Design-Builder may limit such access so as to not unnecessarily impede or restrict traffic flows or any Project Work being carried out by the Design-Builder; and
- (g) without prejudice to any access rights of any such person as a member of the general travelling public, the Province, BCTFA, Third Party Contractors, owners or operators of Third Party Facilities, Relevant Authorities, Railways and Utility Suppliers are permitted to enter upon the Project Site and the Project Infrastructure for the purposes of access to and from any other lands or facilities adjacent to or in proximity to the Project Site and the Project Infrastructure (including any other street, road or highway) owned or operated by such person or in which such person has any interest, provided that, subject to the requirements of Laws and the requirements of this Agreement, the Design-Builder may limit such access so as to not unnecessarily impede or restrict traffic flows or any Project Work being carried out by the Design-Builder.

4.8 No Other Activity, Improvements or Change in Use

The Design-Builder shall not carry on any activity on, or make any changes or improvements to, all or any part of the Project Site or the Project Infrastructure or make any change in use of all or any part of the Project Site or the Project Infrastructure, except for the purposes of the Project Work as expressly required or permitted by, and subject to and in accordance with, the provisions of, this Agreement.

4.9 Design-Builder Submittals

Without limiting the obligations of the Design-Builder to comply with any other Project Requirements, including the preparation and delivery to the Province's Representative of any plans, submittals, programs, drawings, reports and other material, documents and information referred to in the Project Requirements, or any other obligations of the Design-Builder under this Agreement, the Design-Builder shall prepare, submit and, where applicable, comply with any and all plans, submittals, programs, drawings, reports and other material, documents and information set out or referred to in this Agreement or in any Schedule to this Agreement provided that, where the Design-Builder is required in accordance with this Agreement to submit any such plan, submittal, program, drawing, report or other material, document or information to the Province's Representative pursuant to the Review Procedure or the Consent Procedure, or otherwise for the consent, approval or acceptance of the Province, such

compliance shall, notwithstanding any other provision of this Agreement, be with such plan, submittal, program, drawing, report or other material, document or information to which there has been “no objection” under the Review Procedure or which has been “accepted” under the Consent Procedure or which has otherwise been consented to, approved or accepted in writing by the Province, as the case may be.

4.10 Mitigation By Design-Builder

- (a) Without limiting and in addition to all other obligations to mitigate required by this Agreement or at law, in all cases where the Design-Builder is entitled under this Agreement to receive from the Province any compensation (including for any Supervening Event or pursuant to Schedule 13 [Compensation on Termination]) or any other costs, damages or other Direct Losses incurred by the Design-Builder (including by way of indemnity), any extension of time or any relief from performance, or any combination thereof, the Design-Builder shall have a duty to use all reasonable efforts to mitigate and reduce (which reasonable efforts may include by way of competitive procurement for expenditures (where appropriate in accordance with Good Industry Practice or otherwise required by Laws), rescheduling of works and deliveries, and reallocation or redeployment of labour forces and equipment, and pursuing recourse against insurers and third parties) the amount required to be paid by the Province to the Design-Builder, the length of the extension of time and/or the relief to be provided.
- (b) The Design-Builder shall not be entitled to receive those parts of any compensation, costs, damages or other Direct Losses incurred by the Design-Builder, or those parts of any extensions of time or other relief from performance, that the Design-Builder could have mitigated against, reduced or otherwise avoided by the exercise of all reasonable efforts as required in accordance with the provisions of Section 4.10(a).
- (c) Upon request from the Province, the Design-Builder shall promptly submit a detailed description, supported by all such documentation as the Province may reasonably require, of the measures and steps taken by the Design-Builder to meet its obligations under Section 4.10(a).
- (d) The Design-Builder shall require, where practicable, Subcontractors with which the Design-Builder contracts directly, to assume and carry out the same duty to mitigate as is required of the Design-Builder under Section 4.10(a), *mutatis mutandis*.
- (e) The Province shall not be liable for any compensation, costs, damages or other Direct Losses to the extent suffered or incurred as a result of any Subcontractor or other Design-Builder Indemnified Persons failing to mitigate to the same standard as is required of the Design-Builder under this Section 4.10.

4.11 Site Safety and Security

- (a) The Design-Builder shall at all times throughout the Term have full regard for the safety of all persons (including users of the Project Facilities) on the Project Site (whether lawfully or not) and shall during the Access Period (and any period during which access to any other area is made available to the Design-Builder pursuant to Section 2.5(c) or the Design-Builder otherwise has access) maintain the Project Site and any such other

area in a manner and in an orderly state that ensures the safety of such persons and that is appropriate to the avoidance of danger to such persons.

- (b) Without limiting Section 8.8 [Responsibility for Participants and Trespassers] or any other provision of this Agreement, the Design-Builder shall during the Access Period (and any period during which access to any other area is made available to the Design-Builder pursuant to Section 2.5(c) or the Design-Builder otherwise has access) in respect of the Project Site and any such other area at all times take such measures as are reasonably required, including hoarding and fencing where appropriate, in respect of the Project Work being carried out by it to prevent the trespass and access onto the Project Site or such other areas of any persons not entitled to be there or of any creatures.
- (c) The Design-Builder shall take action in accordance with Laws to remove forthwith from the Project Site any person who engages in misconduct or is incompetent or negligent in the performance of any duties, or whose presence on the Project Site is otherwise undesirable.

4.12 Design-Builder as Prime Contractor

- (a) By entering into this Agreement, the Design-Builder agrees that:
 - (i) it is the Prime Contractor for the Project Site;
 - (ii) it shall at all times until the Substantial Completion Date be qualified to fulfil all functions and duties of the Prime Contractor as required under all Health and Safety Laws; and
 - (iii) it shall take all steps or measures necessary, through such arrangements as are appropriate, to fulfil all of its obligations, functions and duties as Prime Contractor in compliance with all Health and Safety Laws.
- (b) Without limiting the Design-Builder's obligations to fulfill, as of and from the Effective Date until the Substantial Completion Date, all duties and functions of the Prime Contractor, the Design-Builder shall, by not later than 30 days after the Effective Date, and in any event before the commencement of any of the Project Work at the Project Site:
 - (i) designate a qualified coordinator (the “**Qualified Coordinator**”) who shall be an individual qualified within the contemplation of the WCA and the OHS Regulation (including being knowledgeable of the Project Work, the hazards involved and the means to control the hazards, by reason of education, training, experience or a combination thereof) to discharge the responsibilities of a “qualified coordinator” as described in the WCA and the OHS Regulation; and
 - (ii) deliver to the Province's Representative:
 - (A) written notice of the designation of the Qualified Coordinator under Section 4.12(b)(i);

- (B) a copy of the “notice of project” for the Project delivered in accordance with the WCA and the OHS Regulation; and
- (C) written notice confirming that the Health and Safety Program has been initiated and is readily available in accordance with the WCA and the OHS Regulation.

4.13 Health and Safety Program

Notwithstanding any limitation in the OHS Regulation regarding the number of workers in any work force, the Design-Builder shall implement prior to mobilization by the Design-Builder to the Project Site a formal written health and safety program (the “**Health and Safety Program**”) in respect of the Project Site that:

- (a) complies with Good Industry Practice and all Laws (including all applicable specifications and standards in Health and Safety Laws);
- (b) satisfies the requirements of Section 3.3 of Part 3 of the OHS Regulation;
- (c) is designed to prevent injuries and occupational diseases within the contemplation of the WCA and the OHS Regulation;
- (d) provides for the establishment and maintenance of a system or systems and a process or processes to ensure compliance with all Health and Safety Laws and to satisfy the Design-Builder’s obligations in respect of occupational health and safety under this Agreement;
- (e) without limiting the foregoing, deals specifically with controlling the hazards of the Project Site, including such hazards as may be identified in hazard identifications provided in the Disclosed Data, and as such hazard identifications are updated by the Design-Builder from time to time throughout the Term;
- (f) implements the Health and Safety Policy and Program (as defined in the BCIB-Contractor Agreement);
- (g) satisfies and addresses all health and safety requirements contained in the Conditions of Access; and
- (h) implements the Avalanche Safety Plan in accordance with Appendix E [Snow Avalanche Safety Measures] of Schedule 4.

The Design-Builder shall update the Health and Safety Program as required from time to time to ensure that the Health and Safety Program at all times complies with the requirements of this Agreement, including this Section 4.13.

4.14 Design-Builder’s Occupational Health and Safety Obligations

- (a) The Design-Builder shall at all times until the Substantial Completion Date:
 - (i) implement and maintain the Health and Safety Program;

- (ii) observe and comply with, and ensure that the performance of the Project Work (including by conducting worker safety orientations, health and safety meetings, safety inspections and accident and incident investigations) complies at all times with, all Health and Safety Laws;
 - (iii) ensure that, in relation to the Project Work, all assessments, levies, penalties, fees and fines which may be made under any Health and Safety Laws are punctually paid as they become due; and
 - (iv) record, collect and retain all occupational health and safety Records, including notices, reports, directives and penalty assessments, in respect of the Project and the Project Work required by and in accordance with all Health and Safety Laws and the BCIB-Contractor Agreement.
- (b) At the request of the Province from time to time, the Design-Builder shall:
- (i) deliver to the Province's Representative evidence of the Design-Builder's implementation and maintenance of the Health and Safety Program in accordance with Section 4.13 [Health and Safety Program] and that a system or systems or a process or processes have been put into place to ensure compliance with Health and Safety Laws and to satisfy the Design-Builder's obligations in respect of occupational health and safety under this Agreement;
 - (ii) provide the Province's Representative with evidence satisfactory to the Province of compliance by the Design-Builder with its obligations in respect of Health and Safety Laws in accordance with this Agreement, including where applicable the compliance of the Design-Builder and its agents and Subcontractors and its or their directors, officers, employees and workers with all applicable Health and Safety Laws, including being registered, in good standing and current in respect of all assessments, levies, penalties, fees and fines thereunder; and
 - (iii) make available to the Province's Representative access to and copies of any Records maintained by the Design-Builder in accordance with the Health and Safety Program.
- (c) In the event of an accident or incident arising from performance of the Project Work that requires notification to the Workers' Compensation Board, the Design-Builder shall ensure that a copy of such notification is provided to the Province at the same time as the notification is delivered to the Workers' Compensation Board, and provide ongoing information to the Province on the progress of any investigation resulting from such notification, accident or incident.

4.15 Refusal to Recognize Design-Builder as Prime Contractor

If the Workers' Compensation Board refuses to recognize or accept the Design-Builder at any time as the Prime Contractor, including by making a declaration or determination to that effect, then:

- (a) the Design-Builder shall not be relieved of any obligations, duties and liabilities as Prime Contractor but shall be responsible to the Province and BCTFA and to those for whom the Design-Builder would have been responsible if the Design-Builder had been accepted

or recognized by the Workers' Compensation Board as the Prime Contractor for fulfilling all obligations, duties and liabilities imposed on the Province or BCTFA or any contractor or subcontractor of any tier of the Province or BCTFA pursuant to Health and Safety Laws in the same manner and to the same extent and for the same purposes as if the Design-Builder undertook the obligations of a Prime Contractor for the Project Site at all times throughout the Access Period for the relevant portion of the Project Site (which obligations include, for greater certainty, the liability for any assessments, levies, penalties, fees or fines assessed, levied or charged from time to time against the Design-Builder or against the Province or BCTFA based on the number of employees employed in relation to the Project or otherwise); and

- (b) if the Workers' Compensation Board recognizes or accepts, including by making a declaration or determination to that effect, any Subcontractor as the Prime Contractor, then the Design-Builder shall not be considered to be in breach of this Agreement solely by reason of the refusal to accept the Design-Builder as the Prime Contractor or the declaration or determination by the Workers' Compensation Board to that effect, provided that and only to the extent that:
- (i) the Design-Builder has not failed to observe, abide by or comply with any term of this Agreement;
 - (ii) such refusal to recognize or accept, or other declaration or determination, of the Workers' Compensation Board was for a reason other than a failure by any person, including for greater certainty by the Design-Builder, to discharge the duties as a Prime Contractor under the Health and Safety Laws;
 - (iii) the Design-Builder has not entered into a contract with any person, including any Subcontractor, under which that person has agreed to be the Prime Contractor in connection with the Project or any part of the Project Site and, for greater certainty, nothing in this paragraph prevents the Design-Builder from entering into such arrangements as are appropriate to fulfil its obligations as the Prime Contractor;
 - (iv) the Design-Builder indemnifies and holds harmless the Province and the Province Indemnified Persons, and each of them, in connection with any and all Direct Losses or (except only to the extent such Direct Losses are caused directly by a Province Non-Excusable Event) arising in connection with any matter contemplated under this Section 4.15 (including for greater certainty any assessments, levies, penalties, fees or fines assessed or charged against the Province and the Province Indemnified Persons, or any of them, based on the number of employees employed in relation to the Project or otherwise); and
 - (v) the Design-Builder shall make, do, execute and cause to be made, done and executed all further and other acts, deeds, instruments, agreements and assurances as the Province or BCTFA may require for the performance of the Design-Builder's obligations as Prime Contractor in accordance with Section 4.12(a).

4.16 Appointment of other Prime Contractors by Province

- (a) Notwithstanding Section 4.13(a), there may be circumstances in which the Design-Builder will be required to perform parts of the Project Work under the direction of another Prime Contractor (in this Section 4.16, the “**Other Prime Contractor**”) who has been appointed by the Province or BCTFA in connection with specified works and activities that may be undertaken and performed at any specified location or locations in the Project Site (in this Section 4.16, the lands and/or premises upon which the relevant parts of the Project Work are to be performed, the “**Separate Site**”). The Province shall provide prior written notice of any such circumstances, and shall notify the Design-Builder of the identity of the Other Prime Contractor, the location or locations of the Separate Site, the period of time in question and reasonable particulars of the work for which the Other Prime Contractor is in law responsible.
- (b) The Design-Builder agrees that, on receipt of written notice from the Province pursuant to Section 4.16(a), the Design-Builder shall cease to be the Prime Contractor in respect of such Separate Site for the specified period and shall at all times in good faith and at the cost of the Design-Builder:
 - (i) coordinate with and comply with the occupational health and safety requirements of the Other Prime Contractor while on the Separate Site, including requirements of the Other Prime Contractor to coordinate health and safety activities;
 - (ii) ensure compliance with the health and safety program of the Other Prime Contractor by the Design-Builder and all Subcontractors while on the Separate Site, including by developing a system to ensure such compliance and, upon the request of the Province, deliver to the Province evidence that such system is in place and being adhered to; and
 - (iii) coordinate the health and safety activities of the Other Prime Contractor while on the balance of the Project Site,in each case to ensure at all times that the workers on the Separate Site do not create a hazard for the workers on the balance of the Project Site, and vice versa.
- (c) Upon receipt from the Province of written notice of the conclusion of the works and activities referred to in a notice delivered under Section 4.16(a), the Design-Builder shall reassume and thereafter fulfil the responsibilities of the Prime Contractor as otherwise set out in this Agreement at the Separate Site.

4.17 Notice of Failure to Comply with Health and Safety Requirements

- (a) In this Section 4.17, the terms “**employer**” and “**workers**” do not include the Design-Builder, or any Subcontractor, or BCIB, or the employees of any of them, including the Employees (as defined in the BCIB-Contractor Agreement).
- (b) If the Design-Builder determines in its reasonable discretion that any employer or its workers:
 - (i) has created an unsafe or harmful condition;

- (ii) has done or omitted to do something that constitutes an unsafe or harmful act; or
- (iii) has failed to comply with Health and Safety Laws or the Health and Safety Program,

and that, on written notice from the Design-Builder to the employer of such condition, act or failure, the employer has failed or refused to take action to correct the condition, act or failure, including any condition, act or failure of any of the employer's workers, the Design-Builder may issue a notice (in this Section 4.17, a "**Notice of Failure to Comply**") to the applicable employer stipulating in reasonable detail the basis for the issuance of the Notice of Failure to Comply, and shall deliver a copy of any Notice of Failure to Comply so issued to the Province.

- (c) Upon issuance of a Notice of Failure to Comply by the Design-Builder under Section 4.17(b), the Design-Builder may suspend all or any part of the Project Work at the location specified in the Notice of Failure to Comply if the Design-Builder believes such action is necessary to ensure that any risk to workers is eliminated or minimized, and shall provide to the Province, promptly and in reasonable detail, confirmation of all such action so taken by the Design-Builder in respect of such Notice of Failure to Comply.
- (d) Upon receipt of a copy of a Notice of Failure to Comply from the Design-Builder under Section 4.17(b), the Province may take whatever action in accordance with Section 11.5 [Province's Other Step-In Rights] the Province deems necessary to ensure that any risk to workers is eliminated or minimized.
- (e) On rectification of the matter set out in a Notice of Failure to Comply, the Design-Builder shall withdraw such Notice of Failure to Comply by endorsing on a copy thereof confirmation of the rectification, and the Design-Builder shall deliver a copy of the endorsed Notice of Failure to Comply to the applicable employer and to the Province. If the Design-Builder suspended all or any part of the Project Work under Section 4.17(c), the Design-Builder shall resume such Project Work.
- (f) The Province shall be deemed to have relied on the terms of and the reasons set out in the Notice of Failure to Comply, notwithstanding any subsequent investigation or inquiry of the matter by the Province, which the Province may but will not be obligated to undertake, and the Design-Builder shall indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, in connection with any and all Direct Losses or Claims (except only to the extent such Direct Losses or Claims are caused directly by a Province Non-Excusable Event) arising in connection with the issuance of any Notice of Failure to Comply issued by the Design-Builder and any acts or omissions of the Province in reliance on such Notice of Failure to Comply.

4.18 Permits

- (a) The Design-Builder shall, or shall cause the Subcontractors, as the case may be, at its or their sole cost, to:
 - (i) obtain all Permits (excluding Province Permits) by the time required or contemplated by the terms of this Agreement to permit it to perform its relevant obligations hereunder;

- (ii) renew, amend or extend, as applicable, all Permits (including Province Permits other than the Province Archeological Permits) by the time required or contemplated by the terms of this Agreement to permit it to perform its relevant obligations hereunder; and
 - (iii) comply with and maintain in good standing each Permit (including each Province Permit) in accordance with its terms, including complying with all requirements and obligations in respect of all Province Permits.
- (b) Where Permits that are the Design-Builder's obligation to obtain, renew, amend or extend under Section 4.18(a) have requirements that may impose any conditions, liabilities, obligations or costs on the Province or BCTFA or on any person other than the Design-Builder, the Subcontractors and other persons for whom the Design-Builder is in law responsible, the Design-Builder shall, prior to obtaining, renewing, amending or extending such Permits, seek the acceptance of the Province, acting reasonably, pursuant to the Consent Procedure, provided, however, that, except as provided in Section 2.2(f)(i) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], neither the Province nor BCTFA shall be responsible for obtaining or for any delay in obtaining or failure to obtain any such Permit, renewal, amendment or extension.
- (c) Where the Design-Builder, or any Subcontractor, as the case may be, is unable to apply for or to obtain, renew, amend or extend any Permit that is the Design-Builder's obligation to obtain, renew, amend or extend under this Section 4.18 without obtaining information or administrative assistance from the Province or BCTFA or without submitting the application for such Permit or renewal or extension in the name of the Province or BCTFA, each of the Province and BCTFA shall at the Design-Builder's cost and expense provide such information and administrative assistance as the Design-Builder may reasonably request and the Province or BCTFA, as the case may be, may reasonably be able to provide and, if requested, shall execute such applications as are required to be in its name to assist the Design-Builder or such Subcontractor, as the case may be, in obtaining, renewing, amending or extending such Permit.
- (d) The Design-Builder at its expense shall provide or cause to be provided such information, documentation and administrative assistance as may be requested by the Province and as the Design-Builder may reasonably be able to provide and, if requested, shall execute such applications as are required to be in its name, to enable the Province or BCTFA to apply for, obtain and (without limiting the Design-Builder's obligations under Section 4.18(a)) renew, amend or extend, and comply with and demonstrate compliance with requirements and obligations under, Province Permits.
- (e) The Design-Builder shall indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, in respect of any and all Direct Losses and Claims that the Province and the Province Indemnified Persons, or any of them, may suffer or incur in connection with or arising out of:
 - (i) the satisfaction and performance during the Term of all conditions, liabilities and obligations imposed on the Province or BCTFA by Permits obtained, renewed or extended by the Design-Builder in accordance with Section 4.18(b) and the payment of all costs in respect thereof;

- (ii) the provision of information or administrative assistance by the Province or BCTFA and the execution of any applications by the Province or BCTFA in accordance with Section 4.18(c) and the payment of all costs in respect thereof, regardless of whether or not the Design-Builder ultimately is able to obtain, renew, amend or extend the relevant Permit as a result of the provision of such assistance or the execution of such applications by the Province or BCTFA;
- (iii) any inability of the Province or BCTFA to obtain or, as applicable, renew or extend any Province Permit or any increased cost to the Province or BCTFA of obtaining or, as applicable, renewing or extending any Province Permit, as a result of any act or omission of the Design-Builder or any Subcontractor, or any other person for whom the Design-Builder is in law responsible; or
- (iv) any cost to the Province or BCTFA of complying with any condition included in any Province Permit to the extent that such condition was included in the Province Permit as a result of any act or omission of the Design-Builder, any Subcontractor, or any other person for whom the Design-Builder is in law responsible.

4.19 Agreements with Governmental Authorities

- (a) The Design-Builder, subject to Section 4.19(b) but without limiting any other provision of this Agreement, shall enter into or cause to be entered into any agreement with any Governmental Authority or other person required in connection with the Project or to enable the Design-Builder to perform the Project Work in accordance with the terms of this Agreement, provided that, if either or both of the Province and BCTFA will be bound or affected in any way by any such agreement, the Design-Builder shall seek the consent of the Province to the terms of such agreement pursuant to the Consent Procedure (such consent not be unreasonably withheld) before entering into the agreement.
- (b) If the Province consents to either or both of the Province and BCTFA being a party or parties to any agreement referred to in Section 4.19(a), the Design-Builder shall assist the Province and/or BCTFA (as the case may be) in entering into such agreement; provided, however, that the Design-Builder shall not be relieved of any of its obligations under Section 4.19(a) or any other provision of this Agreement as a result of any such consent of the Province or assistance provided by the Design-Builder; and provided further that, if either or both the Province and BCTFA incurs or shall incur any liability or obligation under any such agreement, the form and substance of the agreement shall be subject to the prior approval of the Province and/or BCTFA (as the case may be) (which approval may be granted or withheld by the Province or BCTFA in its discretion) and, as between the Province and/or BCTFA (as the case may be) and the Design-Builder, unless otherwise agreed in writing by the parties, the Design-Builder shall discharge such liabilities and perform such obligations and shall indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, in respect of any failure of the Design-Builder to discharge such liabilities or perform such obligations.

4.20 Archaeological and Heritage Objects

- (a) The Design-Builder shall carry out all archaeological surveys, inspections, impact assessments and other archaeological works specified as part of, and shall consult with archaeologists specified by the Province as required by, the Project Requirements.
- (b) As between the parties, all fossils, remains, coins, articles of value or antiquity and other objects having archaeological, artistic, historic or monetary interest or value, including all heritage objects (as defined in the *Heritage Conservation Act* (British Columbia)), that may be found on, at or in the Project Site or otherwise during the carrying out of the Project Work are and shall be, as between the Design-Builder and any Subcontractor on the one hand, and the Province on the other, the sole and absolute property of the Province.
- (c) Upon the discovery of any object referred to in Section 4.20(b) on, at or in the Project Site or otherwise during the carrying out of the Project Work, the Design-Builder shall:
 - (i) immediately inform the Province's Representative;
 - (ii) take all steps not to disturb the object and, if necessary, cease any Project Work in so far as performing such Project Work would or is reasonably likely to endanger the object or prevent or impede its excavation;
 - (iii) take all necessary steps to preserve the object in the same position and condition in which it was found; and
 - (iv) comply with all Laws and requirements of Governmental Authorities with respect to the discovery of such item, including pursuant to the *Heritage Conservation Act* (British Columbia),

and the discovery of such object and compliance by the Design-Builder with its obligations under this Section 4.20(c) (except any such discovery on, at or in the Additional Lands) shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.

- (d) If the Province wishes the Design-Builder to perform procedures which are in addition to those required pursuant to Section 4.20(c) in respect of any object referred to in Section 4.20(b), then the Province shall request a Province Change pursuant to Section 7.1 [Province Changes] in respect of such additional procedures.

4.21 Representations and Warranties of Design-Builder

The Design-Builder represents and warrants to the Province and BCTFA, and acknowledges that the Province and BCTFA are relying upon such representations and warranties in entering into this Agreement and the other Province Project Documents, that at the Effective Date, based on the facts subsisting at the Effective Date:

- (a) the Design-Builder is a general partnership formed and validly existing under the laws of the Province of British Columbia and has full power and capacity to enter into and to carry out the transactions contemplated by, and to duly observe and perform all its

obligations contained in, this Agreement and the other Project Documents to which it is a party, and all other documents, instruments and agreements required to be executed and delivered by the Design-Builder pursuant to this Agreement or such other Project Documents, and to carry out the Project Work;

- (b) Aecon Construction Group Inc. is a corporation duly created and validly existing under the laws of Canada, and has full power and capacity to enter into and to carry out the transactions contemplated by, and to duly observe and perform all its obligations contained in, this Agreement and the other Project Documents to which the Design-Builder is a party, and all other documents, instruments and agreements required to be executed and delivered by the Design-Builder pursuant to this Agreement or such other Project Documents;
- (c) Parsons Inc. is a corporation duly created and validly existing under the laws of the Canada, and has full power and capacity to enter into and to carry out the transactions contemplated by, and to duly observe and perform all its obligations contained in, this Agreement and the other Project Documents to which the Design-Builder is a party, and all other documents, instruments and agreements required to be executed and delivered by the Design-Builder pursuant to this Agreement or such other Project Documents;
- (d) Emil Anderson Construction (EAC) Inc. is a corporation duly created and validly existing under the laws of the Province of British Columbia, and has full power and capacity to enter into and to carry out the transactions contemplated by, and to duly observe and perform all its obligations contained in, this Agreement and the other Project Documents to which the Design-Builder is a party, and all other documents, instruments and agreements required to be executed and delivered by the Design-Builder pursuant to this Agreement or such other Project Documents;
- (e) the execution and delivery by Aecon Constructors, a division of Aecon Construction Group Inc., Parsons Inc. and Emil Anderson Construction (EAC) Inc., as the Partners of the Design-Builder, of this Agreement and the other Project Documents to which the Design-Builder is a party, and all other documents, instruments and agreements required to be executed and delivered by the Design-Builder pursuant to this Agreement or such other Project Documents, and the completion of the transactions contemplated by this Agreement and such other Project Documents, have been duly authorized by all necessary partnership and corporate action on the part of the Design-Builder and each Partner, and this Agreement, and each other Project Document to which the Design-Builder is a party and to be executed and delivered on or before the Effective Date, has been duly executed and delivered by each Partner, and constitutes a legal, valid and binding obligation of the Design-Builder and each Partner enforceable in accordance with its terms, except to the extent that the effectiveness of any enforcement action may be limited by bankruptcy, insolvency, liquidation, reorganization or similar laws of general application affecting creditors' rights generally and except that equitable remedies are in the discretion of the court, and subject to such other qualifications as are set out in the opinions of counsel delivered to the Province and BCTFA in accordance with Section 2.17 [Execution and Delivery of Project Documents];
- (f) the entry into and performance of this Agreement by the Design-Builder do not and shall not:

- (i) conflict with its constating documents or the constating documents of any Partner; or
 - (ii) conflict with any document which is binding upon it or any of the Partners, or any of their respective assets to the extent that such conflict would have or be reasonably likely to have a material adverse effect on the performance by the Design-Builder of its obligations under this Agreement;
- (g) all agreements and consents of third parties required for the execution by each Partner of, and performance of the obligations of the Design-Builder and each Partner under, this Agreement and the other Project Documents to which the Design-Builder is a party, have been received, other than the Permits contemplated in this Agreement to be obtained in connection with the Project Work, agreements with Governmental Authorities to be entered into as contemplated by Section 4.19 [Agreements with Governmental Authorities] and agreements with Utility Suppliers to be entered into as contemplated by Section 4.10 [New and Amended Utility Agreements] of Part 1 of Schedule 4;
- (h) since the Financial Submittal Date:
- (i) there has been no material reduction in the qualifications and expertise of the Design-Builder to perform the Project Work; and
 - (ii) there has been no material adverse change in the financial condition of the Design-Builder;
- (i) all statements, representations and information provided in the Proposal are correct and accurate in all material respects and did not omit any information required to make such statements, representations and information not misleading when taken as a whole, except to the extent the Design-Builder has in writing expressly advised the Province of any incorrectness or inaccuracy prior to the date of execution of this Agreement;
- (j) neither the Design-Builder nor any of the Partners has any knowledge of any fact that materially adversely affects or, so far as it can reasonably foresee, could reasonably be expected to materially adversely affect, either the financial condition of the Design-Builder or any of the Partners or the ability of the Design-Builder or any of the Partners to fulfil the Design-Builder's obligations under this Agreement or any of the other Project Documents to which the Design-Builder is a party;
- (k) neither the Design-Builder nor any of the Partners is not a party to or, nor to its knowledge, threatened with any litigation or Claims that, if successful, would materially adversely affect the financial condition of the Design-Builder or any of the Partners or the ability of the Design-Builder or any of the Partners to fulfil the Design-Builder's obligations under this Agreement or any of the other Project Documents to which the Design-Builder is a party;
- (l) the Partners are the only partners of the Design-Builder;
- (m) the information set out in Section 3.4 [Design-Builder Ownership Information] of Schedule 2 is true and accurate in all material respects;

- (n) the copies of the Material Subcontracts provided by the Design-Builder are true and accurate;
- (o) all of the Material Subcontractors and the Key Individuals are available to carry out their obligations under this Agreement in respect of the Project Work in accordance with this Agreement;
- (p) each of the Project Documents has been executed and delivered by all parties thereto other than the Province and BCTFA, the copies of the Project Documents that the Design-Builder has delivered to the Province and BCTFA are true and complete copies of such documents, and there are not in existence any other agreements or documents replacing or relating to any of the Project Documents which would materially affect the interpretation or application of any of the Project Documents;
- (q) neither the Design-Builder nor any of the Partners nor any of the Subcontractors, nor the employees of any of them, nor any other person for whom the Design-Builder is in law responsible, has, prior to the Effective Date, done or caused to be done any of the matters or things referred to in Section 4.4(b); and
- (r) neither the Design-Builder nor any of the Partners is currently subject to any charge, conviction, ticket, notice of defect or non-compliance, work order, pollution abatement order, pollution prevention order, remediation order or any other order or proceeding under any Environmental Laws that might reasonably be expected to have a material adverse effect on the performance by the Design-Builder and the Partners of the Design-Builder's obligations under this Agreement.

4.22 Without Prejudice

Any covenant, representation, warranty or undertaking made or given by the Design-Builder under any provision of this Agreement is without prejudice to or limitation of any covenant, representation, warranty or undertaking made or given by the Design-Builder under any other provision of this Agreement.

4.23 Survival of Representations and Warranties

All representations and warranties made or given by the Design-Builder under any provision of this Agreement or in any certificate or other document delivered by or on behalf of the Design-Builder at the time of execution of this Agreement are given at the date of execution of this Agreement and shall, unless expressly provided otherwise, survive the execution and delivery of this Agreement and the other Project Documents and are not mitigated or affected by any investigation by or on behalf of the Province or BCTFA.

PART 5 [NOT USED]

**PART 6
INSURANCE, DAMAGE AND DESTRUCTION**

6.1 Insurance Coverages

The Design-Builder shall take out, maintain in force, pay for and renew, or cause to be taken out, maintained in force, paid for and renewed, from Qualified Insurers, insurance for the Project as set out in Schedule 15 [Insurance Requirements] and in accordance with this Part 6, such insurance to be taken out at least five Business Days before, and so that it is in effect from, the commencement of the applicable period of time during which the insurance is required (and for clarity the insurance need not take effect until such commencement). The Design-Builder shall also take out, maintain in force, pay for and renew, or cause to be taken out, maintained in force, paid for and renewed, throughout the Term, from Qualified Insurers, all other insurance as may be required to be taken out from time to time in respect of all or any of the Project Work, the Project Site and/or the Project Infrastructure in accordance with any Laws or any Project Site Agreements and Project Site Encumbrances.

6.2 Province's Right to Insure

If the Design-Builder fails or refuses to obtain or maintain in force any Required Insurance, or to provide evidence of such insurance and renewals in relation thereto as and when required and in accordance with this Part 6, the Province shall, without prejudice to any of its other rights under this Agreement or otherwise, have the right (but not the obligation) itself to procure such insurance, in which event the Design-Builder shall pay to the Province on demand any amounts paid by the Province for that purpose together with an administrative fee equal to 15% of such amounts. Any administrative fee charged under this Section 6.2 shall not be in duplication of any administrative fee charged under Section 12.3(c) in respect of the same costs and expenses.

6.3 Particular Requirements of Policies

In addition to the requirements of Schedule 15 [Insurance Requirements] and without limiting the generality of the other provisions of this Part 6, the policies for the insurance required by Section 6.1 [Insurance Coverages] must comply with the following:

- (a) all policies of insurance must comply with Section 6.18 [Application of Proceeds of Insurance] and Schedule 15 [Insurance Requirements] as to the named insureds, additional named insureds, additional insureds and loss payees under such policies, as applicable;
- (b) all policies must be issued in the English language and governed by the laws of British Columbia and the laws of Canada applicable therein, or such other laws as may be acceptable to the Province in its discretion; and
- (c) all policies of insurance under which the Province or BCTFA is insured or is required to be insured must contain an endorsement to the effect that the policies will not be invalidated and coverage thereunder will not be denied for the Province or BCTFA or any other insureds (other than the Design-Builder, the Design-Builder Indemnified Persons and persons for whom the Design-Builder is in law responsible) by reason of any breach or violation of warranties, representations, declarations or conditions contained in the policies by the Design-Builder, any of the Design-Builder Indemnified Persons, or any person for whom the Design-Builder is in law responsible.

6.4 Deductibles

- (a) Subject to Section 6.4(b), if any policies for the Required Insurance or any other insurance required to be taken out by Section 6.1 [Insurance Coverages] provide that the amount payable in the event of any claim, loss or liability shall be reduced by a deductible amount or subject to a waiting period, then the Design-Builder shall be responsible for any such deductible amount and/or waiting period and, in the event of any claim, loss or liability, the Design-Builder shall be responsible for and shall pay, and shall indemnify and hold harmless the Province and the Province Indemnified Persons and each of them in respect of, the amount not paid by the insurer to any of them as a result of any such deductible amount and/or waiting period.
- (b) The Province will be responsible for any deductible amount or waiting period provided for in any policies of Required Insurance (not exceeding the maximum deductible or waiting period set out for such policy in Schedule 15 [Insurance Requirements]) in the event of:
 - (i) any claim, loss or liability to the extent arising from a Province Non-Excusable Event; and
 - (ii) to the extent provided in Sections 8.10B(b) and 8.10B(c), damage caused by Landslides (other than Excluded Landslides).

6.5 Design-Builder Insurance Primary

The Design-Builder must ensure that all the Required Insurance is primary and not excess to any insurance of the Province or BCTFA, or any of the other additional named insureds, and does not require the sharing of any loss by the Province or BCTFA, or by any insurance of the Province or BCTFA.

6.6 Release of the Province for Insured Loss

- (a) Subject to Section 6.6(b), the Design-Builder, for itself and its successors and assigns, hereby releases the Province and BCTFA and those persons for whom the Province is in law responsible, and their successors and assigns, from any and all financial liability for:
 - (i) damage to any property or any other loss required to be insured by the Required Insurance or actually insured by the Design-Builder or any Subcontractor (whether or not required to be insured by the Required Insurance); and
 - (ii) any delay in start up, business interruption, extra expense, loss of income and loss of profit related thereto;

caused by any of the perils against which the Design-Builder or any Subcontractor has insured or against which by the terms of this Agreement the Design-Builder is required to insure or to procure insurance, and whether or not such loss or damage may have arisen out of any act, omission or negligence of the Province or BCTFA or any person for whom the Province is in law responsible.

- (b) The release in Section 6.6(a) shall not apply to the extent that both:
 - (i) the Province would, but for Section 6.6(a), be liable under this Agreement in respect of the damage to property or other loss required to be insured by the Required Insurance; and
 - (ii) the amount of the relevant loss exceeds the amount of insurance required to be obtained under Schedule 15 [Insurance Requirements] in respect of such property or other loss.

6.7 Compliance with Policies

- (a) The Design-Builder shall comply with the terms, conditions and requirements of all policies for the Required Insurance, shall not do or omit to do, or permit to be done or omitted by any person for whom the Design-Builder is in law responsible or, insofar as it is within its power or the power of any of its Subcontractors, any other person (other than the Province, BCTFA and persons for whom the Province is in law responsible), anything on or with respect to the Project Site or the Project Infrastructure or with respect to the Project Work that could result in or could reasonably be expected to result in the cancellation of any Required Insurance or that would entitle any insurer to refuse to pay any claim under the policy for any Required Insurance or that would diminish the value of any claim under the policy of Required Insurance.
- (b) Provided the Province has been provided with copies of the policies of Required Insurance, neither the Province nor BCTFA shall do, or permit to be done by any person for whom the Province is in law responsible, anything on or with respect to the Project Site or the Project Infrastructure (excluding lawful acts of the Province or BCTFA required or permitted under this Agreement) that could result in or reasonably be expected to result in the cancellation of any Required Insurance or that would entitle any insurer to refuse to pay any claim under the policy for any Required Insurance or that would diminish the value of any claim under the policy of Required Insurance.

6.8 Evidence of Insurance

- (a) The Design-Builder shall provide to the Province's Representative at least 10 Business Days before the Effective Date, drafts of a cover note and a certificate of insurance for each policy for the Required Insurance. Each cover note and certificate of insurance must be in a form and to be signed by an authorized signatory of the insurers or of the insurers' insurance broker or insurance intermediary satisfactory to the Province, and must be sufficient to confirm the insurance and the terms and conditions thereof, as required by this Agreement, and, for such purposes, the Design-Builder shall cause the cover note and the certificate of insurance to be revised as the Province may require.
- (b) At least five Business Days before the Effective Date, the Design-Builder shall deliver to the Province's Representative, for each policy for any Required Insurance, the cover note and certificate of insurance for the policy, as provided in draft to the Province's Representative pursuant to Section 6.8(a), and as revised as required by the Province pursuant to Section 6.8(a), signed by an authorized signatory of the insurers or of the insurers' insurance broker or insurance intermediary satisfactory to the Province,

confirming that the insurance has been obtained and will on or before the required date be in full force and effect, in each case together with:

- (i) evidence satisfactory to the Province that the deposit premiums payable therefor have been paid; and
 - (ii) where the premium for any policy is not fully paid prior to such date, a statement to that effect certified by the Design-Builder setting out the due dates for payment of the remaining premiums and the amount payable on each due date.
- (c) Not later than five Business Days after each due date referred to in Section 6.8(b)(ii), the Design-Builder shall provide to the Province's Representative evidence satisfactory to the Province that the premiums due on that due date have been paid and that the insurance has not been cancelled and is not susceptible to cancellation for non-payment of such premiums.
- (d) The Design-Builder shall provide to the Province's Representative certified copies of all policies of insurance, certified by the insurer or its agent, within 90 days after the date the insurance is required to be in effect under this Agreement.
- (e) The Design-Builder shall provide such additional evidence of compliance with this Part 6 as may be requested by the Province from time to time.

6.9 Renewal

- (a) At least 10 Business Days before the expiration or cancellation of any policy for any Required Insurance, unless such policy is no longer required by the terms of this Part 6 and Schedule 15 [Insurance Requirements], the Design-Builder shall provide to the Province's Representative drafts of a cover note and a certificate of insurance for the renewal or replacement of such policy. Each cover note and certificate of insurance must be in a form and to be signed by an authorized signatory of the insurers or of the insurers' insurance broker or insurance intermediary satisfactory to the Province, and must be sufficient to confirm the insurance and terms and conditions thereof, as required by this Agreement, and, for such purposes, the Design-Builder shall cause the cover note and the certificate of insurance to be revised as the Province may require.
- (b) At least five Business Days before the expiration or cancellation of any policy to be renewed or replaced as provided in Section 6.9(a), the Design-Builder shall deliver to the Province's Representative, for each such policy, the cover note and certificate of insurance for the renewal or replacement of the policy, as provided in draft to the Province's Representative pursuant to Section 6.9(a), and as revised as required by the Province pursuant to Section 6.9(a), signed by an authorized signatory of the insurers or of the insurers' insurance broker or insurance intermediary satisfactory to the Province, confirming that the insurance has been obtained and will be in full force and effect at or before the time of expiry or cancellation of the policy being renewed or replaced, in each case together with:
- (i) evidence satisfactory to the Province that the deposit premiums payable therefor have been paid; and

- (ii) where the premium for the renewal or replacement of any policy is not fully paid prior to the expiration or cancellation of any policy to be renewed or replaced, a statement to that effect certified by the Design-Builder setting out the due dates for payment of the remaining premiums and the amount payable on each due date.
- (c) Not later than five Business Days after each due date referred to in Section 6.9(b)(ii), the Design-Builder shall provide to the Province's Representative evidence satisfactory to the Province that the premiums due on that due date have been paid and that the insurance has not been cancelled and is not susceptible to cancellation for non-payment of such premiums.

6.10 Copies of Communications

At the time the Design-Builder provides to the Province's Representative any submittal, notice or other communication with respect to insurance under this Part 6 or Schedule 15 [Insurance Requirements], the Design-Builder shall at the same time provide a copy of such submittal, notice or other communication and a copy of all documents and enclosures therewith, to "The Corporate Insurance and Bonds Manager" at Ministry of Transportation and Infrastructure, P.O. Box 9850 STN Prov Govt, 4th Floor, 940 Blanshard Street, Victoria, BC, V8W 9T5 (or at such other address as the Province may from time to time by notice to the Design-Builder advise).

6.11 Review of Insurance by Province

Without limiting Section 2.13 [Review, Approval, Inspection and Audit by the Province], the submission or delivery to the Province's Representative, and the receipt, review, approval or acceptance by the Province or the Province's Representative of any insurance policy or any draft or certified copy of an insurance policy or any certificate of insurance, cover note or other evidence of compliance with this Part 6 and Schedule 15 [Insurance Requirements], shall not, irrespective of whether any objection is made thereto by the Province:

- (a) imply any acceptance by the Province or BCTFA that the extent of the insurance coverage is sufficient or that the terms and conditions thereof are satisfactory, in either case for the purposes of the Project or this Agreement; or
- (b) relieve or exempt or be deemed to relieve or exempt the Design-Builder or any other person from any of its obligations and liabilities under this Agreement or any of the other Province Project Documents or at law or in equity including its obligations to insure as provided in this Part 6 [Insurance, Damage and Destruction] and Schedule 15 [Insurance Requirements]; or
- (c) derogate from, limit or prejudice any rights of the Province under this Agreement.

6.12 Workers' Compensation Coverage

The Design-Builder shall at all times during the Term carry and pay for or cause to be carried and paid for full workers' compensation coverage of all workers, employees and others engaged in the performance of the Project Work. The Design-Builder shall, at the request of the Province from time to time, provide to the Province's Representative evidence satisfactory to the Province that such coverage is in effect and that all assessments payable under the WCA in respect of the Project have been paid.

6.13 Claims

- (a) The Design-Builder shall maintain a written register of all claims and incidents which might result in a claim under any of the policies of Required Insurance and shall allow the Province to inspect such register at any time on reasonable notice.
- (b) The Design-Builder shall in addition notify the Province within five Business Days after making any claim under any of the policies for the Required Insurance where the value of the claim exceeds \$25,000 or (regardless of the value of the claim) the claim involves bodily injury or death, accompanied by full particulars of the incident giving rise to the claim.
- (c) In the event of any claim or loss to which any Required Insurance may apply, the Design-Builder shall, and shall ensure that the relevant insured (other than the Province and BCTFA) shall, promptly and diligently notify all applicable insurers, file all required proofs of claim, supply to the insurers and adjusters all required documents and information, and generally execute and deliver all documents and do all acts and things that may be required to obtain the benefit of the insurance for the insureds thereunder including the additional named insureds and additional insureds.
- (d) Each party shall have the right, as its interest may appear, to be a party to and to participate in any claims settlement under any policy of property insurance insuring the Project Infrastructure or any part thereof required by this Agreement to be part of the Required Insurance, and to make and submit its own claim with respect to any loss or damage separately from any claim of any other party or any other person.

6.14 Insurance Not to Prejudice

Neither full compliance by the Design-Builder nor a failure to comply by the Design-Builder with the requirements of this Part 6 [Insurance, Damage and Destruction] shall derogate from, limit or prejudice any rights of the Province under this Agreement or relieve the Design-Builder from any of its other obligations or liabilities under this Agreement.

6.15 Restoration and Reinstatement of Damage or Destruction

Unless this Agreement is terminated in accordance with its terms (including under Section 8.6 [Termination for Force Majeure Event] or Section 8.7 [Termination for Damage or Destruction]), if all or any part of the Project Infrastructure or the Project Site is damaged or destroyed, the Design-Builder shall restore, replace and reinstate such damage or destruction (the “**Reinstatement Work**”) promptly and in any event as soon as practicable in the circumstances. Except as otherwise expressly provided in this Agreement, damage to or destruction of all or any part of the Project Infrastructure or the Project Site shall not terminate this Agreement or relieve the Design-Builder of any of its obligations under this Agreement or entitle the Design-Builder to any compensation from the Province or BCTFA.

6.16 Reinstatement Plan

If all or any part of the Project Infrastructure or the Project Site is damaged or destroyed, in addition to the requirements of Section 8.6 [Termination for Force Majeure Event] or Section 8.7 [Termination for Damage or Destruction], if the Reinstatement Work is reasonably estimated to cost more than \$10,000,000 or in any other case where the Province, having regard to the nature of the

damage or destruction, notifies the Design-Builder that a Reinstatement Plan is required (excluding where the damage or destruction occurs before the Total Completion Date and the Province considers that the continued application of the Design and Certification Procedure would be able to adequately address the Reinstatement Work without the need for a separate Reinstatement Plan), the Design-Builder shall, as soon as practicable and in any event within 20 Business Days after the occurrence of the damage or destruction or receipt of notification from the Province, as the case may be, (or if, with the exercise of all due diligence, more than 20 Business Days is reasonably required for such purposes, then within such longer period of time after the occurrence of such damage or destruction or receipt of notification from the Province, as the case may be, as may be reasonably required with the exercise of all due diligence, provided the Design-Builder exercises and continues to exercise all such due diligence) submit to the Province's Representative pursuant to the Consent Procedure a plan (a "**Reinstatement Plan**") prepared by the Design-Builder for carrying out the Reinstatement Work setting out, in reasonable detail, *inter alia*:

- (a) a description of the Reinstatement Work required to restore, replace and reinstate the damage or destruction (in accordance, where applicable, with any Province Change issued in respect thereof);
- (b) an estimate of the cost to carry out the Reinstatement Work and confirmation of whether or not there are sufficient funds available to the Design-Builder from all sources, including letters of credit, construction or other security, insurance proceeds, deductibles for which the Design-Builder is responsible in accordance with this Agreement, recourse against third parties, amounts required to be paid by the Province to the Design-Builder pursuant to Section 8.3(b) or otherwise under this Agreement, to allow the Design-Builder to complete the Reinstatement Work;
- (c) the Design-Builder's proposed schedule for the execution of the Reinstatement Work;
- (d) the proposed terms upon which the Reinstatement Work is to be effected and, if the Reinstatement Work is to be effected by a third party, the procurement procedure which the Design-Builder proposes to implement to procure the execution of the Reinstatement Work, provided that, if required by the Province in order to comply with applicable Competitive Procurement Requirements, the execution of the Reinstatement Work shall be procured through a competitive procedure designated by the Province and conducted under the supervision of the Province;
- (e) the Design-Builder's proposal for any amended Project Schedule and/or Works Schedule necessary to accommodate the proposed schedule for the execution of the Reinstatement Work (which proposal shall be dealt with in accordance with the provisions of Schedule 3 [Project Schedule], as applicable); and
- (f) the Design-Builder's proposal for any related amendment to the Traffic Management Plan required in connection with the execution of the Reinstatement Work;

and except to the extent necessary to address any emergency or public safety needs, the Reinstatement Work must not be commenced until the Reinstatement Plan has been accepted by the Province in accordance with the Consent Procedure.

6.17 Conduct of Reinstatement Work

The Design-Builder shall carry out the Reinstatement Work in accordance with the Project Requirements and all other applicable requirements under this Agreement and, where applicable, in accordance with the Reinstatement Plan accepted by the Province in accordance with the Consent Procedure. All designs, plans and specifications in respect of the Reinstatement Work shall be subject to the Design and Certification Procedure.

6.18 Application of Proceeds of Insurance

The Design-Builder shall ensure that the insurers under any of the policies of Required Insurance pay the proceeds of insurance under such policies as follows:

- (a) in the case of any policy for the insurance referred to in any of Sections 1.1 [Third Party Liability Insurance During Construction], 1.3 [Automobile Insurance] and 2.1 [Insurance – Operation and Maintenance] of Schedule 15, the proceeds of insurance shall be paid directly to the third party or, where any insured party has discharged the relevant liability to the third party prior to the payment of any relevant insurance proceeds, to the insured party who discharged the relevant liability;
- (b) in the case of any policy for the insurance referred to in Section 1.4(a) of Schedule 15 [Insurance Requirements] (excluding any delay in start up, extra expense, business interruption, loss of income or loss of profits insurance proceeds payable under any such policy), the proceeds of insurance shall be paid to the Province as first loss payee, except where:
 - (i) the Design-Builder has already Totally Completed the Reinstatement Work in respect of the damage or destruction that gave rise to the proceeds; or
 - (ii) the insurance proceeds payable in respect of any single claim made under the relevant insurance policy is equal to or less than \$15,000,000;

in either of which cases the Province shall direct that the proceeds be paid directly to the Design-Builder or the relevant insured; provided that, where the proceeds of any such insurance policy (other than any delay in start up, extra expense, business interruption or loss of profits insurance policy proceeds payable to the Design-Builder) are paid to the Design-Builder in respect of any single claim equal to or less than \$15,000,000, the Design-Builder shall ensure that such proceeds are applied to the Reinstatement Work in respect of the damage or destruction that gave rise to the proceeds and not for any other purpose; and provided further that, where the proceeds of such policies of insurance are payable in whole or in part to the Province pursuant to this Section 6.18(b) (such proceeds, together with any interest, distribution or other gain from time to time received by the Province in respect thereof are called the “**Property Damage Insurance Proceeds**”), then either Section 6.18(c) or Section 6.18(d) as applicable shall apply;

- (c) if the Design-Builder has, in accordance with the provisions of the relevant Reinstatement Plan, entered into a contract with a third party for the purpose of carrying out the Reinstatement Work in respect of the damage or destruction that gave rise to Property Damage Insurance Proceeds being paid by insurers to Province:

- (i) if, in accordance with such contract, the Design-Builder is required to make a payment to such third party for such purpose, and if the Design-Builder submits to the Province's Representative pursuant to the Review Procedure:
 - (A) a copy of an invoice from such third party to the Design-Builder for payment of the cost of such Reinstatement Work;
 - (B) such supporting documentation and detail as may be required by the Province with respect to the Reinstatement Work that is the subject of the invoice and the cost thereof including documents and information to establish and verify the applicable matters to be considered in accordance with Section 2.6 of Schedule 2 [Representatives, Review Procedure and Consent Procedure] in respect of the Reinstatement Work and the Property Damage Insurance Proceeds;
 - (C) standard Ministry evidence (or other evidence satisfactory to the Province) that the provisions of Section 5.10 [Compliance with *Builders Lien Act* and Payments to Contractors] of Schedule 8 and Section 6.12 [Workers' Compensation Coverage] have been complied with in respect of the Reinstatement Work and that there are no outstanding builders' liens or claims therefor in respect of such Reinstatement Work; and
 - (D) written confirmation of the Design-Builder addressed to the Province that the amount of the invoice is justly due and payable in accordance with the relevant contract and that the Design-Builder requires such invoice to be discharged out of the Property Damage Insurance Proceeds,

then the Province shall, not later than the later of:

- (E) the date that is five Business Days after the date on which there has been (or deemed to have been) no objection by the Province under the Review Procedure to the submittal referred to in Sections 6.18(c)(i)(A) to (D) inclusive; and
- (F) the date that is seven Business Days prior to the due date for payment of such invoice by the Design-Builder under the terms of the relevant contract,

pay to the relevant third party, out of the Property Damage Insurance Proceeds paid to the Province on account of the damage or destruction to which the Reinstatement Work relates, an amount equal to the lesser of the amount of such Property Damage Insurance Proceeds paid to the Province and the amount of such invoice; and

- (ii) upon the issuance of a Certificate of Total Completion in respect of the Reinstatement Work pursuant to the Design and Certification Procedure, if the Design-Builder submits to the Province's Representative pursuant to the Review Procedure:

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- (A) a copy of the Certificate of Total Completion in respect of such Reinstatement Work;
- (B) an invoice for payment to the Design-Builder of the balance (if any) of any such Property Damage Insurance Proceeds; and
- (C) standard Ministry evidence (or other evidence satisfactory to the Province) that the provisions of Section 5.10 [Compliance with *Builders Lien Act* and Payments to Contractors] of Schedule 8 and Section 6.12 [Workers' Compensation Coverage] have been complied with in respect of the Reinstatement Work and that there are no outstanding builders' liens or claims therefor in respect of such Reinstatement Work,

the Province shall, subject to any specific requirements of the insurers, within five Business Days after the date on which there has been (or deemed to have been) no objection by the Province under the Review Procedure to the submittal referred to in Sections 6.18(c)(ii)(A) to (C) inclusive, pay to the Design-Builder the balance (if any) of the Property Damage Insurance Proceeds paid to the Province on account of the damage or destruction to which the Reinstatement Work relates;

- (d) if the Design-Builder itself, in accordance with the provisions of the relevant Reinstatement Plan, carries out the Reinstatement Work in respect of which the Insurance Proceeds have been paid to the Province, then:
 - (i) if the Design-Builder submits to the Province's Representative pursuant to the Review Procedure:
 - (A) a certificate from the Design-Builder addressed to the Province confirming in writing the amount of the Property Damage Insurance Proceeds claimed by the Design-Builder, based on the value of the Reinstatement Work carried out by the Design-Builder;
 - (B) such supporting documentation and detail as may be required by the Province with respect to the Reinstatement Work that is the subject of the invoice and the cost thereof (which may include a Mark-up for overhead and profit in accordance with Section 2.4 [Valuation of Change in Costs] of Schedule 11) including documents and information to establish and verify the applicable matters to be considered in accordance with Section 2.6 of Schedule 2 [Representatives, Review Procedure and Consent Procedure] in respect of the Reinstatement Work and the Property Damage Insurance Proceeds;
 - (C) standard Ministry evidence (or other evidence satisfactory to the Province) that the provisions of Section 5.10 [Compliance with *Builders Lien Act* and Payments to Contractors] of Schedule 8 and Section 6.12 [Workers' Compensation Coverage] have been complied with in respect of the Reinstatement Work and that there are no outstanding builders' liens or claims therefor in respect of such Reinstatement Work; and

- (D) written confirmation from the Design-Builder addressed to the Province that the amount of the certificate is justly due and payable in accordance with this Agreement and that the Design-Builder requires such certificate to be discharged out of the Property Damage Insurance Proceeds,

then the Province shall, within five Business Days after the date on which there has been (or deemed to have been) no objection by the Province under the Review Procedure to the submittal referred to in Section 6.18(d)(i)(A) to (D) inclusive, pay to the Design-Builder, out of the Property Damage Insurance Proceeds paid to the Province on account of the damage or destruction to which the Reinstatement Work relates, an amount equal to the lesser of the amount of such Property Damage Insurance Proceeds paid to the Province and the amount claimed in such certificate; and

- (ii) upon the issuance of a Certificate of Total Completion in respect of the Reinstatement Work pursuant to the Design and Certification Procedure, if the Design-Builder submits to the Province's Representative pursuant to the Review Procedure:
 - (A) a copy of the Certificate of Total Completion in respect of such Reinstatement Work;
 - (B) an invoice for payment to the Design-Builder of the balance (if any) of any such Property Damage Insurance Proceeds; and
 - (C) standard Ministry evidence (or other evidence satisfactory to the Province) that the provisions of Section 5.10 [Compliance with *Builders Lien Act* and Payments to Contractors] of Schedule 8 and Section 6.12 [Workers' Compensation Coverage] have been complied with in respect of the Reinstatement Work and that there are no outstanding builders' liens or claims therefor in respect of such Reinstatement Work,

the Province shall, subject to any specific requirements of the insurers, within five Business Days after the date on which there has been (or deemed to have been) no objection by the Province under the Review Procedure to the submittal referred to in Sections 6.18(d)(ii)(A) to (C) inclusive, pay to the Design-Builder the balance (if any) of the Property Damage Insurance Proceeds paid to the Province on account of the damage or destruction to which the Reinstatement Work relates; and

- (e) in the case of any insurance other than that referred to in Sections 6.18(a) and (b), proceeds shall be paid so as to ensure the performance by the Design-Builder of its obligations under this Agreement. Proceeds of delay in start up insurance and business interruption insurance may be used to pay the Design-Builder's debt service and other costs incurred by the Design-Builder covered by such insurance and if so paid shall be deemed to have been paid to ensure the performance by the Design-Builder of its obligations under this Agreement.

6.19 Repayment of Insurance Proceeds

The Design-Builder hereby undertakes that if, following payment to the Design-Builder or to a third party at the request of or on behalf of the Design-Builder as contemplated by Sections 6.18(c) and (d), the Province receives a *prima facie* valid demand from the relevant insurer for all or any part of the Property Damage Insurance Proceeds, the Design-Builder shall, if and to the extent that such demand arises or results (directly or indirectly) from any Design-Builder Non-Excusable Event, pay to the insurer the amount demanded within the time period stated in the demand.

6.20 Proceeds of Property Insurance if Agreement Terminated

If this Agreement is terminated, all proceeds of any property insurance that is required as part of the Required Insurance (excluding the insurance required by Section 1.4(b) of Schedule 15 [Insurance Requirements]), to the extent such proceeds have not been used to pay the cost of, or are not owed in respect of, Reinstatement Work in respect of the loss or damage in respect of which such proceeds were payable, shall be paid to and retained by the Province as its sole property, and for such purposes the Province and the Design-Builder shall sign all such documents and do all such things as may be reasonably required for such proceeds to be paid to the Province by insurers.

6.21 Alternate Risk Financing Measures

From time to time during the Term, the Province may, but will not be obliged to, pursue and implement, subject to and in accordance with the provisions of Part 7 [Province Changes and Design-Builder Proposals] and Schedule 11 [Changes], alternate risk financing measures for the Project if the Province considers in its discretion that such alternate measures would result in coverage substantially similar to the insurance coverages described in Schedule 15 [Insurance Requirements] being obtained in a more cost efficient manner.

PART 7 PROVINCE CHANGES AND DESIGN-BUILDER PROPOSALS

7.1 Province Changes

The Province may, at any time during the Term, require Province Changes (including Minor Works under Section 7.3(a)) subject to and in accordance with the provisions of this Part 7 and Schedule 11 [Changes], and the Design-Builder shall be entitled to apply for relief from its obligations or claim compensation under this Agreement, or both, to the extent, if any, provided in this Part 7 and such Schedule.

7.2 Design-Builder Proposals

The Design-Builder may, at any time during the Term:

- (a) submit the Design-Builder Proposals (either as Minor Works under Section 7.3(b) or as Value Engineering Proposals under Section 7.4 [Value Engineering Proposals]) for consideration by the Province subject to and in accordance with the provisions of this Part 7 and Schedule 11 [Changes], provided that the Province shall not be required to consider any Design-Builder Proposal unless and until the Design-Builder provides to the Province's Representative sufficient information to enable the Province to adequately consider and evaluate such Design-Builder Proposal; and

- (b) request that the Province consider, in its discretion, initiating as a Province Change any other matter, provided that, if the Design-Builder becomes aware that any element of the Project Requirements does not comply with and satisfy the specific requirements of any of paragraphs (a), (b), (c), (e) or (f) of Section 4.1 [Design-Builder to Carry Out Project Work], the Design-Builder shall so notify the Province's Representative prior to complying with such specific requirements and shall, in the case of any such discrepancy arising after the Effective Date, request that the Province initiate as a Province Change an amendment to the Project Requirements so that they comply with and satisfy such specific requirements.

7.3 Minor Works

If at any time during the Term:

- (a) the Province initiates a Province Change that:
 - (i) does not require any material amendment to this Agreement (other than any specific amendment of the Project Requirements to which such Province Change relates); or
 - (ii) will not negatively affect any date set out in the Project Schedule; and
 - (iii) sets out in the proposal a Minor Works Valuation that, when added to the aggregate of all of the Minor Works Valuations for all of the other prior Minor Works initiated by the Province, cannot reasonably be expected to exceed \$10,000,000; or
- (b) the Design-Builder establishes to the satisfaction of the Province, acting reasonably, that a Design-Builder Proposal initiated by the Design-Builder under Section 7.2(a):
 - (i) does not require any material amendment to this Agreement (other than any specific amendment of the Project Requirements to which such Design-Builder Proposal relates); and
 - (ii) has a Minor Works Valuation of less than or equal to zero,

then such Province Change or the Design-Builder Proposal, as the case may be, shall be considered “**Minor Works**” and shall be prepared and evaluated in accordance with the provisions of Part 1 [Minor Works] of Schedule 11.

7.4 Value Engineering Proposals

The Design-Builder may initiate the Design-Builder Proposals as “**Value Engineering Proposals**” to be prepared and evaluated in accordance with Part 3 [Value Engineering Proposals] of Schedule 11.

7.5 Responsibility for Province Changes and Design-Builder Proposals

The Design-Builder shall not be entitled to any payment, compensation, extension of time or other relief for a Province Change or the Design-Builder Proposal except (in the case of Minor Works) in

accordance with Section 1.2(c) of Schedule 11 [Changes] or (in the case of other Province Changes) to the extent provided in a Change Certificate issued in accordance with Schedule 11 [Changes].

7.6 Payments in Respect of Province Changes and Design-Builder Proposals

Any payments between the Province and the Design-Builder and any adjustments to the payments to be made under this Agreement in respect of Province Changes or the Design-Builder Proposals shall be made in accordance with Part 10 [Payments].

PART 8 SUPERVENING EVENTS

8.1 Supervening Events

(a) If, in the case of:

- (i) the Design-Builder, a Compensation Event or Relief Event occurs; or
- (ii) either the Province or the Design-Builder, a Force Majeure Event occurs,

then if and to the extent that such event interferes adversely with, or causes a failure of, or prevents, the performance of, in the case of the Design-Builder, the Project Work or, in the case of the Province, any obligation under this Agreement, then, subject to Section 8.1(b), the affected or entitled party (the “**Applicant**”) may apply for relief from its obligations, apply for extensions of time, claim compensation and/or claim a termination right under this Agreement to the extent provided in this Part 8.

(b) Notwithstanding any other provision of this Part 8, an Applicant shall only be entitled to relief from its obligations, extensions of time, compensation and/or a termination right under this Agreement in accordance with this Part 8 in respect of a Supervening Event:

(i) in the case of a claim of any Supervening Event by the Design-Builder other than a No Threshold Compensation Event, if the interference with, failure of or prevention of the Project Work referred to in Section 8.1(a) arising from such Supervening Event is in respect of either or both the Design and the Construction, and such Supervening Event is either:

(A) one of the first four Supervening Events claimed by the Design-Builder and determined in accordance with this Part 8 to have occurred in any Contract Year from the Effective Date until the Substantial Completion Date (or portion of such Contract Year in the case of the first and last Contract Years which commence during such period), each of which has resulted in either or both of the following:

- (1) a Change in Costs in respect of the Design or the Construction of greater than \$75,000; or
- (2) a delay of three or more days to the occurrence of either or both of the Substantial Completion Date or the Total Completion Date; or

- (B) claimed by the Design-Builder in a Contract Year (or portion thereof in the case of the first and last Contract Years commencing in the period referred to in Section 8.1(b)(i)(A)) after four other Supervening Events meeting the requirements of this Part 8, including Section 8.1(b)(i)(A), have occurred;
- (ii) if and to the extent that such Supervening Event is not caused by, could not reasonably have been prevented by and is beyond the reasonable control of the Applicant or any person for whom the Applicant is in law responsible;
- (iii) in the case of any claim of a Supervening Event by the Design-Builder, if and to the extent that such Supervening Event and/or the effect thereof is not required by the Project Requirements to be contemplated or taken into account in the Design of the Project Infrastructure;
- (iv) if and to the extent that such Supervening Event and/or the effect thereof does not result from or is not contributed to by, directly or indirectly:
 - (A) in the case of a claim of any Supervening Event by the Design-Builder, any Design-Builder Non-Excusable Event; or
 - (B) in the case of a claim of a Force Majeure Event by the Province, any Province Non-Excusable Event; and
- (v) if the Applicant provides a Supervening Event Notice in respect of such Supervening Event pursuant to Section 8.2(a) no more than 12 months after the date of the occurrence or commencement of such Supervening Event.
- (c) Nothing in this Part 8 shall limit the Province's right to request a Province Change pursuant to Section 7.1 [Province Changes] in response to the occurrence of any Supervening Event, including a Province Change to give to the Design-Builder instructions to accelerate construction or take other steps to avoid any delay or impediment, or reduce the period of any future delay or mitigate the effect of any future impediment, resulting from such Supervening Event. Subject to a cancellation of such request for a Province Change as a result of the successful exercise by the Design-Builder of its rights in accordance with Section 4.2 [Design-Builder Objection] of Schedule 11, in the event that the Province requests such a Province Change the procedures in respect of such Supervening Event set out in this Part 8 shall terminate and the matter shall be fully determined in accordance with Part 7 [Province Changes and the Design-Builder Proposals] and Schedule 11 [Changes], provided that the Supervening Event and its consequences (as such consequences may be affected by the Province Change) shall be dealt with as part of the resulting Province Change.

8.2 Procedures Upon Occurrence of a Supervening Event

The following procedures shall apply if a Supervening Event occurs:

- (a) as soon as practicable, and in any event within five Business Days after the Applicant has knowledge that the Supervening Event has caused, or is reasonably likely to cause, an entitlement under this Part 8, the Applicant shall give to the Province, where the

Applicant is the Design-Builder, or the Design-Builder, where the Applicant is the Province, a notice (“**Supervening Event Notice**”) identifying the particular Supervening Event and summarizing, to the extent the Applicant has knowledge thereof, the consequences and the nature of the Applicant’s claim;

- (b) following the delivery of a Supervening Event Notice, as soon as practicable, and in any event within 30 Business Days after the delivery of the Supervening Event Notice, the Applicant shall give to the Province, where the Applicant is the Design-Builder, or the Design-Builder, where the Applicant is the Province,:
 - (i) any additional details or information, including available supporting documentation, in support of its claim in respect of the occurrence of the Supervening Event; and
 - (ii) if applicable, a detailed breakdown of all estimated Direct Losses that have been, will be or are reasonably likely to be incurred by the Applicant as a result of the Supervening Event; and
 - (iii) all other relevant information which would be required to be included in a Change Report under Section 2.3 [Preparation of Change Report] of Schedule 11 if such Supervening Event was a Province Change;
- (c) if a Supervening Event for which a Supervening Event Notice has been delivered ceases, the Applicant shall give to the Province, where the Applicant is the Design-Builder, or the Design-Builder, where the Applicant is the Province, as soon as practicable notice thereof and of when performance of its affected obligations can be resumed;
- (d) a party may not make multiple or duplicative claims in respect of any Supervening Event, and the relief, extensions of time, compensation and/or termination right in respect of a Supervening Event as is agreed to by the parties or otherwise determined in accordance with the Dispute Resolution Procedure pursuant to Section 8.2(h)(i)(B) shall be the only relief, extensions of time, compensation and/or termination right to which the Applicant shall be entitled in respect of such Supervening Event;
- (e) the other party shall provide the Applicant any information reasonably requested by the Applicant in order for the Applicant to make its claim;
- (f) where the claim in respect of a Supervening Event includes Claims to which Section 9.9 [Conduct of Claims Indemnified by the Province] applies, such Claims shall be subject to the provisions of Section 9.9 [Conduct of Claims Indemnified by the Province] and otherwise the claim in respect of such Supervening Event shall be subject to the provisions of this Part 8;
- (g) the Applicant shall demonstrate to the reasonable satisfaction of the Province, where the Applicant is the Design-Builder, or the Design-Builder, where the Applicant is the Province, that:
 - (i) the applicable criteria required under Section 8.1(b) have been met;

- (ii) the Supervening Event has caused or will cause the Applicant to suffer the effects from which or for which the Applicant seeks relief, extensions of time, compensation and/or a termination right under this Part 8; and
 - (iii) it has complied with its mitigation obligations under Section 3.1 [Mitigation By Province] or Section 4.10 [Mitigation By Design-Builder], as applicable; and
- (h) following the delivery of a Supervening Event Notice under Section 8.2(a):
- (i) the Province and the Design-Builder shall consult and seek to agree to the effect of the relevant Supervening Event, provided that either of them may submit for resolution in accordance with the Dispute Resolution Procedure the question of:
 - (A) whether such Supervening Event has occurred, if within 10 Business Days following the delivery of the Supervening Event Notice the Province and the Design-Builder have not agreed to the occurrence of such Supervening Event; and/or
 - (B) the extent of relief, extensions of time and/or compensation to which the Applicant is entitled, if within 20 Business Days following the exchange of all relevant information required under this Section 8.2, the Province and the Design-Builder have not agreed to the extent of such relief, extensions of time and/or compensation; and
 - (ii) without limiting the obligations set out in Section 4.10 [Mitigation By Design-Builder], if the Applicant is the Design-Builder and while the relevant Supervening Event is continuing, the Design-Builder will:
 - (A) consult and meet with the Province at all times as may be required by the Province in the circumstances to review and discuss matters pertaining to the ongoing Supervening Event;
 - (B) promptly provide to the Province for its review, comment and input, and then implement, and update as necessary in the circumstances, detailed contingency plans addressing worker health and safety, general site safety, site security, compliance with any Law (including any special orders or regulations imposed by Governmental Authorities) and any other matters the Province reasonably requires to be addressed as a consequence of the ongoing Supervening Event;
 - (C) promptly advise and seek the input of the Province in respect of the Design-Builder's actions, plans and strategies to mitigate the effects of the ongoing Supervening Event; and
 - (D) work collaboratively and in good faith with the Province promptly to seek to identify opportunities to advance the conduct of the Project Work and the delivery of the Project.

8.3 Design-Builder's Entitlements Upon Occurrence of a Compensation Event

Subject to Sections 8.1(b) and 8.12 [Delay in Notification] and to the Design-Builder's obligations under Section 4.10 [Mitigation By Design-Builder], if at any time a Compensation Event occurs:

- (a) to the extent that, and for so long as, the performance of any obligation under this Agreement by the Design-Builder is negatively affected by the Compensation Event (other than those obligations arising as a result of the Compensation Event, including the Design-Builder's obligations under Section 6.15 [Restoration and Reinstatement of Damage or Destruction]), the Design-Builder shall be relieved from any liability or consequence under this Agreement (including termination by the Province other than as expressly provided for in Section 8.7 [Termination for Damage or Destruction] and without limiting the Province's right to terminate this Agreement pursuant to Section 14.1 [Termination for Convenience]) arising from its affected performance, including that:
 - (i) no NCE Points or Default Points shall be assigned in respect of any such affected performance; and
 - (ii) no Non-Compliance Event Payments shall be applied in respect of any such affected performance;

- (b) subject to Section 8.7 [Termination for Damage or Destruction], Section 8.9 [Allocation of Risks of Participants and Trespassers] and Section 8.11 [Effect of Insurance], and save to the extent that the Design-Builder is entitled to be indemnified therefor pursuant to Section 9.6 [Limited Province Indemnities] in respect of a Compensation Event falling within paragraph (m) of the definition thereof in Section 1.1 [Definitions] of Schedule 1, the Design-Builder shall be compensated through a lump sum payment from the Province for the amount of any Direct Losses incurred, or to be incurred, by the Design-Builder from the occurrence of the Compensation Event, provided that:
 - (i) in the case of a Compensation Event referred to in paragraph (o) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, such amount shall not include the first \$250,000 of the aggregate amount of the Direct Losses incurred by the Design-Builder to mitigate the effects of all Protest Actions during the Term;
 - (ii) in the case of a Compensation Event referred to in paragraph (v) or paragraph (w) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, the Design-Builder will only be entitled to receive payment for 50% of the Change in Costs arising as a result of such Compensation Event, and with such Change in Costs to be the net Change in Costs arising in respect of all Foundations for the applicable Affected Structure;
 - (iii) in the case of a Compensation Event referred to in paragraph (z) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, the Design-Builder will only be entitled to receive payment for 50% of the Change in Costs arising as a result of such Compensation Event; and

- (iv) in the case of a Compensation Event (or a Force Majeure Event in the circumstances set out in Section 8.6(a)(ii)) that causes damage to or destruction of all or any part of the Project Infrastructure or the Project Site, the Province shall make payment of the portion of the amount that is payable for the Reinstatement Work in respect of such damage or destruction based on the same criteria and subject to satisfaction of all the same conditions as are set out in Sections 6.18(c) and (d) for the disbursement of Property Damage Insurance Proceeds under Section 6.18(b);
- (c) subject to Section 8.9 [Allocation of Risks of Participants and Trespassers], if it has been agreed or determined that the Compensation Event has resulted or will result in a delay to the occurrence of the Substantial Completion Date and/or the Total Completion Date, then if the Compensation Event occurs:
 - (i) prior to the Substantial Completion Date, then the Substantial Completion Target Date and the Total Completion Target Date shall be postponed; or
 - (ii) after the Substantial Completion Date but prior to the Total Completion Target Date, then the Total Completion Target Date shall be postponed,

in each case by or for, as the case may be, such time as is reasonable in the circumstances to take account solely of the effect of the delay caused, or that will be caused, by the Compensation Event to the achievement of the relevant date or dates, and in each case the Project Schedule shall be amended accordingly to reflect such postponement, including any resulting postponement of other related milestone dates set out therein.

8.4 Design-Builder's Entitlements Upon Occurrence of a Relief Event

Subject to Sections 8.1(b), 8.12 [Delay in Notification], 8.13 [Limited Compensation for COVID-19 Related Health Event], 8.14 [Allocation of Risks of COVID-19 Related Health Event], and 8.15 [Termination for Relief Event arising from COVID-19 Related Health Event] and to the Design-Builder's obligations under Section 4.10 [Mitigation By Design-Builder], if a Relief Event occurs:

- (a) to the extent that, and for so long as, the performance of any obligation under this Agreement by the Design-Builder is negatively affected by the Relief Event (other than those obligations arising as a result of the Relief Event, including the Design-Builder's obligations under Section 6.15 [Restoration and Reinstatement of Damage or Destruction]):
 - (i) without limiting the Province's right to terminate this Agreement pursuant to Section 14.1 [Termination for Convenience], the Province shall not exercise any right it would otherwise have under this Agreement to terminate this Agreement arising from the Design-Builder's inability to perform such obligation (other than as expressly provided for in this Section 8.4 or Section 8.7 [Termination for Damage or Destruction]); and
 - (ii) no NCE Points or Default Points shall be assigned in respect of any such affected performance; and

- (b) if it has been agreed or determined that the Relief Event has resulted or will result in a delay to the occurrence of the Substantial Completion Date and/or the Total Completion Date, then if the Relief Event occurs:
 - (i) prior to the Substantial Completion Date, then the Substantial Completion Target Date and the Total Completion Target Date shall be postponed; or
 - (ii) after the Substantial Completion Date but prior to the Total Completion Target Date, then the Total Completion Target Date shall be postponed,

in each case by or for, as the case may be, such time as is reasonable in the circumstances to take account solely of the effect of the delay caused, or that will be caused, by such Relief Event to the achievement of the relevant date or dates, and in each case the Project Schedule shall be amended accordingly to reflect such postponement, including any resulting postponement of other related milestone dates set out therein.

8.5 Parties' Entitlements Upon Occurrence of a Force Majeure Event

Subject to Sections 8.1(b) and 8.12 [Delay in Notification] and to the Applicant's obligations under Section 3.1 [Mitigation By Province] or Section 4.10 [Mitigation By Design-Builder], as applicable, if at any time a Force Majeure Event occurs:

- (a) to the extent that, and for so long as, the performance of any obligation under this Agreement by the Applicant is negatively affected by the Force Majeure (other than those obligations arising as a result of the Force Majeure Event, including the Design-Builder's obligations under Section 6.15 [Restoration and Reinstatement of Damage or Destruction]):
 - (i) without limiting the Province's right to terminate this Agreement pursuant to Section 14.1 [Termination for Convenience], the Province shall not exercise any right that it would otherwise have under this Agreement to terminate this Agreement arising from the Applicant's inability to perform such obligation (other than as expressly provided for in Section 8.6 [Termination for Force Majeure Event] or Section 8.7 [Termination for Damage or Destruction]); and
 - (ii) if the Applicant is the Design-Builder, no NCE Points or Default Points shall be assigned in respect of any such affected performance; and
- (b) if it has been agreed or determined that the Force Majeure Event has resulted or will result in a delay to the occurrence of the Substantial Completion Date and/or the Total Completion Date, then if the Force Majeure Event occurs:
 - (i) prior to the Substantial Completion Date, then the Substantial Completion Target Date and the Total Completion Target Date shall be postponed; or
 - (ii) after the Substantial Completion Date but prior to the Total Completion Target Date, then the Total Completion Target Date shall be postponed,

in each case by or for, as the case may be, such time as is reasonable in the circumstances to take account solely of the effect of the delay caused, or that will be

caused, by the Force Majeure Event to the achievement of the relevant date or dates, and in each case the Project Schedule shall be amended accordingly to reflect such postponement, including any resulting postponement of other related milestone dates set out therein.

8.6 Termination for Force Majeure Event

- (a) If the occurrence of a Force Majeure Event frustrates or renders impossible for a continuous period of more than 180 days the performance by the Province or the Design-Builder of its respective obligations with respect to all or a material portion of the Project or the Project Work, as the case may be, so as to frustrate the overall purpose and intent of the Project, then either the Province or the Design-Builder may at any time, provided that such frustration is then continuing, terminate this Agreement by notice to the other party having immediate effect, subject to Sections 8.1(b) and 14.4 [Notice of Intention to Terminate and Dispute], provided that, if the Design-Builder exercises such right to terminate, the Province may, by notice to the Design-Builder reject such termination of this Agreement by the Design-Builder and upon such rejection by the Province:
 - (i) the parties, insofar as they are able to do so, will continue to perform their respective obligations under this Agreement in accordance with the provisions of this Agreement;
 - (ii) without prejudice to the other relief available to the parties in respect of such Force Majeure Event pursuant to Section 8.5 [Parties' Entitlements Upon Occurrence of a Force Majeure Event], the Design-Builder shall, for so long as the effects of the relevant Force Majeure Event continue, be compensated in accordance with Section 8.3(b), but only in respect of the Direct Losses incurred by the Design-Builder as a result of the Force Majeure Event as and from the date of the exercise by the Design-Builder of its termination right; and
 - (iii) the Province may at any time thereafter, provided that such frustration is then continuing, terminate this Agreement by notice to the Design-Builder having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute].
- (b) If this Agreement is terminated by either the Province or the Design-Builder pursuant to Section 8.6(a), compensation on termination shall be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 13.

8.7 Termination for Damage or Destruction

If all or any substantial part of the Project Infrastructure or the Project Site is damaged or destroyed as a result of the occurrence of:

- (a) any event (other than a Compensation Event referred to in paragraph (q) or paragraph (r) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1) and:
 - (i) the information provided by the Design-Builder and consented to by the Province as part of the Reinstatement Plan pursuant to Section 6.16

[Reinstatement Plan], or as otherwise provided by the Design-Builder to the satisfaction of the Province if there is no Reinstatement Plan required under Section 6.16, establishes that there are insufficient funds available to the Design-Builder from all sources to allow the Design-Builder to complete the Reinstatement Work (the deficiency being called the “**Reinstatement Funds Deficiency**”); and

- (ii) no party has agreed to fund the Reinstatement Funds Deficiency,

then:

- (iii) in the event that it is agreed or established that either:

- (A) such damage or destruction of all or a substantial part of the Project Infrastructure or Project Site results from or is contributed to by a Design-Builder Non-Excusable Event, including as a result of a failure by the Design-Builder to comply with and implement all design requirements specified in the Project Requirements applicable to the damaged Project Infrastructure or Project Site; or

- (B) the cause of the Reinstatement Funds Deficiency is a breach by the Design-Builder of any of its obligations with respect to the Required Insurance set out in Part 6 [Insurance, Damage and Destruction] and Schedule 15 [Insurance Requirements], including a failure by the Design-Builder to fund any deductibles and/or waiting periods for which it is responsible under this Agreement,

the Province may terminate this Agreement by notice to the Design-Builder having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute], in which event compensation on termination shall be payable in accordance with Part 2 [Compensation on Termination for the Design-Builder Default] of Schedule 13; or

- (iv) in any case where Section 8.7(a)(iii) does not apply, either the Province or the Design-Builder may terminate this Agreement by notice to the Province having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute], in which event compensation on termination shall be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 13; or

- (b) a Compensation Event referred to in paragraph (q) or paragraph (r) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, the Province shall elect, by notice to the Design-Builder having immediate effect, either:

- (i) to compensate the Design-Builder in accordance with Section 8.3(b), and this Agreement will continue; or

- (ii) subject to Section 14.4 [Notice of Intention to Terminate and Dispute], to terminate this Agreement, in which event compensation on termination shall be

payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 13,

provided that the Province may not in such case elect to terminate this Agreement pursuant to Section 8.7(b)(ii) if the Design-Builder releases the Province from all obligations under Section 8.7(b)(i) and deposits with the Province an amount equal to the estimated amount to complete the Reinstatement Work as set out in the Reinstatement Plan pursuant to Section 6.16 [Reinstatement Plan]. Such amount shall be held and disbursed based on the same criteria as are provided in Sections 6.18(c) and (d) for the disbursement of Property Damage Insurance Proceeds under Section 6.18 [Application of Proceeds of Insurance] (subject to satisfaction of all conditions to such disbursement provided for in that Section).

8.8 Responsibility for Participants and Trespassers

- (a) Except as otherwise expressly provided in this Agreement, neither the Province nor BCTFA shall be responsible for the presence on or around or entry onto or around the Project Site or the Project Infrastructure, or any other interference with or affecting the Project Site or the Project Infrastructure or the vicinity of them or the Project Work by or caused by, any participants (“**Participants**”) in a Labour Dispute or a Protest Action, or any persons other than Participants not entitled to be on the Project Site or the Project Infrastructure (“**Trespassers**”), nor for any act, omission or default of any Participant or Trespasser (in any such case whether before or during the Term). The presence on or around or entry onto or around the Project Site or the Project Infrastructure of, or any other interference with or affecting the Project Site or the Project Infrastructure or the vicinity of them or the Project Work by or caused by, any Participant or Trespasser and any lawful or unlawful activities of any such person shall not be a breach of the obligation of the Province hereunder to permit the Design-Builder to have access to the Project Site, nor a breach of any other obligation or representation or warranty of the Province under this Agreement.
- (b) The management of Participants and Trespassers in respect of the Project Site and the Project Infrastructure shall be the responsibility of the Design-Builder. If at any time any part of the Project Site or the Project Infrastructure is occupied by any Participants or Trespassers, then as soon as reasonably practicable the Design-Builder shall notify the Province of such occurrence and of the action which the Design-Builder proposes to take to deal with such Participants or Trespassers. The Design-Builder may exercise any legal remedies available to it to remove Participants and/or Trespassers (including the obtaining of injunctions and enforcement orders in respect thereof), provided that the Design-Builder shall give the Province’s Representative reasonable (and in any event not less than 24 hours’) notice prior to commencing any legal proceedings for that purpose and provided further that the Design-Builder shall not give directly or indirectly to any Participant or Trespasser any inducement, monetary or otherwise, with a view to avoiding, limiting or influencing the manner of protest activities by that Participant or Trespasser or by other Participants or Trespassers, provided that the Design-Builder shall not by virtue of this Section 8.8 be prevented from entering into bona fide settlements of Claims brought against it by Participants or Trespassers which provide for reasonable payments in satisfaction of such Claims or agreeing to any reasonable cost orders in any proceedings.

- (c) the Design-Builder may request the assistance of the Province (at the cost of the Design-Builder) to remove Participants where the Design-Builder demonstrates to the Province's reasonable satisfaction that it has exercised all legal remedies available to it to remove the Participants (provided that for this purpose the Design-Builder may but shall not be obligated to prosecute injunctive or other judicial remedies beyond the Court of first instance) and that the continued presence of the Participants is having a material adverse effect on the conduct of the Project Work that the Design-Builder is unable to mitigate. Following such request, the Province shall notify the Design-Builder whether the Province can lawfully provide any assistance in relation to the removal of the Participants that is not independently available to the Design-Builder and, to the extent that such assistance can be lawfully provided, the Province shall provide such assistance (at the Design-Builder's cost) to the extent it is, in the discretion of the Province, reasonable and appropriate in the circumstances to do so.
- (d) Where the Design-Builder is given assistance by the Province in accordance with Section 8.8(c), the Design-Builder shall indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, in respect of all Direct Losses and/or Claims suffered or incurred by the Province and the Province Indemnified Persons, or any of them, as a result of or in connection with the provision of such assistance.

8.9 Allocation of Risks of Participants and Trespassers

- (a) In the event of any Protest Action, the Design-Builder shall be entitled to compensation, extensions of time and other relief in respect thereof as a Compensation Event in accordance with this Part 8 and the following additional parameters:
 - (i) the Design-Builder shall only be entitled to extensions of time in respect of Protest Actions pursuant to Section 8.3(c) if and to the extent that the Design-Builder establishes that the Participants in such Protest Action continue to occupy any part of the Project Site or the Project Infrastructure for a period of more than seven days after the Design-Builder has exhausted all legal remedies available to it to seek injunctive relief or other interim judicial remedies from a Court of first instance to remove them and to enforce any injunction or other interim remedy granted by such Court to remove them (provided that for this purpose the Design-Builder may but shall not be obligated to prosecute injunctive or other interim judicial remedies beyond the Court of first instance); and
 - (ii) the Design-Builder shall only be entitled to compensation in respect of Protest Actions pursuant to Section 8.3(b) if and, subject to Section 8.11 [Effect of Insurance], to the extent that the Design-Builder establishes that it has incurred during the Term Direct Losses to mitigate the effects of Protest Actions, including:
 - (A) the costs of exercising any legal remedy available to the Design-Builder in respect of Protest Actions (including in accordance with its obligations under Section 8.8 [Responsibility for Participants and Trespassers]);

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- (B) the increased costs, including financing costs, attributable to any extension of time to which the Design-Builder is entitled;
- (C) the cost of remedying any damage caused by Protest Actions; and
- (D) the taking of any mitigation action in relation to Protest Actions,

which aggregate (including amounts paid by way of indemnity under Section 8.8(d) but excluding amounts referred to in Section 8.11 [Effect of Insurance]) more than _____,

provided that the limitations on the compensation and extensions of time available to the Design-Builder from that otherwise available to the Design-Builder in the event of a Compensation Event, as set out in Sections 8.9(a)(i) and 8.9(a)(ii), shall not apply to the extent that such Protest Action arose, directly or indirectly, as a result of any Province Non-Excusable Event or as a result of actions taken or threatened to be taken by the Employees (as defined in the BCIB-Contractor Agreement).

- (b) Except as expressly provided in Section 8.9(a), and subject to Sections 8.4 and 8.5, as between the Province and the Design-Builder the Design-Builder shall bear, without recourse to the Province:
 - (i) any Losses suffered by the Design-Builder, its agents or Subcontractors or employees of any of them;
 - (ii) any Direct Losses suffered by the Province or any of the Province Indemnified Persons arising:
 - (A) from any interference, obstruction, or other hindrance to the Project or to the conduct of the Project Work, including the presence of any Participant or Trespasser on the Project Site or the Project Infrastructure;
 - (B) from any damage caused to the Project Infrastructure;
 - (C) as a result of any measures taken by or on behalf of or at the request or direction of the Design-Builder; and/or
 - (D) as a result of the failure by the Design-Builder to take or cause to be taken measures which should have been taken,

that are caused by any Participant or Trespasser, including any damage to property, any bodily injury or death, and any loss of income.

- (c) Nothing in this Section 8.9 shall affect:
 - (i) any right of the Province or BCTFA to make or recover any Claim against any Participant or Trespasser for public nuisance or for damage suffered by the Province or BCTFA or their respective agents, contractors or subcontractors of any tier or any employees of any of them; or

- (ii) any right of the Design-Builder to make or recover any Claim against any Participant or Trespasser for damage suffered by the Design-Builder, its agents or Subcontractors or any employees of any of them.

8.10 Sharing of Increased Recoverable Expenditures in Specified Circumstances

- (a) In the event that the discovery of any Undisclosed Utilities causes the Design-Builder to incur additional Recoverable Expenditures in order to carry out the Project Work and otherwise comply with the Project Requirements as a result of the existence or actual location of such Utilities which the Design-Builder would not have incurred but for such discovery, then the Design-Builder shall be entitled, subject to the Design-Builder’s obligations under Section 4.10 [Mitigation By Design-Builder] and except to the extent that any such Recoverable Expenditures result from or are contributed to, directly or indirectly, by any Design-Builder Non-Excusable Event, to receive compensation through a lump sum payment from the Province in respect of such additional aggregate Recoverable Expenditures incurred by the Design-Builder as a direct consequence of the discovery of all such Undisclosed Utilities during the Term (the “**Additional Utilities Recoverable Expenditures**”) in an amount calculated in accordance with Table 8.10(a) set forth below.

Table 8.10(a) Sharing of Additional Utilities Recoverable Expenditures

Additional Utilities Recoverable Expenditure	Province Share of Additional Utilities Recoverable Expenditure	Design-Builder Share of Additional Utilities Recoverable Expenditure	Maximum Cumulative Design-Builder Share of Additional Utilities Recoverable Expenditure during Term
Applicable to first			
Applicable to amount over			

- (b) In the event that the existence of any Non-Foreseeable Contamination causes the Design-Builder to incur additional Recoverable Expenditures in order to carry out the Project Work and otherwise comply with the Project Requirements in accordance with this Agreement which the Design-Builder would not have incurred but for such existence, then the Design-Builder shall be entitled, subject to the Design-Builder’s obligations under Section 4.10 [Mitigation By Design-Builder] and except to the extent that any such Recoverable Expenditures result from or are contributed to, directly or indirectly, by any Design-Builder Non-Excusable Event, to receive compensation through a lump sum payment from the Province in respect of such additional aggregate Recoverable Expenditures incurred by the Design-Builder as a direct consequence of the existence of all such Non-Foreseeable Contamination during the Term (the “**Additional Contamination Recoverable Expenditures**”) in an amount calculated in accordance with Table 8.10(b) set forth below.

Table 8.10(b) Sharing of Additional Contamination Recoverable Expenditures

Additional Contamination Recoverable Expenditure	Province Share of Additional Contamination Recoverable Expenditure	Design-Builder Share of Additional Contamination Recoverable Expenditure	Maximum Cumulative Design-Builder Share of Additional Contamination Recoverable Expenditure during Term
Applicable to first			
Applicable to amount over			

8.10A Changes in Steel Tariffs

- (a) For the purposes of this Section 8.10A:
 - (i) **“Change in Steel Tariffs”** means a Change in Law relating to Steel Tariffs; and
 - (ii) **“Steel Tariffs”** means tariffs on the importing of steel into Canada.
- (b) As soon as practicable, and in any event within ten Business Days after the Design-Builder has knowledge of the occurrence of a Change in Steel Tariffs, the Design-Builder shall give to the Province a notice identifying the Change in Steel Tariffs.
- (c) From time to time, following receipt of an invoice therefor from the Design-Builder, provided such invoice shall be provided no more than 12 months after the date of the notice provided in accordance with Section 8.10A(b), the Province shall pay to the Design-Builder amounts equal to the positive Change in Costs arising solely as a result of a Change in Steel Tariffs, but excluding any Change in Costs relating to any steel not incorporated into the Project Infrastructure, with the intent that the Design-Builder will be placed in a position under this Agreement neither better nor worse in respect to the steel incorporated into the Project Infrastructure than it would have been in had the Change in Steel Tariffs not occurred.
- (d) Any payment required to be made pursuant to Section 8.10A(c) shall be paid by the Province to the Design-Builder on the next date on which the Province makes payment to the Design-Builder pursuant to Section 6.1(j) of Schedule 10 [Payment and Performance Mechanism] following the delivery by the Design-Builder of an invoice for such payment together with written details of the amount claimed and the grounds for and computation of the amount claimed and such further information, calculations, computations and documentation as the Province may reasonably require.
- (e) Where an exemption or refund of Steel Tariffs is applicable to this Agreement by way of the Design-Builder filing claims for, or cooperating fully with the Province and the proper authorities in seeking to obtain such exemption or refund, the Design-Builder will make such applications and provide such cooperation.

8.10B Landslides

- (a) Subject to Sections 8.10B(b), 8.10B(c) and 8.10B(d), the Design-Builder, at its expense, will be responsible, until the Substantial Completion Date, for all Landslide Repair Work resulting from Landslides affecting the Project Infrastructure or the Project Site, and thereafter for all Landslide Repair Work resulting from Excluded Landslides.
- (b) The Province will by payment to the Design-Builder contribute towards the Landslide Repair Costs in connection with any one or more Landslides caused by or attributable to a single Landslide Event in accordance with the following Table:

Table 8.10B Sharing of Landslide Repair Costs

Landslide Repair Costs	Design-Builder Share	Province Share
Applicable to the first \$25,000		
Applicable to the next \$25,000		
Applicable to the next \$25,000		
Applicable to amounts over \$75,000		

provided that:

- (i) the Province will have no obligation to contribute towards Landslide Repair Costs that exceed a reasonable estimate of the cost of carrying out the relevant work taking into account the Design-Builder’s general duty to mitigate such costs pursuant to Section 4.10 [Mitigation by Design-Builder] or that directly or indirectly result from or are attributable to any of the matters referred to in Section 9.6(c), and such Landslide Repair Costs will not be taken into account in determining the Qualifying Landslide Repair Costs incurred by the Design-Builder in any Contract Year for purposes of Section 8.10B(c); and
 - (ii) for greater certainty, the Design-Builder will be solely responsible for all costs of Landslide Repair Work resulting from, and all deductible amounts and waiting periods provided for in any policies of Required Insurance in the event of damage caused by, an Excluded Landslide.
- (c) Without limiting the Province’s contribution obligations set out in Table 8.10B, if the Design-Builder incurs aggregate Qualifying Landslide Repair Costs in any Contract Year of _____, then the Province will bear all Landslide Repair Costs in connection with any subsequent Landslides occurring during that Contract Year.
- (d) Where:
- (i) the Province is obliged to contribute towards Landslide Repair Costs in connection with any one or more Landslides caused by or attributable to a single Landslide Event pursuant to Section 8.10B(b) and the total Landslide Repair Costs in connection with such Landslide(s) are reasonably estimated to exceed _____; or

- (ii) the Province is obliged to bear all of the Landslide Repair Costs in connection with any Landslide pursuant to Section 8.10B(c),

the Province may in its discretion determine who will carry out the Landslide Repair Work and, if the Province determines to retain an independent contractor to carry out such Landslide Repair Work, the procurement method to be employed in selecting and retaining such contractor. Without limiting the generality of the foregoing, the Province may in the exercise of such discretion determine to have any such Landslide Repair Work carried out by its own labour forces (including day labour retained by the Province) or by a Third Party Contractor or by the Design-Builder (any determination to have such works carried out by the Design-Builder shall be a Province Change and the provisions of Part 7 [Province Changes and Design-Builder Proposals] will apply accordingly), provided that, for greater certainty, the Design-Builder will not, by reason only of the Province exercising its discretion in accordance with this Section 8.10B(d), be relieved of its obligation to pay its portion (if any) of Landslide Repair Costs, as determined by reference to Table 8.10B and by reference to Section 8.10B(c).

- (e) Where further development of the Design is required as a result of the occurrence of a Landslide, other than an Excluded Landslide, then the Design-Builder shall initiate a value engineering process for the further joint collaborative development of the Design by the Province and the Design-Builder. Potential solutions shall be priced by the Design-Builder and the most cost effective option selected for construction, with the consent of the Province, and such circumstances shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.

8.11 Effect of Insurance

Notwithstanding anything to the contrary in this Part 8, the Design-Builder shall not be entitled to any compensation under this Part 8 in respect of any Supervening Event or Landslide to the extent, in respect of the Supervening Event or Landslide, as applicable:

- (a) that:
 - (i) the Design-Builder recovers or is entitled to recover under any Required Insurance, or would have been entitled to recover under any Required Insurance if such Required Insurance had been taken out and maintained in accordance with this Agreement; or
 - (ii) the Supervening Event or Landslide, as the case may be, or any aspect thereof is insured against, or required to be insured against, under any Required Insurance, or would have been insured against under any Required Insurance if such Required Insurance had been taken out and maintained in accordance with this Agreement,

whether or not such Required Insurance was in fact effected or, if effected, was vitiated, and whether vitiated as a result of any act or omission of the Design-Builder (or any person for whom the Design-Builder is in law responsible) (including, but not limited to, by reason of non-disclosure or under-insurance or failure or insolvency of the insurer), or for any other reason (excluding only vitiation caused by any act or omission of the Province or any person for whom the Province is in law responsible, but only to the

extent non-vitiation terms protecting against vitiation in the case of such act or omission are not required by the terms of this Agreement to be included in the applicable insurance policies);

- (b) that the Design-Builder recovers or is entitled to recover under any policy of insurance that is not Required Insurance but that the Design-Builder has in fact taken out and maintained;
- (c) that there are proceeds of insurance held by the Province that are (subject to the Design-Builder fulfilling all conditions to the disbursement thereof) available for satisfaction of the Claims or Direct Losses arising as a result of such Supervening Event or Landslide, as applicable, in whole or in part;
- (d) that the Province makes or authorizes, or is obligated under this Agreement (subject to the Design-Builder fulfilling all conditions thereto) to make or authorize, payment to or for the account of or on behalf of the Design-Builder under Section 6.18 [Application of Proceeds of Insurance]; or
- (e) of any amounts in respect of deductibles and waiting periods under any insurance referred to in either of Sections 8.11(a) and (b) for which the Design-Builder is responsible;

provided that, in the case of a Compensation Event described in paragraph (o) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, the Province shall not reduce pursuant to this Section 8.11 the compensation it would otherwise have paid under this Part 8 by reason of proceeds of insurance that the Design-Builder recovers or is entitled to recover up to, in the case of all Compensation Events described in paragraph (o) of the definition of Compensation Event, an aggregate limit over the Term of \$250,000.

8.12 Delay in Notification

- (a) If a Supervening Event Notice is provided by an Applicant to the other party more than 12 months after the date of the occurrence or commencement of such Supervening Event contrary to Section 8.1(b)(v), then the Applicant shall not be entitled to any compensation, extension of time or relief from its obligations under this Agreement in respect of the Supervening Event that was the subject of such Supervening Event Notice.
- (b) If a Supervening Event Notice or any required information is provided by an Applicant to the other party after the relevant dates referred to in Section 8.2 [Procedures Upon Occurrence of a Supervening Event], then the Applicant shall not be entitled to any compensation, extension of time or relief from its obligations under this Agreement in respect of the Supervening Event that was the subject of such Supervening Event Notice to the extent that the amount thereof would (but for this Section 8.12(b)) have increased as a result of such delay in providing such notice or information.

8.13 Limited Compensation for COVID-19 Related Health Event

Subject to Section 8.14 [Allocation of Risks of COVID-19 Related Health Event] and in addition to the relief provided in Section 8.4 [Design-Builder's Entitlements Upon Occurrence of a Relief Event] with respect to a COVID-19 Related Health Event, the Design-Builder shall, for so long as the effects of

such COVID-19 Related Health Event continue, be compensated in accordance with Section 8.3(b), but only in respect of additional incremental costs and expenses (excluding any mark-up by the Design-Builder or any Subcontractor) exceeding \$5 million in the aggregate and incurred by the Design-Builder as a result of:

- (a) any delay to the Project Work directly attributable to compliance by the Design-Builder with:
 - (i) an order issued, whether before or after the Effective Date, by a Senior Governmental Authority in connection with the COVID-19 Related Health Event; or
 - (ii) any guidance or recommendation issued after the Effective Date by the Minister of Health (British Columbia), the Provincial Health Officer (British Columbia) or the Workers' Compensation Board in connection with the COVID-19 Related Health Event:
 - (A) imposing, after the Effective Date, new or additional physical distancing requirements or restricting the number of workers on the Project Site; and
 - (B) compliance with such order or guidance or recommendation adversely effects the Design-Builder's productivity in performing the Project Work;
- (b) the acquisition of additional personal protective equipment for those working at the Project Site where such personal protective equipment is reasonably required for the Design-Builder to continue performance of the Project Work while complying with:
 - (i) an order referred to in Section 8.13(a)(i); or
 - (ii) any guidance or recommendation issued after the Effective Date by the Minister of Health (British Columbia), the Provincial Health Officer (British Columbia) or the Workers' Compensation Board in connection with the COVID-19 Related Health Event;
- (c) complying with any changes or amendments to the Occupational Health and Safety provisions under the WCA, or the regulations to the WCA, directly attributable to the COVID-19 Related Health Event and coming into effect after the Effective Date; or
- (d) accommodation costs incurred in respect of workers reasonably required to be physically present at the Project Site to perform their duties but who were required by a Senior Governmental Authority to quarantine upon entry into British Columbia in connection with a COVID-19 Related Health Event and such requirement for quarantine could not have been reasonably anticipated by the Design-Builder.

8.14 Allocation of Risks of COVID-19 Related Health Event

In the event of any COVID-19 Related Health Event, the Design-Builder shall only be entitled to the relief and compensation provided for a Relief Event in accordance with this Part 8 [Supervening Events] if and to the extent the effects of the COVID-19 Health Related Event in respect of which the

Design-Builder seeks relief are present on or after the date which is 90 days after the Effective Date regardless of the time at which the event arose.

8.15 Termination for Relief Event arising from COVID-19 Related Health Event

- (a) If the occurrence of a Relief Event arising entirely from a COVID-19 Related Health Event, or its effects, persists for more than 180 days after the date a Supervening Event Notice is delivered by the Applicant, either party may at any time, provided that such Relief Event or such effect is then continuing, terminate this Agreement by notice to the other party having immediate effect, subject to Sections 8.1(b) and 14.4 [Notice of Intention to Terminate and Dispute], provided that, if the Design-Builder exercises such right to terminate, the Province may, by notice to the Design-Builder reject such termination of this Agreement by the Design-Builder and upon such rejection by the Province
 - (i) the parties, insofar as they are able to do so, will continue to perform their respective obligations under this Agreement in accordance with the provisions of this Agreement;
 - (ii) without prejudice to the other relief available to the parties in respect of such COVID-19 Related Health Event pursuant to Section 8.4 [Parties' Entitlements Upon Occurrence of a Relief Event] and Section 8.13 [Limited Compensation for COVID-19 Related Health Event], the Design-Builder shall, for so long as the effects of such COVID-19 Related Health continue, be compensated in accordance with Section 8.3(b), but only in respect of the Direct Losses incurred by the Design-Builder as a result of such COVID-19 Related Health Event as and from the date of the exercise by the Design-Builder of its termination right; and
 - (iii) the Province may at any time thereafter, provided that such Relief Event or such effect is then continuing, terminate this Agreement by notice to the Design-Builder having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute].
- (b) If this Agreement is terminated by either the Province or the Design-Builder pursuant to Section 8.15(a), compensation on termination shall be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 13.

**PART 9
INDEMNITIES AND LIMITATIONS ON LIABILITY**

9.1 Indemnification by Design-Builder

Without limiting the Design-Builder's duties, obligations and liabilities under Section 2.3 [Assumption of Risk and Responsibility], and subject to Section 9.2 [Exceptions to Indemnification by Design-Builder], the Design-Builder shall indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, from and against any and all Claims and Direct Losses at any time suffered or incurred by, or brought or made against, the Province and the Province Indemnified Persons, or any of them, that arise directly or indirectly out of, in the course of, in connection with or as a result of the Project Work, or any use or occupation of or event, loss or occurrence on or to the Project

Site or the Project Infrastructure during the Term, or any obligation of the Design-Builder under this Agreement, including, in respect of any of the foregoing, Claims and Direct Losses:

- (a) for or in respect of:
 - (i) bodily injury including death resulting at any time therefrom; or
 - (ii) any damage to or loss of property, whether real or personal, including damage to or loss of:
 - (A) all or any part of the Project Infrastructure or any other property belonging to the Province or BCTFA or for which either of them is responsible;
 - (B) Infrastructure or property of any Governmental Authority or other Relevant Authority, or of any Utility Supplier, Railway or other third party;
 - (C) lands (and improvements thereon) forming part of or adjacent to the Project Site; or
 - (D) Plant or Construction Plant;
- (b) suffered by the Design-Builder or any person for whom the Design-Builder is in law responsible or any employees of any of them or any user of the Project Facilities or other third party, that arise out of or in the course of or in connection with or as a result of the Project Work or the use or occupation of the Project Site and the Project Infrastructure or any part thereof (including any Claims in respect of environmental mitigation measures);
- (c) that are to be borne by the Design-Builder in accordance with Section 8.8 [Responsibility for Participants and Trespassers] or Section 8.9 [Allocation of Risks of Participants and Trespassers] or that arise out of or in connection with any measures taken or not taken by the Design-Builder, or by or on behalf of the Province or BCTFA at the request of the Design-Builder, against or in connection with Participants or Trespassers; or
- (d) caused by, arising out of, relating to or resulting from or in connection with:
 - (i) any act or omission of any user of the Project Site or the Project Infrastructure or other person on or about the Project Site or the Project Infrastructure;
 - (ii) any adoption, reliance, use, interpretation or application by or on behalf of the Design-Builder, any Subcontractor, or any other person for whom the Design-Builder is in law responsible in relation to any Project Work, of any or all of or any part of the Design Data, Disclosed Data or other data or documents provided or made available by or on behalf of the Province or BCTFA, whether before or after execution of this Agreement, except as expressly provided in Section 2.15(d);
 - (iii) any act or omission of the Design-Builder or any person for whom the Design-Builder is in law responsible or employees of any of them that directly or

indirectly causes any breach of any statutory or public powers, authorities, discretions, duties or obligations;

- (iv) any Contamination, or any remediation, handling or legal requirement of a Governmental Authority in respect of Contamination;
- (v) any infringement or misappropriation or alleged infringement or misappropriation of any other person's Intellectual Property Rights or breach or alleged breach of obligations of confidentiality by the Design-Builder or any person for whom the Design-Builder is in law responsible;
- (vi) any breach in the observance or performance of any of the obligations of the Design-Builder under this Agreement or any of the other Project Documents;
- (vii) any repair, correction or warranty obligations of the Design-Builder under this Agreement, including the obligation to correct Project Work Defects under Schedule 5 [Project Work Defects and Warranties];
- (viii) anything done or omitted to be done by or on behalf of the Design-Builder, any Subcontractor, or any other person for whom the Design-Builder is in law responsible, or any of them, in connection with or pursuant to or under any of the Conditions of Access,
- (ix) any breach of Section 4.5 [Prohibited Acts] or anything done or omitted to be done by or on behalf of the Design-Builder, any Subcontractor or any other person in connection with any of Sections 12.3(b)(ii) to (iii) inclusive; or
- (x) any wrongful act, wrongful omission, negligence or wilful misconduct of the Design-Builder or persons for whom the Design-Builder is in law responsible in connection with the Project Work, or during the Term.

9.2 Exceptions to Indemnification by Design-Builder

The obligations of the Design-Builder to indemnify under Section 9.1 [Indemnification by Design-Builder] (and, to the extent this Section 9.2 (or any paragraph of this Section 9.2) is expressly made applicable thereto, under other indemnities under this Agreement) shall not apply to any Claims or Direct Losses to the extent that:

- (a) the Province is obligated to indemnify the Design-Builder in respect of Claims and Direct Losses arising out of the same events or circumstances pursuant to Section 9.5 [Indemnification by the Province] or Section 9.6 [Limited Province Indemnities];
- (b) the Claims or Direct Losses are directly attributable to any wrongful act, wrongful omission or wilful misconduct by the Province or any person for whom the Province is in law responsible on or about the Project Site or the Project Infrastructure;
- (c) the Claims or Direct Losses are directly attributable to any breach in the observance or performance of any of the obligations of the Province or BCTFA under this Agreement or any other Province Project Document, by the Province, BCTFA or any person for whom the Province is in law responsible;

- (d) the Claims or Direct Losses:
- (i) consist of payments that the Province has made or is obligated to make to the Design-Builder pursuant to Schedule 11 [Changes];
 - (ii) consist of compensation that the Province has paid or is obligated to pay to the Design-Builder pursuant to Section 8.3(b) or Section 8.6(a)(ii) to the extent that the relevant Compensation Event, Relief Event or Force Majeure Event, as the case may be, does not arise or result (directly or indirectly) from any Design-Builder Non-Excusable Event; or
 - (iii) are directly attributable to a Province Change, Compensation Event or a Force Majeure Event (save that this exception shall not apply to the extent that the Design-Builder would otherwise be responsible for any such Claims or Direct Losses pursuant to Section 8.9(b)),
- and provided that such Claims or Direct Losses do not arise or result (directly or indirectly) from any Design-Builder Non-Excusable Event;
- (e) the Province and/or the Province Indemnified Persons, as the case may be, have received or are entitled to receive insurance proceeds in respect of such Claims and Direct Losses under the Required Insurance;
- (f) the Claims or Direct Losses relate to rent, user fees, property taxes (if any) or occupancy costs that are or become payable by the Province or BCTFA under Project Site Agreements or Project Site Encumbrances to the extent that the Design-Builder is not obligated to pay such amounts pursuant to Section 5.3 [Exception to the Design-Builder Responsibilities] of Schedule 8;
- (g) the Claims or Direct Losses consist of compensation that the Province has paid or is obligated to pay to the Design-Builder under Section 8.10 [Sharing of Increased Recoverable Expenditures in Specified Circumstances], to the extent that such Claims or Direct Losses do not arise or result (directly or indirectly) from any Design-Builder Non-Excusable Event;
- (h) the Claims or Direct Losses arise as a result of or in connection with any Non-Foreseeable Contamination or Province Subsequent Contamination, and do not arise as a result of or in connection with:
- (i) a Design-Builder Non-Excusable Event in the performance or non-performance of the Design-Builder's Environmental Obligations with respect to such Contamination; or
 - (ii) the Design-Builder or any person for whom the Design-Builder is in law responsible causing, contributing to or exacerbating any such Non-Foreseeable Contamination or Province Subsequent Contamination; or
- (i) the Claims or Direct Losses consist of Claims made by the Concessionaire under the Concession Agreement, to the extent that such Claims or Direct Losses do not arise or result (directly or indirectly) from any Design-Builder Non-Excusable Event, including

in the performance or non-performance of the Design-Builder's obligations under Schedule 18 [Interface Requirements].

9.3 Effect and Limitation of Design-Builder's Indemnities and Liabilities

- (a) Subject to Section 9.12 [No Double Compensation]:
 - (i) the Design-Builder's liability to the Province and the Province Indemnified Persons, or any of them, under any indemnity in this Agreement is without prejudice to any other right or remedy available to the Province and the Province Indemnified Persons, or any of them, provided that any Claim of the Province against the Design-Builder in respect of the subject matters of the indemnity in Section 9.1 [Indemnification by Design-Builder], if made in tort or for breach of contract rather than for indemnification under Section 9.1 [Indemnification by Design-Builder], shall be subject to the exceptions set out in Section 9.2 [Exceptions to Indemnification by Design-Builder] to the same extent as if the Claim had been made under Section 9.1 [Indemnification by Design-Builder]; and
 - (ii) any obligation of the Design-Builder to indemnify and hold harmless under any provision of this Agreement is in addition to and not in substitution for or in limitation of any other obligation of the Design-Builder to indemnify and hold harmless under any other provision of this Agreement.
- (b) Subject to Sections 9.3(c) and 9.3(d), but notwithstanding any other provision of this Agreement, the maximum liability of the Design-Builder for Delay Liquidated Damages shall not exceed
- (c) The limitation of liability set out in Section 9.3(b) shall not apply to liabilities that arise out of any of the following:
 - (i) abandonment, gross negligence, fraud and fraudulent misrepresentations or wilful default or wilful misconduct of the Design-Builder or any person for whom the Design-Builder is in law responsible; and
 - (ii) any Claim or sum actually recovered by the Design-Builder through the Required Insurance, or which could have been so recovered if the Design-Builder had maintained the Required Insurance as required in accordance with this Agreement.
- (d) Subject to Section 9.3(e), but notwithstanding any other provision of this Agreement:
 - (i) the maximum aggregate liability of the Design-Builder for any and all damages, Direct Losses, Claims, indemnifications, liabilities, insurance deductibles, or other obligations of any kind whatsoever arising under or related to this Agreement or the performance of the Project Work, including Delay Liquidated Damages, shall not exceed 50% of the Contract Price; and
 - (ii) as a sublimit of the maximum aggregate liability set out in Section 9.3(d)(i), the maximum aggregate liability of the Design-Builder for Traffic Management

Payments, to be included in the Performance Incentive Payment payable by the Design-Builder pursuant to Section 3.1 [Obligation to make Performance Incentive Payments] of Schedule 10, shall not exceed \$10,000,000.

- (e) The limitations of liability set out in Section 9.3(d) are not intended to limit or otherwise detract from the obligation of the Design-Builder to perform the Project Work for the Contract Price (including cost overruns), and shall not apply to liabilities that arise out of any of the following:
 - (i) Claims by third parties (other than the Province, the Province Indemnified Persons or any Subcontractor);
 - (ii) damage to or destruction of real property or tangible personal property;
 - (iii) bodily injury or death;
 - (iv) abandonment, gross negligence, fraud and fraudulent misrepresentations or wilful default or wilful misconduct of the Design-Builder or any person for whom the Design-Builder is in law responsible;
 - (v) in respect of breach of statutory duty or non-compliance with Law by the Design-Builder or any person for whom the Design-Builder is in law responsible;
 - (vi) in respect of any breach by the Design-Builder of Section 15.1 [Confidentiality]; and
 - (vii) any Claim or sum actually recovered by the Design-Builder through the Required Insurance, or which could have been so recovered if the Design-Builder had maintained the Required Insurance as required in accordance with this Agreement.
- (f) Subject to Section 9.3(g), but notwithstanding any other provision of this Agreement, the maximum aggregate liability of the Design-Builder for all Claims of CP for revenue loss shall not exceed \$50,000,000.
- (g) The limitation of liability set out in Section 9.3(f) shall not apply to liabilities that arise out of any of the following:
 - (i) abandonment, gross negligence, fraud and fraudulent misrepresentations or wilful default or wilful misconduct of the Design-Builder or any person for whom the Design-Builder is in law responsible;
 - (ii) in respect of breach of statutory duty or non-compliance with Law by the Design-Builder or any person for whom the Design-Builder is in law responsible; and
 - (iii) any Claim or sum actually recovered by the Design-Builder through the Required Insurance, or which could have been so recovered if the Design-Builder had

maintained the Required Insurance as required in accordance with this Agreement.

9.4 Conduct of Claims Indemnified by Design-Builder

- (a) If the Province or any Province Indemnified Person (in this Section 9.4 individually referred to as an “**Indemnified Party**” and collectively referred to as the “**Indemnified Parties**”) receives any notice, demand, letter or other document concerning any Claim from which it appears that the Indemnified Party is or may become entitled to indemnification by the Design-Builder under this Agreement, the Indemnified Party shall give notice to the Design-Builder as soon as reasonably practicable and in any event within 30 days after receipt thereof, provided that a failure by an Indemnified Party to give such notice and particulars of a Claim within such time shall not adversely affect the rights of the Indemnified Party under the applicable indemnity except to the extent that the Design-Builder establishes that such failure has materially and adversely affected or prejudiced the ability of the Design-Builder to defend or contest the Claim.
- (b) Subject to Sections 9.4(c), (d), (e), (f) and (g), on the receipt of a notice delivered by an Indemnified Party pursuant to Section 9.4(a) the Design-Builder shall, in its discretion, be entitled to resist the Claim that is the subject of the notice, in the name of the Indemnified Party or the Indemnified Parties at the Design-Builder’s own expense, and have the conduct of any defence, dispute, compromise or appeal of the Claim (including any arbitration proceedings in respect thereof) and of any incidental negotiations. The Indemnified Parties shall give the Design-Builder and its counsel all reasonable cooperation, access and assistance for the purposes of considering and resisting such Claim including providing or making available to the Design-Builder and its counsel documents and information and witnesses for attendance at examinations for discovery and trials, subject always to any and all applicable Laws and solicitor and client privilege, and the Design-Builder shall pay all costs and expenses incurred by the Indemnified Parties in providing such cooperation, access and assistance.
- (c) The defence and any other legal proceedings in respect of any Claim which the Design-Builder exercises its discretion to resist in accordance with Section 9.4(b) shall be undertaken through legal counsel, and shall be conducted in a manner, acceptable to the Indemnified Party and the Design-Builder, acting reasonably. If:
 - (i) the Design-Builder and an Indemnified Party are or become parties to the same Claim and the representation of all parties by the same counsel would be inappropriate due to differing interest or a conflict of interest;
 - (ii) a conflict of interest or a perceived conflict of interest exists between the interests of an Indemnified Party and the Design-Builder or some other person who may be represented by counsel retained by the Design-Builder;
 - (iii) it appears that an Indemnified Party might not be entitled to indemnification by the Design-Builder in respect of all of the liability arising out of the Claim, unless the Design-Builder agrees on a with prejudice basis that all liability of the Indemnified Party arising out of the Claim is covered by the applicable indemnity; or

- (iv) the Design-Builder fails to comply in any material respect with the provisions of Section 9.4(d),

then the Indemnified Party shall be represented by separate counsel selected by the Indemnified Party and the indemnity obligations of the Design-Builder with respect to the Claim (including with respect to the cost of such separate legal representation) shall continue to apply and all reasonable costs and expenses (including reasonable actual legal fees and expenses) of the Indemnified Party doing so shall be included in the indemnity from the Design-Builder. An Indemnified Party may retain separate counsel to act on its behalf in respect of the Claim in circumstances other than those described in the immediately preceding sentence, in which event the indemnity obligations of the Design-Builder with respect to the Claim shall continue to apply but the fees and disbursements of such separate counsel shall be paid by the Indemnified Party. In any case where an Indemnified Party is represented by separate counsel, the Design-Builder and its counsel shall (at the cost of the Design-Builder) give the Indemnified Party and its counsel all reasonable cooperation, access and assistance including providing or making available to the Indemnified Party and its counsel documents and information and witnesses for attendance at examinations for discovery and trials, subject always to any and all applicable Laws and solicitor and client privilege. For greater certainty, the representation of an Indemnified Party by separate counsel as contemplated in this Section 9.4(c) and actions taken by such separate counsel in the course of such representation, including attendance at examinations, hearings and trials, shall not constitute a taking over of the conduct of the relevant legal proceedings by the Indemnified Party for the purposes of Section 9.4(f).

- (d) With respect to any Claim which the Design-Builder exercises its discretion to resist in accordance with Section 9.4(b):
 - (i) the Design-Builder shall keep the Indemnified Parties fully informed and consult with the Indemnified Parties about the conduct of the Claim;
 - (ii) to the extent that an Indemnified Party is not entitled to be indemnified by the Design-Builder for all of the liability arising out of the subject matter of the Claim, no action shall be taken pursuant to Section 9.4(b) that increases the amount of any payment to be made by the Indemnified Party in respect of that part of the Claim that is not covered by the indemnity from the Design-Builder;
 - (iii) the Design-Builder shall not pay or settle or make any admission of liability in respect of such Claim, whether before or after a suit, if any, is commenced, without the prior written consent of the Indemnified Party, such consent not to be unreasonably withheld or delayed;
 - (iv) the Design-Builder shall not bring the name of the Indemnified Party into disrepute; and
 - (v) the Design-Builder shall resist the Claim with all due diligence and in a timely manner.
- (e) If:

- (i) within 30 days after the notice from the Indemnified Party under Section 9.4(a) the Design-Builder fails to notify the Indemnified Party of its intention to resist a Claim pursuant to Section 9.4(b); or
- (ii) the Design-Builder exercises its discretion under Section 9.4(b) not to resist a Claim,

the Indemnified Party shall be entitled to resist such Claim in the name of the Indemnified Party or the Indemnified Parties or in the name of the Design-Builder and have the conduct of any defence, dispute, compromise or appeal of the Claim (including any arbitration proceedings in respect thereof) and of any incidental negotiations, and to pay or settle the Claim on such terms as it may think fit, without prejudice to its right to indemnification by the Design-Builder (including with respect to the costs and expenses of resisting the Claim) and its other rights and remedies under this Agreement, but subject to the other provisions of this Agreement including Sections 3.1 [Mitigation By Province] and 9.10 [Costs and Expenses]. If the Indemnified Party has conduct of the Claim pursuant to this Section 9.4(e), the Indemnified Party shall keep the Design-Builder fully informed and consult with the Design-Builder about the conduct of the Claim.

- (f) The Indemnified Party shall be free at any time to give notice to the Design-Builder that the Indemnified Party is taking over the conduct of any defence, dispute, compromise or appeal of any Claim that is subject to Section 9.4(b) or of any incidental negotiations. Upon receipt of such notice the Design-Builder shall promptly take all steps necessary to transfer the conduct of such Claim to the Indemnified Party and shall provide the Indemnified Party with all reasonable cooperation, access and assistance (including providing or making available to the Indemnified Party and its counsel documents and information and witnesses for attendance at examinations for discovery and trials, subject always to any and all applicable Laws and solicitor and client privilege) for the purposes of considering and resisting such Claim. If the Indemnified Party gives any notice pursuant to this Section 9.4(f), then, except as otherwise expressly provided by this Agreement, the Design-Builder shall be released from its indemnity in favour of such Indemnified Party in respect of such Claim except where such notice was given by the Indemnified Party as a consequence of the failure of the Design-Builder to resist the Claim with all due diligence and in a timely manner or to otherwise perform its obligations in accordance with this Section 9.4.
- (g) Notwithstanding the foregoing, all parties shall comply with the requirements of any insurer who may have an obligation to indemnify any of the parties in respect of a Claim, and the rights of any party to have conduct of any Claim shall be subject to the rights of such insurer under the applicable policy of insurance.

9.5 Indemnification by the Province

Subject to Sections 6.4 [Deductibles], 6.6 [Release of the Province for Insured Loss] and 9.7 [Exceptions to Indemnification by the Province], the Province shall indemnify and hold harmless the Design-Builder and the Design-Builder Indemnified Persons, and each of them, from and against any and all Claims and Direct Losses at any time suffered or incurred by, or brought or made against, the Design-Builder and the Design-Builder Indemnified Persons, or any of them, to the extent resulting from any negligent act or negligent omission of the Province or BCTFA or any person for whom the Province is in

law responsible in relation to the Project Work, the Project Site or the Project Infrastructure, other than Claims and Direct Losses caused by, arising out of, relating to or resulting from or in connection with:

- (a) any negligent act or negligent omission of the Province or BCTFA or any person for whom the Province is in law responsible referred to in either of Sections 2.13(a)(ii) or 2.15 [Disclosed Data];
- (b) the matters referred to in Section 9.1(c) to the extent any such Claim or Direct Loss has not been caused or contributed to by the failure of the Province or BCTFA to perform its obligations in accordance with Schedule 8 [Lands];
- (c) negligent acts or negligent omissions occurring prior to the Effective Date or after the Termination Date;
- (d) any Contamination, or any migration or leaching of Contamination, or any remediation, handling or legal requirement of any Governmental Authority in respect of Contamination, provided this exclusion shall not prejudice the Design-Builder's rights under Section 9.6 [Limited Province Indemnities]; and
- (e) Claims and Direct Losses arising as a result of or in connection with any negligent act or negligent omission of the Province or any person for whom the Province is in law responsible in the course of taking action under any of Sections 11.4(a), 11.4(b) and 11.5(a), except to the extent of any failure of the Province or any Third Party Contractor engaged by the Province for the purposes of exercising the Province's rights under any of those Sections to comply with all applicable Laws and Permits in the course of exercising the Province's rights under any of those Sections.

9.6 Limited Province Indemnities

Subject to Sections 6.4 [Deductibles], 6.6 [Release of the Province for Insured Loss] and 9.7 [Exceptions to Indemnification by the Province], the Province shall:

- (a) solely for the purpose of holding the Design-Builder and the Design-Builder Indemnified Persons harmless against any Relevant Third Party claim (but not so as to give rise to or constitute any separate or new cause of action against the Province aside from any cause of action for recovery of such losses or damages awarded by a court to such Relevant Third Party against the Design-Builder or the Design-Builder Indemnified Persons pursuant to such Relevant Third Party claim), indemnify and hold harmless the Design-Builder and the Design-Builder Indemnified Persons in respect of any Claims and Direct Losses arising from any damage, injury or other harm suffered by such Relevant Third Party and/or Relevant Property that was caused by Existing Contamination (other than Existing Contamination on the Additional Lands) or Province Subsequent Contamination that migrated or leached into or onto the Relevant Property, except to the extent such migration or leaching of such Existing Contamination or Province Subsequent Contamination (and/or damage, injury or other harm suffered) was caused or contributed to by any act or omission of the Design-Builder or any person for whom the Design-Builder is in law responsible after the Design-Builder had knowledge of the Existing Contamination or Province Subsequent Contamination, as the case may be;

- (b) in the event that the Design-Builder suffers any Losses (including legal fees, court costs, expert witness fees and other disbursements) as a result of a Nuisance Claim, the Design-Builder shall be solely responsible for all such Losses (including legal fees, court costs, expert witness fees and other disbursements) with the exception only that the Province shall indemnify the Design-Builder for its Legal Expenses in connection with a Successful Defence, provided that:
 - (i) subject to Sections 9.6(b)(ii) and (iii), the Province shall only be liable to indemnify the Design-Builder for such Legal Expenses with respect to the trial and any appeals after the later of, as applicable:
 - (A) the exhaustion of any and all appeals in respect of the applicable Nuisance Claim; and
 - (B) the expiry of the periods for the filing of any and all appeals in respect of the applicable Nuisance Claim and no appeal having been filed;
 - (ii) in the event that the Claim in which the Nuisance Claim is brought includes causes of action and/or the plaintiff seeks relief in addition to that sought in respect of the Nuisance Claim, the Province shall only be liable to indemnify the Design-Builder in respect of Legal Expenses and, where the Design-Builder's reasonable and actually incurred legal fees, court costs, expert witness fees and other disbursements relate to both the Nuisance Claim and other causes of action and/or relief sought in addition to the Nuisance Claim, the Province's obligation to indemnify the Design-Builder in respect of Legal Expenses shall be determined on a equitable basis; and
 - (iii) notwithstanding the foregoing, all parties shall comply with the requirements of any insurer who may have an obligation to indemnify any of the parties in respect of a Nuisance Claim, and the rights of any party to have conduct of any Nuisance Claim shall be subject to the rights of such insurer under the applicable policy of insurance;
- (c) the Province will indemnify and save harmless the Design-Builder against all Losses resulting from third party Claims for personal injury or death or loss of or damage to property caused by Landslides onto the Project Lands (other than the Additional Lands) or the CP Lands; provided that the indemnity under this Section will not extend or apply to any Losses directly or indirectly resulting from or attributable to:
 - (i) any Excluded Landslides;
 - (ii) the negligence of the Design-Builder or any person for whom the Design-Builder is responsible in closing Highway 1 or implementing the initial response to open Highway 1 following any Landslide;
 - (iii) any other failure of the Design-Builder to design or construct the Project Infrastructure and perform the Operation and Maintenance in accordance with the Design-Builder's obligations under this Agreement; or

- (iv) any other act or omission of the Design-Builder or any person for whom the Design-Builder is responsible, or the conduct of the Project Work or any activity in connection therewith (except only to the extent such Losses or Claims result directly from a Province Non-Excusable Event); and
- (d) the Province will indemnify and save harmless the Design-Builder against all Losses resulting from third party Claims for damage caused to the CP Lands or CP infrastructure by the Design-Builder's Construction-generated ground vibrations triggering release of rock fall from within the CP Lands or causing or triggering a geohazard within the CP Lands, provided that the indemnity under this Section will not extend or apply to any Losses directly or indirectly resulting from or attributable to:
 - (i) a failure of the Design-Builder to maintain Construction-generated ground vibrations, including ground vibrations caused by blasting operations, at a peak particle velocity of 50 mm/sec or less at the property line of the CP Lands, as contemplated in Section 3.6(h) of Part 1 [General Provisions] to Schedule 4;
 - (ii) the negligence of the Design-Builder or any person for whom the Design-Builder is responsible;
 - (iii) any other failure of the Design-Builder to design or construct the Project Infrastructure and perform the Operation and Maintenance in accordance with the Design-Builder's obligations under this Agreement; or
 - (iv) any other act or omission of the Design-Builder or any person for whom the Design-Builder is responsible, or the conduct of the Project Work or any activity in connection therewith (except only to the extent such Losses or Claims result directly from a Province Non-Excusable Event or from any act or omission of CP or any person for whom CP is responsible).

9.7 Exceptions to Indemnification by the Province

The obligations of the Province to indemnify under Section 9.5 [Indemnification by the Province] or Section 9.6 [Limited Province Indemnities] shall not apply to any Claims or Direct Losses to the extent that:

- (a) the Claims or Direct Losses are directly attributable to any Design-Builder Non-Excusable Event; or
- (b) the Claims or Direct Losses are otherwise compensated for or eligible for compensation or other relief under the terms of this Agreement (including Part 7 [Province Changes and the Design-Builder Proposals], Part 8 [Supervening Events] and Schedule 13 [Compensation on Termination]).

9.8 Limitation of Province Liability

Neither the Province nor BCTFA shall under any circumstances be liable to the Design-Builder or any of the Design-Builder Indemnified Persons or any persons for whom the Design-Builder is in law responsible, whether in contract, tort, by statute or otherwise, and whether or not arising from any negligent act or negligent omission on the part of the Province or BCTFA or any persons for whom the

Province is in law responsible, for any Claims or Losses of any person caused by, arising out of, relating to or resulting from or in connection with the Project Work or any Contamination. The foregoing limitation of liability shall not apply in relation to any liability of the Province for:

- (a) Claims and Direct Losses to the extent the Province must indemnify the Design-Builder or any of the Design-Builder Indemnified Persons therefor under Sections 9.5 [Indemnification by the Province] or 9.6 [Limited Province Indemnities];
- (b) any failure by the Province or BCTFA to make proper payment to the Design-Builder in accordance with the terms of this Agreement; or
- (c) any breach in the observance or performance of any of its obligations under this Agreement (other than payment obligations) by the Province or BCTFA, except where the Design-Builder has an express remedy under this Agreement in respect of such breach, which remedy shall be exhaustive of the Design-Builder's rights in respect of such breach.

9.9 Conduct of Claims Indemnified by the Province

- (a) If the Design-Builder or any Design-Builder Indemnified Person (in this Section 9.9 individually referred to as an “**Indemnified Party**” and collectively referred to as the “**Indemnified Parties**”) receives any notice, demand, letter or other document concerning any Claim from which it appears that the Indemnified Party is or may become entitled to indemnification by the Province under this Agreement, or to compensation by the Province in respect of a Supervening Event under Part 8 [Supervening Events], the Indemnified Party shall give notice to the Province as soon as reasonably practicable and in any event within 30 days after receipt thereof or in accordance with Part 8 [Supervening Events], if applicable, provided that, subject to Section 8.12 [Delay in Notification], a failure by an Indemnified Party to give such notice and particulars of a Claim within such time shall not adversely affect the rights of the Indemnified Party under the applicable indemnity or compensation provision except to the extent that the Province establishes that such failure has materially and adversely affected or prejudiced the ability of the Province to defend or contest the Claim.
- (b) Subject to Sections 9.9(c), (d), (e) and (f), on the receipt of a notice delivered by an Indemnified Party pursuant to Section 9.9(a) the Province shall, in its discretion, be entitled to resist the Claim that is the subject of the notice, in the name of the Indemnified Party or the Indemnified Parties at the Province's own expense, and have the conduct of any defence, dispute, compromise or appeal of the Claim (including any arbitration proceedings in respect thereof) and of any incidental negotiations. The Indemnified Parties shall give the Province and its counsel all reasonable cooperation, access and assistance for the purposes of considering and resisting such Claim including providing or making available to the Province and its counsel documents and information and witnesses for attendance at examinations for discovery and trials, subject always to any and all applicable Laws and solicitor and client privilege, and the Province shall pay all costs and expenses incurred by the Indemnified Parties in providing such cooperation, access and assistance.
- (c) The defence and any other legal proceedings in respect of any Claim which the Province exercises its discretion to resist in accordance with Section 9.9(b) shall be undertaken

through legal counsel, and shall be conducted in a manner, acceptable to the Indemnified Party and the Province, acting reasonably. If:

- (i) the Province and/or BCTFA and an Indemnified Party are or become parties to the same Claim and the representation of all parties by the same counsel would be inappropriate due to differing interest or a conflict of interest;
- (ii) a conflict of interest or a perceived conflict of interest exists between the interests of an Indemnified Party and the Province and/or BCTFA or some other person who may be represented by counsel retained by the Province and/or BCTFA;
- (iii) it appears that an Indemnified Party might not be entitled to indemnification or compensation by the Province in respect of all of the liability arising out of the Claim, unless the Province agrees on a with prejudice basis that all liability of the Indemnified Party arising out of the Claim is covered by the applicable indemnity or compensation provision; or
- (iv) the Province fails to comply in any material respect with the provisions of Section 9.9(d),

then the Indemnified Party shall be represented by separate counsel selected by the Indemnified Party and the indemnity or compensation obligations of the Province, as applicable, with respect to the Claim (including with respect to the cost of such separate legal representation) shall continue to apply and all reasonable costs and expenses (including reasonable actual legal fees and expenses) of the Indemnified Party doing so shall be included in the indemnity or compensation from the Province. An Indemnified Party may retain separate counsel to act on its behalf in respect of the Claim in circumstances other than those described in the immediately preceding sentence, in which event the indemnity or compensation obligations of the Province, as applicable, with respect to the Claim shall continue to apply but the fees and disbursements of such separate counsel shall be paid by the Indemnified Party. In any case where an Indemnified Party is represented by separate counsel, the Province and BCTFA and its or their counsel shall (at the cost of the Province) give the Indemnified Party and its counsel all reasonable cooperation, access and assistance including providing or making available to the Indemnified Party and its counsel documents and information and witnesses for attendance at examinations for discovery and trials, subject always to any and all applicable Laws and solicitor and client privilege.

- (d) With respect to any Claim which the Province exercises its discretion to resist in accordance with Section 9.9(b):
 - (i) the Province shall keep the Indemnified Parties fully informed and consult with the Indemnified Parties about the conduct of the Claim;
 - (ii) to the extent that an Indemnified Party is not entitled to be indemnified or compensated by the Province for all of the liability arising out of the subject matter of the Claim, no action shall be taken pursuant to Section 9.9(b) which increases the amount of any payment to be made by the Indemnified Party in

respect of that part of the Claim that is not covered by the indemnity or compensation provision from the Province;

- (iii) the Province shall not pay or settle or make any admission of liability in respect of such Claim, whether before or after a suit, if any, is commenced, without the prior written consent of the Indemnified Party, such consent not to be unreasonably withheld or delayed;
 - (iv) the Province shall not bring the name of the Indemnified Party into disrepute; and
 - (v) the Province shall resist the Claim with all due diligence and in a timely manner.
- (e) If:
- (i) within 30 days after the notice from the Indemnified Party under Section 9.9(a) the Province fails to notify the Indemnified Party of its intention to resist a Claim pursuant to Section 9.9(b); or
 - (ii) the Province exercises its discretion under Section 9.9(b) not to resist a Claim,

the Indemnified Party shall be entitled to resist such Claim in the name of the Indemnified Party or the Indemnified Parties or in the name of the Province and have the conduct of any defence, dispute, compromise or appeal of the Claim (including any arbitration proceedings in respect thereof) and of any incidental negotiations, and to pay or settle such Claim on such terms as it may think fit, without prejudice to its right to indemnification or compensation by the Province and its other rights and remedies under this Agreement, but subject to the other provisions of this Agreement including Sections 4.10 [Mitigation By Design-Builder] and 9.10 [Costs and Expenses]. If the Indemnified Party has conduct of the Claim pursuant to this Section 9.9(e), the Indemnified Party shall keep the Province fully informed and consult with the Province about the conduct of the Claim.

- (f) Notwithstanding the foregoing, all parties shall comply with the requirements of any insurer who may have an obligation to indemnify any of the parties in respect of a Claim, and the rights of any party to have conduct of any Claim shall be subject to the rights of such insurer under the applicable policy of insurance.

9.10 Costs and Expenses

Where in accordance with any provision of this Agreement a party is entitled to claim indemnification or reimbursement from another party for any costs, expenses or other amounts, the indemnifying or reimbursing party shall be obligated to provide indemnification or reimbursement only to the extent that the costs, expenses or other amounts claimed were reasonably incurred having regard to all relevant circumstances at the time.

9.11 No Liability for Irrecoverable Losses

Notwithstanding any other provision of this Agreement, no party to this Agreement shall be obligated to pay to any other party to this Agreement, or liable to any other party to this Agreement for,

whether in contract or in tort or on any other basis whatsoever, any Irrecoverable Losses suffered or incurred by such other party to this Agreement.

9.12 No Double Compensation

Notwithstanding any other provision of this Agreement, but without prejudice to the rights of a party to terminate this Agreement in accordance with its terms, no party shall be entitled to recover compensation or make a Claim under this Agreement in respect of any Loss that it has incurred (or any failure of another party) to the extent that it has already been compensated in respect of that Loss or failure pursuant to this Agreement or otherwise, and, for the purposes of this Section 9.12, Performance Incentive Payments and Non-Compliance Event Payments shall only be considered compensation to the Province or BCTFA in respect of the breaches or failures by the Design-Builder or other events or circumstances that give rise thereto to the extent such payments or deductions are made, and such payments or deductions shall be without prejudice to the right of the Province to claim and recover from the Design-Builder, subject to the other provisions of this Agreement, Direct Losses to the extent any such payment or deduction does not compensate the Province in full for such Direct Losses, and such right of the Province is hereby expressly preserved.

9.13 No Compensation Where Insured

Notwithstanding anything to the contrary in this Agreement, except in the case of compensation for Claims and Direct Losses under Part 8 [Supervening Events] (in which case Section 8.11 [Effect of Insurance] applies), and in the case of compensation on termination under Schedule 13 [Compensation on Termination] (in which case Section 3.1 [No Compensation to Extent of Insurance] of Schedule 13 applies), neither the Province nor BCTFA shall be liable to the Design-Builder, whether in contract or in tort or on any other basis whatsoever, for any Claims or Direct Losses, and any amounts payable by the Province or BCTFA shall be reduced, to the extent, in respect of such Claims or Direct Losses:

- (a) that:
 - (i) the Design-Builder recovers or is entitled to recover under any Required Insurance, or would have been able to recover under any Required Insurance if such Required Insurance had been taken out and maintained in accordance with this Agreement; or
 - (ii) the Claims or Direct Losses are insured against, or required to be insured against under any Required Insurance, or would have been insured against under any Required Insurance if such Required Insurance had been taken out and maintained in accordance with this Agreement;

whether or not such Required Insurance was in fact effected or, if effected, was vitiated, and whether vitiated as a result of any act or omission of the Design-Builder (or of any person for whom the Design-Builder is in law responsible) including, but not limited to, by reason of non-disclosure or under-insurance or failure or insolvency of the insurer, or for any other reason (excluding only vitiation caused by any act or omission of the Province or any person for whom the Province is in law responsible, but only to the extent non-vitiation terms protecting against vitiation in the case of such act or omission are not required by the terms of this Agreement to be included in the applicable insurance policies);

- (b) that the Design-Builder recovers or is entitled to recover under any policy of insurance that is not Required Insurance but that the Design-Builder has in fact taken out and maintained;
- (c) that there are proceeds of insurance held by the Province that are (subject to the Design-Builder fulfilling all conditions to the disbursement thereof) available for satisfaction of such Claims or Direct Losses, in whole or in part;
- (d) that the Province makes or authorizes, or is obligated under this Agreement (subject to the Design-Builder fulfilling all conditions thereto) to make or authorize, payment to or for the account of or on behalf of the Design-Builder, under Section 6.18 [Application of Proceeds of Insurance]; or
- (e) of any amounts in respect of deductibles and waiting periods under any insurance referred to in either of Sections 9.13(a) and (b) for which the Design-Builder is responsible.

9.14 Survival

The provisions of this Part 9 and each other indemnity contained in this Agreement shall survive the expiration or termination of this Agreement.

PART 10 PAYMENTS

10.1 Contract Price and Payments

- (a) The Design-Builder shall perform its obligations under this Agreement for the contract price of \$440,635,000.00 (the “**Contract Price**”). The Contract Price is not subject to change or adjustment except as expressly provided in Section 3.6(e)(ii) of Part 1 [General Provisions] of Schedule 4 and in Section 2.5 [Consequences of Province Changes] of Schedule 11. The Design-Builder agrees to accept the Contract Price as full payment and reimbursement to the Design-Builder for performing the Project Work, including all labour, services, materials, equipment and overhead required to perform the Project Work, all financing costs and profit.
- (b) Subject to the Design-Builder meeting the requirements for payment set out in this Agreement, the Province will pay the Design-Builder the amounts expressly provided for in this Agreement in accordance with the provisions of this Agreement.
- (c) The obligations of the Design-Builder to make payments under this Agreement are cumulative and in addition to, and not in substitution for or to the exclusion of, each or any other payment obligation of the Design-Builder hereunder.
- (d) No payment of or on account of any amount by the Province to the Design-Builder in accordance with this Agreement, including the release by the Province of any holdback amounts hereunder, or partial or entire use or occupancy of the Project Infrastructure, the Project Site or any part or parts thereof by the Province or any other person, and no approval of any invoice, report or application submitted by the Design-Builder to the Province for any such payment, shall constitute or be construed as constituting a final

evaluation or an acceptance by the Province of any Project Work as being in accordance or compliance with this Agreement

- (e) Notwithstanding any payment by the Province to the Design-Builder in accordance with this Agreement, including the release by the Province of any holdback amounts hereunder, and notwithstanding any review, inspection, enquiry, discussions or negotiations in respect of an invoice, report or application submitted by the Design-Builder to the Province for any such payment, the Design-Builder is and at all times shall remain responsible for providing, performing and carrying out the Project Work in accordance and compliance with this Agreement.

10.2 Additional Payments

If it is agreed or determined in accordance with this Agreement that a party is entitled to payment from another party in respect of any of:

- (a) a Province Change or Value Engineering Proposal (other than Minor Works and subject to Section 2.5 [Consequences of Province Changes] of Schedule 11) under Part 7 [Province Changes and the Design-Builder Proposals];
- (b) a Compensation Event (other than in the circumstances described in Section 8.3(b)(iv)) under Part 8 [Supervening Events];
- (c) a Force Majeure Event (which, for greater certainty, shall only be in the circumstances described in Section 8.6(a)(ii)) under Part 8 [Supervening Events]; and
- (d) any of the events described in Section 8.10 [Sharing of Increased Recoverable Expenditures in Specified Circumstances] or Section 8.10B [Landslides].

then the affected party may make written demand for such payment from time to time following such agreement or determination and, in respect of any Direct Losses, after such Direct Losses have been incurred, and such payment will be due and payable within 30 days of delivery of written demand supported with all relevant information required in accordance with this Agreement.

10.3 Province Rights to Audit

Without limiting any other rights of the Province to audit any other aspect of the Project Work in accordance with this Agreement, the Design-Builder shall, before, during and at any time after the payment of any lump sum contemplated in Section 10.2 [Additional Payments], ensure that the Province has unrestricted rights of audit over all documentation (including any aspect of the calculation of any such lump sum) used in connection with, or relevant to, the calculation of any such lump sum.

10.4 Province's Right of Set-Off

Subject to Section 3.3 [Rights of Set-Off] of Schedule 13, and without prejudice to and without limiting or derogating from any statutory right of the Province to withhold any sum of money due or becoming due to the Design-Builder, the Province and BCTFA may set off any liquidated amounts owing by the Design-Builder to the Province or BCTFA under this Agreement or any of the other Province Project Documents (which, without limiting any other provision of the Agreement, shall be deemed to include the amount of any payment made by the Province to any person which is the responsibility of the

Design-Builder under this Agreement) against any payments due from the Province or BCTFA to the Design-Builder under this Agreement.

10.5 Payments in Canadian Dollars

All payments under this Agreement shall be made in Canadian Dollars for value on or before the due date to the bank account of the recipient (located in the City of Vancouver or the City of Victoria, British Columbia) as specified by the recipient from time to time with reference to this Section 10.5.

10.6 Due Date for Payments

- (a) If no date is specified for the making of any payment by a party under this Agreement, such party shall make such payment on or before the date that is 30 days after the receipt by such party of the demand, invoice, debit note or Report to which such payment relates, or the final determination of the amount of such payment by the parties in accordance with this Agreement, as the case may be.
- (b) If the date for making any payment under this Agreement falls on a day that is not a Business Day, the date for making such payment shall be extended to the next Business Day.

10.7 Taxes on Payments

- (a) For the purposes of this Section 10.7:
 - (i) **“Change in Tax Law”** means a Change in Law relating to GST or PST, including the imposition of any successor or replacement tax for GST or PST;
 - (ii) **“Irrecoverable Tax”** means GST or PST:
 - (A) incurred by the Design-Builder in respect of the supply of any property or service to the Design-Builder which is consumed, used or supplied or to be consumed, used or supplied exclusively by the Design-Builder in the course of carrying out the Project Work; or
 - (B) required to be collected and remitted to any Governmental Authority by the Design-Builder in respect of the supply of any property or service by the Design-Builder to the Province made exclusively in the course of carrying out the Project Work,in each case to the extent that the Design-Builder is unable to collect or obtain any Recovery;
 - (iii) **“Recipient”** means a party to which a taxable supply is provided under this Agreement;
 - (iv) **“Recovery”** in relation to any GST or PST means recovery or elimination of liability for such GST or PST in any way, including by way of input tax credits, refunds, rebates, exemptions, remissions or any similar recovery for such GST or PST; and

- (v) “**Supplier**” means a party providing a taxable supply under this Agreement.
- (b) Subject to this Section 10.7, including the provisions relating to a Change in Tax Law herein, all payments (including payments in kind) to be made by a party under this Agreement are:
 - (i) exclusive of GST; and
 - (ii) inclusive of all Taxes (including PST) other than GST.
- (c) If any GST is imposed on a Recipient in connection with the provision of any taxable supply under this Agreement by a Supplier, the Recipient shall pay the GST to the Supplier and the Supplier shall remit the GST, all in accordance with the obligations of the Recipient and the Supplier under the *Excise Tax Act* (Canada).
- (d) The Design-Builder acknowledges and agrees that as and from the Effective Date it shall levy, collect and remit GST on the supply of the Project Work provided that if, following the Effective Date, the Province provides to the Design-Builder certification that according to Laws or agreement between the Province and the Federal Government it is no longer required to pay GST, the Design-Builder shall, at the later of the time that the Design-Builder receives such certification and the date the Province is no longer required to pay GST, cease levying and collecting GST on the supply of the Project Work.
- (e) Following receipt of an invoice therefor from the Design-Builder, the Province shall pay to the Design-Builder from time to time amounts equal to any Irrecoverable Tax if and to the extent such Irrecoverable Tax results solely from a Change in Tax Law as any such Irrecoverable Tax is incurred by the Design-Builder or required to be collected and remitted to any Governmental Authority, as the case may be, with the intent that the Design-Builder (including, for the purposes of this provision the Partners) will be placed in a position under this Agreement neither better nor worse than it would have been in had the Change in Tax Law not occurred, provided that all amounts paid under this Section 10.7(e) shall be grossed up by an amount equal to the amount of income tax actually payable in a Contract Year by the Design-Builder and/or the Partners that can be demonstrated by the Design-Builder results from being subjected to the Irrecoverable Tax and/or receipt of the payment under this Section 10.7(e) after taking into account any other income tax credits, deductions or relief to which the Design-Builder or the Partners may be eligible.
- (f) If, solely as a result of a Change in Tax Law, the Design-Builder becomes entitled to a Recovery in respect of GST or PST which was, prior to such Change in Tax Law, an Irrecoverable Tax that had been paid to the Design-Builder by the Province pursuant to Section 10.7(e), then the Design-Builder shall pay to the Province from time to time the amount or amounts of such Recovery to which the Design-Builder becomes entitled, to the extent required to place the Design-Builder in a position under this Agreement neither better nor worse than it would have been in had the Change in Tax Law not occurred.
- (g) Any payment required to be made by the Province to the Design-Builder pursuant to Section 10.7(e), or by the Design-Builder to the Province pursuant to Section 10.7(f), shall be paid by the relevant party within 10 Business Days following the delivery by the

other applicable party of an invoice or debit note for such payment, provided that the Province shall not be required to pay any amount to the Design-Builder pursuant to Section 10.7(e) until the Design-Builder has delivered to the Province's Representative written details of the amount claimed and the grounds for and computation of the amount claimed and such further information, calculations, computations and documentation as the Province may reasonably require.

- (h) The Design-Builder shall provide to the Province's Representative any information, calculations, computations and documentation reasonably requested by the Province from time to time in relation to the amount of any GST or PST chargeable in accordance with this Agreement and payable by the Province to the Design-Builder or by the Design-Builder to the Province in accordance with this Agreement.

10.8 Payment of Disputed Amounts

- (a) A party shall have the right to dispute, in good faith, any amount specified as payable from one party to another in any demand, invoice, debit note or Report.
- (b) Except as otherwise expressly provided in this Agreement, a party shall pay any undisputed portion of any amount that is the subject of a dispute to the other party in accordance with this Agreement, but any disputed portion or amount shall not be payable until the dispute is resolved in accordance with this Agreement.
- (c) If payment of any amount payable under this Agreement is delayed while the matter is in dispute in accordance with Section 10.8(a), upon resolution of such dispute a party shall pay any amount agreed or determined to be due by such party within 10 Business Days following such resolution, together with interest on such amount calculated at an interest rate that is 1% per annum over the Prime Rate at that time, compounded monthly from the time such amount originally became payable (but for such dispute) under this Agreement until the earlier of:
 - (i) the date of such payment in accordance with this Section 10.8(c); and
 - (ii) the due date for such payment under this Section 10.8(c).

For greater certainty, Section 10.10 [Interest on Overdue Amounts] shall apply to any amount payable pursuant to this Section 10.8(c) that is not paid within such 10 Business Days.

10.9 Inaccuracies in Payments

Subject to Section 3.4 [Full and Final Settlement] of Schedule 13, if there is any inaccuracy in any demand, invoice, debit note or Report issued by a party pursuant to this Agreement providing for the payment of an amount from one party to the other, whether determined upon an examination by the Province pursuant to Section 1.6 [Audit and Inspection] of Schedule 17 or otherwise:

- (a) the necessary adjustments in such demand, invoice, debit note or Report and resulting payment shall be made by the applicable party within 10 Business Days after the date such inaccuracy is established by agreement or pursuant to the Dispute Resolution Procedure; and

- (b) if such inaccuracy results in an underpayment or overpayment being made by one party to another party (as against the sum that would have been paid but for such inaccuracy), then, if the paying party or the receiving party, as the case may be, issued the demand, invoice, debit note or Report containing such inaccuracy, the paying party or the receiving party shall, in addition to paying such underpayment or re-paying such overpayment, as the case may be, to such other party, pay interest thereon at a rate per annum equal to the Default Rate from the date of payment by the relevant party to such other party pursuant to the original demand, invoice, debit note or Report to the date of payment of such underpayment by the paying party or the date of repayment of such overpayment by the receiving party, as the case may be.

10.10 Interest on Overdue Amounts

If payment of any amount payable under this Agreement is not made when due (including payments payable pursuant to Schedule 13 [Compensation on Termination] and any payments required pursuant to Sections 10.7(g), 10.8(c) and 10.9(a)), interest shall, unless another interest rate is indicated in this Agreement, be payable on such amount at the Default Rate and shall be calculated from the date due under this Agreement until paid, compounded monthly.

10.11 Interest without Prejudice

The right of a party to receive interest in respect of the late payment of any amount due under this Agreement is without prejudice to any other rights that party may have under this Agreement.

10.12 Payment of Interest by Province

Notwithstanding any other term of this Agreement, the payment of interest by the Province pursuant to this Agreement is subject to the provisions of the *Financial Administration Act* (British Columbia).

PART 11 PROVINCE'S ACCESS, MONITORING AND STEP-IN RIGHTS

11.1 Province Access

The Province, BCTFA, the Province's Representative, the Federal Government, and any contractors, consultants or other persons authorized by any of them, including Third Party Contractors, shall:

- (a) have unrestricted access at all reasonable times throughout the Term to the Project Site and the Project Infrastructure in order to do any or all of the following:
- (i) perform any obligations or functions or exercise any rights of the Province's Representative, the Province or BCTFA under this Agreement;
 - (ii) fulfil any statutory, public or other powers, authorities, discretions, duties or functions;
 - (iii) conduct any study, test or trial for purposes of research initiated by the Province or BCTFA or any other person authorized by the Province or BCTFA; and

- (iv) construct, operate, manage, maintain, repair, rehabilitate or reconstruct on the Project Site any Infrastructure other than, prior to the Substantial Completion Date, the Project Infrastructure;
- (b) have reasonable access at all reasonable times and upon reasonable prior notice to any site or workshop where Plant is being manufactured for the purposes of general inspection and auditing and of attending any test or investigation being carried out in respect of the Project Work; and
- (c) have the right to attend regular Project Site and other similar progress meetings,

provided that any access granted in accordance with this Section 11.1 shall be exercised in accordance with any health and safety procedures established by the Design-Builder pursuant to Sections 4.13 [Health and Safety Program] and 4.14 [Design-Builder's Occupational Health and Safety Obligations] for the time being in force in relation to the areas to which such access is granted, provided that nothing in this Section 11.1 shall be construed so as to impede the proper performance of the roles, functions and duties of the Province and BCTFA as set out in this Agreement and under Laws.

11.2 Uncovering of Work

- (a) The Design-Builder shall ensure that the Province's Representative is afforded advance notice of and a full opportunity to witness inspection and testing activity in accordance with the Inspection and Testing Plan and other relevant provisions of this Agreement. If the Design-Builder does not provide such notice and opportunity, the Design-Builder shall at the request of the Province uncover any relevant part of the Project Work which has been covered up or otherwise put out of view or remove any relevant part of the Project Work that has been proceeded with in order to permit the Province to witness the relevant inspection or test activity. The Design-Builder shall bear all costs of any such uncovering or removal, regardless of whether or not any defect is discovered in the relevant Project Work.
- (b) The Province shall have the right to request the Design-Builder to open up and inspect any part or parts of the Project Work where the Province (following consultation with the Design-Builder) reasonably believes that such part or parts of the Project Work is or are defective or that the Design-Builder has failed to comply with the requirements of this Agreement, and the Design-Builder shall comply with such request. If the Province exercises such right, it shall consult with the Design-Builder as to the timing of the opening up and inspection of the relevant part or parts of the Project Work with a view to avoiding or, if unavoidable, minimizing any delay caused to the conduct of the remaining Project Work.
- (c) If the Province requires an uncovering of the Project Work pursuant to Section 11.2(b) and such Project Work is not subsequently found to be defective and is found to have complied with the requirements of this Agreement, then such uncovering of the Project Work shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.

11.3 Increased Monitoring

- (a) Without prejudice to any other rights of the Province under this Agreement, if at any time during the Term:
 - (i) the Design-Builder is assigned 10 or more Default Points in any 12 calendar month period; or
 - (ii) a Design-Builder Default occurs; or
 - (iii) any material discrepancy, inaccuracy or error (including error by omission or incompleteness) is discovered by the Province or the Province's Representative in respect of any monthly report delivered by the Design-Builder to the Province in accordance with Part 6 [Periodic Reports and Payment Applications] of Schedule 10,

then the Province may by notice to the Design-Builder increase the level of its monitoring of the Design-Builder above that otherwise carried out by the Province under this Agreement, including pursuant to Section 4.4 [Province Monitoring] of Schedule 7, until such time as the Design-Builder has demonstrated to the reasonable satisfaction of the Province that it will perform and is capable of performing its obligations under this Agreement.

- (b) A notice to the Design-Builder provided by the Province's Representative pursuant to Section 11.3(a) shall specify the additional measures to be taken by the Province in monitoring the Design-Builder in response to the matters which led to such notice being sent.
- (c) If the Province carries out increased monitoring pursuant to this Section and requires the Design-Builder to pay the Province's costs and expenses in respect thereof pursuant to Section 11.3(d), and it is subsequently agreed or determined pursuant to the Dispute Resolution Procedure that the Province was not entitled to require the Design-Builder to pay the Province's costs and expenses in respect of such increased monitoring in accordance with this Section, then the payment by the Design-Builder of such Province costs and expenses shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.
- (d) The Design-Builder shall pay to the Province on demand all costs and expenses incurred by the Province in carrying out increased monitoring under this Section 11.3, together with an administration fee equal to fifteen percent (15%) of such costs and expenses, and all without prejudice to any other rights of the Province.

11.4 Province's Emergency Rights

- (a) Without limiting any other rights of the Province under this Agreement or at Law, and whether or not the Province has then given notice of default or notice of termination in accordance with any provisions of this Agreement entitling it to do so or the Design-Builder has then given notice of termination in accordance with any provisions of this Agreement entitling it to do so, and regardless of any dispute with respect to whether or not there is a valid right or obligation to terminate, if at any time during the Term the

Province reasonably believes that it needs to take action in relation to the Project Facilities or the Project Work or any part thereof due to the occurrence of an Emergency, then the Province may in its discretion do either or both of the following (but this shall not obligate the Province to mitigate, rectify or protect against, or attempt to mitigate, rectify or protect against, such Emergency or, after having commenced to mitigate, rectify or protect against or attempt to mitigate, rectify or protect against such Emergency, to continue to do so):

- (i) upon notice from the Province to the Design-Builder (which notice shall not be required to be in writing and shall not be required where it is impracticable in the circumstances for the Province to give prior notice) take or cause to be taken all such steps and actions as the Province considers, in its discretion, are required to mitigate, rectify or protect against such Emergency and, to the extent and for the period necessary for such purposes, enter upon the Project Site and the Project Infrastructure or any part thereof to carry out or cause to be carried out any work, provided that the Province shall, and shall cause any applicable third parties engaged by it for the purposes of exercising the Province's rights under to this Section 11.4 to, comply with all applicable Laws and Permits and to carry out any action under this Section expeditiously; or
 - (ii) by written notice from the Province to the Design-Builder, require the Design-Builder to take such steps as the Province considers, in its discretion, necessary or expedient to mitigate, rectify or protect against such Emergency including, if such Emergency has been caused or contributed to by a breach of any Subcontract, taking all action in respect of such Subcontract as the Province considers, in its discretion, necessary or expedient, and the Design-Builder shall use all reasonable efforts to comply with the Province's requirements as soon as reasonably practicable.
- (b) If the Province gives notice to the Design-Builder pursuant to Section 11.4(a)(ii) and the Design-Builder either:
- (i) does not confirm, within the time period specified by the Province in the notice given pursuant to Section 11.4(a)(ii) (or, if no such time period is specified, within five Business Days), that it is willing to take such steps as are referred to or required in such notice or present an alternative plan to the Province to mitigate, rectify and protect against such Emergency that the Province may accept or reject, in its discretion; or
 - (ii) fails to take the steps as are referred to or required in such notice or accepted alternative plan within such time as set out in such notice or accepted alternative plan or within such time as the Province, in its discretion, shall stipulate,

then the Province may, in addition to the ability to take the actions set out in Section 11.4(a), without further notice to the Design-Builder, to the extent and for the period necessary for such purpose, suspend the progress of the relevant Project Work, and suspend in whole or in part the relevant rights of the Design-Builder under this Agreement (including the rights of the Design-Builder under Section 2.5 [Access to and Responsibility for Project Site] and Schedule 8 [Lands] as applicable to the relevant Project Work), provided that any such suspension of the Design-Builder's rights shall

cease on the date upon which the Province has completed mitigating, rectifying or protecting against such Emergency or notifies the Design-Builder that such suspension shall cease.

- (c) No action taken by the Province under Section 11.4(a) or 11.4(b) shall be deemed to be a termination of this Agreement or relieve the Design-Builder from any of its obligations under this Agreement (except to the extent any such obligation is fully performed by the Province or cannot reasonably be performed due to such action taken by the Province), and, subject to Section 11.4(d), the Province shall not incur any liability to the Design-Builder for any act or omission of the Province or any other person in the course of taking such action, except to the extent of any failure by the Province or any Third Party Contractor engaged by the Province for the purposes of exercising the Province's rights under this Section 11.4 to comply with all applicable Laws and Permits in the course of exercising the Province's rights under Section 11.4(a) or 11.4(b).
- (d) To the extent that an Emergency has been caused by a Province Non-Excusable Event or a Compensation Event, any actions of the Province under this Section 11.4 in respect of such Emergency shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.
- (e) Except where the Province carries out actions under this Section 11.4 in the event of an Emergency caused by a Province Non-Excusable Event or a Compensation Event, the Design-Builder shall pay to the Province on demand all costs and expenses incurred by the Province in carrying out such actions under this Section 11.4, including any costs paid by the Province to the Design-Builder in accordance with Section 11.6 [Availability of Certain Assets on Step-In], together with an administration fee equal to fifteen percent (15%) of such costs and expenses, and all without prejudice to any other rights of the Province.

11.5 Province's Other Step-In Rights

- (a) Without limiting any other rights of the Province under this Agreement or at Law, and whether or not the Province has then given notice of default or notice of termination in accordance with any provisions of this Agreement entitling it to do so or the Design-Builder has then given notice of termination in accordance with any provisions of this Agreement entitling it to do so, and regardless of any dispute with respect to whether or not there is a valid right or obligation to terminate, if at any time during the Term any one or more of the following events occurs:
 - (i) the Design-Builder has been assigned one or more Default Point pursuant to Section 5.4(b) or 5.4(c) of Schedule 10 [Payment and Performance Mechanism] and the matter or matters giving rise to the assignment of such Default Point(s) has not or have not been remedied within a reasonable time to the satisfaction of the Province, acting reasonably;
 - (ii) a Design-Builder Default occurs and the Province reasonably believes that such Design-Builder Default remains unremedied; or
 - (iii) the Province receives a Notice of Failure to Comply from the Design-Builder pursuant to Section 4.17(b),

then the Province may in its discretion do either or both of the following (but this shall not obligate the Province to remedy such matter or attempt to do so, or, after having commenced to remedy such matter or attempt to do so, to continue to do so):

- (iv) by five Business Days' notice to the Design-Builder, to the extent and for the period necessary to remedy such matter or matters, suspend the progress of any or all of the Project Work, and suspend in whole or in part the rights of the Design-Builder under this Agreement (including the rights of the Design-Builder under Section 2.5 [Access to and Responsibility for Project Site] and Schedule 8 [Lands]), provided that any such suspension of the Design-Builder's rights shall cease on the earlier of the date upon which the Province has completed remedying such matter or notifies the Design-Builder that such suspension shall cease; and
 - (v) upon notice to the Design-Builder, take or cause to be taken all such steps and actions as may be reasonably required to remedy such matter or matters and, to the extent and for the period necessary for such purpose, enter upon the Project Site and the Project Infrastructure or any part thereof to carry out any work, provided that the Province shall, and shall cause any Third Party Contractors engaged by the Province for the purposes of exercising the Province's rights under this Section 11.5 to, comply with all applicable Laws and Permits and to carry out any action under this Section expeditiously.
- (b) No action taken by the Province under Section 11.5(a) shall be deemed to be a termination of this Agreement or relieve the Design-Builder from any of its obligations under this Agreement (except to the extent any such obligation is fully performed by the Province or cannot reasonably be performed due to such action taken by the Province), and, subject to Section 11.5(c), the Province shall not incur any liability to the Design-Builder for any act or omission of the Province or any other person in the course of taking such action, except to the extent of any failure by the Province or any Third Party Contractor engaged by the Province for the purposes of exercising the Province's rights under this Section 11.5 to comply with all applicable Laws and Permits in the course of exercising the Province's rights under Section 11.5(a).
- (c) If the Province takes action under Section 11.5(a) and it is subsequently agreed or determined pursuant to the Dispute Resolution Procedure that the Province was not entitled to take such action in accordance with this Section 11.5, then the taking of any such action shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.
- (d) Except where the Province carries out actions under this Section 11.5 in the circumstances contemplated in Section 11.5(a)(iii) or where Section 11.5(c) applies, the Design-Builder shall pay to the Province on demand all costs and expenses incurred by the Province in carrying out such actions, including any costs paid by the Province to the Design-Builder in accordance with Section 11.6 [Availability of Certain Assets on Step-In], together with an administration fee equal to fifteen percent (15%) of such costs and expenses, and all without prejudice to any other rights of the Province.

11.6 Availability of Certain Assets on Step-In

Where the Province exercises its rights under Section 11.4 [Province’s Emergency Rights] or Section 11.5 [Province’s Other Step-In Rights], for the duration of the exercise of such rights the Design-Builder shall, and shall cause its Subcontractors to, to the extent requested by the Province, make available to the Province or, at the direction of the Province to a third party designated by the Province, at a fair market price or rent, as the case may be, and at the risk of the Province, all facilities and all or any part of the stocks of material, road vehicles, spare parts, equipment and machinery (including Construction Plant) and other moveable property then owned or leased by or otherwise available to the Design-Builder or any of its Subcontractors that is required for the purposes of the exercise of such rights by the Province.

PART 12 DESIGN-BUILDER DEFAULT AND PROVINCE REMEDIES

12.1 Design-Builder Default

Each occurrence of any one or more of the following events or circumstances shall constitute a “**Design-Builder Default**”:

- (a) any Design-Builder Insolvency Event;
- (b) the abandonment of the Project by the Design-Builder;
- (c) the Design-Builder or any Partner ceasing to perform a substantial portion of its business or the suspension or non-performance of a substantial portion of the business of the Design-Builder or any Partner (except as a result of the exercise by the Province of its rights under Part 11 [Province’s Access, Monitoring and Step-In Rights], and except where such cessation, suspension or non-performance constitutes a Design-Builder Default referred to in Section 12.1(b)), whether voluntarily or involuntarily, that has or could reasonably be expected to have a material adverse effect on the performance by the Design-Builder of its obligations under this Agreement or any other Project Document, and such event or circumstance is not remedied by the resumption of business or the cessation of the suspension or non-performance of business, within 30 Business Days after the date notice to do so is given by the Province to the Design-Builder;
- (d) any Change in Ownership or Change in Control that is not permitted by Section 16.3 [Change in Control of Design-Builder];
- (e) any breach by the Design-Builder of Section 16.1 [Assignment by Design-Builder];
- (f) any breach of Section 4.4(b);
- (g) any failure by the Design-Builder to comply with Schedule 23 [Privacy Protection] in a material respect and such failure is not remedied within 30 Business Days after the date notice of such failure is given by the Province to the Design-Builder (and for the purposes of this paragraph such failure shall be considered remedied when the Design-Builder has taken steps satisfactory to the Province to mitigate the effects of the failure and has implemented measures satisfactory to the Province to prevent a recurrence of the failure);

- (h) any breach by the Design-Builder of Section 16.5 [Material Subcontracts], and such breach would, or might reasonably be expected to, or does, have any of the effects described or referenced in Section 2.6(b) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], except where such breach, such occurrence or such effects are capable of being remedied and such breach, such occurrence or such effects are in fact remedied within 30 Business Days after the date notice of such breach or such occurrence is given by the Province to the Design-Builder;
- (i) a sale, transfer, lease or other disposition by the Design-Builder or any Partner of the whole or any part (that is material in the context of the performance of the Design-Builder's obligations under this Agreement) of its undertaking, property or assets by a single transaction or a number of transactions (whether related or not and whether at the same time or over a period of time) that has or could reasonably be expected to have a material adverse effect on the financial position of the Design-Builder or the performance by the Design-Builder of its obligations under this Agreement, except where such occurrence or the relevant material adverse effect is capable of being remedied and is in fact remedied within 30 Business Days after the date notice of such occurrence is given by the Province to the Design-Builder;
- (j) any representation or warranty made by the Design-Builder in Section 4.21 [Representations and Warranties of the Design-Builder] being incorrect in any material respect when made and the incorrectness of the fact or facts misrepresented has or might reasonably be expected to have a material adverse effect on the ability of the Design-Builder or the Province to perform their respective obligations, or the ability of the Province to exercise any of its rights, under this Agreement or any of the other Province Project Documents, except where such incorrect representation or warranty or the relevant material adverse effect is capable of being remedied and is in fact remedied within 60 Business Days after the date notice of such incorrect representation or warranty is given by the Province to the Design-Builder;
- (k) any Required Insurance is not taken out, maintained, paid for or renewed in accordance with Part 6 [Insurance, Damage and Destruction] and Schedule 15 [Insurance Requirements], or is cancelled by any insurer;
- (l) evidence that Required Insurance has in fact been taken out, maintained, paid for and renewed in accordance with Part 6 [Insurance, Damage and Destruction] and Schedule 15 [Insurance Requirements] is not provided to the Province in accordance with Part 6 [Insurance, Damage and Destruction] and Schedule 15 [Insurance Requirements];
- (m) a failure by the Design-Builder to comply with the requirements or directive of a final award (after all rights of further appeal have been exhausted or have expired) in a matter dealt with in accordance with the Dispute Resolution Procedure and such failure to comply is not remedied within 30 Business Days after the date notice of such non-compliance is given by the Province to the Design-Builder or within such longer period of time after the date such notice is given (if a longer period of time is reasonably required to comply) so long as the Design-Builder has commenced to comply within such 30 Business Days and proceeds with such compliance with all due diligence and continuity to completion;
- (n) at any time the Default Points Balance is 60 or more Default Points;

- (o) failure by the Design-Builder to achieve Substantial Completion on or before the Substantial Completion Longstop Date;
- (p) the aggregate liability of the Design-Builder under this Agreement exceeding the aggregate limit of liability under Section 9.3(d)(i);
- (q) a failure by the Design-Builder to pay to the Province when due and payable any amount that is due and payable by the Design-Builder to the Province under this Agreement, and such payment is not the subject of an unresolved dispute pursuant to the Dispute Resolution Procedure, and such failure is not remedied within 20 Business Days after the date notice that such payment is overdue is given by the Province to the Design-Builder;
- (r) the provision, performance or carrying out of the Project Work or any part of the Project Work without a Permit required in connection with such Project Work or in breach of the terms of any Permit required in connection with such Project Work and the failure to have the relevant Permit or such breach is not remedied within 30 Business Days after the date notice of such failure or breach is given by the Province to the Design-Builder or, if a longer period of time is reasonably required to remedy such failure or breach, within such longer period of time so long as the Design-Builder has commenced remedying such failure or breach within such 30 Business Days and proceeds to remedy it with all due diligence and continuity to completion; and
- (s) a failure by the Design-Builder to perform or observe any of its material obligations under this Agreement or any of the other Province Project Documents that is not referred to in any of the other paragraphs of this Section 12.1, and without regard to whether or not the Design-Builder has received or receives NCE Points or Default Points under this Agreement for or as a result of such failure, and such failure is not remedied within 30 Business Days after the date notice of such failure is given by the Province to the Design-Builder.

Each notice that may be given to the Design-Builder referred to in any of Sections 12.1(c), (g), (h), (i), (j), (m), (q), (r) and (s) shall specify in reasonable detail according to the information then reasonably available to the Province the failure, breach, occurrence or other matter in respect of which the notice is given, and shall state clearly that the notice is given under this Section 12.1 and could lead to a Design-Builder Default and to termination of this Agreement.

12.2 Notice of Default by Design-Builder

The Design-Builder shall notify the Province of the occurrence, and details, of any Design-Builder Default and of any event or circumstance that has occurred and may or would, with the passage of time or otherwise, constitute or give rise to a Design-Builder Default, in any case promptly upon the Design-Builder becoming aware of such occurrence.

12.3 Remedies of the Province for Design-Builder Default

If and whenever a Design-Builder Default occurs and is continuing, the Province may, at its option and without prejudice to any of its other rights or remedies or to any rights or action which accrue or shall already have accrued to the Province under this Agreement or otherwise at law or in equity, exercise any or all of the following rights and remedies as the Province, in its discretion, shall determine:

- (a) if the Design-Builder Default is one referred to in any of Sections 12.1(a), (b), (c), (d), (e), (g), (h), (i), (j), (m), (n), (o), (p) or (r), the Province may terminate this Agreement by notice to the Design-Builder having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute];
- (b) if the Design-Builder Default is one referred to in Section 12.1(f), the Province may:
 - (i) where the breach is occasioned by the Design-Builder or by an employee of the Design-Builder who is not acting independently of the Design-Builder or by any person duly authorized to act for and on behalf of the Design-Builder, terminate this Agreement in its entirety by notice having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute];
 - (ii) where the breach is occasioned by an employee of the Design-Builder who is acting independently of the Design-Builder, then unless the Design-Builder causes the termination of such employee's employment (or, where such employee is an Employee as defined in the BCIB-Contractor Agreement, then unless the Design-Builder recommends dismissal of such Employee to BCIB in accordance with the BCIB-Contractor Agreement) within 30 days after the earlier of the Design-Builder becoming aware of the breach and notification to the Design-Builder of the breach and (if considered by the Design-Builder, acting reasonably, to be necessary) employs a replacement to perform such terminated employee's functions (or, in the case of an Employee under the BCIB-Contractor Agreement, requests such a replacement from BCIB in accordance with the BCIB-Contractor Agreement) within such 30 day period, terminate this Agreement in its entirety by notice having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute];
 - (iii) where the breach is occasioned by any person other than as referred to above in Sections 12.3(b)(i) or 12.3(b)(ii), and whether or not any benefit to the Design-Builder or the employer of the person occasioning the breach was intended, then unless the Design-Builder causes the termination of the employment of such person (including, where such employee is an Employee as defined in the BCIB-Contractor Agreement or any BCIB-Subcontractor Agreement, recommending or causing the recommending of the dismissal of such Employee to BCIB in accordance with such BCIB-Contractor Agreement or BCIB-Subcontractor Agreement, as the case may be) (and, in the case of a person other than a person employed by the Design-Builder, the termination of the engagement or employment of that person's employer) within 30 days after the earlier of the Design-Builder becoming aware of the breach and notification to the Design-Builder of the breach or such longer period as the Province may in its discretion by notice permit, terminate this Agreement in its entirety by further notice given after the end of such 30 day period, such further notice having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute];
- (c) if the Design-Builder Default is one referred to in Section 12.1(k) or Section 12.1(l):
 - (i) the Province may in its discretion, and without prejudice to its rights under Section 12.3(c)(ii), after advising the Design-Builder of the Province's intention to do so, remedy the Design-Builder Default or engage one or more third parties

to do so, and in connection therewith the Province may take or cause to be taken all such steps and actions as may be reasonably required to remedy the Design-Builder Default (but this shall not obligate the Province to (A) remedy or to attempt to remedy a Design-Builder Default or (B) after having commenced to remedy or to attempt to remedy a Design-Builder Default, to continue to do so), and the Design-Builder shall pay to the Province on demand all costs and expenses incurred by the Province in remedying or attempting to remedy such Design-Builder Default, together with an administrative fee equal to fifteen percent (15%) of such costs and expenses, provided that no such action by the Province shall be deemed to be a termination of this Agreement or relieve the Design-Builder from any of its obligations under this Agreement (except to the extent any such obligation is fully performed by the Province); and

- (ii) if the Design-Builder Default is not remedied within 20 Business Days after notice of such Design-Builder Default is given by the Province to the Design-Builder, the Province may terminate this Agreement by notice to the Design-Builder having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute];
- (d) if the Design-Builder Default is one referred to in Section 12.1(q), and provided that the aggregate amount of:
 - (i) the sum that is the subject of that the Design-Builder Default; and
 - (ii) all other sums that:
 - (A) are due and payable and remain unpaid by the Design-Builder to the Province;
 - (B) are not the subject of an unresolved dispute pursuant to the Dispute Resolution Procedure; and
 - (C) have each been outstanding and unpaid by the Design-Builder to the Province for more than 20 Business Days after the date a notice of non-payment thereof was given by the Province to the Design-Builder under Section 12.1(t);

exceeds \$250,000, the Province may give further notice to the Design-Builder of such aggregate amount and the non-payment thereof requiring the Design-Builder to pay such aggregate amount within 10 Business Days after the date such further notice is given by the Province to the Design-Builder, and if such aggregate amount is not paid by the Design-Builder within such 10 Business Days, then the Province may terminate this Agreement by notice to the Design-Builder having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute];

- (e) if the Design-Builder Default is one referred to in Section 12.1(s), the Province may give notice to the Design-Builder of the Design-Builder Default requiring the Design-Builder at the option of the Design-Builder either:

- (i) to remedy the Design-Builder Default referred to in that notice within 20 Business Days after the date such notice is given by the Province to the Design-Builder; or
- (ii) to submit to the Province's Representative pursuant to the Review Procedure, within 20 Business Days after the date such notice is given by the Province to the Design-Builder, a reasonable schedule and plan for the remedying of such Design-Builder Default specifying in reasonable detail the manner and latest date by which such Design-Builder Default will be remedied;

and in either case Section 12.4 [Termination for Failure to Remedy According to Program] shall apply; and

- (f) except as otherwise expressly provided in this Agreement or any of the other Province Project Documents, and subject to Schedule 16 [Dispute Resolution Procedure], the Province may exercise any of its other rights and remedies, whether under this Agreement or any of the other Province Project Documents, or at law or in equity.

12.4 Termination for Failure to Remedy According to Program

If the Province gives notice to the Design-Builder of a Design-Builder Default pursuant to Section 12.3(e), and if the Design-Builder Default referred to in that notice is not remedied:

- (a) according to a schedule and plan that the Design-Builder submits to the Province's Representative pursuant to the Review Procedure in accordance with Section 12.3(e)(ii) and to which the Province has no objection under the Review Procedure; or
- (b) except where Section 12.4(a) applies, before the expiry of the period referred to in Section 12.3(e)(i),

then, in any such event, the Province may at its option, and without prejudice to any of its other rights or remedies and to any rights of action which accrue or shall already have accrued to the Province, terminate this Agreement by notice to the Design-Builder having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute].

12.5 Province Costs

Without limiting, but without duplicating, any other amounts the Design-Builder is obligated under this Agreement to pay to the Province or BCTFA on account of costs and expenses incurred by the Province, the Design-Builder shall pay to the Province and BCTFA on demand all costs and expenses incurred by the Province and BCTFA or either of them in exercising any rights and remedies as a result of a Design-Builder Default that would not have been incurred but for the Design-Builder Default, including any relevant increased administrative costs and expenses and legal and other professional advisor expenses.

12.6 Province Remedies Cumulative

Except as otherwise expressly provided in this Agreement or any of the other Province Project Documents:

- (a) all rights and remedies of the Province under this Agreement and the other Province Project Documents are cumulative and are in addition to and not in substitution for or to the exclusion of any other rights and remedies available to the Province under this Agreement or any of the other Province Project Documents or at law or in equity; and
- (b) the Province may have recourse to any one or more or all of such rights and remedies, concurrently or successively, as it shall see fit, without prejudice to any of its other available rights and remedies.

12.7 Continued Effect

Notwithstanding any Design-Builder Default, the Province may continue to treat this Agreement as being in full force and effect and to enforce its rights under this Agreement, without prejudice to any other rights and remedies of the Province in relation to such Design-Builder Default including the right to terminate this Agreement as provided herein.

12.8 Compensation on Termination

In the event of an effective termination of this Agreement pursuant to Section 12.3(a), 12.3(c)(ii), 12.3(d) or Section 12.4 [Termination for Failure to Remedy According to Program], compensation on termination shall be payable in accordance with Part 2 [Compensation on Termination for Design-Builder Default] of Schedule 13.

PART 13 PROVINCE DEFAULT AND DESIGN-BUILDER REMEDIES

13.1 Province Default

Each occurrence of any one or more of the following events or circumstances shall constitute a “**Province Default**”:

- (a) a failure by the Province to pay to the Design-Builder when due and payable any amount that is due and payable by the Province to the Design-Builder under this Agreement, and such payment is not the subject of an unresolved dispute pursuant to the Dispute Resolution Procedure, and such failure is not remedied within 20 Business Days after the date notice that such payment is overdue is given by the Design-Builder to the Province;
- (b) a failure by the Province to comply with the requirements or directive of a final award (after all rights of further appeal have been exhausted or have expired) in a matter dealt with in accordance with the Dispute Resolution Procedure and such failure to comply is not remedied within 20 Business Days after the date notice of such non-compliance is given by the Design-Builder to the Province, or, if a longer period of time is reasonably required to comply, within such longer period of time as is reasonably required to comply so long as the Province has commenced to comply within such 20 Business Days and proceeds with such compliance with all due diligence and continuity to completion;
- (c) any breach by the Province of the provisions of Section 16.2 [Assignment by the Province];

- (d) any person to whom the interests of the Province or BCTFA under this Agreement or any other Province Project Document are transferred in accordance with Section 16.2 [Assignment by the Province] ceases to be a Qualified Governmental Entity;
- (e) except where such failure constitutes a Compensation Event, a failure by the Province to perform or observe any of its material obligations under this Agreement or any of the other Province Project Documents, and such failure continues so as to substantially frustrate the performance of, or render it impossible for the Design-Builder to perform, the Design-Builder's material obligations under this Agreement for a continuous period of not less than 60 days after notice of such failure is first given by the Design-Builder to the Province, and such continuing failure is still not remedied within 30 days after further notice of such failure is given by the Design-Builder to the Province after the expiration of such 60 days;
- (f) except where such expropriation, sequestration, requisition or seizure constitutes or results in a Compensation Event referred to in paragraph (a) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, any expropriation, sequestration, requisition or other seizure by the Province or any agent, crown corporation, ministry or department of the Province, of the Project Site or any material part thereof (other than the Additional Lands), other than in the exercise of rights or obligations set out in, or expressly contemplated by, this Agreement, and such action substantially frustrates the performance of, or renders it impossible for the Design-Builder to perform, the Design-Builder's material obligations under this Agreement for a continuous period of not less than 60 days after the date notice of such action is first given by the Design-Builder to the Province, and such matter is still not remedied within 30 days after further notice of such matter is given by the Design-Builder to the Province after the expiration of such 60 days; and
- (g) any representation or warranty made by the Province in Section 3.2 [Representations and Warranties of the Province] being incorrect in any material respect when made and the incorrectness of the fact or facts misrepresented has or might reasonably be expected to have a material adverse effect on the ability of the Design-Builder or the Province to perform their respective obligations, or the ability of the Design-Builder to exercise any of its rights, under this Agreement or any of the other Province Project Documents, except where such incorrect representation or warranty or the relevant material adverse effect is capable of being remedied and is in fact remedied within 60 Business Days after the date notice of such incorrect representation or warranty is given by the Design-Builder to the Province.

Each notice that may be given to the Province referred to in any of Sections 13.1(a), (b), (e), (f) and (g) shall be given to the Province's Representative, shall specify in reasonable detail, according to the information reasonably available to the Design-Builder, the failure, breach, occurrence or other matter in respect of which the notice is given, and shall state clearly that the notice is given under this Section 13.1 and could lead to a Province Default and to termination of this Agreement.

13.2 Notice of Default by Province

The Province shall notify the Design-Builder of the occurrence, and details, of any Province Default and of any event or circumstance that has occurred and may or would, with the passage of time

or otherwise, constitute or give rise to a Province Default, in either case promptly upon the Province becoming aware of such occurrence.

13.3 Remedies of Design-Builder for Province Default

If and whenever a Province Default occurs and is continuing, the Design-Builder may, at its option and without prejudice to any of its other rights or remedies and to any rights or action which accrue or shall already have accrued to the Design-Builder, exercise any or all of the following rights and remedies as the Design-Builder, in its sole discretion, shall determine:

- (a) the Design-Builder may terminate this Agreement by notice to the Province having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute], if the Province Default is one referred to in Section 13.1(a) and the aggregate amount of:
 - (i) the sum that is the subject of that Province Default; and
 - (ii) all other sums that:
 - (A) are due and payable and remain unpaid by the Province to the Design-Builder;
 - (B) are not the subject of an unresolved dispute pursuant to the Dispute Resolution Procedure; and
 - (C) have each been outstanding and unpaid by the Province to the Design-Builder for more than 45 Business Days after the date a notice of non-payment thereof was given by the Design-Builder to the Province under Section 13.1(a);exceeds \$250,000, and such aggregate amount is not paid by the Province to the Design-Builder within 20 Business Days following written notice given by the Design-Builder to the Province of such aggregate amount and the non-payment thereof;
- (b) if the Province Default is one referred to in any of Sections 13.1(b), (c), (d), (e), (f) or (g), the Design-Builder may terminate this Agreement by notice to the Province having immediate effect, subject to Section 14.4 [Notice of Intention to Terminate and Dispute]; and
- (c) except as otherwise expressly provided in this Agreement (including in Section 9.8 [Limitation of Province Liability]) or any of the other Province Project Documents, and subject to Section 1.4 [No Fettering of Province's Rights, Powers and] and Schedule 16 [Dispute Resolution Procedure], the Design-Builder may exercise any of its other rights and remedies, whether under this Agreement or any of the other Province Project Documents, or at law or in equity.

13.4 Design-Builder Costs

Without limiting, but without duplicating, any other amounts the Province is obligated under this Agreement to pay to the Design-Builder on account of costs and expenses incurred by the Design-Builder, and except to the extent the Design-Builder is compensated for such costs and expenses in

compensation paid or payable under Schedule 13 [Compensation on Termination], the Province shall pay to the Design-Builder on demand all costs and expenses incurred by the Design-Builder in exercising any rights and remedies as a result of a Province Default that would not have been incurred but for the Province Default, including any relevant increased administrative costs and expenses and legal and other professional advisor expenses.

13.5 Design-Builder Remedies Cumulative

Except as otherwise expressly provided in this Agreement or any of the other Province Project Documents:

- (a) all rights and remedies of the Design-Builder under this Agreement and the other Province Project Documents are cumulative and in addition to and not in substitution for or to the exclusion of any other rights and remedies available to the Design-Builder under this Agreement or any of the other Province Project Documents or at law or in equity; and
- (b) the Design-Builder may have recourse to any one or more or all of such rights and remedies, concurrently or successively, as it shall see fit, without prejudice to any of its other available rights and remedies.

13.6 Continued Effect

Notwithstanding any Province Default, the Design-Builder may continue to treat this Agreement as being in full force and effect and to enforce its rights under this Agreement, without prejudice to any other rights and remedies of the Design-Builder in relation to such Province Default including the right to terminate this Agreement as provided herein.

13.7 Compensation on Termination

In the event of an effective termination of this Agreement pursuant to Section 13.3(a) or Section 13.3(b), compensation on termination shall be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 13.

PART 14 TERMINATION

14.1 Termination for Convenience

- (a) The Province may in its discretion and for any reason whatsoever terminate this Agreement at any time by giving to the Design-Builder at least 90 days' prior notice of the effective date of such termination, and on such effective date this Agreement shall terminate.
- (b) In the event of notice being given by the Province in accordance with Section 14.1(a), from and after the giving of such notice and during the notice period thereunder the Design-Builder shall only proceed with or continue, or allow or permit third parties to proceed with or continue, those portions of the Project Work that are specifically authorized in writing by the Province during the notice period.

- (c) In the event of any termination pursuant to Section 14.1(a), compensation on termination shall be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 13.

14.2 No Other Rights of Termination

Notwithstanding Sections 12.3(f), 12.6 [Province Remedies Cumulative], 13.3(c) and 13.5 [Design-Builder Remedies Cumulative], and without prejudice to their respective rights of termination expressly set out in this Agreement, each of the Province and the Design-Builder waives and agrees not to exercise any common law or equitable right or remedy it may have prior to the end of the Term to terminate, repudiate, rescind or otherwise bring to an end this Agreement as a consequence of any breach, failure or default by another party hereunder.

14.3 Continued Performance

Subject to any exercise by the Province of its rights under Part 11 [Province's Access, Monitoring and Step-In Rights] and subject to Section 14.1(b), and unless otherwise directed by the Province with respect to obligations of the Design-Builder, the parties shall continue to perform their respective obligations under this Agreement, notwithstanding the giving of any notice of default, Notice of Intention to Terminate or notice of termination, until the termination of this Agreement becomes effective in accordance with the terms of this Agreement.

14.4 Notice of Intention to Terminate and Dispute

Except in the case of a termination pursuant to Section 14.1 [Termination for Convenience]:

- (a) if either the Province or the Design-Builder wishes to terminate this Agreement pursuant to a right of termination that it believes it is entitled to exercise under the terms of this Agreement, such party (in this Section 14.4, the “**Terminating Party**”) must by notice (a “**Notice of Intention to Terminate**”) to the other of them (in this Section 14.4, the “**Terminated Party**”) to be given before or at the time notice of termination is given, specify the right to terminate that the Terminating Party intends to exercise and the event, circumstance or default giving rise to such right or obligation to terminate;
- (b) if the Terminated Party wishes to dispute the right to terminate (or the existence or occurrence of the event, circumstance or default giving rise to such right to terminate), as set out in a Notice of Intention to Terminate, the Terminated Party must, within 20 Business Days after receiving the Notice of Intention to Terminate, either:
 - (i) refer the dispute to the Dispute Resolution Procedure, in which event the dispute shall be resolved by agreement of the parties or, failing such agreement, through the Dispute Resolution Procedure and such termination shall take effect:
 - (A) when it is agreed by the parties or finally determined by the Dispute Resolution Procedure that the exercise of the right to terminate is or would be valid in accordance with this Agreement; or
 - (B) when notice of termination pursuant to that right to terminate is actually given;

whichever is later; or

- (ii) apply to Court for declaratory relief in respect of the purported right to terminate and/or refer to the Court the question of whether or not the exercise of the right to terminate is or would be valid in accordance with this Agreement, in which event the dispute shall be resolved by agreement of the parties or, failing such agreement, by the Court, and such termination shall take effect:

- (A) when it is agreed by the parties or finally determined by the Court (without further rights of appeal) that the exercise of the right to terminate is or would be valid in accordance with this Agreement; or

- (B) when notice of termination pursuant to that right to terminate is actually given;

whichever is later;

- (c) if, within 20 Business Days after receiving the Notice of Intention to Terminate, the Terminated Party neither refers the matter to the Dispute Resolution Procedure nor applies to Court as provided in Section 14.4(b), the Terminating Party shall have a valid right to terminate this Agreement, and the Terminated Party shall have no further right to dispute or challenge or seek recourse in respect of the validity of such right to terminate, and termination pursuant to that right to terminate shall take effect:

- (i) on the expiration of such 20 Business Days; or

- (ii) when notice of termination pursuant to that right to terminate is actually given;

whichever is later; and

- (d) the parties agree to conduct expeditiously any proceedings under Section 14.4(b)(i) or Section 14.4(b)(ii), as applicable.

14.5 Changes after Notice of Termination

If either the Province or the Design-Builder gives a Notice of Intention to Terminate or a notice of termination, the Design-Builder shall not, and shall cause the Subcontractors not to, without the prior written consent of the Province (which consent may not be unreasonably withheld or delayed):

- (a) materially amend or offer, promise or agree for the future materially to amend the terms and conditions of employment of any employee employed by the Design-Builder or any of the Subcontractors whose work (or any part of it) is work undertaken for the purposes of the Project;

- (b) materially increase or make offers of employment so as materially to increase the number of employees referred to in Section 14.5(a);

- (c) do or omit to do any other thing in relation to employees referred to in Section 14.5(a) that would or might reasonably be expected to increase any Employee Termination Payments and/or Material Subcontractor Breakage Costs included in any compensation

on termination payable by the Province in connection with the termination of this Agreement;

- (d) cancel or terminate, or materially amend the terms and conditions of, any agreements or arrangements for the acquisition or supply of Plant for the purposes of the Project Work;
- (e) materially alter the volumes or quantities of Plant ordered for the purposes of the Project Work; or
- (f) enter into any new agreements or arrangements for the acquisition or supply of Plant for the purposes of the Project Work except at reasonable arm's length market rates and on reasonable arm's length market terms and conditions.

14.6 Effect of Termination or Expiry Generally

If for any reason this Agreement is terminated or the Term expires:

- (a) the rights of access granted to the Design-Builder pursuant to Section 2.5 [Access to and Responsibility for Project Site] shall terminate on the Termination Date and the Design-Builder shall cease to have any further rights under Section 2.5 [Access to and Responsibility for Project Site] and Schedule 8 [Lands] with respect to the Project Site and the Project Infrastructure, except to the extent necessary to enable the Design-Builder to perform any obligations of the Design-Builder under this Agreement required to be performed in consequence of or following such termination or expiry;
- (b) after the Termination Date, the Design-Builder shall not have any further right to provide, perform or carry out any further Project Work, but this shall not relieve or release the Design-Builder from any of its obligations under this Agreement or any other Province Project Documents including obligations that, by their terms or by necessary implication, are intended to survive termination or to give effect to termination or expiry or to the consequences thereof, or are consequential upon termination or expiry;
- (c) the Province and the Design-Builder shall reconcile between them any amounts due or accruing due under this Agreement and the other Province Project Documents from one party to the other as at the Termination Date, including:
 - (i) any outstanding Province Payments, Performance Incentive Payments and Non-Compliance Event Payments that are due; and
 - (ii) the uncalled balance of any deposits and security provided by the Design-Builder under Permits assigned under Section 14.8(a)(viii) remaining as at the date of assignment, to the extent not replaced by the Province and returned to the Design-Builder,

and any net balance owing shall be adjusted in the compensation payable on termination as provided in Section 3.2 [Adjustment for Net Balance] and Section 3.3 [Rights of Set Off] of Schedule 13, or paid by the relevant party to the other in the case of expiry;

- (d) subject to Sections 14.6(a), (b) and (c), and Section 3.4 [Full and Final Settlement] of Schedule 13, such termination or expiry shall be without prejudice to all the rights, remedies and obligations of the parties under this Agreement with respect to:
 - (i) any event, occurrence, circumstance, act or omission arising or existing before the effective time of termination or expiry;
 - (ii) any breach of this Agreement, Province Default or the Design-Builder Default occurring prior to the effective time of termination or expiry;
 - (iii) provisions of this Agreement that are to be observed and performed under this Agreement up to the effective time of termination or expiry; and
 - (iv) provisions of this Agreement that, by their terms or by necessary implication, are intended to survive termination or expiry or to give effect to termination or expiry or to the consequences thereof, or are consequential upon termination or expiry;

and such rights, remedies and obligations shall continue following termination or expiry, subject to Sections 14.6(a), (b) and (c) and subject to Section 3.4 [Full and Final Settlement] of Schedule 13; and

- (e) except as provided above in this Section 14.6, all rights and obligations of the parties under this Agreement shall cease and be of no further force or effect.

14.7 Province Discretion to Complete

If for any reason this Agreement is terminated before the end of the Term, then notwithstanding any duty of the Province to mitigate its Losses:

- (a) whether or not the Project Work is continued by the Province or any other person;
- (b) whether or not the Project Facilities are operated or attempts to do so are made or discontinued;
- (c) what use, if any, is made of any Project Work performed prior to the Termination Date; and
- (d) whether or not any Project Work performed prior to the Termination Date is altered or removed;

shall be in the discretion of the Province, and the Design-Builder shall have no claim against the Province with respect thereto.

14.8 Transfer of Assets

- (a) Without limiting the provisions of Section 18.7 [Further Assurances], within 30 days after the Termination Date the Design-Builder shall, at no cost to the Province and in all cases free from Encumbrances (provided that the Province shall have the right, but shall not be obligated, to pay off any and all such Encumbrances in which event any amounts so paid shall immediately be due and owing by the Design-Builder to the Province and

shall be payable by the Design-Builder to the Province forthwith on demand or, at the option of the Province, shall be adjusted as provided in Section 14.6(c)), and in each case to the extent not previously transferred, assigned or delivered, as the case may be or caused to be transferred, assigned or delivered by the Design-Builder in accordance with the terms of this Agreement:

- (i) if and to the extent the Province so elects, confirm by bill of sale or other document requested by the Province the transfer to the Province or, at the direction of the Province, to BCTFA or a third party designated by the Province, of title to and ownership of all Plant title to which has passed or is intended to be passed to the Province or to BCTFA or a third party designated by the Province on or before the Termination Date in accordance with Section 2.12 [Transfer of Title].
- (ii) deliver to the Province or, at the direction of the Province, to BCTFA or a third party designated by the Province possession of all Plant referred to in Section 14.8(a)(i) to the extent it is not then affixed to and part of or incorporated into the Project Infrastructure;
- (iii) cause the benefit of all manufacturers' and third party warranties in respect of Project Work, Project Infrastructure, and any other assets that are required to be transferred to the Province in accordance with this Agreement, to be transferred and assigned to the Province or, at the direction of the Province, to BCTFA or a third party designated by the Province;
- (iv) quit claim in favour of the Province, or, at the direction of the Province, in favour of BCTFA or a third party designated by the Province, any interest of the Design-Builder in the Project Infrastructure or any other improvements from time to time on, to or forming part of the Project Site;
- (v) deliver to the Province, or, at the direction of the Province, to BCTFA or a third party designated by the Province, the Construction Records, including "as built drawings" showing all alterations made since the commencement of the Project Work to or for the Project Site and the Project Infrastructure;
- (vi) deliver to the Province, or, at the direction of the Province, to BCTFA or a third party designated by the Province, operation and maintenance manuals for the Project Infrastructure (as the same has been constructed, installed, altered, upgraded and augmented by the carrying out of the Project Work) and any other assets transferred or to be transferred to the Province or, at the direction of the Province, to BCTFA or a third party designated by the Province, including in respect of communications, signalling and other systems completed and/or in service at the Termination Date;
- (vii) deliver to the Province, or, at the direction of the Province, to BCTFA or a third party designated by the Province, where applicable in accordance with Section 1.5 [Procedure on Termination] of Schedule 17:
 - (A) the Records;

- (B) all Province Provided Materials;
 - (C) all Modifications to Province Provided Materials; and
 - (D) copies of all Project Intellectual Property,

in any such case, in any stage of completion or development, in such electronic or other format as the Province may reasonably require;
- (viii) if and to the extent the Province so elects, and to the extent permitted by Laws, assign or cause to be assigned all Permits to the Province or, at the direction of the Province, to BCTFA or a third party designated by the Province;
 - (ix) return to the Province all Confidential Information of the Province or BCTFA within the possession or control of the Design-Builder or any Subcontractor; and
 - (x) remove all signs identifying itself and (except as otherwise directed by the Province) the Subcontractors as contractors and subcontractors in connection with the Project Work and the Project Facilities.
- (b) Without prejudice to any of the other provisions of this Agreement that require earlier transfer of any of the same, following the Termination Date the Design-Builder shall, at its own cost, transfer to the Province, or, at the direction of the Province, to BCTFA or a third party designated by the Province, title to and possession of (to the extent not referred to in Section 14.8(a)), all documents, manuals, records and information reasonably required to enable the Province to carry out and perform, or procure the carrying out and performance of, the work that would, but for termination of this Agreement, have constituted the Project Work, to the extent that title thereto is not owned by or title to or possession thereof has not previously been transferred to the Province or, at the direction of the Province, to BCTFA or a third party designated by the Province in accordance with the terms of this Agreement.
 - (c) Following the Termination Date, to the extent the Province so elects, the Design-Builder shall take all steps required by the Province to ensure:
 - (i) that all Construction Plant that is being used exclusively for the purposes of any Construction then in progress will remain available for the purpose of completing the relevant Construction, subject, except as otherwise provided herein, to payment therefor by the Province of a reasonable rental charge; and
 - (ii) compliance by the Design-Builder with its obligations under Section 3.1(e) of Schedule 8 [Lands].
 - (d) Within 30 days after the Termination Date, the Design-Builder shall, and shall cause its Subcontractors to, offer to sell to the Province or, at the direction of the Province, to BCTFA or a third party designated by the Province, which offer shall remain open for acceptance for at least 30 days after the date such offer is made, at a fair market value (determined as between a willing seller and a willing buyer with any disputes as to such fair market value being determined pursuant to the Dispute Resolution Procedure) and free from any Encumbrances, all or any part of the stocks of material, spare parts and

Plant owned by the Design-Builder or any of its Subcontractors, that is being used or is intended to be used exclusively for the purposes of Project Work (other than Construction) and is not otherwise transferred or to be transferred to or at the direction of the Province pursuant to any other provision of this Agreement.

The Design-Builder shall ensure in the case of all Permits and Subcontracts to which the Design-Builder is a party, and shall use all reasonable efforts to ensure in the case of Subcontracts to which the Design-Builder is not a party, that provisions are included to ensure that the Province will be in a position to exercise its rights and the Design-Builder will be in a position to comply with its obligations under this Section 14.8 without additional payment or compensation to any person except as expressly contemplated by this Section 14.8.

14.9 Handover

If for any reason this Agreement is terminated or the Term expires, the following provisions shall apply in respect of the handover of the Project Site and the Project Infrastructure:

- (a) the Design-Builder shall, for a period not exceeding one year after the Termination Date, cooperate fully with the Province and any successor contractor or operator of or with respect to the Project Site, the Project Infrastructure or the Project Work or any part thereof in order to achieve a smooth and orderly transfer of the Project Work and any work in the nature of the Project Work as a going concern and so as to protect the integrity of the Project Infrastructure and so as to protect the safety of, and avoid undue delay or inconvenience to, members of the public;
- (b) the Design-Builder shall as soon as practicable after notice from the Province to do so remove from the Project Site and the Project Infrastructure all materials, plant, machinery, equipment, apparatus, temporary buildings, road vehicles, spare parts and other property owned or leased by the Design-Builder or any person for whom the Design-Builder is in law responsible (including Plant and Construction Plant), other than that:
 - (i) title to which has passed to the Province, BCTFA or a third party designated by the Province under Section 2.12 [Transfer of Title]; or
 - (ii) required to be transferred, delivered, provided, sold or rented to or at the direction of the Province pursuant to Section 14.8 [Transfer of Assets];

and, if the Design-Builder has not done so within 30 days after any notice from the Province requiring it to do so, the Province may (without being responsible for any Loss) remove and sell any such property and shall hold any proceeds less all costs incurred to the credit of the Design-Builder;

- (c) the Design-Builder shall provide all information concerning the Project, the Project Infrastructure and the Project Work reasonably requested by the Province and not otherwise required to be provided by the Design-Builder pursuant to other provisions of this Agreement to the Province and any successor contractor or operator of the Project Site and/or the Project Infrastructure (or any part of either thereof) and provide any necessary training in relation to the communications, signalling and other systems and

equipment in service at the Termination Date, as shall reasonably be required for the efficient transfer of responsibility for Operation and Maintenance;

- (d) the Design-Builder shall, not later than the Termination Date, deliver to the Province:
 - (i) keys to all traffic sign housings;
 - (ii) lifting keys for all types of chamber covers;
 - (iii) all keys and pass cards used by the Design-Builder to gain access to the Project Site or any Project Infrastructure, including all buildings forming part of the Project Infrastructure;
 - (iv) codes and passwords to all computers and computerized systems, control of which is required to be transferred to the Province or its designee pursuant hereto; and
- (e) the Design-Builder shall as soon as practicable vacate and hand over to the Province, and leave in a safe and orderly condition, any parts of the Project Site in respect of which either the Access Period has commenced but not otherwise terminated or expired (or in respect of which access has been made available to the Design-Builder pursuant to Section 2.5(c) or the Design-Builder otherwise has access, in either case at the Termination Date) and the Project Infrastructure located on any such parts of the Project Site, including any communications, signalling and other systems and equipment completed and/or in service as at the Termination Date.

PART 15 CONFIDENTIALITY AND INTELLECTUAL PROPERTY

15.1 Confidentiality

- (a) Each party agrees, for itself and its respective directors, officers, employees and agents, to keep confidential and not to disclose to any person any Confidential Information received from another party, other than as expressly provided in Section 15.1(b) or as otherwise expressly provided in this Agreement.
- (b) Notwithstanding Section 15.1(a), a party may disclose the whole or any part of the Confidential Information in any of the following circumstances:
 - (i) in the case of any party:
 - (A) to its and its Affiliate's directors, officers, employees, contractors, subcontractors, agents and professional advisors, including, in the case of the Design-Builder and Subcontractors, to the extent necessary to enable it to perform (or to cause to be performed) or to protect or enforce any of its rights or obligations under this Agreement or any of the other Project Documents, provided that the party has first obtained from such person or entity to whom the disclosure is to be made an undertaking of strict confidentiality in relation to the relevant Confidential Information;

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- (B) when required to do so by Laws (including FOIPPA) or by or pursuant to the rules or any order having the force of law of any Governmental Authority or by or pursuant to the rules or any order of any recognized public stock exchange;
 - (C) to the extent that the Confidential Information has, except as a result of any disclosure prohibited by this Agreement, become publicly available or generally known to the public at the time of such disclosure;
 - (D) to the extent that the Confidential Information is already lawfully in the possession of the recipient or lawfully known to the recipient prior to such disclosure;
 - (E) to the extent that it has acquired the Confidential Information from a third party who is not in breach of any obligation as to confidentiality to any other party to this Agreement;
 - (F) to any assignee or proposed assignee permitted under Part 16 [Assignment, Change in Ownership and Subcontracting];
 - (G) the disclosure of which is expressly permitted or required by this Agreement; or
 - (H) the disclosure of which is necessary for the enforcement of this Agreement;
- (ii) in the case of the Province and BCTFA:
- (A) to the extent required for the design, construction, completion, commissioning, testing, operation, maintenance, rehabilitation or improvement of the Project Infrastructure and the Project Site, or the carrying out of any statutory, public or other powers, authorities, discretions, duties or functions in respect of the Project Infrastructure and the Project Site, and including with respect to the contemplation, procurement or undertaking of any such activities by any third parties (including any other Governmental Authority);
 - (B) in relation to the outcome of the procurement process for the Project as may be required to be published;
 - (C) to any minister, ministry, office or agency of the Province, including the Auditor General and the Office of the Comptroller General, and their respective directors, officers, employees, and professional advisors, where required for parliamentary, governmental, statutory or judicial purposes;
 - (D) whether or not falling within Section 15.1(b)(ii)(B) or 15.1(b)(ii)(C), to BCTFA, the Ministry or any other Governmental Authority or to TI Corp, Infrastructure BC, and their respective directors, officers, employees, and professional advisors;

- (E) in the exercise of any of the rights granted to the Province by way of license, including under any Complete License; and
 - (F) which is required to be provided to the Owner's Engineer or to the Independent Engineer in order for it to carry out its respective responsibilities in respect of the Project in accordance with this Agreement;
- (c) Without prejudice to any other rights and remedies that another party may have, each of the parties agrees that damages may not be an adequate remedy for a breach of Section 15.1(a) and that each other party shall, in such case, be entitled to the remedies of injunction, specific performance or other equitable relief for any threatened or actual breach of Section 15.1(a), subject, in the case of a claim for any such remedy against the Province, to the provisions of the *Crown Proceeding Act* (British Columbia).

15.2 Freedom of Information, Privacy Protection and Security

- (a) The Design-Builder acknowledges that it is aware that FOIPPA applies to this Agreement and to all contractual submissions and other documents and records relating to this Agreement and to the procurement process in respect of the Project and that the Province, the Ministry and BCTFA are required to fully comply with FOIPPA. No action taken or required to be taken by the Province, the Ministry or BCTFA for the purpose of complying with FOIPPA shall be considered a breach of any obligation under this Agreement.
- (b) The Design-Builder, without limiting its obligation to comply with all Laws, shall comply with and cause all of its agents and Subcontractors and the employees of any of them to comply with:
 - (i) the provisions of Schedule 23 [Privacy Protection] in connection with all Personal Information collected or created in the course of performing the Project Work; and
 - (ii) the Security Schedule in connection with all electronic internet-based systems to be provided by the Design-Builder in accordance with this Agreement.

15.3 Ownership of Intellectual Property and License to Province

- (a) Except as expressly set out in this Agreement, including Section 15.3(b), or as may otherwise be agreed to in writing between the Province and the Design-Builder after the date of this Agreement, as between the Province and the Design-Builder:
 - (i) the Design-Builder shall exclusively own, automatically upon its generation or creation, all rights, including Intellectual Property Rights, in and to the Project Intellectual Property; and
 - (ii) the Province shall exclusively own, automatically upon its generation or creation, all rights, including Intellectual Property Rights, in and to the Records, any Province Provided Materials and any Modifications to Province Provided Materials.

- (b) The Design-Builder agrees that, at no cost to the Province, it:
 - (i) hereby irrevocably and unconditionally conveys, transfers and assigns, or shall procure such conveyance, transfer or assignment from any third parties, or for all rights that arise only upon creation agrees that it shall cause to be so conveyed, transferred and assigned, to the Province all right, title and interest in and to the Records and to any Modifications to Province Provided Materials, including all Intellectual Property Rights thereto;
 - (ii) shall provide to the Province, whether during or after the Term, executed waivers in favour of the Province and BCTFA of all moral rights in the Project Intellectual Property, the Records and any Modifications to Province Provided Materials from all Persons who generated or created Project Intellectual Property, Records or Modifications to Province Provided Materials, by one or more instruments in writing substantially in the form of the waiver of moral rights included in Schedule 20 [Waiver of Moral Rights];
 - (iii) shall provide to the Province upon Substantial Completion and at any time upon request by the Province, whether during or after the Term, (A) copies of all materials comprising the Project Intellectual Property and (B) the Modifications to Province Provided Materials, in the format or formats as requested by the Province. Without limiting the generality of the foregoing, the Design-Builder shall provide the Province with copies of all software and firmware, and all updates made thereto, that are included in or relate to the Project Work or the Project Infrastructure (as the same has been constructed, installed, altered, upgraded and augmented by the carrying out of the Work); and
 - (iv) shall provide to the Province upon Substantial Completion and at any other time upon request by the Province the source code (if any) for any Records and Modifications to Province Provided Materials, and shall ensure that the source code (if any) for any Project Intellectual Property, and for any Background IP and Third Party IP necessary or desirable to implement, operate or exploit the Project Intellectual Property, is deposited in escrow or otherwise rendered available to the Province in a manner and on terms acceptable to the Province, acting reasonably.
- (c) Other than any license rights granted to the Province and BCTFA pursuant to Section 15.3(d), the Province and BCTFA will not own any Intellectual Property Rights in the Background IP or the Third Party IP.
- (d) The Design-Builder, at no cost to the Province:
 - (i) hereby unconditionally grants to the Province and BCTFA a Complete License in and to the Project Intellectual Property and the Background IP; and
 - (ii) shall grant, or cause to be granted, to the Province and BCTFA a Complete License in and to the Third Party IP.
- (e) For greater certainty, the provisions of Section 15.3(b)(iv) and the license provisions contained in Section 15.3(d)(ii) do not extend to include any non-specialized third party

software, technology or other Intellectual Property that is generally commercially available.

- (f) Nothing in Section 15.3(d) shall give the Province or BCTFA the right to sell, lease, license, sublicense or otherwise transfer, convey or alienate any software included in the Project Intellectual Property, the Background IP or the Third Party IP (whether for commercial consideration or not) to any person, otherwise than as may be necessary or desirable to use the Project Intellectual Property, the Background IP or the Third Party IP for Complete License Purposes.
- (g) If any Complete License granted under in Section 15.3(d) cannot be validly granted without the consent of a third party, the Design-Builder, at the Design-Builder's expense, shall use its best efforts to obtain such consent and, without limiting any of its other obligations, shall indemnify and hold harmless the Province and each Province Indemnified Person from and against any and all Direct Losses and Claims in any way arising from the Design-Builder's failure to obtain such consent.
- (h) If the Design-Builder is unable to provide any assignments, licenses or waivers required to be provided under this Agreement, the Design-Builder shall, at no additional cost to the Province or BCTFA, replace the portion of the Third Party IP, Background IP or Project Intellectual Property for which the assignment, license or waiver cannot be provided, with an alternative product or technology that meets the Province's requirements.
- (i) Except as otherwise agreed in writing with the Province and BCTFA, the Design-Builder hereby represents, warrants and covenants that:
 - (i) all Project Intellectual Property, Records and all Modifications to Province Provided Materials are and will be original and do not and will not infringe any third party's Intellectual Property Rights;
 - (ii) it owns, or will as necessary acquire, the rights associated with the Project Intellectual Property, the Background IP and the Third Party IP as may be necessary to provide the assignments or grant the licenses to the Province and BCTFA as required by the terms of this Agreement; and
 - (iii) it has obtained or will obtain waivers of moral rights from all persons as necessary to provide the waivers in favour of the Province and BCTFA as required by the terms of this Agreement.
- (j) The Design-Builder hereby irrevocably designates and appoints the Province, BCTFA and their duly authorized ministers, officers and agents as the Design-Builder's agent and attorney-in-fact to act for and on behalf of the Design-Builder to execute, deliver and file any and all documents with the same legal force and effect as if executed by the Design-Builder, provided that:
 - (i) the Province, BCTFA or any such other person shall only be entitled to rely upon such designation and appointment in circumstances where the Province and BCTFA are unable for any reason to secure the execution by the Design-Builder of any document reasonably required for the purpose of giving effect to, or

establishing compliance with, the Design-Builder's obligations under this Section 15.3; and

- (ii) if a dispute as to whether or not the Design-Builder has complied with any such obligation has been referred to the Dispute Resolution Procedure, the Province, BCTFA or any such other person shall only be entitled to rely upon such designation and appointment in relation to such obligations after such dispute has been resolved in favour of the Province and BCTFA.

15.4 License of Intellectual Property to Design-Builder

- (a) The Province hereby grants to the Design-Builder, only during the Term and only for the purpose of carrying out the Project Work and performing all obligations of the Design-Builder under the Project Documents, a non-transferable, non-exclusive, royalty-free limited license (but with no right to grant sub-licenses except to the Subcontractors) to:
 - (i) use and reproduce the Records and any Province Provided Materials, including any Modifications to Province Provided Materials, required by the Design-Builder for any purpose relating to the Project Work or the Project Infrastructure (including, as appropriate and only to the extent that the Province has the right and authority to grant such license, the Disclosed Data), and all Intellectual Property Rights therein;
 - (ii) make Modifications to any Province Provided Materials, including any Modifications to Province Provided Materials, required by the Design-Builder for any purpose relating to the Project Work or the Project Infrastructure (including, as appropriate and only to the extent that the Province has the right and authority to grant such license, the Disclosed Data), and all Intellectual Property Rights therein; and
 - (iii) use all Project Marks designated by the Province for the Project and the Project Infrastructure from time to time, provided that the Design-Builder's use of such Project Marks shall at all times be subject to compliance by the Design-Builder with any and all guidelines provided by the Province to the Design-Builder from time to time in respect of the use thereof.
- (b) Notwithstanding Section 15.4(a), nothing in this Agreement shall be construed as a permission or authorization for the Design-Builder to, and the Design-Builder shall not, copy or make Modifications to any materials, documents or data (including Disclosed Data) or other information owned by third parties without the prior written consent of such third party owner.

15.5 Traffic Data

- (a) Without prejudice to any rights which the Design-Builder may have in the Traffic Data, the Province and BCTFA shall be entitled without further consent from the Design-Builder:

- (i) to use the Traffic Data for the purposes of exercising rights or carrying out duties under this Agreement or carrying out any statutory, public or other powers, authorities, discretions, duties or functions; and
 - (ii) to incorporate the Traffic Data in any traffic or other statistics prepared by or on behalf of the Province or BCTFA and to publish such statistics or the Traffic Data either generally or to a limited category of persons or otherwise to exploit such statistics or the Traffic Data and whether or not in return for any fee.
- (b) Without prejudice to any rights which the Province and BCTFA may have in the Traffic Data, the Design-Builder shall be entitled without further consent from the Province to use the Traffic Data for the purposes of exercising rights or carrying out duties under this Agreement.

15.6 Survival

Notwithstanding any other provision of this Agreement, the provisions of this Part 15 will survive the expiry or any earlier termination of this Agreement.

PART 16 ASSIGNMENT, CHANGE IN OWNERSHIP AND SUBCONTRACTING

16.1 Assignment by Design-Builder

Neither the Design-Builder nor any Partner shall not assign, transfer, mortgage, pledge, charge, or create any trust, security interest or other interest in, any interest of the Design-Builder or any Partner in and under any of the following:

- (a) this Agreement;
- (b) any of the other Province Project Documents; or
- (c) any of the Material Subcontracts (or any of the performance securities or guarantees provided thereunder),

or any part thereof, or any benefit therein or thereunder:

- (d) without the prior acceptance of the Province in accordance with the Consent Procedure, which acceptance may be withheld in the Province's discretion;
- (e) unless at the same time, in the same transaction, to the same person and to the same extent, the Design-Builder or such Partner assigns, transfers, mortgages, pledges, charges, or creates a trust, security interest or other interest in its interests in and under each of such documents together, and none of them separately; and
- (f) except in the case of such an assignment, transfer or creation of any trust or other interest by way of security, unless the assignee, transferee or other person taking an interest executes and delivers to the Province an agreement in form and substance satisfactory to the Province acting reasonably whereby such assignee, transferee or other person assumes and agrees with the Province to observe, perform and be bound by, all of the

obligations of the Design-Builder or such Partner under such documents and the other Project Documents to which the Design-Builder or such Partner is a party.

16.2 Assignment by the Province and BCTFA

- (a) Subject to Section 16.2(b), the Province and BCTFA may, without the consent of the Design-Builder, assign or transfer any of their respective interest in and under this Agreement and the other Province Project Documents to a Qualified Governmental Entity that executes and delivers to the Design-Builder an agreement in form and substance satisfactory to the Design-Builder acting reasonably whereby such assignee or transferee assumes and agrees to observe, perform and be bound by, all the obligations and liabilities of the Province or BCTFA, as the case may be, under this Agreement and the other Province Project Documents that are being transferred.
- (b) Except as provided in Section 16.2(a), neither the Province nor BCTFA shall, without the prior consent of the Design-Builder, which may be withheld in the Design-Builder's discretion, assign or otherwise transfer any of its interest in or under this Agreement and the other Province Project Documents.
- (c) Upon any assignment or transfer in accordance with Section 16.2(a) of any or all of the obligations or liabilities of the Province or BCTFA under this Agreement and the other Province Project Documents to a Qualified Governmental Entity and the execution and delivery of the agreement contemplated in Section 16.2(a), the Province or BCTFA, as the case may be, shall be released from the obligations and liabilities under this Agreement and the other Province Project Documents that are the subject of such assignment or transfer.

16.3 Change in Control of Design-Builder

No Change in Control of the Design-Builder shall be permitted without the prior written consent of the Province in accordance with the Consent Procedure, which consent may be withheld in the Province's discretion, provided that a Change in Control of the Design-Builder arising from any *bona fide* open market transaction effected on a recognized public stock exchange shall not require the Province's consent.

16.4 Use of Subcontractors by Design-Builder

Except as otherwise provided in this Agreement, the Province acknowledges that the Design-Builder may provide, perform and carry out part of the Project Work through one or more Subcontractors. Notwithstanding any such contracting and subcontracting:

- (a) the Design-Builder shall not be relieved or excused from any of its obligations and liabilities under this Agreement; and
- (b) the Design-Builder shall be and remain principally liable to the Province for the observance and performance of all the covenants, agreements, conditions and provisos contained in this Agreement that are by the terms of this Agreement to be observed and performed by the Design-Builder.

16.5 Material Subcontracts

- (a) The Design-Builder shall not enter into:
- (i) any new Material Subcontract not entered into on or before the Effective Date;
 - (ii) any assignment of a Material Subcontract to a new Material Subcontractor; or
 - (iii) any material change to the scope of work to be performed under any Material Subcontract,
- unless full particulars of the relevant document or proposed course of action have been submitted to the Province's Representative pursuant to the Consent Procedure and have been accepted by the Province, acting reasonably, in accordance with the Consent Procedure.
- (b) The Design-Builder shall deliver to the Province's Representative a conformed copy of each Material Subcontract within 10 Business Days after the date of its execution, and in any case prior to the Material Subcontractor performing any Project Work at the Project Site.

PART 17 DEFECTS

17.1 Risks of Defects

- (a) The Design-Builder shall carry out in accordance with Schedule 5 [Project Work Defects and Warranties], as part of the Project Work, any remedial or other works required as a result of any Project Work Defect, other than any Latent Defect, which Latent Defects shall be remedied in accordance with Section 17.2 [Reporting and Rectification of Latent Defects].
- (b) Except as expressly provided in Section 17.2 [Reporting and Rectification of Latent Defects] or as otherwise expressly provided elsewhere in this Agreement, in respect of any Project Work Defect:
- (i) any such defect comprising a Nonconformity shall be addressed by the Design-Builder in accordance with Part 6 [Nonconformities] of Schedule 7;
 - (ii) all costs of and associated with such defect and any remedial or other works required as a result of such defect shall be borne by the Design-Builder; and
 - (iii) neither the Province nor BCTFA shall have any liability to the Design-Builder or any of its Subcontractors (whether in contract, tort, by statute or otherwise howsoever and whether or not arising out of any negligent act or negligent omission on the part of the Province or BCTFA or any of their respective employees, agents, contractors or subcontractors of any tier or employees of any of them) in respect of any Loss or Claim arising out of or in connection with the existence of any such defect or any remedial or other works required as a result of any such defect.

17.2 Reporting and Rectification of Latent Defects

- (a) Without prejudice to any other reporting requirement under this Agreement, in the event that a Latent Defect becomes apparent at any time during the Term, the Design-Builder shall promptly and in any event within 10 days of becoming aware of such Latent Defect give notice to the Province's Representative identifying the Latent Defect in reasonable detail.
- (b) Upon the occurrence of either of the following:
 - (i) the Design-Builder notifying the Province of a Latent Defect; or
 - (ii) the Province becoming aware of a Latent Defect and notifying the Design-Builder thereof,

the Province shall as soon as reasonably practicable do one of the following in its discretion for each Latent Defect:

- (iii) retain the Design-Builder to complete the rectification of such Latent Defect by initiating a Province Change in respect of such rectification work under Section 7.1 [Province Changes], with the compensation and relief to which the Design-Builder is entitled being determined in accordance with Schedule 11 [Changes], provided that any entitlement which the Design-Builder would have had under Part 8 [Supervening Events] if such Latent Defect had constituted a Compensation Event under Section 17.2(b)(iv), including relief from delays and Direct Losses resulting from the Design-Builder's compliance with its obligations under Section 17.3 [Traffic Management and Public Safety with Defects] in respect of such Latent Defect shall be included in the compensation and relief to which the Design-Builder is entitled for such Province Change; or
- (iv) have such rectification work carried out by its own labour forces (including day labour retained by the Province) or by a Third Party Contractor, in which event the existence of such Latent Defect and the Design-Builder's obligations arising as a result of such Latent Defect, including its resulting obligations as Prime Contractor and its obligations under Section 17.3 [Traffic Management and Public Safety with Defects], as well as the acts and omissions of the Province or such Third Party Contractor, as the case may be, in carrying out such rectification work shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply, except only that, for the purposes of Section 8.1(b)(v) in the case of any Latent Defect, the time period referred to therein shall not apply in respect of any such Compensation Event in respect of such Latent Defect.

17.3 Traffic Management and Public Safety with Defects

For greater certainty, the Design-Builder shall be responsible in accordance with this Agreement for all Traffic Management and other procedures and arrangements for the safety of the public using the Project Infrastructure for which it is otherwise responsible under the terms of this Agreement irrespective of any defect in the Project Infrastructure, including any Project Work Defect or Latent Defect.

**PART 18
GENERAL**

18.1 Disputes

- (a) Except as otherwise expressly provided in this Agreement:
- (i) any dispute between the parties with respect to any of the subject matters of this Agreement, whether or not the provisions of this Agreement specifically refer the dispute to the Dispute Resolution Procedure;
 - (ii) any matter or dispute between the parties that, by the express terms of this Agreement, is to be resolved or determined by the Dispute Resolution Procedure; and
 - (iii) any disagreement between the parties with respect to any matter that, by the express terms of this Agreement, is to be agreed upon by the parties;

shall be resolved in accordance with, and the parties shall comply with, the Dispute Resolution Procedure, provided that, notwithstanding this or any other provision in this Agreement, no matter, decision or determination which by the terms of this Agreement is subject to or within the discretion of, or is to be made in the discretion of, the Province or the Province's Representative shall be subject to the Dispute Resolution Procedure.

- (b) At all times, notwithstanding the existence of any dispute or the referral of any dispute for resolution under the Dispute Resolution Procedure, except as may otherwise be expressly provided in this Agreement, the parties shall continue to comply with, observe and perform all of their respective obligations (including the obligation of the Design-Builder to proceed with the conduct of the Project Work) in accordance with the provisions of this Agreement without prejudice to the right to contest, dispute and challenge the relevant matter in accordance with the provisions of this Agreement.
- (c) Without limiting any other provision of this Agreement, to the extent that any such dispute involves a disagreement as to the nature or scope of any of the Project Work (including as to the performance or method of performance of any of the Project Work), the Design-Builder shall abide by the decision of the Province with respect to the subject matter of the dispute and diligently proceed with the Project Work, and shall comply with all instructions given by the Province pending the outcome of the dispute, but without prejudice to the rights of the Design-Builder as ultimately determined in accordance with the Dispute Resolution Procedure.
- (d) Any and all issues or disputes between or among the Province, BCTFA and the Design-Builder, whether or not subject to the Dispute Resolution Procedure, shall constitute Confidential Information.

18.2 Public Communications

- (a) The Design-Builder will carry out the Communications and Engagement in accordance with Schedule 9 [Communications and Engagement].

- (b) Unless expressly provided in this Agreement or otherwise required by any Law (but only to that extent), neither party shall make or permit to be made any public announcement or disclosure whether for publication in the press, radio, television or any other medium of any Confidential Information or any matters relating thereto, without the prior written consent of the other party, which consent may be granted or withheld by such other party in its discretion.

18.3 Entire Agreement

This Agreement (including the Schedules) constitutes the entire agreement between the parties with respect to all matters contained herein, expressly superseding all prior agreements and communications (both oral and written) between any of the parties with respect to all matters contained herein and superseding as well the Request for Qualifications and the Request for Proposals.

18.4 Amendment

No amendment to this Agreement shall be binding unless it is in writing and signed by each of the parties hereto.

18.5 Notices

Any notice, demand, request, consent, approval, objection, agreement or other communication required or permitted to be given, made or issued under this Agreement must, unless otherwise specifically provided in this Agreement, be in writing signed by the providing party and delivered by hand, sent by a recognized courier service (with delivery receipt requested), or transmitted by facsimile or electronic transmission to the address, facsimile transmission number and/or electronic email address of each party set out below:

- (a) if to the Province:

Ministry of Transportation and Infrastructure
5B – 940 Blanshard Street
Victoria, British Columbia
V8W 3E6
Attention: The Deputy Minister
Facsimile: 250-387-6431

- (b) if to BCTFA:

BC Transportation Financing Authority
c/o Ministry of Transportation and Infrastructure
5B – 940 Blanshard Street
Victoria, British Columbia
V8W 3E6
Attention: The Chief Executive Officer
Facsimile: 250-387-6431

- (c) if to the Province's Representative:
- Suite 301 Victoria Street West
Kamloops, British Columbia
V2C 2A2
Attention: Province's Representative, Kicking Horse Canyon Project – Phase 4
Email: KHCDocumentControl@gov.bc.ca

- (d) if to the Design-Builder or the Design-Builder's Representative:
- Kicking Horse Canyon Constructors (GP)
c/o Aecon Constructors, a division of Aecon Construction Group Inc.
1055 Dunsmuir Street, Suite 2124
Vancouver, British Columbia
V7X 1G4
Attention: General Counsel
Email: yfushman@aecon.com

or to such other address, facsimile transmission number or electronic mail address as any party or its representative may, from time to time, designate to the other party and its representatives in the manner set out above. Any such notice or communication shall be considered to have been received:

- (e) if delivered by hand or by a courier service during business hours on a Business Day, when delivered, and if not delivered during business hours, upon the commencement of business hours on the next Business Day;
- (f) if sent by facsimile transmission during business hours on a Business Day, upon the sender receiving confirmation of the successful transmission and, if not transmitted during business hours, upon the commencement of business hours on the next Business Day following confirmation of the transmission; and
- (g) if sent by electronic transmission during business hours on a Business Day, upon receipt, and if not delivered during business hours, upon the commencement of business hours on the next Business Day provided that:
- (i) the receiving party has, by electronic mail or by hand delivery, acknowledged to the notifying party that it has received such notice; or
- (ii) within 24 hours after sending the notice, the notifying party has also delivered a copy of such notice to the receiving party by hand delivery.

18.6 Waiver

Except as expressly provided otherwise in this Agreement, any waiver of any provision of this Agreement shall only be effective if in writing signed by the waiving party, and no failure by any party at any time to exercise a right or remedy under or to enforce any provision of this Agreement or to require performance by any other party of any of the provisions of this Agreement shall be construed as a waiver of any such provision and shall not affect the validity of this Agreement or any part thereof or the right of any party to enforce any provision in accordance with its terms. Any waiver shall only apply to the specific matter waived and only in the specific instance and for the specific purpose for which it is given.

18.7 Further Assurances

The parties shall do, execute and deliver, or shall cause to be done, executed and delivered, all such further acts, documents and things as the other may reasonably request for the purpose of giving effect to this Agreement or for the purpose of establishing compliance with the parties' respective obligations under this Agreement.

18.8 Relationship of the Parties

Nothing contained in this Agreement or in the other Province Project Documents nor any action taken pursuant hereto or thereto shall be deemed to constitute the Province and the Design-Builder, or BCTFA and the Design-Builder, or all of them, a partnership, joint venture or any other similar such entity.

18.9 Binding Effect

Subject to the provisions of Part 16 [Assignment, Change in Ownership and Subcontracting], this Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

18.10 Counterparts

This Agreement may be executed in one or more counterparts. Any single counterpart of a set of counterparts executed, in either case, by all of the parties will constitute a full, original and binding agreement for all purposes. Counterparts may be executed and delivered either in original or PDF form.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the day and year first above written.

SIGNED on behalf of **HER MAJESTY**)
THE QUEEN IN RIGHT OF THE)
PROVINCE OF BRITISH COLUMBIA)
by a duly authorized representative of)
the **MINISTER OF TRANSPORTATION**)
AND INFRASTRUCTURE in the)
pre)
)
)
)

(Witness) *Kate Fairbrother*

Kevin Richter
Associate Deputy Minister and Acting Deputy
Minister, Ministry of Transportation and
Infrastructure

BC TRANSPORTATION FINANCING AUTHORITY
by its authorized signatory:

Per:

Nancy Bain
Executive Financial Officer and Corporate Secretary

**KICKING HORSE CANYON CONSTRUCTORS
(GP), by its partners:**

AECON CONSTRUCTORS, a division of
AECON CONSTRUCTION GROUP INC.
by its authorized signatories:

Per:


Name
Title

Per:

Name:
Title:

PARSONS INC.
by its authorized signatories:

Per:

Name: Nuno Pereira
Title: Senior Vice President

Per:

Name:
Title:

EMIL ANDERSON CONSTRUCTION (EAC) INC.
by its authorized signatories:

Per:

Name:
Title:

Per:

Name:
Title:

**SCHEDULE 1
DEFINITIONS AND INTERPRETATION**

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**PART 1
DEFINITIONS**

1.1 Definitions

In this Agreement, including the Recitals and Schedules hereto, unless otherwise specified or the context otherwise requires, the following words and expressions have the following meanings:

“**AASHTO**” means American Association of State Highway and Transportation Officials.

“**Access Period**” means the period:

- (a) commencing on the date from which such part of the Project Site is made available to the Design-Builder pursuant to Section 1.3 [Commencement of Access to Project Site] of Schedule 8; and
- (b) ending on the date on which the Design-Builder’s access to such part of the Project Site terminates pursuant to Section 1.4 [Termination of Access to Project Site] of Schedule 8.

“**Additional Lands**” means those Project Lands identified as “Additional Lands” on the Land Identification Drawings.

“**Affected Structure**” has the meaning given in Section 5.6C(b) of Part 2 [Design and Construction Requirements] of Schedule 4.

“**Affiliate**” means, with respect to a person (in this definition, the “**Subject Person**”) any one or more of the following, as applicable:

- (a) any other person or persons that Control the Subject Person, or is or are Controlled by the Subject Person, or is or are Controlled by the same person or persons that Control the Subject Person; and
- (b) in the case of a corporation, any other corporation that is an “affiliate” of the first mentioned corporation within the meaning of “affiliate” as defined in the *Business Corporations Act* (British Columbia) in effect as at the Effective Date;

“**Agreed Remedy Cost**” has the meaning given in Section 6.12(b)(ii) of Part 3 [Design and Certification Procedure] of Schedule 4.

“**Agreement**” means this agreement including all recitals and Schedules to this agreement, as amended, supplemented or restated from time to time by agreement in writing signed by the parties.

“**Alternative Route**” has the meaning given in Section 3.1(a) of Part 4 [Traffic Management] of Schedule 4.

“**Applicant**” has the meaning given in Section 8.1(a).

“**Appropriately Qualified Professional**” or “**AQP**” has the meaning given in DBSS 165.01.02.

“**Approved Purposes**” means any purpose in connection with this Agreement, the Project, the Project Work, the Project Site, the Project Infrastructure or any part of any of them.

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“**Arbitration Dispute Notice**” has the meaning given in Section 4.1 [Referral to Arbitration] of Schedule 16.

“**Arbitrator**” has the meaning given in Section 4.5 [No Conflict for Arbitrator] of Schedule 16.

“**Archaeological and Heritage Resource Management Plan**” means the Archaeological and Heritage Resource Management Plan for the Project dated August 2020, as amended, supplemented or replaced by the Project Archaeologist from time to time.

“**Archaeological Manager**” means the person appointed by the Design-Builder in accordance with Section 2.2 [Archaeological Manager] of Schedule 6.

“**Archaeological Monitor**” means a specialist, overseen by the Archaeological Manager, present during the course of the Project Work to identify and protect archaeological deposits, features or objects which may be uncovered or otherwise affected by the Project Work and to monitor those areas of the Project Site where chance finds of archaeological deposits, features or objects could occur.

“**Architect**” means a person having a Certificate of Practice with the Architectural Institute of British Columbia.

“**ARD/ML**” has the meaning given in Section 6.2(a) of Part 2 [Design and Construction Requirements] of Schedule 4.

“**ARD/ML Material Management Plan**” means the plan prepared by the Design-Builder in accordance with Section 2.7 [ARD/ML Material Management Plan] of Schedule 6.

“**ASTM**” means the American Society for Testing and Materials.

“**Available Track Window**” has the meaning given in Section 3.6(h)(iv)(A) of Part 1 [General Provisions] of Schedule 4.

“**Avalanche**” means a snow avalanche that is Size 1 or larger according to TASARM.

“**Avalanche Mitigation Structure**” means a wall, fence or similar structure intended to reduce the Avalanche hazard to the travelling public and the risk of Avalanche damage to the New Project Infrastructure.

“**Avalanche Path**” means any existing avalanche path included in the Avalanche Atlas provided in the Data Room or Avalanche Occurrence Records or a new slope that is encountered or created in the course of Construction that can produce an Avalanche.

“**Avalanche Safety Plan**” has the meaning given in Section 4(b) of Appendix E [Snow Avalanche Safety Measures] to Schedule 4.

“**Background IP**” means the Intellectual Property specifically identified as Background IP in Appendix C [Background IP and Third Party IP] to this Schedule and that is or will be embedded in or used in connection with the Project Intellectual Property, or necessary or desirable to implement, operate or exploit the Project Intellectual Property, but which was not created or brought into existence for any of the Project Intellectual Property Purposes and provided that, for clarity, the “**Background IP**” does not include any of the Third Party IP.

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"**Basic Site Restoration**" means site restoration other than Enhanced Site Restoration.

"**BCIB**" means BC Infrastructure Benefits Inc.

"**BCIB-Contractor Agreement**" means the agreement to be entered into between BCIB and the Design-Builder, in the form set out in Appendix A [BCIB-Contractor Agreement] to Schedule 21, as amended, supplemented or replaced from time to time by written agreement of the parties thereto.

"**BCIB-Subcontractor Agreement**" means each agreement to be entered into between BCIB and a Subcontractor in accordance with Section 1.4 [BCIB-Subcontractor Agreements] of Schedule 21, as amended, supplemented or replaced from time to time by written agreement of the parties thereto.

"**BCICAC**" means the British Columbia International Commercial Arbitration Centre.

"**BCTFA**" has the meaning given in the Recitals.

"**Best Management Practices**" means the environmental best management practices applicable for highway construction, including but not limited to Good Industry Practice and the Reference Documents.

"**BMIS**" or "**Bridge Management Information System**" means the Ministry's corporate structure asset management application that is used to maintain inventory and condition data for Structures to support the Ministry programs.

"**Bonds**" means a performance bond and a labour and materials payment bond, each:

- (a) in the form attached as Schedule 14 [Specimen Bonds] or in substantially equivalent form acceptable to the Province;
- (b) in the amount of _____ ; and
- (c) issued by a surety licensed to transact the business of a surety in British Columbia and acceptable to the Province, acting reasonably.

"**Bridge**" means a structure providing a means of transit for pedestrians, cyclists and/or vehicles above the land and/or water surface of a valley, arroyo, gorge, river, stream, lake, canal, tidal inlet, gut or strait, above a highway, railway or other obstruction, whether natural or artificial and consists of the Foundation, Substructure and Superstructure.

"**Bridge Deck**" means the wearing surface of a Bridge and the structural component that transfers loads to the other Superstructure components.

"**Bridge Structural Engineer**" means a Professional Engineer specializing in Bridge structural design, construction, maintenance and rehabilitation.

"**Business Day**" means a day other than a Saturday, Sunday or Statutory Holiday in British Columbia.

"**CASL**" means *An Act to promote the efficiency and adaptability of the Canadian economy by regulating certain activities that discourage reliance on electronic means of carrying out commercial activities, and to amend the Canadian Radio-television and Telecommunications Commission Act, the Competition Act,*

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the Personal Information Protection and Electronic Documents Act and the Telecommunications Act (Canada).

“**Category III Structures**” means Structures that meet any of the criteria set out in Section 3.2(d) of Part 3 [Design and Certification Procedure] of Schedule 4.

“**Certificate**” means any certificate in the form of one of the certificates set out in Appendix C [Form of Certificates] to Schedule 4.

“**Certificate of Substantial Completion**” means the Certificate issued by the Owner’s Engineer in accordance with Article 6 [Construction Certification] of Part 3 of Schedule 4 confirming the achievement of Substantial Completion.

“**Certificate of Total Completion**” means the Certificate issued by the Owner’s Engineer in accordance with Article 6 [Construction Certification] of Part 3 of Schedule 4 confirming the achievement of Total Completion.

“**Change Certificate**” has the meaning given in Section 2.7 [Change Certificate] of Schedule 11.

“**Change in Control**” means a Change in Ownership resulting in a change of the person or persons having Control of the Design-Builder.

“**Change in Costs**” means, in respect of any Province Change or Supervening Event, the net amount (calculated in accordance with Sections 2.3 [Preparation of Change Report] and 2.4 [Valuation of Change in Costs] of Schedule 11), which may be positive or negative, of:

- (a) all additional costs (including direct and indirect costs, capital expenditure costs and financing costs) which the Design-Builder reasonably expects to incur as a direct consequence of implementing the Province Change which the Design-Builder would not incur if the Province Change is not implemented, or as a result of such Supervening Event, as the case may be; and
- (b) any cost savings (including direct and indirect costs, capital expenditure costs and financing costs) or other credits which the Design-Builder can realize as a direct consequence of implementing the Province Change, including costs which the Design-Builder would incur if the Province Change is not implemented, or as a result of such Supervening Event, as the case may be.

“**Change in Law**” means the coming into force, after the Financial Submittal Date, of any new Law in Canada (including a new Law relating to Taxes), or any amendment to or repeal of any existing Law in Canada (including an existing Law relating to Taxes) (but excluding in each case any lawful requirements of any Governmental Authority (unless resulting from a Change in Law)) which is binding on the Design-Builder, but excluding any such new Law or amendment or repeal:

- (a) relating to Taxes or any amendment to or repeal of any existing Law relating to Taxes that in either case is of general application in respect of capital or large corporations taxes, the rate of taxation applicable to the general income of a person or a change in the manner of calculation of the general income of a person;

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- (b) arising from any change in the interpretation of any Law, other than a judgement of a relevant Court which changes binding precedent in British Columbia;
- (c) arising from or in any way connected to or having substantially the same effect as any Law which, as of the Financial Submittal Date:
 - (i) had been introduced as a Bill in the Legislative Assembly of British Columbia or the Parliament of Canada or in a draft statutory instrument published or issued by a Governmental Authority; or
 - (ii) had been published in the Canada Gazette or in a draft bill as part of a Governmental Authority discussion or consultation paper;
- (d) relating to the application for, coming into effect, terms, implementation, repeal, revocation or otherwise of any Permit; or
- (e) consisting of an amendment, replacement or repeal of any of the Reference Documents.

“**Change in Ownership**” means, with respect to a person, a change in the ownership, whether beneficial or otherwise, of the shares or units of ownership of such person, or in the direct or indirect power to vote or transfer any of the shares or units of ownership of such person.

“**Change Report**” has the meaning given in Section 2.3 [Preparation of Change Report] of Schedule 11.

“**Checking Team**” means the relevant group of engineers assigned to independently undertake a design check in accordance with the Design and Certification Procedure.

“**CHRIS**” or “**Corporate Highway & Resource Information System**” means the Ministry’s corporate application that is used to maintain inventory and condition data for inventory other than Structures to support the Ministry programs.

“**Claim**” means any claim, demand, action, cause of action, suit or proceeding.

“**Clear Zone**” has the meaning as set out in the BC Supplement to TAC.

“**Closure**” means any partial or total closure, obstruction, blockage or other restriction or interference (howsoever arising) impeding the flow of traffic on or affecting the ability of the public to pass and re-pass over a highway of whatever duration including any partial or total closure, obstruction, blockage, restriction or interference:

- (a) that is instigated by the Design-Builder;
- (b) that is required for any works by a Governmental Authority or for any inspection, investigation or survey (whether carried out by the Design-Builder, the Province or any Governmental Authority or any other person);
- (c) that results from an Incident;
- (d) that is instigated by the Police or other Relevant Authority for health, safety or emergency reasons or that results from Protest Action; or

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- (e) that materially affects the ability to use that highway or such part thereof in a safe manner resulting from the build up of snow or ice or from any other natural event physically affecting the highway,

but excluding a Stoppage, and provided also that any traffic congestion or slowing of the flow of traffic in a lane or lanes within the highway will not by itself be considered to be a Closure (including where the same results from speed restrictions properly imposed from time to time as a direct result of adverse weather conditions or seasonal restrictions for the time being affecting the highway, but excluding where the standard of construction and/or condition of the highway has contributed to the need for such speed restrictions).

“**Commissioner**” means the Information and Privacy Commissioner under FOIPPA.

“**Communications and Engagement**” means all activities carried out by the Design-Builder in accordance with Schedule 9 [Communications and Engagement] and any other activities of a communications nature set out in this Agreement.

“**Communications and Engagement Obligations**” has the meaning given in Section 2.1 [Communications and Engagement Obligations] of Schedule 9.

“**Communications Director**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

“**Community and Stakeholder Engagement**” means:

- (a) building relationships with and keeping the public, local residents and businesses, and adjacent property owners informed, gathering input and feedback, and responding to questions and concerns; and
- (b) building relationships with and keeping designated Stakeholders informed through on-going two-way communication about the Project, gathering input and feedback, and responding to questions and concerns, planning and organizing formal working groups, and organizing and/or attending other meetings that the Province may deem appropriate.

“**Community Benefits Agreement**” means the community benefits agreement dated July 17, 2018 between the Allied Infrastructure and Related Construction Council of British Columbia and BCIB, as amended, supplemented or replaced from time to time in accordance with this Agreement.

“**Community Benefits Requirements**” has the meaning given in Section 1.1 [Community Benefits Requirements] of Schedule 21.

“**Community Liaison Committee**” has the meaning given in Section 5.3(a) of Schedule 9 [Communications and Engagement].

“**Compensation Event**” means any of the following events or circumstances:

- (a) a breach by the Province of Section 2.5(a)(i), Section 2.5(c) or Section 2.1 [Handover of Lands] of Schedule 8;

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- (b) the circumstances referred to in Section 2.15(d) as constituting a Compensation Event;
- (c) the existence as at the Financial Submittal Date of any Project Site Agreement, Encumbrance or Utility Agreement, or any amendment to any thereof, affecting any Project Lands (other than the Additional Lands) or any Infrastructure on any Project Lands (other than the Additional Lands), that:
 - (i) in the case of a Project Site Agreement or Encumbrance, is not described in or referred to in either of Appendix A [Project Lands] or Appendix B [Certain Project Site Encumbrances] to Schedule 8;
 - (ii) is not registered in the Land Title Office against title to any Project Lands as at the Financial Submittal Date; and
 - (iii) the Design-Builder does not otherwise have knowledge of, could not have discovered through the exercise of reasonable due diligence (provided that any investigation of Crown grants or unregistered leases shall be deemed not to be required for reasonable due diligence to have been exercised for these purposes) and could not reasonably have been anticipated from an analysis of all relevant information available to the Design-Builder (including the Disclosed Data) as at the Financial Submittal Date, having regard to the opportunity afforded the Design-Builder to conduct such due diligence and analysis before the Financial Submittal Date;
- (d) a claim asserting infringement of indigenous rights or indigenous treaty rights or indigenous title by any indigenous group(s), but not including any Protest Action resulting from or in connection with any such claim or any such claim in respect of any Additional Lands (provided that, for certainty, the exclusion of any such Protest Action from this paragraph (d) shall not prejudice any otherwise valid claim that the Design-Builder may have as a result of the occurrence of a Compensation Event referred to in paragraph (o) of this definition;
- (e) [Not Used]
- (f) the circumstances referred to in Section 4.20(c) as constituting a Compensation Event;
- (g) delay by the Province in disbursing Property Damage Insurance Proceeds in accordance with Section 6.18(c) or Section 6.18(d), as applicable, after all conditions to such authorization and direction have been satisfied, beyond the relevant time periods provided for in those Sections;
- (h) the circumstances referred to in Section 11.2(c) as constituting a Compensation Event;
- (i) the circumstances referred to in Section 11.3(c) as constituting a Compensation Event;
- (j) the circumstances referred to in Section 11.4(d) as constituting a Compensation Event;
- (k) the circumstances referred to in Section 11.5(c) as constituting a Compensation Event;

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- (l) the circumstances referred to in Section 17.2(b)(iv) as constituting a Compensation Event;
- (m) the existence of any Province Subsequent Contamination, except to the extent:
 - (i) any actions required to be taken by the Design-Builder pursuant to Part 3 [Contamination and Hazardous Substances] of Schedule 6 in respect of such Province Subsequent Contamination are required to be taken as a result of or in connection with the Design-Builder or any person for whom the Design-Builder is in law responsible causing, contributing to or exacerbating any such Province Subsequent Contamination; or
 - (ii) any such Province Subsequent Contamination is caused, contributed to or exacerbated by the Design-Builder or any person for whom the Design-Builder is in law responsible;
- (n) the circumstances referred to in Section 2.2(f)(i) of Schedule 2 [Representatives, Review Procedure and Consent Procedure] as constituting a Compensation Event;
- (o) subject to Section 8.9(a), a Protest Action;
- (p) a Discriminatory Change in Law;
- (q) damage to or destruction of the Project Infrastructure or part thereof caused by a Seismic Event (other than the Project Infrastructure on the Additional Lands);
- (r) damage to or destruction of the Project Infrastructure or part thereof caused by a Flood (other than the Project Infrastructure on the Additional Lands);
- (s) any wilful misconduct, negligent act or negligent omission of any Third Party Contractor on or about the Project Site occurring on or after the Effective Date;
- (t) the existence of a Nonconformity caused solely by a Province Non-Excusable Event;
- (u) it has been determined by a court of competent jurisdiction, without any further rights of appeal, that:
 - (i) a part of the Project Site (other than the Additional Lands) is not a “highway” as defined by the *Transportation Act* (British Columbia); and
 - (ii) the *Builders Lien Act* (British Columbia) applies to that part of the Project Site;
- (v) the circumstances referred to in Section 5.6C(b)(iii)(B) of Part 2 [Design and Construction Requirements] of Schedule 4 as constituting a Compensation Event;
- (w) the circumstances referred to in Section 5.6C(b)(iv)(A) of Part 2 [Design and Construction Requirements] of Schedule 4 as constituting a Compensation Event;
- (x) the circumstances referred to in Section 3.6(h)(iv)(F)(1) of Part 1 [General Provisions] of Schedule 4 as constituting a Compensation Event;

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- (y) the circumstances referred to in each of Sections 3.7(d)(iii)(A) and 3.7(d)(iv)(A) of Part 1 [General Provisions] of Schedule 4 as constituting a Compensation Event;
- (z) the circumstances referred to in Section 8.10B(e) as constituting a Compensation Event;
or
- (aa) the failure by CP to:
 - (i) comply with its obligations under the CP Agreement, where the Design-Builder has made all reasonable efforts to cause CP to comply; or
 - (ii) prior to entering into CP Agreement, voluntarily comply with what would be its obligations in accordance with the draft of the CP Agreement included in the Data Room as of August 18, 2020, where the Design-Builder has complied with all of its obligations under this Agreement,

in each case where such compliance is necessary in connection with the performance of the Project Work;
- (bb) the circumstances referred to in Section 3.7(f)(ii) of Part 1 [General Provisions] of Schedule 4 as constituting a Compensation Event; and
- (cc) the circumstances referred to in paragraph (m) of the definition of “Relief Event” in this Section as constituting a Compensation Event.

“**Competitive Procurement Requirements**” means all applicable requirements of Laws, including all treaties or agreements relating to trade to which the Province is a party from time to time, and of procurement policies or guidelines of the Province in effect from time to time.

“**Complete License**” means, in respect of any Licensed Property, a non-exclusive, perpetual, irrevocable, worldwide, royalty-free, fully-paid, sublicensable, transferable and assignable licence or sub-licence (if applicable) for the Province, BCTFA, their employees, agents, contractors, consultants, advisors, sublicensees, successors and assigns to do any one or more of the following for any one or more of the Complete License Purposes:

- (a) exercise, in respect of the Licensed Property, all of the rights set out in the *Copyright Act* (Canada), including the right to use, reproduce, make Modifications to, publish, distribute and otherwise use the Licensed Property in any medium or format, whether now known or hereafter devised;
- (b) use, make, have made and otherwise implement, operate or exploit any product or service based on, embodying, incorporating or derived from the Licensed Property; and
- (c) exercise any and all other past, present or future rights in and to the Licensed Property.

“**Complete License Purposes**” means, for any Licensed Property, any and all use whatsoever in relation to any design, construction, completion, commissioning, testing, operation, maintenance, repair, modification, alteration, adaptation, rehabilitation, improvement, expansion, extension, financing or regulation (including with respect to the contemplation, procurement or undertaking of any such activities by the Province or any third parties) in connection with the applicable Approved Purposes for such

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Licensed Property, and/or, for all Licensed Property, the carrying out of any statutory, public or other powers, authorities, discretions, duties or functions in respect of any of the foregoing, including the development of transportation standards, policies and procedures.

“**Compulsory Acquisition Laws**” means all Laws authorizing the expropriation or other compulsory acquisition of land or Land Rights, including the *Transportation Act* (British Columbia), the *Transportation Investment Act* (British Columbia) and the *Expropriation Act* (British Columbia).

“**Compulsory Acquisition Order**” means any order or other process of any Court or other relevant body or authority pursuant to a Compulsory Acquisition Law effecting the expropriation or other compulsory acquisition of any land or Land Rights in any Project Lands forming or intended to form part of the Project Site, but does not include an agreement entered into pursuant to Section 3 of the *Expropriation Act* (British Columbia).

“**Concession Agreement**” means the redacted version of the concession agreement among the Province, BCTFA and the Concessionaire made as of October 28, 2005 and as amended, supplemented or replaced from time to time, which has been provided by the Province to the Design-Builder and identified as the “Concession Agreement” for the purposes of this Agreement.

“**Concessionaire**” means Trans-Park Highway General Partnership.

“**Concessionaire’s Operator**” means Emcon Services Inc., or any successor or replacement Operator appointed under the Concession Agreement.

“**Conditions of Access**” has the meaning given in Section 1.1 [Conditions of Access] of Schedule 8.

“**Confidential Information**” means all confidential or proprietary information of a party that is (whether before, on or after the Effective Date) supplied, or to which access is granted, to or on behalf of another party pursuant to or relating to this Agreement (including the terms of this Agreement and any documents or information supplied in the course of proceedings under the Dispute Resolution Procedure), either in writing, or in any other form, directly or indirectly pursuant to discussions with another party, and includes all documents, computer records, specifications, formulae, evaluations, methods, processes, technical descriptions, reports, analyses, compilations, studies and other data, records, drawings and information and other documents whether prepared by or on behalf of a party which contain or otherwise reflect or are derived from such information, and expressly includes Disclosed Data, Personal Information.

“**Consent Procedure**” means the procedure defined in Section 2.2 [Consent Procedure] of Schedule 2 whereby submissions for consent in respect of certain matters are made by the Design-Builder to the Province’s Representative.

“**Consequential Losses**” means any damages or losses that would be considered under applicable British Columbia law to constitute consequential damages or losses, whether or not any such loss arises directly or indirectly from the incident giving rise to the claim and whether foreseeable or not, howsoever caused, even if a party knew or should have known of the possibility or likelihood of such damage or such loss.

“**Construction**” means:

- (a) the performance of all construction, alteration, augmenting, upgrading, installation, configuration, integration, completion, testing, commissioning and other services and

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activities, including site preparation and decommissioning, required to be performed or carried out by the Design-Builder to construct and complete the New Project Infrastructure in accordance with the Final Design for the New Project Infrastructure in order to achieve Total Completion;

- (b) the performance of all project management, quality management, environmental management, communications management and other management services and activities required to be performed or carried out by the Design-Builder for the carrying out of the foregoing;
- (c) the supply by the Design-Builder of all Plant, Construction Plant, other property, workers and materials for the performance or carrying out of the foregoing; and
- (d) all other work, services and activities to be provided by the Design-Builder in respect of the foregoing,

all as set out and described in and in accordance with this Agreement, including the Design and Construction Requirements and the Design and Certification Procedure.

“Construction Certificate” means a Certificate in respect of the Construction as provided by the Design-Builder pursuant to the Design and Certification Procedure.

“Construction Communications and Engagement Plan” has the meaning given in Section 2.5(a) of Schedule 9 [Communications and Engagement].

“Construction Environmental Management Plan” means the plan prepared by the Design-Builder in accordance with Section 2.6 [Construction Environmental Management Plan] of Schedule 6.

“Construction Manager” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

“Construction Management Plan” has the meaning given in Section 1.5 [Construction Management Plan] of Schedule 3.

“Construction Plant” means plant, materials, tools, implements, equipment, machinery, vehicles, temporary buildings and structures, whether owned or leased by the Design-Builder or a Subcontractor, necessary for or used or to be used in the performance of the Project Work, but does not include Plant.

“Construction Quality Management Plan” means the plan for the quality management of the Construction prepared by the Design-Builder in accordance with Appendix C [Construction Quality Management Plan] to Schedule 7.

“Construction Records” means all stand-alone documents of any kind, including records, plans and drawings, including installation drawings and cable schedules, as applied for construction purposes and as modified during construction, so as to constitute a complete and accurate record of the as-built features of the Project Infrastructure.

“Construction Segment” has the meaning given in Section 3.2(d) of Part 1 [General Provisions] of Schedule 4.

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“**Construction Specifications**” means the specifications, criteria and requirements for materials and products, procedures and methodology for providing, performing and carrying out the Design and Construction as developed by the Design-Builder in accordance with this Agreement.

“**Contamination**” means the presence of any Hazardous Substance in the environment (including Hazardous Substances that occur naturally in the environment or result from natural processes), except Hazardous Substances present in the environment in quantities or concentrations below permissible levels as set by applicable Environmental Laws. If Contamination is present in soil, soil vapour, surface water, sediment or ground water, then the soil, soil vapour, surface water, sediment or groundwater, as the case may be, containing the Contamination will also be deemed for the purposes of this Agreement to be Contamination.

“**Contract Price**” has the meaning given in Section 10.1(a).

“**Contract Year**” means each period of 12 calendar months commencing on January 1 and ending on December 31 during the Term, provided that:

- (a) the first Contract Year shall be the period from the Effective Date to the next following December 31; and
- (b) the last Contract Year shall be the period ending on the Termination Date and beginning on the next preceding January 1.

“**Control**” of a person means any of the following:

- (a) the power to direct or cause the direction of the management, actions, policies or decisions of that person, whether directly or indirectly through other persons, and whether through the ownership of shares, voting securities, partnership interests, units of ownership, or other ownership interests, or by contract, or otherwise;
- (b) legal or beneficial ownership or control over equity or ownership interests in that person, whether directly or indirectly through other persons:
 - (i) having a subscribed value (taking into account contributions to be made) of more than one half of the subscribed value (taking into account contributions to be made) of all equity or ownership interests in that person; or
 - (ii) carrying more than one half of the voting rights for:
 - (A) the management, actions, policies or decisions of that person; or
 - (B) the election or appointment of directors or managers of that person; or
- (c) if the person is a corporation, “**control**” within the meaning of Section 2(3) of the *Business Corporations Act* (British Columbia) in effect as at the Effective Date,

and “**Controlled**” has the corresponding meaning.

“**Correction**” means one of the following actions to eliminate a detected Nonconformity:

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- (a) Rework;
- (b) Repair;
- (c) Reject; and
- (d) Use as Is.

“**Corrective Action**” means an action to eliminate the cause of an existing Nonconformity, defect or other undesirable situation to prevent its recurrence.

“**Cost Item**” means each discrete portion of the Design and Construction components (as applicable) of the Project Work that is identified in Appendix B [Progress Measurement Principles] to Schedule 10.

“**Cost Item Amount**” means the amount of deemed costs, expressed in dollars, attributable to each Cost Item, as set out in Appendix B [Progress Measurement Principles] to Schedule 10.

“**Cost Item Progress Amount**” has the meaning given in Section 2.1(b) of Schedule 10 [Payment and Performance Mechanism].

“**Court**” means the Supreme Court of British Columbia and courts of appeal therefrom.

“**COVID-19 Related Health Event**” means the COVID-19 pandemic declared by the WHO on March 11, 2020 and continuing until the date on which such pandemic is determined by the WHO to be in a "post-pandemic" period.

“**CP**” means Canadian Pacific Railway Company.

“**CP Agreement**” means the Project Coordination and Cost Recovery Agreement to be entered into between the Province, BCTFA and CP, as amended, supplemented or replaced from time to time in accordance with this Agreement.

“**CP Field Representative**” means the individual so appointed by CP pursuant to the CP Agreement.

“**CP Lands**” means the “Railway Lands” as defined in the CP Agreement.

“**CP Reference Documents**” has the meaning given in Section 3.1(b) of Part 1 [General Provisions] of Schedule 4.

“**CSA**” means the Canadian Standards Association.

“**Cultural Monitor**” means an Identified Indigenous Group community member who monitors ground disturbance activities in the vicinity of Project-specific “environmentally sensitive areas” and “restricted zones - archaeology sites”, as shown on the Environmental Constraint Drawings, and looks for material that could have archaeological, heritage and/or cultural values in Project-specific areas to be identified prior to the start of Construction with the applicable Identified Indigenous Group Liaison.

“**Data Room**” means the secure website established by the Province in connection with the procurement process for the Project prior to the Effective Date and includes all of its contents, including the materials, documents, information and data contained therein, either directly or by an external link; for record

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purposes, the content of the said secure website, both as at the Financial Submittal Date and as at the Effective Date, has been preserved and distributed to the parties.

“**Default Points**” means those points assigned to the Design-Builder in accordance with Section 5.4 [Assignment of Default Points] of Schedule 10.

“**Default Points Balance**” has the meaning given in Section 5.4(e)(ii) of Schedule 10 [Payment and Performance Mechanism].

“**Default Rate**” at any time means simple interest at an annual rate that is per annum over the Prime Rate at that time. If and when the Prime Rate changes, the Default Rate shall automatically change by the same amount at the same time.

“**Deficiency Holdback**” has the meaning given in Section 3.1(c) of Schedule 5 [Project Work Defects and Warranties].

“**Delay Liquidated Damages**” has the meaning given in Section 3.2(a) of Schedule 10 [Payment and Performance Mechanism].

“**Design**” means:

- (a) the production of the compendium of drawings, plans, specifications, calculations and other material produced by or on behalf of the Design-Builder to calculate and define the Construction necessary to carry out and complete the New Project Infrastructure in accordance with the Design and Construction Requirements and the other applicable Project Requirements, including the preparation of all reports, design drawings, construction drawings and Construction Records;
- (b) the performance of all project management, quality management, environmental management, communications management and other management services and activities required to be performed or carried out by the Design-Builder for the carrying out of the foregoing;
- (c) the supply by the Design-Builder of all Plant, Construction Plant, other property and workers for the carrying out of the foregoing; and
- (d) all other work, services and activities to be provided by the Design-Builder in respect of the foregoing,

all as set out and described in and in accordance with this Agreement, including the Design and Construction Requirements and the Design and Certification Procedure.

“**Design and Certification Procedure**” means the procedure defined in Part 3 [Design and Certification Procedure] of Schedule 4 for the review of Design Data in connection with the Project Work.

“**Design and Construction Requirements**” means all standards, specifications (including the Construction Specifications), procedures, design criteria, design guidelines and other requirements applicable to all design activities included within the Project Work, including the Design, and to all Construction, all as set out in this Agreement as at the Effective Date and as amended, supplemented or replaced from time to time after the Effective Date in accordance with this Agreement.

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“**Design-Builder**” has the meaning given in the Recitals.

“**Design-Builder Breakage Costs**” means, without duplication, Direct Losses sustained by the Design-Builder as a direct result of the early termination of this Agreement, but only to the extent that:

- (a) the Direct Losses are incurred in connection with the Project and in respect of the performance of the Project Work, including, without duplication:
 - (i) costs of materials or goods ordered or subcontracts placed that cannot be cancelled without such Direct Losses being incurred;
 - (ii) expenditures reasonably incurred in anticipation of the performance of the Project Work in the future;
 - (iii) demobilisation costs, including the cost of any relocation of Construction Plant used in connection with the Project Work; and
 - (iv) termination payments that are required under applicable Laws or under lawful contracts of employment to be made to employees of the Design-Builder and are reasonably and properly incurred by the Design-Builder arising as a direct result of termination of this Agreement (provided that the Design-Builder takes all reasonable steps to mitigate such termination payments) and provided that in calculating such amount no account will be taken of any liabilities and obligations of the Design-Builder arising out of:
 - (A) contracts of employment or other agreements entered into by the Design-Builder to the extent that such contracts of employment or agreements were not entered into substantially in connection with the Project; or
 - (B) contracts of employment or other agreements entered into by the Design-Builder to the extent that such contracts of employment or agreements were not entered into in the ordinary course of business and on reasonable commercial arm’s length terms,or, in the case of Employees as defined in and provided under the BCIB-Contractor Agreement, such termination payments as are payable to such Employees in accordance with the BCIB-Contractor Agreement;

(b) the Direct Losses are incurred under arrangements and/or agreements that are consistent with terms that have been entered into in the ordinary course of business and on reasonable commercial terms; and

(c) the Design-Builder has used all reasonable efforts to mitigate the Direct Losses,

and provided that no compensation for loss of future profits of the Design-Builder will be included in such Direct Losses.

“**Design-Builder Communication Protocol**” has the meaning given in Section 2.4 [Design-Builder Communication Protocol] of Schedule 9.

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“**Design-Builder Default**” has the meaning given in Section 12.1 [Design-Builder Default].

“**Design-Builder Default Termination Sum**” has the meaning given in Section 2.1 [Obligation to Pay Compensation on the Design-Builder Default] of Schedule 13.

“**Design-Builder Indemnified Person**” means:

- (a) the Design-Builder’s Representative in its capacity as such under this Agreement;
- (b) any agent or professional advisor (including legal and financial advisor) of the Design-Builder (excluding Subcontractors), in its capacity as such in connection with the Project; and
- (c) any director, officer or employee of the Design-Builder or of any person falling within paragraph (b) of this definition.

“**Design-Builder Insolvency Event**” means the occurrence of any of the following:

- (a) any resolution of the Design-Builder or any Partner or the directors of the Design-Builder or any Partner is passed for the dissolution, liquidation or winding-up of the Design-Builder or any Partner, or for the suspension of operations of the Design-Builder or any Partner, or authorizing any of the actions in any of paragraphs (b) through (f) of this definition;
- (b) a decree, declaration or order of a court having jurisdiction is issued or entered, adjudging the Design-Builder or any Partner bankrupt or insolvent, or ordering the winding-up or liquidation of the Design-Builder or any Partner, or approving any reorganization, arrangement, compromise, composition, compounding, extension of time, moratorium or adjustment of liabilities of the Design-Builder or any Partner under the *Companies’ Creditors Arrangement Act* (Canada), the *Bankruptcy and Insolvency Act* (Canada) or the *Winding-up and Restructuring Act* (Canada) or any other bankruptcy, insolvency, moratorium, reorganization or analogous law of any applicable jurisdiction, or any action or proceeding is commenced or instituted against the Design-Builder or any Partner for any of the foregoing and such action or proceeding against the Design-Builder or any Partner continues unstayed and is not withdrawn or dismissed within 45 days after it is commenced or instituted, or any action or proceeding is commenced or instituted by the Design-Builder or any Partner for any of the foregoing;
- (c) if execution, distress, sequestration or any analogous process is issued, filed or levied against the Design-Builder or any Partner or against all or a substantial part of the property or assets of the Design-Builder or any Partner and such execution, distress, sequestration or other process continues unstayed and in effect and is not withdrawn, dismissed, overturned or set aside within the period of 45 days following its issuance or filing and such execution, distress, sequestration or analogous process has or could reasonably be expected to have a material adverse effect on the performance by the Design-Builder of its obligations under this Agreement;
- (d) a trustee, receiver, receiver and manager, interim receiver, custodian, liquidator, provisional liquidator, agent for a secured creditor, or other person with similar powers, is appointed in any manner in respect of the Design-Builder or any Partner or in respect of

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all or a substantial portion of the property and assets of the Design-Builder or any Partner, or any creditor takes control of the Design-Builder or any Partner or of all or a substantial portion of the property and assets of the Design-Builder or any Partner or any action or proceeding is commenced or instituted against the Design-Builder or any Partner for any of the foregoing and such action or proceeding against the Design-Builder or any Partner continues unstayed and is not withdrawn or dismissed within 45 days after it is commenced or instituted, or any action or proceeding is commenced or instituted by the Design-Builder or any Partner for any of the foregoing;

- (e) the Design-Builder or any Partner admits its inability to pay or fails to pay its debts generally as they become due, acknowledges its insolvency, makes an assignment in bankruptcy or makes any other assignment for the benefit of creditors, or files any proposal, notice of intention or petition or otherwise commences or consents to or acquiesces in the commencement of any proceeding seeking any reorganization, arrangement, compromise, composition, compounding, extension of time, moratorium or adjustment of liabilities of the Design-Builder or any Partner under the *Companies' Creditors Arrangement Act* (Canada), the *Bankruptcy and Insolvency Act* (Canada) or the *Winding-up and Restructuring Act* (Canada) or any other bankruptcy, insolvency, moratorium, reorganization or analogous law of any applicable jurisdiction, or consents to or acquiesces in the appointment in any manner of a trustee, receiver, receiver and manager, interim receiver, custodian, liquidator, provisional liquidator, agent for a secured creditor or other person with similar powers in respect of the Design-Builder or any Partner or in respect of all or a substantial portion of the property or assets of the Design-Builder or any Partner; or
- (f) the Design-Builder or any Partner suffers any event, or any event or set of circumstances occurs or comes about, analogous to any of the foregoing events or sets of circumstances set out in this definition, in any jurisdiction in which the Design-Builder or any Partner is incorporated, formed, domiciled or resident.

“Design-Builder Irrecoverable Losses” means:

- (a) any loss of revenue and loss of profits that might have been, or might be, obtained or received from a source other than the Project;
- (b) any loss of business opportunity or other loss of opportunity with respect to a source other than the Project; and
- (c) Consequential Losses suffered by:
 - (i) any Subcontractor (save to the extent expressly provided otherwise in the definition of Material Subcontractor Breakage Costs in this Section 1.1);
 - (ii) any Affiliate or former Affiliate of a Subcontractor (except any Affiliate or former Affiliate that is itself a Subcontractor at the time that any such Consequential Losses are suffered, in which event paragraph (c)(i) of this definition shall apply, and provided that this exception shall only apply to the extent that any Consequential Losses suffered are in such Affiliate's or former Affiliate's capacity as a Subcontractor);

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- (iii) any Relevant Person (except any Relevant Person that is a Subcontractor at the time that any such Consequential Losses are suffered, in which event paragraph (c)(i) of this definition shall apply, and provided that this exception shall only apply to the extent that any Consequential Losses suffered are in such Relevant Person’s capacity as a Subcontractor); and
- (iv) any third party (other than a person referred to in any of subsections (c)(i), (c)(ii) and (c)(iii) of this definition) for which the Design-Builder or a Subcontractor is, pursuant to a contractual commitment entered into by the Design-Builder or a Subcontractor with such third party, liable to indemnify such third party (in this definition, a “**Design-Builder Contractual Commitment**”) where:
 - (A) the entering into by the Design-Builder or Subcontractor of the Design-Builder Contractual Commitment was avoidable with the exercise of reasonable diligence and foresight; or
 - (B) the nature, scope, extent and terms of the indemnification provisions contained in the Design-Builder Contractual Commitment (including any liability of the Design-Builder or Subcontractor in respect of Consequential Losses) were, at the time such Design-Builder Contractual Commitment was entered into, not on reasonable arm’s length commercial terms or otherwise not in the ordinary course of business; or
 - (C) the Design-Builder Contractual Commitment was entered into for a reason other than:
 - (1) the *bona fide* pursuit of completion of the Project Infrastructure;
 - (2) the performance of the Project Work; and
 - (3) the furtherance of the Design-Builder’s obligations in respect of the Project.

“**Design-Builder Non-Excusable Event**” means any of the following:

- (a) any wrongful act, wrongful omission, negligent act, negligent omission or wilful misconduct; or
- (b) any breach in the performance or observance of any of the Design-Builder’s obligations under this Agreement or any other Project Document,

of or by the Design-Builder or any person for whom the Design-Builder is in law responsible.

“**Design-Builder Proposal**” means any of the following as initiated by the Design-Builder:

- (a) a variation in the design, quality or scope of the New Project Infrastructure, or the construction thereof;
- (b) any other variation in the Project Requirements or this Agreement; or

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- (c) any other matter which, by the terms of this Agreement, is stated to constitute a Design-Builder Proposal or in respect of which the provisions of Section 7.2 [Design-Builder Proposals] are stated to be applicable.

“**Design-Builder Railway Protection Measures**” has the meaning given in Section 3.6(a) of Part 1 [General Provisions] of Schedule 4.

“**Design-Builder’s Environmental Obligations**” means:

- (a) the obligations of the Design-Builder under this Agreement to comply with and carry out all requirements of Environmental Laws in connection with the Project Work; and
- (b) the obligations of the Design-Builder described in Schedule 6 [Environmental Obligations], including with respect to remediation of Contamination on Project Lands.

“**Design-Builder’s Representative**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure] or such substitute as may be appointed by the Design-Builder pursuant to Section 3.2 [Change of the Design-Builder’s Representative] thereof.

“**Design Certificate**” means a Certificate in respect of the Design as issued by the Design-Builder pursuant to the Design and Certification Procedure.

“**Design Data**” means all calculations, designs, design or construction information, criteria, standards, specifications, plans, reports, drawings, graphs, sketches, models and other materials, including all eye readable or computer or other machine readable data and including all design submissions required under the Project Requirements, used or to be used for the Project Work, any Province Change, or a Design-Builder Proposal accepted by the Province in accordance with Schedule 11 [Changes].

“**Designer**” means Parsons Inc. or any assignee or replacement permitted under this Agreement.

“**Design Life**” means the period of time during which the structural component performs its intended function without significant repairs, rehabilitation or replacement.

“**Design Management Plan**” means the Design Management Plan submitted by the Design-Builder in accordance with Section 1.1 [Submission of Design Management Plan] of Part 3 of Schedule 4.

“**Design Manager**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

“**Design Quality Management Plan**” means the plan for the quality management of the Design prepared by the Design-Builder in accordance with Appendix B [Design Quality Management Plan] to Schedule 7.

“**Design Team**” means the group of Professional Engineers and others within a Designer’s organization undertaking the design or assessment of the Project Work in connection with the Project Requirements.

“**Detailed Design**” means the detailed design to be developed from the preliminary design shown in the Design and Construction Requirements in respect of each part of the Project Work so as to allow

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construction of that part in accordance with the Design and Construction Requirements and so as to comply with, fulfill and satisfy the requirements of the Design and Construction Requirements.

“**Detour Route**” means a route within the Project Site which takes traffic off the regular route and, using existing or newly made temporary roadways within the construction work zone, guides traffic around the work zone.

“**DFO**” means the Department of Fisheries and Oceans of the Federal Government.

“**Direct Losses**” means Losses other than:

- (a) in the case of Losses suffered or incurred by the Province, Province Irrecoverable Losses; and
- (b) in the case of Losses suffered or incurred by the Design-Builder, the Design-Builder Irrecoverable Losses.

“**Disclosed Data**” means any and all information, data, reports and documents from time to time disclosed, provided or made available by the Province or its representatives or any other person on behalf of the Province to the Design-Builder or its representatives or to any Subcontractor or their representatives, or any Proponent Team Member of the Preferred Proponent (as both such terms are defined in the Request for Proposals) in connection with or pertaining to the Project, the Project Work, the Project Site, the Project Infrastructure, the requirements of any Governmental Authority, traffic records and forecasts or any obligations undertaken by the Design-Builder under this Agreement, and whether disclosed, provided or made available before, on or after the Effective Date, and including:

- (a) any Design Data provided or made available by or on behalf of the Province;
- (b) the Reference Documents;
- (c) any and all plans, drawings, materials, books, records, files, correspondence, studies, tests, test results, test data, certificates, investigations, samples, surveys, reports, statements, documents, facts, information, projections and traffic information (including volume counts, classification counts, origin and destination data, speed and travel time information and vehicle jurisdiction data), including any of the foregoing stored electronically or on computer-related media;
- (d) the Factual Geotechnical Data;
- (e) any and all information relating to Contamination;
- (f) the data, reports and documents referred to in this Agreement including in any Schedule;
- (g) any of the foregoing provided in connection with the Request for Qualifications and/or the Request for Proposals;
- (h) anything contained in the Data Room, either directly or by an external link; and
- (i) the Land Identification Drawings, the Land Identification Sheets, and the information contained thereon.

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“**Discriminatory Change in Law**” means a Change in Law consisting of the bringing into force, amendment or repeal of a Law by the Province which specifically and only applies to:

- (a) the Project and not to other highway projects whose design or construction are procured on a basis similar to the Project;
- (b) the Design-Builder and not to any other persons; or
- (c) the Design-Builder and other persons that have contracted with the Province or any other Governmental Authority on similar highway projects procured on a basis similar to the Project and not to any other person.

“**Dispute Resolution Procedure**” means the procedure set out in Schedule 16 [Dispute Resolution Procedure].

“**Disturbance**” means any alteration to any surface or subsurface conditions by the Design-Builder as a result of the performance of any Construction by it including excavating, dumping, wasting, filling, drainage, removing or affecting vegetation and other Construction-related activities that directly or indirectly reduces the stability of a slope, and “**Disturbed**” shall be construed accordingly.

“**Domestic Commercial Arbitration Rules**” means the BCICAC’s Domestic Commercial Arbitration Rules of Procedure, as revised September 15, 2016 and as amended from time to time.

“**Drainage Structures**” mean the parts of the Infrastructure designed to carry water away from the Road Base, including ditches, culverts, spillways, dyking, flumes, and drains, and further defined as follows:

- (a) on highway features: curb and gutters, catch basins (including Sumps and Grates) and Manholes;
- (b) adjacent highway features: drainage ditches (lined and unlined), spillways and half round flumes; and
- (c) under highway features: all culverts less than 3m in diameter or span, trash racks at inlets on minor culverts, fish passage features and Subsoil systems (pipes or filter layers).

“**Draw Request**” has the meaning given in Section 6.1(b) of Schedule 10 [Payment and Performance Mechanism].

“**Dynamic Message Sign**” or “**DMS**” means an electronically programmable sign that is used to display traffic information to travellers.

“**Effective Date**” means the date of this Agreement.

“**EGBC**” means the Association of Professional Engineers and Geoscientists of British Columbia.

“**EGBC Bylaws**” means the bylaws of EGBC made under the *Engineers and Geoscientists Act* (British Columbia).

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“**Emergency**” means the existence or occurrence of any of the following:

- (a) a serious threat or risk to:
 - (i) the health or safety of members of the public;
 - (ii) the environment; or
 - (iii) the safety or integrity of the Project Infrastructure or any property adjacent to or in the vicinity of the Project Site;
- (b) any event or circumstance that prevents or unjustifiably restricts the use of the Project Infrastructure as a public highway; and
- (c) any event or circumstance in respect of the Project Infrastructure or the Project Site that prevents the Province, BCTFA or any other Relevant Authority from carrying out any function or duty that it is required by Laws to carry out in respect of the Project Infrastructure or the Project Site.

“**Emergency Situation**” means a situation arising that causes an immediate and serious threat or danger to the public, CP employees, agents or contractors, the Province, the employees or agents of the Province and all persons engaged or retained by the Province, whether directly or indirectly, in connection with the Project, including the Design-Builder, the Subcontractors or any employees thereof, the CP Lands, or the Railway Operations, as may arise in connection with the Project or a Geotechnical Event.

“**Encumbrance**” means any mortgage, lien, pledge, judgment, execution, charge, security interest, restriction, covenant, restrictive covenant, easement, right of way, encroachment, condition, right of re-entry, lease, licence, permit to use or occupy land, crossing agreement (excluding railway crossing agreements), assignment, option, right to acquire, right of first refusal or pre-emption, trust, title defect, claim or encumbrance of any nature whatsoever, whether registered or registrable, and whether or not created by statute.

“**Engagement Events**” has the meaning given in Section 2.1(k)(i) of Schedule 9 [Communications and Engagement].

“**Enhanced Site Restoration**” means the provision, in accordance with the Project Requirements, of functional grading and finishing of disturbed land, to revegetate existing soils with grass, ground covers and other vegetation, for the purpose of minimizing surface erosion, minimizing spread of invasive and noxious weeds and restoring habitat for wildlife.

“**Enquiry-Response**” means the process by which the Design-Builder will receive and respond to general public and Stakeholder enquiries, suggestions and complaints with respect to the Project, and the Design-Builder’s electronic tracking system of all such enquiries, in accordance with Schedule 9 [Communications and Engagement].

“**Environmental Authority**” means a Governmental Authority exercising its authority under Environmental Laws.

“**Environmental Constraint Drawings**” means drawings which compile the designated environmental sensitive areas and restricted zones – archaeology sites that have been identified through review of

environmental values in the Project Site and adjacent lands which are likely to be by directly or indirectly affected by the Project.

“**Environmental Laws**” means:

- (a) all requirements and provisions under or prescribed by any and all applicable Laws;
- (b) all applicable rules, regulations, orders-in-council, codes, protocols, guidelines, policies, procedures, licences, permits, approvals, plans, authorizations and any other governmental requirements, in each case promulgated under or pursuant to any Laws; and
- (c) all applicable judicial, administrative or regulatory judgments, orders, decisions, certificates and exemptions, including those rendered by any Governmental Authority;

all as may be amended from time to time, relating to environmental assessment, the protection of the natural environment, the protection of plant, animal and human health, and the protection of land, water and air resources, including those relating to occupational health, management of waste, safety and transportation of dangerous goods, and the safety requirements and procedures that would, in the ordinary and usual course of the construction, operation, management, repair, maintenance and rehabilitation of similar facilities in British Columbia by any person, be recognized, followed and implemented by such person, and includes the *Canadian Environmental Protection Act* (Canada), the *Fisheries Act* (Canada), the *Transportation of Dangerous Goods Act* (Canada), the *Canada Water Act* (Canada), and the *Environmental Management Act* (British Columbia).

“**Environmental Manager**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

“**Environmental Observer**” means an Identified Indigenous Group community member who reports to the Environmental Manager and observes Project Work that could result in environmental impacts in areas to be identified prior to the start of Construction with the applicable Identified Indigenous Group Liaison.

“**Environmental Procedure**” has the meaning given in the DBSS.

“**Environmental Quality Management Plan**” means the plan for the quality management of the Design-Builder’s Environmental Obligations prepared by the Design-Builder in accordance with Appendix E [Environmental Quality Management Plan] to Schedule 7.

“**Escrow Agreement**” means the documents escrow agreement dated as of September 1, 2020 among the Province, Aecon Constructors, a division of Aecon Construction Group Inc., Parsons Inc., Emil Anderson Construction (EAC) Inc. and Miller Thomson LLP, as amended, supplemented or replaced from time to time.

“**Excluded Event**” means a Traffic Disruption Event that is:

- (a) directly attributable to a Province Non-Excusable Event;

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- (b) directly attributable to a Police Incident not caused or permitted to occur by the Design-Builder;
- (c) directly attributable to a Non-Police Incident of less than 30 minutes' duration not caused or permitted to occur by the Design-Builder;
- (d) directed by a Governmental Authority having jurisdiction, in response to some event or circumstance not caused or permitted to occur by the Design-Builder;
- (e) directed by the Province, in response to some event or circumstance not caused or permitted to occur by the Design-Builder;
- (f) directly attributable to a Compensation Event;
- (g) required solely to permit the conduct of work by or on behalf of a Utility Supplier, other than Utility Work;
- (h) directly attributable to, and resulting unavoidably from, a Latent Defect;
- (i) directly attributable to any Special Event specified by the Province and of the duration required by the Province;
- (j) directly attributable to a Flood, but only during the period while the Project Site (other than the Additional Lands) or portion thereof is submerged as a result of such Flood; or
- (k) directly attributable to a Landslide, other than:
 - (i) an Excluded Landslide;
 - (ii) a Landslide to the extent occurring on or affecting the Additional Lands; or
 - (iii) a Landslide in respect of which the Landslide Repair Costs the Design-Builder is obligated to bear pursuant to Section 8.10B(b) are less than or equal to \$10,000.

“Excluded Landslide” means a Landslide:

- (a) that originates along portions of the Project Infrastructure or the Project Site which have been Disturbed by the Design-Builder;
- (b) that occurs during the Construction or during the period of two years following the Substantial Completion Date; and
- (c) for which the Disturbance is a reasonable factor in the causation of the Landslide,

provided that the extent that any Landslide which occurs within the period of two years following the Substantial Completion Date is reasonably caused by work undertaken by the Province's own forces or a Third Party Contractor, such Landslide or portion thereof shall not be an Excluded Landslide.

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“**Existing Contamination**” means any Contamination that is situated in, on, under or over, or affects:

- (a) any parcel of Project Lands; or
- (b) any Infrastructure or other improvements on or to any parcel of Project Lands,

on the day immediately preceding the Handover Date for such parcel.

“**Expert Panel**” has the meaning given in Section 3.2 [Expert Panel] of Schedule 16.

“**Expert Panel Dispute Notice**” has the meaning given in Section 3.1 [Referral to Expert Panel] of Schedule 16.

“**Expert Panel Member Agreement**” has the meaning given in Section 3.2(d) of Schedule 16 [Dispute Resolution Procedure].

“**Expert Referee**” has the meaning given in Section 2.1 [Referral to Expert Referee] of Schedule 16.

“**Expert Referee Dispute Notice**” has the meaning given in Section 2.1 [Referral to Expert Referee] of Schedule 16.

“**Expert Referee Agreement**” has the meaning given in Section 2.2 [Expert Referee Agreement] of Schedule 16.

“**Extended Closure**” has the meaning given in Table 2.1 [Stoppages and Closures] of Part 4 of Schedule 4.

“**Extensible Reinforcement**” means reinforcement elements that are within the soil for mechanically stabilized earth walls and are subject to long term creep, including geogrids.

“**External Quality Audit**” means either or both:

- (a) a second party Quality Audit conducted by parties having an interest in the relevant organization, such as customers; and
- (b) a third party Quality Audit conducted by an external independent organization such as a certification or registration body.

“**Factual Geotechnical Data**” means the data identified as “Factual Geotechnical Data” in Appendix B [Factual Geotechnical Data] to this Schedule.

“**Federal Government**” means Her Majesty the Queen in right of Canada.

“**Final Deficiency List**” has the meaning given in Section 6.12(b) of Part 3 [Design and Certification Procedure] of Schedule 4.

“**Final Deficiency List Deficiency**” means a defect or deficiency specified in the Final Deficiency List.

“**Final Design**” means the designs for all disciplines consisting of the relevant TAF(s) together with all final Design drawings, Design Certificates, supporting Design Data and calculations.

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“**Financial Submittal Date**” means September 1, 2020.

“**First Nation Business**” means, in respect of an Identified Indigenous Group, a sole proprietorship, limited company, co-operative, partnership, or not-for-profit organization where at least 51% of such firm is owned and controlled by Members or the dependent spouses and children of Members and, if such firm has six or more full-time staff, at least 33% of the full-time employees are Members or the dependent spouses and children of Members.

“**First Nation Joint Venture**” means, in respect of an Identified Indigenous Group, a joint venture of two or more First Nation Businesses or a First Nation Business and a non-First Nation Business, provided that the First Nation Business has, or the First Nation Businesses have, at least 51% ownership and control of the joint venture and, if the joint venture has six or more full-time staff, at least 33% of the full-time employees are Members or the dependent spouses and children of Members.

“**Fiscal Quarter**” means each quarter of each Fiscal Year ending on June 30, September 30, December 31 and March 31.

“**Fiscal Year**” means each period during the Term commencing April 1 and ending March 31.

“**Fisheries Authorizations**” means all authorizations required to be obtained (whether in the name of the Design-Builder or the Province) under any provisions of the *Fisheries Act* (Canada) in respect of the Project and the Project Work.

“**Flood**” means waves, tides, tidal waves, and the rising of, breaking out or the overflow of any body of water, whether natural or man made, whether or not caused by or attributable to an earthquake.

“**FOIPPA**” means the *Freedom of Information and Protection of Privacy Act* (British Columbia).

“**Footing**” means the portion of the Substructure resting on the ground.

“**Force Majeure Event**” means any of the following events or circumstances:

- (a) war, hostilities (whether declared or undeclared), invasion, revolution, armed conflict, act of foreign enemy or terrorism;
- (b) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds;
- (c) nuclear explosion, combustion of nuclear fuel or ionizing radiation;
- (d) riot or civil commotion (other than riot or civil commotion constituting a Protest Action); and
- (e) governmental expropriation or confiscation of property by the Federal Government, to the extent that such expropriation or confiscation does not result in a breach by the Province of Section 2.5(a)(i) or Section 2.5(c).

“**Foundation**” means the portion of a Structure that transfers loads to the supporting soils.

“**Full Closure**” has the meaning given in Table 2.1 [Stoppages and Closures] of Part 4 of Schedule 4.

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“**GAAP**” means, with respect to any entity at any time, generally accepted accounting principles approved by the Canadian Institute of Chartered Accountants, or any successor institute, as applicable to that entity at that time in accordance with generally accepted accounting principles, as such principles may be amended or varied by International Financial Reporting Standards then in effect in Canada.

“**General Project Work Defect Warranty Period**” means the period from the Substantial Completion Date to and including the second anniversary of the Substantial Completion Date or, if earlier, the second anniversary of the Termination Date, provided that the General Project Work Defect Warranty Period shall be extended for one additional year for all work required of the Design-Builder to correct any Project Work Defect completed in the last year of the General Project Work Defect Warranty Period pursuant to Section 2.1 [Project Work Defect Warranty] of Schedule 5, such that the General Project Work Defect Warranty Period for any such item of remedial work shall extend for an additional year after such Project Work Defect is corrected.

“**Geotechnical Baseline Area Polygon Drawings**” has the meaning given in Section 5.6A [Geotechnical Baseline Areas] of Part 2 of Schedule 4.

“**Geotechnical Baseline Areas**” means those areas identified as Geotechnical Baseline Areas in Section 5.6A [Geotechnical Baseline Areas] of Part 2 of Schedule 4.

“**Geotechnical Baseline Assumptions**” means the underlying assumptions of the Province based on existing geotechnical field investigation information available in the Data Room and specified in Section 5.6B [Geotechnical Baseline Assumptions] of Part 2 of Schedule 4.

“**Geotechnical Engineer**” means a Professional Engineer qualified by training and experience in geotechnical/geological engineering specialization.

“**Geotechnical Event**” any rock, debris or earth fall, topple, slide, spread or flow (as further set out in Cruden and Varnes, 1996), or snow avalanche, flooding, washout, hydrotechnical event, river or stream erosion, or rock or debris fall in CP's rail tunnels or any other geohazard, or ground instability, each as may arise in connection with the Project.

“**Good Industry Practice**” means the exercise of that degree of skill, diligence, prudence and foresight that would reasonably and ordinarily be expected from a person, skilled and experienced in any of the design or construction of bridges and roads similar in type to the Project Facilities, seeking in good faith to comply with all applicable Laws and the same contractual obligations as the contractual obligations of the Design-Builder under this Agreement and under the same or similar circumstances and conditions.

“**Governmental Authority**” means:

- (a) the Province;
- (b) the Federal Government; and
- (c) any other:
 - (i) federal, provincial, territorial, regional, municipal or local governmental authority, quasi-governmental authority, Court, government organization, commission, board or tribunal;

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- (ii) regulatory, administrative or other agency; or
- (iii) political or other subdivision, department or branch of any of the foregoing;

having jurisdiction in any way over or in respect of any aspect of the performance of this Agreement or the Project Work, or the Project Site or the Project Infrastructure.

“**GST**” means the goods and services tax imposed pursuant to Part IX of the *Excise Tax Act* (Canada), and any successor or replacement tax therefor.

“**Handover Date**” means, in respect of a parcel of Project Lands, the date such parcel is made available to the Design-Builder as provided in Section 1.3 [Commencement of Access to Project Site] of Schedule 8.

“**Hazardous Substance**” means any hazardous waste, hazardous product, hazardous substance, contaminant, toxic substance, deleterious substance, dangerous good, pollutant, waste, hazardous waste, reportable substance, and any other substance, in respect of which the storage, manufacture, handling, disposal, treatment, generation, use, transport, remediation or Release into or presence in the environment is prohibited, controlled or regulated under Environmental Laws including:

- (a) oil, flammable substances, explosives, radioactive materials, hazardous wastes or “substances, toxic wastes or toxic substances or any other contaminants or pollutants;
- (b) any such substance which may or could pose a hazard to any real property, or to persons on or about any real property, or causes any real property to be in violation of any Environmental Laws, including any mixing or combination of any such substance with any other such substance that would cause a breach of any applicable Environmental Laws;
- (c) asbestos in any form which is or could become friable, radon gas, urea formaldehyde foam insulation, transformers or other equipment which contain dielectric fluid containing levels of polychlorinated biphenyls in excess of limits prescribed by any Environmental Laws; and
- (d) any such substance defined as or included in the definitions of “dangerous goods”, “deleterious substance”, “hazardous substances”, “hazardous wastes”, “hazardous materials”, “extremely hazardous wastes”, “restricted hazardous waste”, “toxic substances”, “special waste”, “waste” or words of similar import under any applicable Environmental Laws, including the *Canadian Environmental Protection Act* (Canada), the *Fisheries Act* (Canada), the *Transportation of Dangerous Goods Act* (Canada), the *Canada Water Act* (Canada) and the *Environmental Management Act* (British Columbia), including the Hazardous Waste Regulation promulgated thereunder.

“**Hazard Zones**” has the meaning given in Section 2.6(a) of Part 4 [Traffic Management] of Schedule 4.

“**Health and Safety Laws**” means all Laws relating to occupational health and safety, including the WCA and the OHS Regulation.

“**Health and Safety Program**” has the meaning given in Section 4.13 [Health and Safety Program].

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“**Health and Safety Program Quality Management Plan**” means the plan for the quality management of the Design-Builder’s Health and Safety program prepared by the Design-Builder in accordance with Appendix F [Health and Safety Program Quality Management Plan] to Schedule 7.

“**Holding Company**” means, with respect to a corporation, another corporation of which the first mentioned corporation is a “subsidiary” within the meaning of “subsidiary” as defined in the *Business Corporations Act* (British Columbia) as at the Effective Date.

“**Hold Point**” means a mandatory verification point beyond which the specific work cannot proceed without acceptance, as defined by the Inspection and Testing Plan or as specified by the Province’s Representative.

“**Identified Indigenous Groups**” means the Ktunaxa Nation Council, the Shuswap Indian Band and the four Secwepemc Bands (Adams Lake Indian Band, Little Shuswap Lake Indian Band, Neskonlith Indian Band, and Splatsin).

“**Identified Indigenous Group Liaison**” means a representative nominated by each of the Identified Indigenous Groups (for a total of three representatives) to liaise between the Design-Builder and the applicable Identified Indigenous Group on matters regarding employment, the environment, and archaeology, culture and heritage.

“**IFC Drawings**” means drawings that are issued for construction by the Design-Builder.

“**Impacted Drainage Area**” has the meaning given in Section 7.2(b)(ii) of Part 2 [Design and Construction Requirements] of Schedule 4.

“**Implementation Plan**” means the sub-plan of the Traffic Management Plan described in Section 4.2.3 [Implementation Plan] of Part 4 of Schedule 4.

“**Incident**” means any motor vehicle collision, motor vehicle breakdown or parking, flooding, forest fire, rockfall, avalanche, Release of a Hazardous Substance, Debris, Emergency or other unplanned event or circumstance of any nature whatsoever occurring on, over, across or in relation to the Project Infrastructure that results in the potential occurrence or the occurrence of a Closure.

“**Incident Management Plan**” means the sub-plan of the Traffic Management Plan described in Section 4.2.2 [Incident Management Plan] of Part 4 of Schedule 4.

“**Independent Engineer**” means the entity appointed by the Province from time to time.

“**Independent Quality Audit**” has the meaning given in Section 4.7(a) of Schedule 7 [Quality Management].

“**Independent Quality Auditor**” has the meaning given in Section 4.7(b) of Schedule 7 [Quality Management].

“**Indigenous Contracting and Employment Coordinator**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

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“**Indigenous Participation Plan**” has the meaning given in Section 1.2 [Indigenous Participation Plan] of Schedule 22.

“**Indigenous Requirements**” has the meaning given in Section 1.1 [General Requirements] of Schedule 22.

“**Infrastructure**” means all road and highway infrastructure including Structures, roadways, hard shoulders, slip roads, side roads, access roads, pavement, Bridges and other highway structures, whether over or under the travelled surface, together with all related supporting infrastructure, buildings, improvements and amenities, including all intelligent traffic systems, fences and barriers, curbs, culverts, drainage systems including outfalls and balancing ponds, grassed areas, hedges and trees, planted areas, footways, road markings, road traffic signs, road traffic signals, road lighting, communications installations, weigh stations, washrooms and rest areas, picnic sites, pullouts, embankments, retaining walls and cuttings.

“**Infrastructure BC**” means Infrastructure BC Inc.

“**Initiating Party**” has the meaning given in Section 3.1 [Referral to Arbitration] of Schedule 16.

“**Inspection and Testing Plan**” or “**ITP**” means a detailed spreadsheet of all on and off Project Site inspection and testing activities for Project Work performed by the Design-Builder and that of its Subcontractors.

“**Intellectual Property**” means all forms of intellectual property whatsoever including all access codes, algorithms, application programming interfaces (APIs), apparatus, circuit designs and assemblies, concepts, data, databases and data collections, designs, diagrams, documentation, drawings, equipment designs, flow charts, formulae, ideas and inventions (whether or not patentable or reduced to practice), IP cores, know-how, materials, marks (including trade marks, trade names, brand names, product names, logos and slogans), methods, models, net lists, network configurations and architectures, procedures, processes, protocols, schematics, semiconductor devices, software code (in any form including source code and executable or object code), specifications, subroutines, techniques, test vectors, tools, uniform resource identifiers including uniform resource locators (URLs), user interfaces, web sites, works of authorship, and other forms of technology.

“**Intellectual Property Rights**” means all past, present and future rights, including of the following types, which may exist or be created under the laws of any jurisdiction in the world in respect of any Intellectual Property:

- (a) rights associated with works of authorship, including exclusive exploitation rights, copyrights, moral rights, industrial design, integrated circuit topography and mask work rights;
- (b) trade mark and trade name rights and similar rights;
- (c) trade secret rights;
- (d) patent and industrial property rights;
- (e) other proprietary rights in Intellectual Property of every kind and nature; and

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- (f) rights in or relating to registrations, renewals, extensions, combinations, divisions and reissues of, and applications for, any of the rights referred to in paragraphs (a) through (e) above.

“**Interested Parties**” means those persons who may be affected by the carrying out of the Project Work or who are duly authorized by Laws to review or otherwise take an interest in the Project Work, including the Relevant Authorities.

“**Interference**” means to endanger, hinder, interfere with or in any way affect the Railway Operations, in connection with the Project or a Geotechnical Event.

“**Interim Design**” means an interim design for a component of the Project Work produced by the Design-Builder in accordance with Article 2 [Design Submissions, Review and Reports] of Part 3 of Schedule 4.

“**Internal Quality Audit**” means a first party Quality Audit of an organization’s own processes conducted by or on behalf of the organization.

“**Irrecoverable Losses**” means:

- (a) in the case of Losses suffered or incurred by the Province, Province Irrecoverable Losses; and
- (b) in the case of Losses suffered or incurred by the Design-Builder, the Design-Builder Irrecoverable Losses.

“**Irrevocability Agreement**” means the irrevocability agreement entered into as of September 1, 2020 among, *inter alia*, the Province, Aecon Constructors, a division of Aecon Construction Group Inc., Parsons Inc. and Emil Anderson Construction (EAC) Inc., as amended, supplemented or replaced from time to time.

“**ISO 9000:2015 Standard**” means the ISO 9000:2015 International Standard, Quality Management Systems – Fundamentals and Vocabulary, as revised and updated from time to time, or, at the direction of the Province, such other replacement standard as the Province may designate, acting reasonably.

“**ISO 9001:2015 Standard**” means the ISO 9001:2015 International Standard, Quality Management Systems - Requirements, as revised and updated from time to time, or, at the direction of the Province, such other replacement standard as the Province may designate, acting reasonably.

“**ISO 9001 Lead Auditor Course**” means a accredited ISO 9001 course for lead auditors that meets the training portion of the requirements for current certification of individual quality system auditors with the International Register of Certified Auditors.

“**ISO 9004:2009 Standard**” means the ISO 9004:2009 International Standard, Quality Management Systems – Guidelines for Performance Improvements, as revised and updated from time to time, or, at the direction of the Province, such other replacement standard as the Province may designate, acting reasonably.

“**ISO 14001:2015 Standard**” means the ISO 14001:2015 International Standard – Environmental Management Systems – Requirements with Guidance for Use, as revised and updated from time to time,

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or, at the direction of the Province, such other replacement standard as the Province may designate, acting reasonably.

“**ISO 19011:2018 Standard**” means the ISO 19011:2018 International Standard, Guidelines for Quality and/or Environmental Management Systems Auditing, as revised and updated from time to time, or, at the direction of the Province, such other replacement standard as the Province may designate, acting reasonably.

“**TTS Equipment**” has the meaning given in Section 12.2 [ITS Equipment] of Part 2 of Schedule 4.

“**Key Individuals**” means the individuals specified by the Design-Builder in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], as changed from time to time in accordance with Schedule 2 [Representatives, Review Procedure and Consent Procedure].

“**Ktunaxa Nation Council**” includes the communities of ʔakisqnuq First Nation, Tobacco Plains Indian Band, ʔAqam and Yaqaq Nukiy.

“**Labour Dispute**” means any lawful or unlawful strike (including a general strike in British Columbia), lockout, go-slow or other labour dispute occurring after the Effective Date affecting generally the whole or a significant section of the highway construction industry in British Columbia and/or the highway operation and maintenance industry in British Columbia.

“**Land Identification Drawings**” means the drawing entitled “KHCP4-LAND IDENTIFICATION DRAWINGS_Oct 21 2020” attached as Appendix C [Land Identification Drawings] to Schedule 8.

“**Land Identification Sheets**” means the PDF version of the Land Identification Drawings.

“**Land Rights**” means an estate or interest in or right over or relating to any land (including an air space parcel, foreshore and land covered by water) whether legal, equitable, contractual, irrevocable, revocable, permanent, temporary or otherwise including a fee simple interest, subsurface rights, a leasehold estate, a statutory right of way, an easement, a license, rights under a crossing agreement, including a railway crossing agreement, or a permit.

“**Landslide**” means the downslope mass movement of soil, rock and organic material under the influence of gravity, and includes debris flows and other similar mobile mixtures of solid particles and water, and rock falls, and for greater certainty excludes an Avalanche.

“**Landslide Event**” means an occurring natural phenomenon, such as, but not limited to, fire, earthquake, rainfall, wind and snow, which has sufficient intensity to cause Landslides.

“**Landslide Repair Costs**” means:

- (a) the Direct Losses of Landslide Repair Work, other than Landslide Repair Work resulting from an Excluded Landslide, and excluding any Performance Incentive Payments payable by the Design-Builder in connection with a Landslide; and
- (b) any deductible amounts provided for in any policies of Required Insurance in the event of damage to the Project Infrastructure (other than Project Infrastructure on the Additional Lands) and/or the Project Site (other than the Additional Lands), and any damage to Plant

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and Construction Plant located on the Project Site (other than the Additional Lands), caused by a Landslide other than an Excluded Landslide.

“Landslide Repair Work” means:

- (a) the removal of rocks, soil and debris and other clean up work; and
- (b) repairing, to the extent required to restore Highway 1 to normal operating conditions in accordance with and to the standards provided for in the Project Requirements, damage to the Project Infrastructure (other than Project Infrastructure on the Additional Lands) and/or the Project Site (other than the Additional Lands), and any damage to Plant and Construction Plant located on the Project Site (other than the Additional Lands),

in each case caused by a Landslide, and

- (c) any required repair works to stabilize a Landslide so that the Landslide does not cause an Interference.

“Lane Closure” has the meaning given in Table 2.1 [Stoppages and Closures] in Part 4 of Schedule 4.

“Lane Shift” means a transfer of traffic along lane(s) of the same route and which, using existing roadway lanes or surfaces, guides traffic around the work zone.

“Large Animal Passage” has the meaning given in Section 2.8(j)(ii) of Schedule 6 [Environmental Obligations].

“Latent Defect” means any defect in any Original Project Infrastructure (other than any Original Project Infrastructure on the Additional Lands) (provided that at the time of the discovery of such defect the Original Project Infrastructure containing such defect has not been disturbed by the carrying out of the Project Work by the Design-Builder (other than only to the extent such disturbing is necessary to discover the existence, nature and extent of such defect), the onus of establishing which shall be on the Design-Builder) existing as at the Effective Date which the Design-Builder is not aware of as at the Effective Date, and which could not reasonably have been discovered, ascertained or anticipated as at the Effective Date by a competent person acting in accordance with Good Industry Practice during a visual examination of the Original Project Infrastructure on or before the Financial Submittal Date (including the Disclosed Data as it exists as at the Financial Submittal Date) having regard to the opportunity afforded the Design-Builder to conduct such inspection, examination and analysis before the Financial Submittal Date.

“Latent Project Work Defect” has the meaning given in Section 2.2(b) of Schedule 5 [Project Work Defects and Warranties].

“Laws” means all laws (including the common law), statutes, regulations, treaties, judgments and decrees and all official directives, bylaws, rules, consents, approvals, authorizations, guidelines, orders and policies of any Governmental Authority having the force of law from time to time affecting, applicable to or otherwise relating to the Project, the Project Work, the Project Site, the Project Infrastructure, the Design-Builder, the Province or BCTFA, as the case may be, including, for greater certainty, those related to the issuance of Permits and any applicable building codes.

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“**Legal Expenses**” means all reasonable legal fees, court costs, expert witness fees and other disbursements actually incurred by the Design-Builder in connection with a Successful Defence that the Design-Builder is unable to recover from the plaintiff(s) in a Nuisance Claim, having made all reasonable efforts to prosecute a claim (including collection and enforcement proceedings) for costs against the plaintiff.

“**Licensed Property**” means any Intellectual Property or other property to which the Complete License applies.

“**Limited Notice to Proceed Agreement**” means the agreement made as of September 17, 2020 among the Province, Aecon Constructors, a division of Aecon Construction Group Inc., Parsons Inc. and Emil Anderson Construction (EAC) Inc., as amended, supplemented or replaced from time to time.

“**LKI**” or “**Landmark Kilometre Inventory**” refers to Segment 1820 of Highway 1 in the B.C. LKI – July 2019 version publicly available at <https://www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/landmark-kilometre-inventory>.

“**Losses**” means any and all damages, losses, loss of revenue, loss of profit, loss of business opportunity, liabilities, charges, judgments, court orders, penalties, fines, assessments, costs (including finance costs) and expenses (including legal and other professional charges and expenses on a full indemnity basis and including reasonable costs of mitigation incurred by the Province in complying with its obligations pursuant to Section 3.1 [Mitigation by Province] or the Design-Builder in complying with its obligations pursuant to Section 4.10 [Mitigation by the Design-Builder], as the case may be) of any nature and kind whatsoever and howsoever arising, whether under statute or contract, at common law, in equity, in connection with judgments or criminal or quasi criminal proceedings, or otherwise, and whether direct, indirect or consequential, and “**Loss**” will be construed accordingly.

“**Major Culverts**” means structures 3 m or more in diameter or span constructed of various materials (typically corrugated iron) and required to convey watercourses under the highway.

“**Major Drainage**” has the meaning given in Section 1010.03 of the BC Supplement to TAC.

“**Major Retaining Wall**” means a structure whose purpose is to structurally retain earth and which are inventoried as Structures by the Ministry when the wall face is greater than 45 degrees and the maximum exposed wall height exceeds 2.0m, with the primary purpose of the structure not being to support Bridge abutments and rock fall or avalanche catchments.

“**Major Sign Structures**” means overhead sign support structures typically of truss construction with the horizontal members either supported at both ends or cantilevered over the Travelled Lanes.

“**Mark-up**” means any direct or indirect margin, mark-up, overhead charge, premium or other increase over or above the actual amount incurred for salary, wages, machinery, equipment, tools or any other input.

“**Material Subcontract**” means an agreement between the Design-Builder and one or more Material Subcontractors for or relating to the provision of all or part of the Project Work, each as amended, supplemented or replaced from time to time in accordance with this Agreement.

“**Material Subcontractor**” means any supplier of structural steel, reinforcing steel, steel pipe piles, precast concrete supply and rock fall attenuation, and any pile installation subcontractor, blasting

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subcontractor and concrete deck finishing subcontractor, in each case engaged directly by the Design-Builder or any Partner, and any substitute subcontractor for any such subcontractor, as may be permitted by this Agreement.

“**Member**” means, in respect of an Identified Indigenous Group, a member of such Identified Indigenous Group.

“**Member-owned Equipment and Operator**” means, in respect of an Identified Indigenous Group, a piece of equipment that is at least 51% owned by a Member or the dependent spouse or child of a Member, and an operator that is qualified to operate the equipment who is a Member or the dependent spouse or child of a Member.

“**Minimum Indigenous Apprenticeship Requirement**” has the meaning given in Section 1.1(b) of Schedule 22 [Indigenous Requirements].

“**Minimum Indigenous Contracts Requirement**” has the meaning given in Section 1.1(c) of Schedule 22 [Indigenous Requirements].

“**Minimum Indigenous Employment Requirement**” has the meaning given in Section 1.1(a) of Schedule 22 [Indigenous Requirements].

“**Minister**” means the member of the Executive Council of the Province who is charged from time to time with the administration of the *Transportation Act* (British Columbia), and includes the Minister’s deputy and any person authorized to act for or on behalf of either of them with respect to any matter under or contemplated by this Agreement.

“**Ministry**” means the ministry of the Province headed by the Minister.

“**Ministry Standards**” means all standards and specifications referred to or identified in Schedule 4 [Design and Construction] or elsewhere in this Agreement, including the Reference Documents, issued or adopted by the Province as applicable generally to the design, construction of roads, highways, Bridges and related Structures, systems and improvements, or specifically to the Project Work or to all or any parts or components of the Project Infrastructure and the Project Site, in each case as at the Effective Date or as subsequently amended or revised after the Effective Date.

“**Minor Works**” has the meaning given in Section 7.3 [Minor Works].

“**Minor Works Valuation**” means a reasonable estimate, consistent with the principles set out in Section 2.4 [Valuation of Change in Costs] of Schedule 11, of the net amount of all Changes in Costs incurred by the Design-Builder to implement a Province Change or the Design-Builder Proposal.

“**Modifications**” means, in respect of any Intellectual Property or other property, all modifications including any alterations, changes, deletions, amendments, upgrades, updates, enhancements, revisions or improvements.

“**Modifications to Province Provided Materials**” means all Modifications made to any Province Provided Materials, whether made by or on behalf of the Province or by or on behalf of the Design-Builder.

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“**MFLNRO**” means the Ministry of Forests, Lands, Natural Resource Operations and Rural Development of the Province.

“**MOE**” means the Ministry of Environment and Climate Change Strategy of the Province.

“**Motor Vehicle**” means a motor vehicle as defined in the *Motor Vehicle Act* (British Columbia).

“**Multiplate**” means a steel culvert 3 m or more in diameter, fully or partially factory assembled or field assembled by bolting together a number of corrugated steel plates and provided that, when less than 3 m in diameter, it shall be considered to be a culvert.

“**NCE (Cash) Payment**” means a payment paid or payable pursuant to Section 4.3 [Calculation of Non-Compliance Event Payments] of Schedule 10 in respect of the occurrence of one or more Non-Compliance Events as described in:

- (a) Section 3.3(f)(i) of Schedule 2 [Representatives, Review Procedure and Consent Procedure]; and
- (b) Section 1.5(c)(iii) of Schedule 22 [Indigenous Requirements].

“**NCE Points**” means those points assigned to the Design-Builder in accordance with Section 5.1 [Assignment of NCE Points] of Schedule 10.

“**NCE Points Balance**” has the meaning given in Section 5.2(b)(ii) of Schedule 10 [Performance Mechanism].

“**NCE Points (Default) Balance**” has the meaning given in Section 5.3(b) of Schedule 10 [Performance Mechanism].

“**NCE (Points) Payment**” means a payment paid or payable pursuant to Section 4.3 [Calculation of Non-Compliance Event Payments] of Schedule 10 in respect of NCE Points assigned to the Design-Builder pursuant to Part 5 [NCE Points and Default Points] of Schedule 10 in respect of the occurrence of one or more Non-Compliance Events.

“**New Project Infrastructure**” at any time means the Infrastructure (including Original Project Infrastructure) situated in, on, under or over any part of the Project Lands during the Access Period for such part of the Project Lands, as such Infrastructure is constructed, installed, altered, upgraded and augmented at that time by the carrying out of the Project Work, including both new Infrastructure and altered, upgraded and/or augmented Infrastructure, but excluding Utilities of Utility Suppliers and Third Party Facilities.

“**No Default Interest Rate**” at any time means simple interest at an annual rate that is the Prime Rate at that time. If and when the Prime Rate changes, the Default Rate shall automatically change by the same amount at the same time.

“**Non-Compliance Event**” or “**NCE**” means:

- (a) a failure by the Design-Builder to meet a specific performance measure described in Appendix D [Assignment of NCE Points] to Schedule 10;

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- (b) a failure by the Design-Builder to discover and issue a Nonconformity Report in respect of a Nonconformity in the circumstances set out in Section 5.1(c) of Schedule 10 [Payment and Performance Mechanism];
- (c) a failure by the Design-Builder to retain, make available or replace any Key Individual, or to fill any Key Individual position, as required by Section 3.3 [Key Individuals] of Schedule 2; or
- (d) a failure by the Design-Builder to meet any Minimum Indigenous Contracts Requirement as required by Section 1.1(c) of Schedule 22 [Indigenous Requirements].

“**Non-Compliance Event Payments**” means the payments paid or payable by the Design-Builder to the Province pursuant to Section 4.3 [Calculation of Non-Compliance Event Payments] of Schedule 10.

“**Nonconformity**” means any failure by the Design-Builder to perform any of its obligations under this Agreement in respect of any aspect of the Project Work and which failure is not rectified by the Design-Builder within the applicable time period, if any, stipulated in this Agreement, including but not limited to the following:

- (a) a Non-Compliance Event;
- (b) defective workmanship or repairs not in compliance with the requirements of this Agreement;
- (c) use of materials and/or equipment not in compliance with the requirements of this Agreement;
- (d) deficient, incomplete and/or illegible Quality Documentation;
- (e) deficient, incomplete and/or illegible Records;
- (f) inadequate and/or ineffective defect identification processes;
- (g) failure to achieve documented response time requirements;
- (h) failure to comply with Quality Management System processes;
- (i) failure to complete a Correction of a Nonconformity and, if applicable, failure to take Corrective Action in respect of any Nonconformity, within the required time;
- (j) failure to take Opportunities for Improvement (if applicable) with respect to any potential Nonconformity within the required time; and
- (k) failure to meet the Design-Builder’s reporting obligations under this Agreement.

“**Nonconformity Report**” means a document issued by either the Province or the Design-Builder pursuant to Section 6.1 [Nonconformity Reporting Process] of Schedule 7 detailing the description of an identified Nonconformity and the proposed rectification and action taken or to be taken to deal with such Nonconformity.

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“**Nonconformity Tracking System**” means a system to track Nonconformity Reports issued by the Province or the Design-Builder as set out in Section 6.2 [Nonconformity Report Tracking System] of Schedule 7.

“**Non-Default Termination Sum**” has the meaning given in Section 1.2 [Calculation of Non-Default Termination Sum] of Schedule 13.

“**Non-Foreseeable Contamination**” means all Existing Contamination other than any Existing Contamination on the Additional Lands and any other Existing Contamination that is disclosed by, or could reasonably have been foreseen from an analysis of or interpreting, any field test data, investigations, studies and/or reports (for the purposes of this definition, “**Analytical Information**”) contained in the Disclosed Data (excluding any Analytical Information that is located or disclosed in the Data Room solely by way of links to external websites) as at the Financial Submittal Date to the extent contained in any of the following included in the Data Room:

- (a) a Phase 1 or Phase 2 Environmental Site Assessment in accordance with Standard CAN/CSA-Z768-01;
- (b) a Stage 1 or Stage 2 Preliminary Site Investigation in accordance with the MOE Technical Guidance Document No. 10 entitled “Checklist for Reviewing a Preliminary Site Investigation” dated October 2005;
- (c) any hazardous materials assessments and surveys for buildings; and/or
- (d) any other field test data, or investigations, studies and/or reports associated with such data, disclosed in the Data Room.

“**Non-Permitted Traffic Disruption Event**” means a Traffic Disruption Event described in Section 2.7 [Non-Permitted Traffic Disruption Events] of Part 4 of Schedule 4.

“**Non-Police Incident**” means an Incident as a result of which the Police do not require closure of all or part of Highway 1.

“**No Threshold Compensation Event**” means each of the Compensation Events referred to in paragraphs (a), (b), (g), (h), (i), (j), (k), (m), (n), (p), (x) or (y) of the definition of Compensation Event in this Section 1.1.

“**Notice of Intention to Terminate**” has the meaning given in Section 14.4(a).

“**Notice of Objection to Arbitration**” has the meaning given in Section 4.1(a)(i) of Schedule 16 [Dispute Resolution Procedure].

“**Notice of Objection to Expert Referee**” has the meaning given in Section 2.1 [Referral to Expert Referee] of Schedule 16.

“**Nuisance Claim**” means a Claim for damages or other relief for private nuisance, public nuisance or injurious affection in relation to the Project.

“**OHS Regulation**” means the *Occupational Health and Safety Regulation* (British Columbia) promulgated pursuant to the WCA.

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“**Operation and Maintenance**” has the meaning given in Section 5.1 [Responsibility for Operation and Maintenance – General] of Part 1 of Schedule 4.

“**Operation and Maintenance Plan**” has the meaning given in Section 5.6 [Operation and Maintenance Plan] of Part 1 of Schedule 4.

“**Opportunities for Improvement**” means a situation or condition where actions can be taken by the Design-Builder to enhance its performance in the delivery of products or services or to eliminate the causes of a potential Nonconformity or other undesirable situation in order to prevent its occurrence.

“**Original Project Infrastructure**” means Infrastructure situated in, on, under or over any parcel of Project Lands at the Handover Date for such parcel, but excludes Utilities of Utility Suppliers and Third Party Facilities.

“**Other Land**” means any land other than the Project Lands.

“**Overhead**” means a Bridge carrying a highway over either a railway or a railway and another facility.

“**Overpass**” means a grade separated Structure carrying a highway over a road, a highway, a railway or a watercourse.

“**Owner’s Engineer**” means WSP Canada Inc., or any replacement appointed by the Province from time to time.

“**Participants**” has the meaning given in Section 8.8(a).

“**parties**” means the parties to this Agreement unless reference is made specifically to another agreement or document.

“**Partners**” means Aecon Constructors, a division of Aecon Construction Group Inc., Parsons Inc. and Emil Anderson Construction (EAC) Inc.

“**Pavement Marking**” means a retro-reflective mechanism such as paint used to delineate a profile, such as a road.

“**Payment Application**” means a payment application in the applicable form set out in Appendix E [Payment Application Forms] to Schedule 10, and includes a Draw Request.

“**Payment Period**” means each calendar month, provided that:

- (a) the first Payment Period shall commence on the Effective Date and end on the last day of the calendar month following the calendar month in which the Effective Date occurs; and
- (b) the last Payment Period shall end on the last day of the calendar month in which the Total Completion Date occurs.

“**Performance Incentive Payments**” means, collectively, the payments paid or payable by the Design-Builder to the Province pursuant to Section 4.1 [Calculation of Performance Incentive Payments] of Schedule 10.

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“**Performance Requirements**” has the meaning given in Section 3.6 [Performance Requirements] of Part 1 of Schedule 4.

“**Permits**” means:

- (a) all permissions, consents, approvals, certificates, permits, licences, statutory agreements and authorizations required from any Governmental Authority; and
- (b) all necessary permissions, consents, approvals and agreements from any third parties;

needed to carry out the Project and the Project Work in accordance with this Agreement, including all such permissions, consents, approvals, certificates, permits, licences, statutory and other agreements and authorizations required under or pursuant to any other Permit, the Indigenous Requirements, the Requirements of Interested Parties, any Project Site Agreement or any Project Site Encumbrance, but for greater certainty does not include a permit granted pursuant to Article 8.400 of the Community Benefits Agreement.

“**person**” means a legal entity, individual, corporation, body corporate, partnership, joint venture, association, trust, syndicate, limited liability company, pension fund, union or Governmental Authority, and the heirs, executors, administrators and legal representatives of an individual.

“**Personal Information**” means recorded information about an identifiable individual, other than contact information, collected or created by the Design-Builder as a result of this Agreement but excluding any such information that, if Schedule 23 [Privacy Protection] did not apply to it, would not be under the “control of a public body” within the meaning of FOIPPA.

“**Person Year**” means 2,080 hours of employment less vacation and statutory holiday entitlement.

“**Pit Development Plan**” means a geotechnical report and drawing describing the property boundaries, topographic contours, material types, slope breaks, extraction faces, extraction areas/volumes, benches, access roads, drainage features, stockpiles, restricted areas and other attributes (existing or planned) for a Ministry gravel pit, quarry or borrow source.

“**Plant**” means plant, goods, products, commodities, materials, supplies, machinery, equipment, apparatus and other tangible property supplied by or on behalf of the Design-Builder:

- (a) intended to form part of the Project Infrastructure or actually forming part of the Project Infrastructure; or
- (b) intended to be incorporated into or permanently affixed to real property forming part of the Project Site or actually incorporated into or permanently affixed to real property forming part of the Project Site.

“**Police**” means any of:

- (a) the Royal Canadian Mounted Police;
- (b) any other provincial, federal, regional or municipal police force, police department or other law enforcement body and any related governing body having territorial jurisdiction

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over or in respect of the Project Infrastructure, the Project Site or any part thereof from time to time;

- (c) a member of the Royal Canadian Mounted Police or any other law enforcement body or related governing body referred to in paragraph (b) above; and
- (d) any other official who has or is exercising the powers of a constable or a peace officer while engaged in law enforcement duties, when those duties are exercised in relation to a matter in connection with, or which incidentally affects the construction or operation of, the Project Infrastructure, the Project Site or any part thereof from time to time.

“Police Incident” means any Incident as a result of which the Police require closure of all or part of Highway 1.

“Ponding” means large puddles of water trapped on a roadway.

“Prime Contractor” means a “prime contractor” as defined and described in the WCA and the OHS Regulation, respectively.

“Prime Rate” at any time means the variable rate of interest per annum announced from time to time by Canadian Imperial Bank of Commerce (or its successor) as such bank’s “prime” rate then in effect for determining interest rates on Canadian dollar commercial loans made by it in Canada.

“Professional Engineer” means a person who is registered as a professional engineer with the EGBC.

“Progress Amount” has the meaning given in Section 2.1(a)(i) of Schedule 10 [Payment and Performance Mechanism].

“Progress Payment” means a progress payment for a Payment Period paid or payable by the Province pursuant to Section 1.1 [Obligation to make Progress Payments] of Schedule 10.

“Project” has the meaning given in Section 2.1 [The Project].

“Project Archaeologist” has the meaning given in Section 2.2(d)(ii) of Schedule 6 [Environmental Obligations].

“Project Documents” means:

- (a) this Agreement;
- (b) the BCIB-Contractor Agreement;
- (c) when executed by the parties thereto in accordance with this Agreement, each BCIB-Subcontractor Agreement entered into by a Subcontractor in accordance with this Agreement;
- (d) the Bonds;
- (e) the Material Subcontracts;

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- (f) the Proponent Agreement;
- (g) the Irrevocability Agreement; and
- (h) the Escrow Agreement,

and all other documents executed and delivered by or on behalf of the parties pursuant to Section 2.17 [Execution and Delivery of Project Documents] and Schedule 19 [Closing Deliveries].

“Project Facilities” at any time means:

- (a) the lands and interests in land described in Appendix A [Project Lands] to Schedule 8 that, before that time, have been made available to the Design-Builder as provided in Section 1.3 [Commencement of Access to Project Site] of Schedule 8, and excluding:
 - (i) any Temporary Land Rights that have terminated or expired; and
 - (ii) any Land Rights (other than fee simple interests) that have been terminated; and
- (b) the Project Infrastructure at that time.

“Project Infrastructure” at any time means the Original Project Infrastructure at that time and the New Project Infrastructure at that time.

“Project Intellectual Property” means all Intellectual Property, whether complete or not, and all Intellectual Property Rights therein, that is not Background IP or Third Party IP and which is created, brought into existence, acquired, licensed or used by the Design-Builder or any Subcontractor, directly or indirectly, for the Project Intellectual Property Purposes, including Work Product (as defined in the Proponent Agreement) and Design Data that is prepared by or on behalf of the Design-Builder and/or any of the Design-Builder’s agents, employees or Subcontractors, but specifically excluding Records, Construction Records, Province Provided Materials, Modifications to Province Provided Materials and Design Data provided or made available by or on behalf of the Province.

“Project Intellectual Property Purposes” means the purpose of designing or constructing the New Project Infrastructure or otherwise for the purposes of the Project Work or this Agreement.

“Project Lands” means those lands and interests in lands identified as “Project Lands” on the Land Identification Drawings..

“Project Marks” has the meaning given in Section 2.16(a).

“Project Requirements” means all standards, specifications, procedures, design criteria, design and professional practice guidelines and other requirements applicable to the Project Work, including the Design, the Construction, and all other design activities and Construction, all as set out in this Agreement as at the Effective Date and as amended, supplemented or replaced from time to time after the Effective Date in accordance with this Agreement, and includes the Design and Construction Requirements.

“Project Schedule” means the schedule of the milestone dates for the Project Work set out in Appendix A [Project Schedule] to Schedule 3 as of the Effective Date, and as subsequently amended from time to time in accordance with Section 1.2 [Project Schedule] of Schedule 3.

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“**Project Site**” at any time means any part of the Project Lands for which the Access Period is extant as at that time.

“**Project Site Agreements**” means any and all agreements and instruments setting out terms and conditions on which Land Rights in any parcel of Project Lands that are less than a fee simple interest are at any time, on or after the Effective Date, held by the Province or BCTFA, including:

- (a) Land Rights described in the column titled “Land Rights if other than a Fee Simple Interest or Highway” in Table A in Appendix A [Project Lands] to Schedule 8; and
- (b) the Railway Agreements,

and any amendments thereto.

“**Project Site Encumbrances**” means any and all Encumbrances from time to time charging, encumbering or affecting any lands comprising part of the Project Site on or after the Effective Date, and any amendments thereto, and including:

- (a) any such Encumbrances described in Appendix A [Project Lands] or Appendix B [Certain Project Site Encumbrances] to Schedule 8;
- (b) any such Encumbrances disclosed in the Disclosed Data;
- (c) any such Encumbrances registered in the Land Title Office against title to any lands comprising part of the Project Site;
- (d) any permit issued in replacement for a statutory right of way registered in the Land Title Office against title to any Project Lands that is cancelled on cancellation of a certificate of title in the Land Title Office for any parcel of Project Lands; and
- (e) any such Encumbrance that is a permitted Encumbrance (howsoever described) under or in respect of any agreement or instrument pursuant to which Land Rights in any part of the Project Site are, at any time, on or after the Effective Date, held by the Province or BCTFA.

“**Project Work**” means all activities of or required of the Design-Builder (and/or any of the Design-Builder’s employees and Subcontractors) in connection with the performance of any obligations of the Design-Builder under this Agreement, and the conduct of all work and operations of the Design-Builder (and/or any of the Design-Builder’s employees and Subcontractors) on or in relation to the Project, the Project Site and the Project Infrastructure including the Design, the Construction and the Reinstatement Work.

“**Project Work Defect**” has the meaning given in Section 1.2 [Project Work Defects] of Schedule 5.

“**Property Damage Insurance Proceeds**” has the meaning given in Section 6.18(b).

“**Proponent Agreement**” means the proponent agreement entered into as of December 11, 2019 among, *inter alia*, the Province, Aecon Constructors, a division of Aecon Construction Group Inc., Parsons Inc. and Emil Anderson Construction (EAC) Inc., as amended, supplemented or replaced from time to time.

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“Proposal” means:

- (a) the technical submittal dated June 30, 2020; and
- (b) the financial submittal dated the Financial Submittal Date,

each submitted by the Preferred Proponent (as defined in the Request for Proposals) to the Province in response to the Request for Proposals, together with all amendments and supplements to such technical proposal and financial proposal.

“Proposal Extracts” means the extracts from the Proposal attached as Schedule 12 [Proposal Extracts].

“Protest Action” means any civil disobedience, protest action, riot, civil commotion, blockade or embargo, including any action taken or threatened to be taken, by any person or persons protesting or demonstrating against the carrying out of any part of the Project (including the construction of the Project Infrastructure) or against the construction or operation of highways in general, occurring after the Effective Date, but excluding any Labour Dispute or any other strike, lockout, industrial relations dispute or job action by, of or against workers carrying out any part of the Project Work.

“Province” has the meaning given in the Recitals.

“Province Archaeological Permits” means the Province Permits listed as items 2, 3 and 4 in Appendix B [Province Permits] to Schedule 4.

“Province Archaeological Work” has the meaning given in Section 14.1 of Appendix A [Table of Commitments] to Schedule 6.

“Province Change” means any of the following as initiated by the Province:

- (a) a variation in the design, quality or scope of the New Project Infrastructure or the Project Work, or in the Construction or any part thereof;
- (b) any other variation in the Project Requirements or this Agreement; or
- (c) any other matter which, by the terms of this Agreement, is stated to constitute a Province Change or in respect of which the provisions of Section 7.1 [Province Changes] are stated to be applicable.

“Province Default” has the meaning given in Section 13.1 [Province Default].

“Province Indemnified Persons” means:

- (a) the Province’s Representative in its capacity as such under this Agreement;
- (b) BCTFA;
- (c) TI Corp;
- (d) Infrastructure BC;

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- (e) any agent or professional advisor (including legal and financial advisors) of the Province or BCTFA (excluding the Design-Builder and any person for whom the Design-Builder is in law responsible); and
- (f) any director, officer or employee of the Province or BCTFA or of any person falling within paragraph (c) of this definition.

“Province Irrecoverable Losses” means:

- (a) any loss of revenue and loss of profits that might have been, or might be, obtained or received by the Province, BCTFA or TI Corp from the Project or a source other than the Project, including loss of revenue from the Project Facilities;
- (b) any loss of business opportunity or other loss of opportunity suffered by the Province, BCTFA or TI Corp with respect to a source other than the Project; and
- (c) Consequential Losses suffered by a third party, for which the Province or BCTFA is, pursuant to a contractual commitment entered into by the Province or BCTFA with such third party, liable to indemnify such third party (in this definition, an **“Province Contractual Commitment”**) where:
 - (i) the entering into by the Province or BCTFA of the Province Contractual Commitment and the nature, scope, extent and terms of the indemnification provisions contained therein (including any liability of the Province or BCTFA in respect of Consequential Losses) were, at the time such Province Contractual Commitment was entered into, inconsistent with Past Practice, or otherwise outside the normal course of the customary activities of the Province or BCTFA, as the case may be, and unreasonable having regard to all relevant circumstances at the time; and
 - (ii) neither the Province nor BCTFA did any of the following:
 - (A) disclosed the Province Contractual Commitment in the Data Room on or before the Financial Submittal Date; or
 - (B) consulted with the Design-Builder or the Design-Builder’s Representative prior to entering into the Province Contractual Commitment in the case of a Province Contractual Commitment entered into after the Financial Submittal Date; or
 - (C) consulted with any Affiliate, agent or representative of the Design-Builder prior to entering into the Province Contractual Commitment in the case of a Province Contractual Commitment entered into prior to the Financial Submittal Date; and
 - (iii) the Province Contractual Commitment was entered into for reasons other than the *bona fide* pursuit of:
 - (A) delivery and/or completion of the Project or any component of the Project;

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- (B) performance and/or completion of the Project Work or any of the Project Infrastructure; or
 - (C) furtherance of the Design-Builder’s obligations in respect of the Project; and
- (iv) **“Past Practice”** refers to the customary practice of the Province or BCTFA at the time a Province Contractual Commitment is entered into, with respect to the nature, scope, extent and terms of indemnification provisions (including any liability of the Province or BCTFA in respect of Consequential Losses) contained in contractual arrangements entered into by the Province or BCTFA with arm’s length third parties, having regard to the nature of the Province Contractual Commitment and all relevant circumstances at the time any such Province Contractual Commitment was entered into.

“Province Non-Excusable Event” means any of the following:

- (a) any wrongful act, wrongful omission, negligent act, negligent omission or wilful misconduct; or
- (b) any breach in the performance or observance of any of the Province’s obligations under this Agreement or any other Province Project Document,

of or by the Province or any person for whom the Province is in law responsible.

“Province Payments” means, collectively, the payments paid or payable by the Province to the Design-Builder pursuant to Part 1 [Payment Obligations of Province] of Schedule 10.

“Province Permits” means the Permits listed in Appendix B [Province Permits] to Schedule 4.

“Province Project Documents” means this Agreement, the Proponent Agreement and the Irrevocability Agreement, the Escrow Agreement.

“Province Provided Materials” means any materials, documents, data (including Design Data provided or made available by or on behalf of the Province and the Disclosed Data) or other information, and any Intellectual Property Rights therein, provided by the Province or its representatives or any other person on behalf of the Province to or for the benefit of the Design-Builder or its representatives or to any Subcontractor or its respective representatives or any Proponent Team Member of the Preferred Proponent (as both such terms are defined in the Request for Proposals) for the Project Intellectual Property Purposes.

“Province’s Representative” means the person appointed by the Province pursuant to Section 1.1(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement or substitute as may be appointed by the Province pursuant to Section 1.2 [Change of Province’s Representative] of Schedule 2.

“Province Subsequent Contamination” means any Contamination, other than Existing Contamination, on any part of the Project Infrastructure or the Project Site that was caused by the Province or any person for whom the Province is in law responsible.

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“**PST**” means the sales tax that is imposed pursuant to the *Provincial Sales Tax Act* (British Columbia), and any successor or replacement tax therefor.

“**Qualified Coordinator**” has the meaning given in Section 4.12(c)(i).

“**Qualified Governmental Entity**” means any of the following:

- (a) the Province or any ministry or department of the Province;
- (b) any person having the legal capacity, power and authority to become a party to and to perform the obligations of the Province or, as the case may be, BCTFA, under this Agreement and the other Province Project Documents, the duties, obligations and liabilities of which are guaranteed and supported by the Province or any ministry or department of the Province;
- (c) the Federal Government provided it has the legal capacity, power and authority to become a party to and to perform the obligations of the Province or, as the case may be, BCTFA, under this Agreement and the other Province Project Documents; and
- (d) any person having the legal capacity, power and authority to become a party to and to perform the obligations of the Province or, as the case may be, BCTFA, under this Agreement and the other Province Project Documents, the duties, obligations and liabilities of which are guaranteed by the Federal Government or any ministry or department of the Federal Government.

“**Qualified Indigenous-sourced Resources**” means, in respect of an Identified Indigenous Group:

- (a) its Members;
- (b) the dependent spouses and children of its Members;
- (c) its Member-owned Equipment and Operators;
- (d) its First Nation Businesses; and
- (e) its First Nation Joint Ventures.

“**Qualified Insurer**” means a reputable and duly qualified insurer of good standing in the worldwide insurance market, licensed to transact insurance business in Canada, rated A.M. Best A- or better or Standard & Poors Ratings Services, a division of the McGraw-Hill Companies, Inc. (in this definition, “**Standard & Poors**”) A or better, provided that:

- (a) if a rating from A.M. Best Company or Standard & Poors is not available, or if A.M. Best Company or Standard & Poors ceases to provide ratings for insurance companies, then having a rating equivalent to or better than the A.M. Best A- rating or the Standard & Poors A rating as at the Effective Date, from another rating agency of equivalent calibre that provides ratings of equivalent quality, all as agreed upon by the parties or, failing such agreement, as determined by the Dispute Resolution Procedure; or

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- (b) if A.M. Best Company changes its A- rating or Standard & Poors changes its A rating, then having a rating equivalent to or better than the A.M. Best A- rating or the Standard & Poors A rating as at the Effective Date, from A.M. Best Company or Standard & Poors or another rating agency of equivalent calibre that provides ratings of equivalent quality, all as agreed upon by the parties or, failing such agreement, as determined by the Dispute Resolution Procedure.

“Qualifying Landslide Repair Costs” means the Landslide Repair Costs incurred by the Design-Builder (and not reimbursed by the Province in accordance with Section 8.10B(b)) in connection with any one or more Landslides caused by or attributable to a single Landslide Event.

“Quality Audit” means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

“Quality Audit Plans” means the Design-Builder’s audit plans defining the Internal Quality Audits and External Quality Audits that the Design-Builder shall perform or cause to be performed on its own processes and the processes of its Subcontractors.

“Quality Director” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

“Quality Documentation” means all documentation required in accordance with Schedule 7 [Quality Management] which together constitutes and describes the Quality Management System, including the Quality Manual, Quality Management Plans, Work Method Statements and Quality Audit Plans.

“Quality Management Plan” means each detailed quality management plan of the Design-Builder detailing which procedures and associated resources shall be applied by whom and when for each aspect of the Project Work required in accordance with this Agreement, including the Design Quality Management Plan, the Construction Quality Management Plan, the Traffic Quality Management Plan, the Environmental Quality Management Plan and the Health and Safety Program Quality Management Plan.

“Quality Management System” or **“QMS”** means the Design-Builder’s management system that establishes the organizational structure, procedures, processes, systems, management plans and resources for determining and achieving the Quality Policy in the performance of the Project Work in accordance with this Agreement.

“Quality Manual” means the Design-Builder’s quality manual meeting the requirements set out in Appendix A [Quality Manual] to Schedule 7 and:

- (a) outlining the Quality Management System for all aspects of the Project Work, and for the complete organization (including the Design-Builder and its Subcontractors) involved in performing the Project Work;
- (b) establishing Quality Policy and Quality Objectives; and
- (c) outlining the means by which the Design-Builder shall establish, implement, control and continually improve processes to achieve that Quality Policy and those Quality Objectives.

“**Quality Objectives**” means the objectives related to quality that are measurable and consistent with the Quality Policy and which are to be formally expressed and recorded in the Quality Manual in accordance with Schedule 7 [Quality Management], provided that, alternatively, each Quality Management Plan may have its own Quality Objectives which are directly related to applicable Quality Policy expressed or recorded in the Quality Manual.

“**Quality Policy**” means the overall intentions and direction of the Design-Builder related to quality applicable to the overall organization (including the Design-Builder and its Subcontractors) involved in performing the Project Work which are to be formally expressed and recorded in the Quality Manual in accordance with Schedule 7 [Quality Management], provided that, alternatively, each Quality Management Plan may have its own Quality Policies which are directly related to applicable Quality Objectives expressed or recorded in the Quality Manual.

“**Quality Records**” has the meaning given in Section 5.8 [Quality Records] of Schedule 7.

“**Queue Clearing Time**” means the minimum amount of time that Highway 1 must remain open to clear queued traffic prior to implementing a subsequent Stoppage or Closure, with queued traffic being deemed to be cleared when the last vehicle stopped in the queue has completely cleared the location of the first vehicle in that queue at the start of the Stoppage or Closure location in any one direction.

“**Railway Agreements**” means any agreements entered into by the Province or BCTFA with a Railway and any Railway Orders granted or issued in favour of the Province or BCTFA allowing or providing for Infrastructure comprising or to comprise Project Infrastructure to be located upon or across Project Lands, and improvements thereon, that are Railway Lands, and the construction, maintenance and use of such Infrastructure upon and across such Railway Lands, and includes the CP Agreement.

“**Railway Coordinator**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

“**Railway Impact Assessment Report**” has the meaning given in Section 3.2(a) of Part 1 [General Provisions] of Schedule 4.

“**Railway Lands**” means Project Lands, and improvements thereon, that are owned or held by or under the control of a Railway.

“**Railway Operations**” means the operations, business and undertaking of CP in respect to or in furtherance of Rolling Stock over CP's network of railway lines, as well as the operation of switches, signals, fibre optic, signal and communications systems (including conduits, cables, fibres, towers, associated equipment and facilities), whether on the CP Lands or elsewhere.

“**Railway Order**” means an order of the Canadian Transportation Agency (or its predecessor the National Transportation Agency) or a certificate or order issued pursuant to the *Railway Act* (British Columbia) and/or the *Railway Safety Act* (British Columbia)

“**Railway Protection Baseline Criteria**” has the meaning given in Section 3.6(a) of Part 1 [General Provisions] of Schedule 4.

“**Railways**” means CP.

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“**Records**” has the meaning given in Section 1.1 [Design-Builder Records] of Schedule 17 and includes Construction Records and Quality Records.

“**Records Management Protocol**” means the protocol developed by the Design-Builder pursuant to Section 1.3 [Records Management Protocol] of Schedule 17.

“**Recoverable Expenditures**” means expenditures incurred, directly or indirectly, by the Design-Builder, which expenditures:

- (a) relate to an asset that:
 - (i) has a physical existence; and
 - (ii) will generate benefits to be received in future years; and
- (b) are not recurring or routine.

“**Reference Concept**” means the Reference Concept(s) as provided in the Data Room.

“**Reference Documents**” means the references, codes, standards, specifications, guidelines, policies, reports, publications, manuals, bulletins and other such documents listed in Appendix A [Reference Documents] to this Schedule, each as amended, supplemented or replaced from time to time in accordance with Section 1.2(b) of this Schedule.

“**Reinstatement Funds Deficiency**” has the meaning given in Section 8.7 [Termination for Damage or Destruction].

“**Reinstatement Plan**” has the meaning given in Section 6.16 [Reinstatement Plan].

“**Reinstatement Work**” has the meaning given in Section 6.15 [Restoration and Reinstatement of Damage or Destruction].

“**Reject**” means an action (including recycling or destroying) to remove a detected Nonconformity from the Project Work or discontinue its use.

“**Release**” includes any spill, leak, deposit, pumping, pouring, emission, emptying, discharging, injecting, escape, leaching, migration, disposal, dumping or other form of release of a Hazardous Substance, or permitting of any of the foregoing.

“**Relevant Authority**” means any entity whose authority is or may be required for the carrying out of all or any part of the Project Work or which has any authority or right in respect of the Project, the Project Infrastructure, the Project Site or any part thereof under any Laws and includes Governmental Authorities.

“**Relevant Completion Percentage**” has the meaning given in Section 2.1(b) of Schedule 10 [Payment and Performance Mechanism].

“**Relevant Persons**” means:

- (a) the Partners;

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- (b) persons who formerly were Partners;
- (c) Affiliates of the Design-Builder; and
- (d) persons who formerly were Affiliates of the Design-Builder.

“Relevant Property” means any property that is not within the boundary of the Project Lands that is affected:

- (a) by any Existing Contamination or Province Subsequent Contamination in, on, under or over:
 - (i) any Project Lands (other than, in the case of Existing Contamination, the Additional Lands); or
 - (ii) any Project Infrastructure (other than, in the case of Existing Contamination, any Project Infrastructure on the Additional Lands); or
- (b) by any migration or leaching of Existing Contamination or Province Subsequent Contamination from:
 - (i) any Project Lands (other than, in the case of Existing Contamination, Additional Lands); or
 - (ii) any Project Infrastructure (other than, in the case of Existing Contamination, any Project Infrastructure on the Additional Lands).

“Relevant Third Party” means:

- (a) any person having a legal interest in any Relevant Property who suffers damage, injury or other harm caused by:
 - (i) Existing Contamination or Province Subsequent Contamination in, on, under or over:
 - (A) any Project Lands (other than, in the case of Existing Contamination, the Additional Lands); or
 - (B) any Project Infrastructure (other than, in the case of Existing Contamination, any Project Infrastructure on the Additional Lands); or
 - (ii) migration or leaching of any Existing Contamination or Province Subsequent Contamination into or onto the Relevant Property from:
 - (A) any Project Lands (other than, in the case of Existing Contamination, the Additional Lands); or
 - (B) any Project Infrastructure (other than, in the case of Existing Contamination, any Project Infrastructure on the Additional Lands); and

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- (b) any person who suffers damage, injury or other harm caused by any Existing Contamination or Province Subsequent Contamination in, on or under any Relevant Property from time to time to the extent such Existing Contamination or Province Subsequent Contamination constitutes Existing Contamination or Province Subsequent Contamination which has migrated or leached into or onto the Relevant Property from:
 - (i) any Project Lands (other than, in the case of Existing Contamination, the Additional Lands); or
 - (ii) any Project Infrastructure (other than, in the case of Existing Contamination, any Project Infrastructure on the Additional Lands),

and “**Relevant Third Party**” includes the Province and BCTFA to the extent they have a legal interest in any Relevant Property.

“**Relief Event**” means any of the following events or circumstances:

- (a) receipt by the Design-Builder of an order or direction by Police or fire, ambulance or other emergency services or other Relevant Authorities, provided such order or direction does not result from the occurrence of another Supervening Event;
- (b) the inability of the Design-Builder to obtain a required Permit or a required renewal or extension of any required Permit (other than a required Permit or a required renewal or extension of any required Permit in respect of the Additional Lands) due, in each case, to any unreasonable delay by a Relevant Authority, provided that the Design-Builder has made all reasonable efforts to obtain such Permit, renewal or extension, including making complete and timely application and, to the extent reasonably practicable, making modifications to the applicable design and/or construction methods;
- (c) fire, explosion, lightning or storm affecting the Project Site (other than the Additional Lands) or the Project Infrastructure (other than Project Infrastructure on the Additional Lands), other than a fire or explosion constituting a Compensation Event;
- (d) a Labour Dispute;
- (e) blockade or embargo falling short of a Protest Action or a Force Majeure Event;
- (f) the discovery of any Undisclosed Utilities;
- (g) the existence of any Non-Foreseeable Contamination;
- (h) the failure by a Utility Supplier to comply with its obligations under a Utility Agreement, where such compliance is necessary in connection with the performance of the Project Work and where the Design-Builder has made all reasonable efforts to cause the Utility Supplier to comply;
- (i) [Not Used]
- (j) subject to Section 8.14 [Allocation of Risks of COVID-19 Related Health Event], a COVID-19 Related Health Event;

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- (k) a Landslide, other than:
 - (i) an Excluded Landslide;
 - (ii) a Landslide to the extent occurring on or affecting the Additional Lands; or
 - (iii) a Landslide in respect of which the Landslide Repair Costs the Design-Builder is obligated to bear pursuant to Section 8.10B(b) are less than or equal to \$10,000;
- (l) the circumstances referred to in Section 3.6(h)(iv)(F)(2) of Part 1 [General Provisions] of Schedule 4 as constituting a Relief Event;
- (m) the carrying out by the Project Archaeologist of any Province Archaeological Work after the date listed for the completion of such Province Archaeological Work set out in the Province’s workplan under section 7.1 of the Archaeological and Heritage Resource Management Plan as of the Financial Submission Date, provided that, if the carrying out of such Province Archaeological Work by the Project Archaeologist continues more than 60 days after such date listed for completion (the “**Compensation Event Trigger Date**”), the continuing carrying out of such Project Archaeological Work after such Compensation Event Trigger Date shall constitute a Compensation Event commencing on the Compensation Event Trigger Date; and
- (n) the inability of the Province to obtain a renewal or extension of any Province Archaeological Permit required in order for the Design-Builder to carry out any archaeological work in respect of the Project Site other than the Province Archaeological Work.

“**Repair**” means an action that makes a detected Nonconformity acceptable for its intended purpose.

“**Reports**” has the meaning given in Section 2.1 [Required Reports] of Schedule 17.

“**Request for Proposals**” means the request for proposals in respect of the Project issued by the Province on December 13, 2019, together with all amendments, supplements and addenda thereto.

“**Request for Qualifications**” means the Request for Qualifications in respect of the Project issued by the Province on September 5, 2019, together with all amendments, supplements and addenda thereto.

“**Required Insurance**” means the insurance required to be taken out, maintained in force, paid for and renewed by the Design-Builder in accordance with the provisions of Part 6 [Insurance, Damage and Destruction] and Schedule 15 [Insurance Requirements].

“**Required Province Change**” means a Province Change contemplated in any of the following:

- (a) Section 7.2(b);
- (b) Section 1.2(b) of this Schedule;
- (c) Section 3.7(e) of Part 1 [General Provisions] of Schedule 4;
- (d) Section 4.10 [New and Amended Utility Agreements] of Part 1 of Schedule 4;

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- (e) [Not Used]
- (f) Section 2.2 [Extension of Specified Handover Date by Province] of Schedule 8;
- (g) Section 5.5 [Additions or Changes by Province Change] of Schedule 8;
- (h) Section 2.1 [Changes to Community Benefits Agreement or Regime] of Schedule 21; and
- (i) Section 2.2 [Other Agreements with Indigenous Groups] of Schedule 22.

“Requirements of Interested Parties” means the requirements of Interested Parties which are legally enforceable against any or all of the Province, BCTFA and the Design-Builder, whether established pursuant to Laws, the provisions of this Agreement or otherwise:

- (a) as disclosed or described in the Disclosed Data; or
- (b) which, as of the Financial Submittal Date, the Design-Builder otherwise had knowledge of, could have discovered through the exercise of reasonable due diligence, or could reasonably have been anticipated from an analysis of all relevant information available to the Design-Builder (including the Disclosed Data) as at the Financial Submittal Date, having regard to the opportunity afforded the Design-Builder to conduct such due diligence and analysis before the Financial Submittal Date.

“Responding Party” has the meaning given in Section 3.1 [Referral to Arbitration] of Schedule 16.

“Restricted Detonation” has the meaning given in Section 3.2(a)(xii) of Part 1 [General Provisions] of Schedule 4.

“Restricted Periods” means those periods of time, as set out in Part 4 [Traffic Management] of Schedule 4 during any Construction for an identified location during which there are restrictions on the Design-Builder’s available Traffic Management measures.

“Retaining Structure” means a Structure designed to resist the horizontal earth pressures of a fill or other material.

“Review Procedure” means the procedure defined in Section 2.1 [Review Procedure] of Schedule 2 whereby submissions for review are made by the Design-Builder to the Province’s Representative.

“Rework” means an action that makes a detected Nonconformity conform to the Project Requirements.

“Risk Assessment Plan” means the sub-plan of the Traffic Management Plan described in Section 4.2.5 [Risk Assessment Plan] of Part 4 of Schedule 4.

“Road Base” means the portion of highway subsurface on which the travelling surface or wearing surface is placed.

“Road Safety Audit” means an audit carried out in accordance with Article 13 [Road Safety Audit] of Part 2 of Schedule 4.

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“**Road Safety Audit Team**” means a group of individuals appointed from time to time in accordance with the Design and Certification Procedure to carry out road safety audits in respect of the Project Work.

“**Road Safety Audit Certificate**” has the meaning given in Section 4.3 [Road Safety Audit Certificates] of Part 3 of Schedule 4.

“**Roadside**” means that part of the public highway between the edge of the Shoulder and the highway right-of-way boundary, excluding the Shoulder.

“**Rock Excavation Process Progressive Test Procedure Plan**” means the sub-plan of the Traffic Management Plan described in Section 4.2.6 [Rock Excavation Process Progressive Test Procedure Plan] of Part 4 of Schedule 4.

“**Rolling Stock**” means trains, locomotives, railcars, boxcars, gondolas, railway machinery, vehicles, equipment of every nature, and the contents of same.

“**RPMS**” or “**Roadway Pavement Management System**” means the Ministry’s corporate pavement asset management application that is used for monitoring the condition of paved highways to support the planning, programming and delivery of the annual resurfacing plan.

“**RWIS**” means the Road Weather Information System that provides real time reporting of pavement and weather information.

“**SCR Points**” has the meaning given in Section 4.8(f) of Schedule 7.

“**Seismic Event**” means an earthquake and includes snowslide, landslide or other earth movements occurring concurrently with and directly resulting from an earthquake shock, but does not include Flood. More than one earthquake shock occurring within any 168 consecutive hours shall be deemed a single earthquake.

“**Senior Geotechnical Engineer**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

“**Senior Governmental Authority**” means:

- (a) the Province;
- (b) the Federal Government;
- (c) any other provincial or territorial government in Canada; or
- (d) any organization, commission, board, tribunal, regulatory, administrative or other agency, department or branch of any of the foregoing, including the Provincial Health Officer (British Columbia) and the Workers’ Compensation Board.

“**Senior Rock Engineer**” means the Key Individual identified by such title in Section 3.3(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of Schedule 2.

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“**Service Life**” has the meaning given to that term in CAN/CSA-S6-14.

“**Shoulder**” means the area between the edge of the outside traffic lane and the ditch, including the components of Shoulder top, Shoulder edge and Shoulder side slope, and with the Shoulder edge being the breakpoint between the Shoulder top and the Shoulder side slope.

“**Side Protection**” means the railing, parapets or barriers of the Bridge Structure.

“**Sign**” means a lettered board, message or other display which includes all regulatory, warning, guide or informational, advisory, construction and maintenance, route markers and all special or other messages/displays under provincial jurisdiction as defined by the Province but excluding electronically controlled messages/displays, but including the sign face overlay.

“**Site Condition Rating**” has the meaning given in Section 4.8(d) of Schedule 7.

“**Site Materials**” means all materials, including soil, aggregates, gravel, rocks, coal, minerals or other deposits, excavated, arising or produced in connection with the carrying out of the Project Work on the Project Lands.

“**Site Superintendent**” means a person appointed by the Design-Builder or any Subcontractor to direct the work on the Project Site.

“**Special Event**” has the meaning given in Section 1.7(c) of Part 4 [Traffic Management] of Schedule 4.

“**Specified Cost Item**” means a Cost Item identified in Appendix B [Progress Measurement Principles] to Schedule 10 as one in respect of which a Cost Item Progress Amount is payable only upon 100% completion thereof.

“**Specified Handover Date**” in respect of a parcel of Project Lands means the date specified as the “Specified Handover Date” for the parcel in Appendix A [Project Lands] to Schedule 8.

“**Species of Concern**” means wildlife species that are identified by federal or provincial conservation status rankings as of heightened concern for Indigenous groups, stakeholders (including regulators and scientists) or the public.

“**Stakeholder**” means commuters, local residents, local businesses, goods movers, adjacent property owners, marine users, Emergency responders, and any other individuals or audiences identified as stakeholders by the Province.

“**Statement of Progress**” has the meaning given in Section 6.1(a) of Schedule 10 [Payment and Performance Mechanism].

“**Statutory Authority**” means, in defence of a Nuisance Claim, a finding by the court that the Design-Builder has established that, at common law, private and/or public nuisance, as applicable, was an inevitable result of the exercise of statutory authority by the Province and/or BCTFA in the construction of the Project.

“**Statutory Holiday**” has the meaning given in Section 1.7(b) of Part 4 [Traffic Management] of Schedule 4.

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“**Stoppage**” has the meaning given in Table 2.1 [Stoppages and Closures] in Part 4 of Schedule 4.

“**Strengthened Earthworks**” means materials other than intact bedrock, either placed or *in situ*, the stability of which has been improved by tensile reinforcement acting through interface friction, bearing or other means (such as reinforced soil or soil nailing) or by external support such as gabions, where the slope face is less than 45 degrees to the horizontal.

“**Structural Barrier**” is a rigid traffic barrier designed as part of a Structure to the requirements of CAN/CSA S6-14.

“**Structures**” means any (temporary or permanent):

- (a) Bridge, Major Culvert, Major Retaining Wall, Major Sign Structure;
- (b) multi-span Bridge or culvert having a cumulative length of 5 m or more;
- (c) Bridge or culvert (other than of corrugated metal) having a span of 3 m or more;
- (d) corrugated metal Bridge or culvert having a span of 0.9 m or more (irrespective of cover to the road surface);
- (e) pedestrian or cycle underpass (irrespective of span and cover to the road surface);
- (f) Retaining Structure, including reinforced earth, anchored earth and cribwall systems with slope between 45° and 90° to the horizontal, where the level of the fill at the back of the wall is greater than 2 m above the finished ground level in front of the wall;
- (g) sign or signal gantry or high mast for lighting, television cameras, catenary lighting systems or intelligent transportation system equipment;
- (h) Substructure or Foundation supporting rockfall attenuator systems;
- (i) Avalanche Mitigation Structures;
- (j) buildings and weigh stations;
- (k) facing panel systems more than 1.5 m in height; and
- (l) noise walls,

forming part of the Project Infrastructure.

“**Subcontract**” means any contract entered into by a Subcontractor in relation to the provision, performance or carrying out of any Project Work.

“**Subcontractor**” means any party (other than the Design-Builder or BCIB) that enters into a contract in relation to the provision, performance or carrying out of any Project Work (including any contract for the supply of any Plant or Construction Plant) with:

- (a) the Design-Builder; or

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- (b) any subcontractor of any tier of the Design-Builder.

“**Subdivision**” means CP's Mountain Subdivision together with all improvements, railway lines and structures situated therein or thereon.

“**Substantial Completion**” means the satisfactory completion, in accordance with the Design and Certification Procedure, of all Project Work required in respect of the Project Infrastructure in accordance with all Laws, Permits, applicable Project Requirements and other requirements applicable to the Project Infrastructure referred to or set out in this Agreement, including:

- (a) paving of all road surfaces, other than final top lift paving;
- (b) completion of all Structures and drainage systems;
- (c) full operation of all traffic lighting and signalization;
- (d) Pavement Markings at all intersections and on all major roads;
- (e) installation of all regulatory, warning and guide signing;
- (f) installation of all median and Roadside barrier and other safety devices;
- (g) completion of all Utility Work, other than Utility Work independent of Highway 1;
- (h) all construction staging areas located on the Project Site are in a condition acceptable to the Province; and
- (i) all Debris, superfluous materials and equipment have been removed from the Project Site, and the Project Site has been satisfactorily cleared,

in each case to such extent as is necessary to permit the safe, uninterrupted and unobstructed public use of the Project Infrastructure (subject to Stoppages and Closures in accordance with Part 4 [Traffic Management] of Part 4 of Schedule 4) and in accordance with the Project Requirements and this Agreement, and “**Substantially Completed**”, “**Substantially Completing**” and “**Substantially Complete**” have corresponding meanings.

“**Substantial Completion Date**” means the date on which Substantial Completion occurs, as established by the Certificate of Substantial Completion.

“**Substantial Completion Longstop Date**” means at any time the date that is twelve months after the Substantial Completion Target Date, as such first mentioned date may be extended pursuant to this Agreement.

“**Substantial Completion Target Date**” means November 30, 2023.

“**Substructure**” means the Structure of a Bridge (including piers and abutments) which supports the Superstructure and transfers load to the Foundations.

“**Successful Defence**” means, with respect to a Nuisance Claim, a final judgment of dismissal in favour of the Design-Builder, which dismissal shall, in the case of a claim for public nuisance or private nuisance

only, be based on Statutory Authority. In no event shall the term “Successful Defence” apply to a Nuisance Claim made against the Design-Builder for which settlement has occurred unless:

- (a) as a term of such settlement the plaintiff(s) agree to a dismissal of such Nuisance Claim, which dismissal shall, in the case of a claim for public nuisance or private nuisance only, be based on Statutory Authority;
- (b) the settlement was entered into in good faith by the Design-Builder; and
- (c) the Design-Builder had obtained the prior written consent of the Province, in its discretion, to such settlement.

“**Superelevation**” means the vertical rise in elevation from the outside edge of a highway surface, to the inside edge on a curving section of highway, and “**Superelevated**” has a corresponding meaning.

“**Superstructure**” means the Structure of a Bridge (including bearings, girders and Bridge Deck) which is supported by the Substructure.

“**Supervening Event**” means any of a Compensation Event, Relief Event or Force Majeure Event.

“**Supervening Event Notice**” has the meaning given in Section 8.2(a).

“**Surplus Disposal Site**” has the meaning given in Section 11.4(a) of Part 2 [Design and Construction Requirements] of Schedule 4.

“**Surplus Disposal Site Annual Monitoring and Maintenance Reports**” has the meaning given in Section 2.5(o) of Schedule 6 [Environmental Obligations].

“**Surplus Disposal Site Quarterly Field Reports**” has the meaning given in Section 6.2(e) of Part 2 [Design and Construction Requirements] of Schedule 4.

“**Surveillance Quality Audit**” means Quality Audits conducted by or on behalf of the Province as contemplated in Section 4.3.3(a) of Schedule 7 [Quality Management].

“**Table of Commitments**” means the document attached as Appendix A [Table of Commitments] to Schedule 6, and as amended, supplemented or replaced from time to time.

“**Table of Railway Protection Requirements**” has the meaning given in Section 3.6(a) of Part 1 [General Provisions] of Schedule 4.

“**TAF**” means a technical appraisal form substantially in the format attached as Appendix D [Sample Contents for a Structural TAF] to Schedule 4, and submitted by the Design-Builder to the Province’s Representative in accordance with the Design and Certification Procedure.

“**Tax**” or “**Taxes**” means, from time to time, all present and future taxes, surtaxes, duties, levies, imposts, rates, fees, deductions, withholdings, assessments and similar impositions imposed, levied, rated, collected, charged, withheld or assessed by or payable to any Governmental Authority (including income, capital (including large corporations), withholding, consumption, sales, use, transfer, goods and services or other value-added, excise, customs, anti-dumping, countervail, net worth, stamp, registration, franchise, payroll, employment, health, education, business, school, property, local improvement,

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development, education development and occupation taxes, surtaxes, duties, levies, imposts, rates, fees, deductions, withholdings, assessments and similar impositions), and any other payments imposed by any Governmental Authority in lieu of any of the foregoing, together with all fines, interest, penalties on or in respect of, or in lieu of or for non-collection of, those taxes, surtaxes, duties, levies, imposts, rates, payments, assessments, withholdings, dues and other charges, and includes all PST and GST except where stated to the contrary.

“Temporary Land Rights” means those Land Rights that have an anticipated expiry date that will occur before the Substantial Completion Date, and identified as “Temporary Land Rights” on the Land Identification Drawings.

“Temporary Works” means all works and things of a temporary nature of every kind required in or about the execution and completion of the Project Work.

“Term” means the period commencing on the Effective Date and ending at 11:59 p.m. on the date that is the later of:

- (a) the end of the period for the notification of Latent Project Work Defects in Section 2.2(b) of Schedule 5 [Project Work Defects and Warranties]; and
- (b) the completion of any work performed by the Design-Builder to correct any Project Work Defects pursuant to Schedule 5 [Project Work Defects and Warranties].

“Termination Date” means the effective date of termination of this Agreement according to its terms.

“Third Party Contractor” means any contractor (excluding the Design-Builder and any person for whom the Design-Builder is in law responsible) that, on behalf of the Province or BCTFA, has carried out or will carry out work after the Effective Date in respect of the Project Infrastructure or otherwise on the Project Site, including any Other Prime Contractor as defined in Section 4.16(a).

“Third Party Facilities” means bus shelters, telephone facilities, kiosks, Utilities and other facilities and associated equipment, plant, materials and apparatus installed and operated or to be installed and operated on the Project Site or areas adjacent to the Project Site by any transit authority, communications provider, Utility Supplier or other third party.

“Third Party IP” means the Intellectual Property specifically identified as Third Party IP in Appendix C [Background IP and Third Party IP] to this Schedule that is owned by a person other than the Design-Builder or a Subcontractor, or any Affiliate thereof, and that and is or will be embedded in or used in connection with the Project Intellectual Property, or necessary or desirable to implement, operate or exploit the Project Intellectual Property, but which was not created or brought into existence for any of the Project Intellectual Property Purposes.

“TI Corp” means Transportation Investment Corporation.

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“**Total Completion**” means the satisfactory full and final completion, in accordance with the Design and Certification Procedure, of all Project Work required in respect of the Design and Construction in accordance with all Laws, Permits, applicable Project Requirements and other requirements referred to or set out in this Agreement, including the completion of the remedy of all Final Deficiency List Deficiencies and the completion of all final top lift paving, and “**Totally Completed**”, “**Totally Completing**” and “**Totally Complete**” have corresponding meanings.

“**Total Completion Date**” means the date on which Total Completion occurs, as established by the relevant Certificate of Total Completion.

“**Total Completion Target Date**” means May 31, 2024.

“**Traffic Communication Plan**” means the sub-plan of the Traffic Management Plan described in Section 4.2.4 [Traffic Communication Plan] of Part 4 of Schedule 4.

“**Traffic Control**” means the placement or erection of Signs, signals, Pavement Markings or other installations, and the use of flaggers and other personnel, for the purpose of regulating, warning or guiding traffic.

“**Traffic Control Plan**” or “**TCP**” means the sub-plan or sub-plans of the Traffic Management Plan prepared by the Design-Builder in accordance with Section 4.2.1 [Traffic Control Plans] of Part 4 of Schedule 4.

“**Traffic Control Supervisor**” means a person appointed by the Design-Builder in accordance with Section 8.4 [Traffic Control Supervisors] of Part 4 of Schedule 4.

“**Traffic Crash**” means sudden and unexpected vehicle collision which results in damage and/or injury, or loss of control.

“**Traffic Data**” means all information relating to traffic:

- (a) in the Reports submitted by the Design-Builder pursuant to Schedule 17 [Records and Reports]; and
- (b) obtained by the Province by direct interrogation of the measurement equipment provided by the Design-Builder as part of the Project Work.

“**Traffic Disruption Event**” means a Closure or Stoppage on Highway 1.

“**Traffic Engineer**” means the person appointed by the Design-Builder in accordance with Section 8.3 [Traffic Engineer] of Part 4 of Schedule 4.

“**Traffic Management**” means the recognition of the various situations where Traffic Control and guidance are required, and the implementation of effective procedures, including Traffic Control, to safely control and guide traffic with minimal interruptions and delays.

“**Traffic Management Auditing**” has the meaning given in Section 4.8(b) of Schedule 7.

“**Traffic Management Payments**” means the payments to be made by the Design-Builder to the Province pursuant to Section 4.2 [Calculation of Traffic Management Payments] of Schedule 10.

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“**Traffic Management Plan**” or “**TMP**” means the plan prepared by the Design-Builder in accordance with Article 4 [Traffic Management Plan] of Part 4 of Schedule 4.

“**Traffic Operations Requirements**” has the meaning given in Section 1.5.1(a) of Part 2 [Design and Construction Requirements] of Schedule 4.

“**Traffic Quality Management Plan**” means the plan for the quality management of the Traffic Management for the Project Facilities prepared by the Design-Builder in accordance with Appendix D [Traffic Quality Management Plan] to Schedule 7.

“**Travelled Lane**” means the surface of a highway:

- (a) between the painted Shoulder line on one side and the painted Shoulder line on the other side; or
- (b) in the absence of Shoulder lines, from asphalt edge to asphalt edge; or
- (c) in the absence of hard surfacing, as defined for a dirt and gravel highway,

and includes the trafficable portions of rest areas, pullout areas, parking areas, weigh scale areas, and any other vehicle-accessible portions within the highway right-of-way.

“**Trespassers**” has the meaning given in Section 8.8(a).

“**Twenty-Minute Closure**” has the meaning given in Table 2.1 [Stoppages and Closures] of Part 4 of Schedule 4.

“**Underpass**” means a Structure carrying a road, a highway, a railway or pedestrians over a highway.

“**Undisclosed Utilities**” means any Utilities (other than Utility Service Connections) located underground on the Project Site (other than the Additional Lands) and the Project Infrastructure (other than the Project Infrastructure on the Additional Lands) (and, for greater certainty, not visible on or above ground), the existence of which:

- (a) was not disclosed, or is discovered more than 2 m in any horizontal direction from the location disclosed, to the Design-Builder in the Disclosed Data as at the Financial Submittal Date; and
- (b) the Design-Builder does not otherwise have knowledge of, could not have discovered through the exercise of reasonable due diligence prior to the Financial Submittal Date, and could not reasonably have been anticipated from any analysis of all relevant information available to the Design-Builder (including the Disclosed Data) as at the Financial Submittal Date, having regard to the opportunity afforded the Design-Builder to conduct such due diligence and analysis before the Financial Submittal Date.

“**Unresolved NCE**” has the meaning set out in Appendix D [Assignment of NCE Points] to Schedule 10.

“**Use As Is**” means that no action to eliminate a detected Nonconformity is needed.

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“**Utilities**” means privately, publicly or cooperatively owned lines, facilities or systems for transmitting or distributing electricity, data, communications, gas, oil and petroleum products, water, storm water and sewage or other similar commodity which serve the public directly or indirectly, including underground, surface and overhead facilities as well as facilities which use common poles, ducts or conduits on a shared basis, all related and ancillary Infrastructure and all Utility Service Connections.

“**Utility Agreements**” means all agreements entered into by the Province or BCTFA with a Utility Supplier in connection with the construction, installation, operation, repair, preservation, relocation and/or maintenance of Utilities in, on, under, over or adjacent to the Project Infrastructure and the Project Site or any part thereof, and includes any site or other permits issued thereunder or pursuant thereto, all as amended, supplemented or replaced from time to time, and including:

- (a) the Protocol Agreement between BC Hydro and the Province dated December 13, 2018; and
- (b) the Protocol Agreement between BC Tel and the Ministry of Transportation and Highways dated January 26, 1996.

“**Utility Service Connections**” means:

- (a) the direct connections to the point of the utility mains (including to transmission or distribution mains) that specifically provide utility service to privately-owned properties, which include any properties owned in fee simple by a public agency or road dedication where a public agency has an agreement to operate a service within such road dedication; and
- (b) any private utilities within such privately-owned properties, which include any properties owned in fee simple by a public agency or road dedication where a public agency has an agreement to operate a service within such road dedication.

“**Utility Supplier**” means the owner of any Utility.

“**Utility Work**” means temporary and permanent installation, protection, removal and relocation works relating to Utilities carried out in connection with or as part of the Project Work and related and ancillary works.

“**Value Engineering Proposal**” has the meaning given in Section 7.4 [Value Engineering Proposals].

“**Warranty Holdback**” has the meaning given in Section 3.2(a) of Schedule 5 [Project Work Defects and Warranties].

“**WCA**” means the *Workers Compensation Act* (British Columbia).

“**Website**” has the meaning given in Section 2.1(i)(ii) of Schedule 9 [Communications and Engagement].

“**WHO**” means the World Health Organization.

“**Wildlife Exclusion Fencing System**” has the meaning given in Section 2.8 [Wildlife Exclusion Fencing System] of Schedule 6.

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“**Witness Point**” means a mandatory verification point at which the specific work shall be inspected or witnessed as defined by the Inspection and Testing Plan.

“**Workers’ Compensation Board**” means the Board defined in and continued under the WCA.

“**Work Method Statements**” or “**WMS**” means written management plans for critical and complex activities, processes or plans where the absence of written instructions could have a negative impact on worker safety, quality, consistency, cost or schedule, which constitute commitments of the Design-Builder and describe how work shall be performed, inspected or tested and shall include a checklist to confirm that work is being conducted in accordance with the appropriate standard, code, specification or plan in accordance with this Agreement.

“**Works Schedule**” means the detailed schedule for design, investigation, construction, testing, commissioning and related activities within the Design and Construction, to be submitted by the Design-Builder pursuant to, and as subsequently amended from time to time in accordance with, Section 1.3 [Works Schedule] of Schedule 3.

1.2 Reference Documents

- (a) The Reference Documents are referenced in this Agreement by the “Short Form” identified on Appendix A [Reference Documents] to this Schedule.
- (b) The Design-Builder shall at all times comply with the then most current versions of all Reference Documents, provided that, if and to the extent that any amendment, supplement or replacement of or to any Reference Document after the Financial Submittal Date impacts the design, quality or scope of the Project Work or the Design and Construction or any part thereof:
 - (i) if and to the extent that compliance with such amendment, supplement or replacement of or to such Reference Document is required for the Design-Builder’s continued compliance with Laws (the onus of establishing which shall be on the Design-Builder), but without limiting the Design-Builder’s obligation to comply with Laws, the Province shall issue a Province Change to require compliance with such amendment, supplement or replacement of or to such Reference Document and the provisions of Part 7 [Province Changes and the Design-Builder Proposals] shall apply accordingly; and
 - (ii) in all other cases, the Design-Builder shall not be required to comply with such amendment, supplement or replacement of or to such Reference Document unless the Province has issued a Province Change to require such compliance, in which case the provisions of Part 7 [Province Changes and the Design-Builder Proposals] shall apply accordingly.

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**PART 2
INTERPRETATION**

This Agreement will be interpreted according to the following provisions, save to the extent that the context or the express provisions of this Agreement otherwise require:

2.1 Waiver of *Contra Proferentum*

The parties waive the application of any rule of law which otherwise would be applicable in connection with the construction of this Agreement that ambiguous or conflicting terms or provisions should be construed against the party who (or whose counsel) prepared the executed agreement or any earlier draft of the same, or against the party benefiting from such terms or provisions.

2.2 Headings

The table of contents, headings and sub-headings, and references to them, in this Agreement, are for convenience of reference only, do not constitute a part of this Agreement, and will not be taken into consideration in the interpretation or construction of, or affect the meaning of, this Agreement.

2.3 Cross References

All references to Parts, Articles, Sections, paragraphs and Schedules are references to the relevant Parts, Articles, Sections, paragraphs and Schedules of this Agreement unless reference is made to another Agreement. Without limiting the generality of the foregoing, reference in this Agreement, or in a Schedule of this Agreement, to a Part, Article or Section refers to the applicable Part, Article or Section in this Agreement (excluding the Schedules), unless reference to a Part, Article, Section or paragraph of a particular Schedule to this Agreement is indicated.

2.4 Internal References

The words “**herein**”, “**hereof**” and “**hereunder**” and other words of similar import refer to this Agreement as a whole and not to any particular Part, Article, Section, paragraph or Schedule of this Agreement.

2.5 Reference to Statutes and Reference Documents

- (a) Unless a reference to a statute or statutory provisions (including any subordinate legislation) refers expressly to a statute or statutory provision in effect at a particular time (in which case the reference is to the statute or statutory provision in effect at that time), references to any statute or statutory provision (including any subordinate legislation) include any statute or statutory provision which amends, extends, consolidates or replaces the same or which has been amended, extended, consolidated or replaced by the same. References to any statute or statutory provisions include any applicable orders, regulations, bylaws, ordinances, orders, codes of practice, instruments or other subordinate legislation made under the relevant statute or statutory provision.
- (b) Unless a reference to a Reference Document refers expressly to a Reference Document in effect at a particular time (and provided that the reference to a particular name, date, edition, version or similar description as a “Document Name” identified for a particular Reference Document on Appendix A [Reference Documents] to this Schedule shall not

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constitute such an express reference), but subject to Section 1.2(b) of this Schedule, references to any Reference Document include any document which amends, extends, consolidates or replaces the same or which has been amended, extended, consolidated or replaced by the same.

2.6 Reference to Statutory or Public Duties or Functions

References to statutory or public duties or functions are references to such duties or functions (including powers and discretions) from time to time and include any common law duties and functions (including powers and discretions).

2.7 Reference to Right or Duty of a Governmental Body

A reference to any right, power, obligation, duty or responsibility of any Governmental Authority or of any board or commission of any Governmental Authority is to the Governmental Authority or the board or commission that, pursuant to Laws, has such right, power, obligation or responsibility at the relevant time.

2.8 Time

- (a) All references to time of day are references to Pacific Standard time or Pacific Daylight Saving time, as the case may be, in Vancouver, British Columbia.
- (b) If the time for doing an act falls or expires on a day that is not a Business Day, the time for doing such act will be extended to the next Business Day.

2.9 Time of the Essence

Time is of the essence of this Agreement, and remains of the essence in respect of any extension of time given.

2.10 Number

Words importing the singular include the plural and vice versa.

2.11 Gender

Words importing a particular gender include all genders.

2.12 Reference to Office of a Governmental Body

Each reference to a minister, ministry, office, branch, agency, board, commission or similar body of any Governmental Authority shall be deemed to be a reference to any successor or replacement in function of such minister, ministry, office, branch, agency, board, commission or similar body.

2.13 Reference to Public Organizations

Any reference to a public organization will be deemed to include a reference to any successor(s) to such public organization or any organization or entity or organizations or entities which has or have taken over the functions or responsibilities of such public organization.

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2.14 Persons for Whom Design-Builder is Responsible

A reference to a person or persons for whom the Design-Builder is in law responsible means and is limited to: the Key Individuals; officers, employees, consultants, agents, professional advisors (including legal and financial advisors) and invitees; any person over whom the Design-Builder could reasonably be expected to exercise control and the Subcontractors and their respective officers, employees, consultants and agents; and any other person for whom the Design-Builder is responsible in law or by the terms of this Agreement. For certainty, notwithstanding any arrangement with respect to Employees (as such term is defined in the BCIB-Contractor Agreement and each BCIB-Subcontractor Agreement), as between the Province and the Design-Builder, for the purposes of this Agreement only, all such Employees will be deemed to be “persons for whom the Design-Builder is in law responsible”.

2.15 Persons for Whom Province is Responsible

A reference to a person or persons for whom the Province is in law responsible means and is limited to:

- (a) BCTFA and TI Corp, but only in respect of performing functions in relation to the Project, the Project Site, the Project Infrastructure or this Agreement;
- (b) the Province’s Representative in its capacity as such under this Agreement; and
- (c) employees, agents, professional advisors (including legal and financial advisors) and contractors of the Province or BCTFA (which may include Third Party Contractors) in all cases only while performing functions of, or on behalf of, the Province or BCTFA in relation to the Project, the Project Site, the Project Infrastructure or this Agreement;

but excludes the Design-Builder and any person for whom the Design-Builder is in law responsible pursuant to Section 2.14 [Persons for Whom the Design-Builder is Responsible] of this Schedule.

2.16 Reference to Legal Entity

Any reference to a corporate or other legal entity includes and is also a reference to any entity that is a successor to such entity.

2.17 Currency

All monetary amounts are expressed in Canadian dollars and all amounts to be calculated and paid pursuant to this Agreement are to be calculated and paid in Canadian dollars.

2.18 Costs

Without limiting Section 9.10 [Costs and Expenses], whenever this Agreement obliges the Province to pay any amount to the Design-Builder in respect of any costs, expenses, fees, charges, liabilities, losses, claims or other sums incurred by the Design-Builder:

- (a) such obligation will be construed as applying only to so much of such sums as have been properly incurred on an arm’s length commercial basis or, where not incurred on an arm’s length commercial basis (including when the payment is made to an Affiliate of the Design-Builder), so much of them as are proper and reasonable; and

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- (b) the Design-Builder will, when requested by the Province, provide reasonable supporting evidence of such costs, expenses, fees, charges, liabilities, losses, claims or other sums.

2.19 Knowledge of Province

The Province will not be imputed with knowledge of any fact, matter or thing unless that fact, matter or thing is within the actual knowledge of the Province's Representative or within the actual knowledge of those of the Province's employees and agents who have responsibilities in connection with the conduct of the Project or the Project Work.

2.20 Knowledge of Design-Builder

Without limiting the extent of its actual knowledge, the Design-Builder will for all purposes of this Agreement be deemed to have such knowledge in respect of the Project and the Project Work as is held (or ought reasonably to be held) by all persons involved in carrying out the Project and the Project Work including the Design-Builder, the Partners, any Subcontractors, and their respective officers, employees, consultants and agents, and any Proponent Team Member of the Preferred Proponent (as such terms are defined in the Request for Proposals).

2.21 Performance to Standards

Any requirement for any thing or action to be "in accordance with", "in conformity with" or "in compliance with" any standard, code, criteria, specification, guideline or other requirement or stipulation, and any requirement expressed using words or phrases of similar import, means that such thing or action is to exceed or at least equal that standard, code, criteria, specification, guideline or other requirement or stipulation.

2.22 Words of Inclusion; Mandatory Provisions

- (a) The words "**include**", "**includes**" or "**including**" are to be construed as meaning "include without limitation", "includes without limitation" and "including without limitation", respectively, and the words following "include", "includes" and "including" shall not be considered to set forth an exhaustive list.
- (b) The words "**will**" and "**shall**" are synonymous with each other and used interchangeably herein to designate a mandatory requirement or obligation, as applicable.

2.23 General Meanings Not Restricted

General words are not given a restrictive meaning:

- (a) if they are introduced by the word "other", by reason of the fact that they are preceded by words indicating a particular class of act, matter or thing; or
- (b) by reason of the fact that they are followed by particular examples intended to be embraced by those general words.

2.24 Trade Meanings

Unless otherwise defined in this Agreement or the context otherwise requires, words or abbreviations which have well-known and accepted trade meanings are used in accordance with those meanings.

2.25 Decisions of the Province

Where in this Agreement:

- (a) the Province, BCTFA, the Minister or the Province’s Representative is entitled to make a decision or determination, or to grant or withhold any consent, approval or acceptance or to exercise any judgement (in this Section 2.26, any such decision, determination, grant, withholding or exercise is referred to as an “**Province Decision**”), “in its discretion” or “in the discretion” of the Province, BCTFA, the Minister or the Province’s Representative, as the case may be, or words of similar import; or
- (b) the Province, BCTFA, the Minister or the Province’s Representative is entitled to make a Province Decision and there is neither express language conferring discretion as contemplated by Section 2.25(a) of this Schedule nor express language requiring the Province, BCTFA, the Minister or the Province’s Representative, as the case may be, to act reasonably or not to act unreasonably,

the Province, BCTFA, the Minister or the Province’s Representative, as the case may be, shall be entitled to make the relevant Province Decision in its sole, absolute, unfettered and subjective discretion.

2.26 All Reasonable Efforts

- (a) The expression “**all reasonable efforts**”, when used in connection with an obligation of the Design-Builder, means taking all reasonable steps to achieve the objective and to perform the obligation, including doing all that can reasonably be done in the circumstances taking into account the Design-Builder’s obligations hereunder to mitigate delays and additional costs to the Province and BCTFA, and in any event taking no less steps and efforts than those that would be taken by a reasonable and prudent person in comparable circumstances but where the whole of the benefit of the obligation and where all the results of taking such steps and efforts accrued solely to that person’s own benefit.
- (b) The expression “**all reasonable efforts**”, when used in connection with an obligation of the Province or BCTFA, means taking all reasonable steps to achieve the objective and to perform the obligation, including doing all that can reasonably be done in the circumstances taking into account the obligations of the Province or BCTFA, as the case may be, hereunder to mitigate delays and additional costs to the Design-Builder, and in any event taking no less steps and efforts than those that would be taken by a reasonable and prudent person in comparable circumstances but where the whole of the benefit of the obligation and where all the results of taking such steps and efforts accrued solely to that person’s own benefit, provided that the foregoing shall not require the Province or BCTFA to:

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- (i) take any action which is contrary to the public interest or decline, refrain or abstain from taking any action which is in the public interest, as determined by the Province or BCTFA in its discretion;
- (ii) exercise or refrain, decline or abstain from exercising any statutory or administrative law power, authority or discretion; or
- (iii) undertake any mitigation measure that might be available arising out of its status as the Crown or as a legislative or public body that would not normally be available to a private commercial party.

2.27 Accounting Terms

All accounting and financial terms used herein are, unless otherwise indicated, to be interpreted and applied in accordance with GAAP, consistently applied.

2.28 Severability

Each provision of this Agreement will be valid and enforceable to the fullest extent permitted by law. If any provision of this Agreement is held to be invalid, unenforceable or illegal to any extent, such provision may be severed and such invalidity, unenforceability or illegality will not prejudice or affect the validity, enforceability and legality of the remaining provisions of this Agreement. If any such provision of this Agreement is held to be invalid, unenforceable or illegal, the parties will promptly endeavour in good faith to negotiate new provisions to eliminate such invalidity, unenforceability or illegality and to restore this Agreement as nearly as possible to its original intent and effect.

2.29 No Derogation from Laws

No provision of this Agreement is intended to derogate from or be inconsistent with or in conflict with any Laws and no provision of this Agreement shall be interpreted in a manner as to result in any such derogation, inconsistency or conflict and, if any such provision is found by a court of competent jurisdiction to be inconsistent with or in conflict with any Laws, the applicable Laws will prevail and such provision will be read down or rendered inoperative (either generally or in such particular situation, as appropriate), to the extent of such conflict or inconsistency, as the case may be and, if any such provision is found by a court of competent jurisdiction to derogate from any Laws, then such provision will be read down or rendered inoperative (either generally or in such particular situation, as appropriate) to the extent of the derogation.

2.30 Joint and Several

The obligations and liabilities of the Design-Builder under this Agreement shall be the obligations and liabilities of the Design-Builder and each of the Partners, jointly and severally with each other.

2.31 Principles for Resolving Conflicts within Documents

In the case of any conflict, ambiguity or inconsistency between or among any of the provisions within the main body of this Agreement or any of the Schedules hereto, including any conflict, ambiguity or inconsistency between or among any of the provisions within Schedule 4 or any of the Project

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Requirements, the following principles will apply unless the matter is expressly addressed elsewhere in this Agreement:

- (a) in the case of any conflict, ambiguity or inconsistency relating to the quality, manner or method of performing the Project Work, the provisions (including any part of the Proposal Extracts) establishing the higher quality, manner or method of performing the Project Work, using the more stringent standards, or the broader scope of the Project Work will prevail, with the intent that the provisions which produce the higher quality with the higher levels of safety, durability, performance and service will govern;
- (b) in the case of any conflict, ambiguity or inconsistency relating to the application of any codes and standards referred to in the Project Requirements, the Design-Builder shall promptly provide the Province's Representative with written notice including full particulars of the conflict, ambiguity or inconsistency and the conflict, ambiguity or inconsistency shall be resolved in accordance with a written direction given by the Province to the Design-Builder, which shall be given as soon as reasonably practicable after receipt by the Province's Representative of such notice from the Design-Builder;
- (c) in the case of any conflict, ambiguity or inconsistency between or among the Proposal Extracts and any other provision of this Agreement, the provision of this Agreement or the relevant part or parts thereof shall prevail unless in the discretion of the Province and by written direction given by the Province to the Design-Builder (which direction shall be given as soon as reasonably practicable after, and in any event within 15 Business Days after, the Province's Representative receives written notice of such conflict, ambiguity or inconsistency from the Design-Builder) the Province confirms that the relevant Proposal Extract or the relevant part or parts thereof shall prevail; and
- (d) in the case of any dispute regarding other conflict, ambiguity or inconsistency, the dispute will be resolved in accordance with the Dispute Resolution Procedure applying accepted rules of contract interpretation.

2.32 No Additional Payments or Time

The Design-Builder will not be entitled to any additional payment, reduction in any payment to be made by the Design-Builder or extension of time under this Agreement as a result of the existence of any conflict, ambiguity or inconsistency referred to in Section 2.31 [Principles for Resolving Conflicts within Documents] of this Schedule or as a result of giving effect to any resolution of any such conflict, ambiguity or inconsistency pursuant to Section 2.31 [Principles for Resolving Conflicts within Documents] of this Schedule (whether by the terms of Section 2.31 [Principles for Resolving Conflicts within Documents] of this Schedule, by agreement between the Province and the Design-Builder, or pursuant to the Dispute Resolution Procedure).

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**APPENDIX A
REFERENCE DOCUMENTS**

Short Form	Document Name
AASHTO Guide for Design of Pavement Structures	<i>AASHTO Guide for Design of Pavement Structures</i> , 1993.
AASHTO Guide Specifications for Design and Construction of Segmental Concrete Bridges	<i>AASHTO Guide Specifications for Design and Construction of Segmental Concrete Bridges</i> , 2 nd Edition, with 2003 Interim Revisions.
AASHTO LRFD Bridge Design Specifications	<i>AASHTO LRFD Bridge Design Specifications</i> , 8 th Edition, 2017
AASHTO LRFD Bridge Construction Specifications	<i>AASHTO LRFD Bridge Construction Specifications</i> , 4 th Edition, 2017
AASHTO MASH	<i>AASHTO Manual for Assessing Safety Hardware</i> , Second Edition, 2016.
AASHTO Mechanistic-Empirical Pavement Design Guide	<i>AASHTO Mechanistic-Empirical Pavement Design Guide</i> , 2015.
AASHTO M 320	<i>AASHTO M 320 Standard Specification for Performance-Graded Asphalt Binder</i> , 2017.
AASHTO R 52-6	<i>AASHTO R 52-6, Standard Specification for Compost for Erosion/Sediment Control (Compost Blankets)</i> , 2010.
AASHTO Roadside Design Guide	<i>AASHTO Roadside Design Guide</i> , 2011.
Air Emissions – Environment and Climate Change Canada Best Practices for Reduction	Cheminfo Services Ltd. for Environment Canada, Transboundary Issues Branch <i>Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities</i> , March 2005.
Amphibian and Reptile Conservation	Ministry of Forests, Lands and Natural Resource Operations and Ministry of Environment <i>Guidelines for Amphibian and Reptile Conservation during Urban and Rural Land Development in British Columbia</i> , 2014.
ANSI C136.31	American National Standards Institute, Inc. <i>American National Standard for Roadway and Area Lighting Equipment-Luminaire Vibration</i> , 2011.
API 5L	American Petroleum Institute <i>API Specification 5L Line Pipe</i> , 46 th Edition.
Archaeological Chance Find Procedure	Hemmera Envirochem Inc. <i>Kicking Horse Canyon Project – Phase 4 Archaeological Chance Find Procedure Revision 1.0</i> , July 23, 2019.
Archaeological Handbook	BC Ministry of Small Business, Tourism and Culture, Archaeology Branch <i>British Columbia Archaeological Resource Management Handbook</i> , February 1998.
Archaeological Impact Assessment Guidelines	BC Ministry of Small Business, Tourism and Culture, Archaeology Branch <i>BC Archaeological Impact Assessment Guidelines</i> , Revised October 1998.
ASCE Guidelines for Design of Cable-Stayed Bridges	<i>ASCE Guidelines for Design of Cable-Stayed Bridges</i> , 1992.
ASME A17.1/CSA B44	American Society of Mechanical Engineers A17.1-2013/CSA B44-13, <i>Safety Code for Elevators and Escalators</i> , October 2013.
ASTM A123	<i>ASTM A123-17, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products</i> , 2017.
ASTM A153	<i>ASTM A153-16a, Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware</i> , 2016.
ASTM A252	<i>ASTM A252-19, Standard Specification for Welded and Seamless Steel Pipe Piles</i> , 2019.

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Short Form	Document Name
ASTM A416	ASTM A416-18, <i>Standard Specification for Low-Relaxation, Seven-Wire Steel Strand for Prestressed Concrete</i> , 2018.
ASTM C1218	ASTM C1218-17, <i>Standard Test Method for Water-Soluble Chloride in Mortar and Concrete</i> , 2017.
ASTM C457	ASTM C457-16, <i>Standard Test Method for Microscopical Determination of Parameters of the Air-Void System in Hardened Concrete</i> , 2016.
ASTM D1621	ASTM D1621-16, <i>Standard Test Method for Compressive Properties of Rigid Cellular Plastics</i> , 2016.
ASTM D3035	ASTM D3035-15, <i>Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter</i> , 2015.
ASTM D4694	ASTM D4694-15, <i>Standard Test Method for Deflections with a Falling-Weight-Type Impulse Load Device</i> , September 2015.
ASTM D4695	ASTM D4695-15, <i>Standard Guide for General Pavement Deflection Measurements</i> , March 2015.
ASTM D6359	ASTM D6359, <i>Standard Specification for Minimum Retro-reflectance of Newly Applied Pavement Marking Using Portable Hand-Operated Instruments</i> , 1999.
ASTM F714	ASTM F714-13, <i>Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter</i> , 2013.
ASTM F738	ASTM F738-02, <i>Standard Specification for Stainless Steel Metric Bolts, Screws, and Studs</i> , 2008.
Asphalt Institute MS-17	Asphalt Institute <i>Asphalt Overlays and Pavement Rehabilitation 1st Edition No.17 (MS 17)</i> , 1969.
ATC-49	MCEER/ATC-49 <i>Recommended LRFD Guidelines for the Seismic Design of Highway Bridges</i> , 2003.
Avalanche Design Reference	Canadian Avalanche Association <i>Planning Methods for Assessing and Mitigating Snow Avalanche Risk</i> , 2018.
BC Ambient Air Quality Objectives	Province of British Columbia <i>British Columbia Ambient Air Quality Objectives</i> Updated May 9, 2018
BC Building Code	<i>British Columbia Building Code</i> , 2018.
BC Supplement to CAN/CSA-S6-14	BC Ministry of Transportation <i>Bridge Standards and Procedures Manual – Volume 1 – Supplement to CAN/CSA-S6-14</i> , October 28, 2016.
BC Supplement to TAC	BC Ministry of Transportation and Infrastructure <i>B.C. Supplement to TAC Geometric Design Guide 2019 3rd Edition</i> , April 2019.
BC Water Quality Guidelines – Approved	BC Ministry of Environment <i>British Columbia Approved Water Quality Guidelines</i> , 2006 Edition.
BC Water Quality Guidelines – Aquatic Life	BC Ministry of Environment and Climate Change <i>British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture, Summary Report</i> , August 2019.
BC Water Quality Guidelines – Working	BC Ministry of Environment <i>British Columbia Working Water Quality Guidelines</i> , 2006 Edition.
Best Practices for Managing Invasive Plants on Roadsides	BC Ministry of Transportation and Infrastructure <i>Best Practices for Managing Invasive Plants on Roadsides</i> , 2010.

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Short Form	Document Name
Blue Book	BC Road Builders and Heavy Construction Association <i>The Blue Book Equipment Rental Rate Guide</i> .
Bridge Standards and Procedures Manual	BC Ministry of Transportation <i>Bridge Standards and Procedures Manual</i> , 2005-2016.
CAN/CSA A23.1	CAN/CSA A23.1-19, <i>Concrete Materials and Methods of concrete Construction</i> , 2019.
CAN/CSA A23.2	CAN/CSA A23.2-19, <i>Test Methods and Standard Practices for Concrete</i> , 2019.
CAN/CSA A283	CAN/CSA A283, <i>Qualification Code for Concrete Testing Laboratories</i> , 2019.
CAN/CSA C22.2 No. 60529	CAN/CSA C22.2 No. 60529, <i>Degrees of Protection Provided by Enclosures (IP Code)</i> 2016.
CAN/CSA-G40.21-M	CAN/CSA G40.21-M, General Requirements for Rolled or Welded Structural Quality Steel / Structural Quality Steel, 2013.
CAN/CSA-S6-14	CAN/CSA-S6-14, <i>Canadian Highway Bridge Design Code</i> , 2014.
CAN/CSA W47.1	CAN/CSA W47.1, <i>Certification of Companies for Fusion Welding of Steel</i> , 2009, Reaffirmed in 2014.
CAN/CSA W59	CAN/CSA W59 <i>Welded Steel Construction (Metal Arc Welding)</i> , 2018.
CAN/CSA W178.1	CAN/CSA W178.1, <i>Certification of Welding Inspection Organizations</i> , 2018.
CAN/CSA W178.2	CAN/CSA W178.2, <i>Certification of Welding Inspectors</i> , 2018.
CAN/ULC-S102.2-10	CAN/ULC-S102.2-10 <i>Standard Method of Test for Surface Burning Characteristics of building Materials and Assemblies</i> , 2010.
Canada-wide Standards for Particulate Matter and Ozone	Canadian Council of Ministers of the Environment <i>Canada Wide Standards for Particulate Matter and Ozone</i> , 2012.
Canadian Electrical Code	Canadian Standards Association <i>CSA C22.1 Canadian Electrical Code</i> , (24 th Edition) 2018.
Canadian Foundation Engineering Manual	Canadian Geotechnical Society <i>Canadian Foundation Engineering Manual</i> , 4 th Edition.
Canadian Rail Operating Rules	Transport Canada <i>Canadian Rail Operating Rules</i> , April 24, 2020.
Canadian Water Quality Guidelines for the Protection of Aquatic Life Protocol	Canadian Council of Ministers of the Environment <i>Canadian Water Quality Guidelines for the Protection of Aquatic Life Protocol</i> ; 2007.
Cantilever Sign Structures Drawings	BC Ministry of Transportation, <i>SP635-3.6.5 to SP635-3.6.12 (Interim)</i> ; 2010.
Catalogue of Standard Traffic Signs	BC Ministry of Transportation <i>Catalogue of Standard Traffic Signs</i> .
Compendium of Wildlife Guidelines for Industrial Development in the North Area	BC Ministry of Forests, Lands and Resource Operations <i>Compendium of Wildlife Guidelines for Industrial Development Projects in the North Area</i> , British Columbia, November 19, 2014.
CP Guidelines for Excavations on CPR Property	Canadian Pacific Railway <i>Guidelines for Excavations on CPR Property</i> , updated March 8, 2012.
CP Minimum Safety Requirements	Canadian Pacific Railway <i>Minimum Safety Requirements for Contractors Working on CP Property in Canada</i> , effective September 15, 2010.

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Short Form	Document Name
CP Operational Constraint for Work On, Above or Below Railway Right of Way	Canadian Pacific Railway <i>Operational Constraint for Work On, Above or Below Railway Right of Way</i> , May 1, 2009.
CP Protection of Structures Adjacent to Railroad Tracks	Canadian Pacific Railway Protection of Structures Adjacent to Railroad Tracks, April 2016.
CP Requirements for Culverts	Canadian Pacific Railway <i>Structures Planning and Design Requirements for the Design of Steel Culverts Carrying Railway Traffic</i> , April 2009.
CP Specification No. SP-TS-2.39	Canadian Pacific Railway (CPR) <i>Specification No. SP-TS-2.39: Pipeline and Utility Installations Buried within Canadian Pacific Railway Right-of-Way in Canada</i> , Effective April 23, 2007.
CP Third Party Flagging Information Guide	Canadian Pacific Railway <i>Third Party Flagging Information Guide</i> .
CP Track Monitoring Requirements for Third Party Projects	Canadian Pacific Railway <i>Track Monitoring Requirements for Third Party Projects</i> , October 2008.
CP Track Movement Monitoring Guidelines for Trenchless Pipe Installation	Canadian Pacific Railway <i>Track Movement Monitoring Guidelines for Trenchless Pipe Installation</i> , updated April 9, 2014.
CP Utility Specification and Application Process	Canadian Pacific Railway <i>Utility Specification and Application Process</i> .
CTA Cost Apportionment Guidelines	Canadian Transportation Agency <i>Apportionment of Costs of Grade Separations: A Resource Tool</i> , November 2011.
Culvert and Fish Passage Fact Sheet	BC Ministry of Transportation <i>Culvert and Fish Passage Information Sheet</i> , May 2013.
DBSS	BC Ministry of Transportation and Infrastructure <i>2018 Design-Build Standard Specifications for Highway Construction</i> , Adopted November 1, 2018.
Debris Flow Control Structures for Forest Engineering	BC Ministry of Forests Research Branch <i>Paper 22/1996 Debris Flow Control Structures for Forest Engineering</i> , 1996.
Develop with Care	BC Ministry of Forests, Lands and Natural Resource Operations and BC Ministry of Environment <i>Develop with Care: Environmental Guidelines for Urban and Rural Development in British Columbia</i> , 2014.
EGBC Bylaws	<i>EGBC Bylaws of the Association</i> , Amended October 2018.
EGBC Documented Independent Review of Structural Designs	<i>EGBC Quality Management Guidelines - Documented Independent Review of Structural Designs</i> , Version 1.4, January 9, 2018.
EGBC Climate Change – Resilient Design	<i>EGBC Professional Practice Guidelines, Developing Climate Change – Resilient Designs for Highway Infrastructure in British Columbia (Interim) V1.0</i> .
EGBC Seismic Design Guidelines	<i>EGBC Guidelines – Performance-Based Seismic Design of Bridges in BC</i> , March 23, 2018.
Electrical and Signing Materials Standards	BC Ministry of Transportation <i>Electrical and Signing Materials Standards (Draft)</i> , 2003 and including Volume 1 updated June 2014.
Electrical and Traffic Engineering Manual	BC Ministry of Transportation <i>Electrical and Traffic Engineering Manual – Guidelines for the Design of Lighting, Signal, Sign, and ITS Installations</i> , 2019.
Emergency Response Guidebook	Transport Canada <i>Emergency Response Guidebook</i> , 2016.
Environmental Best Practices for Highway Maintenance Activities	BC Ministry of Transportation and Infrastructure <i>Environmental Best Practices for Highway Maintenance Activities</i> , January 2018.

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Short Form	Document Name
Environmental Summary Report	Hemmera Envirochem Inc. <i>Kicking Horse Canyon Project – Phase 4 Environmental Summary Report</i> , December 2019.
ETAG-027	European Organization for Technical Approvals <i>Guideline for European Technical Approval of Falling Rock Protection Kits (ETAG 027)</i> , September 2012, amended April 2013.
FHWA Circular No. 7	U.S. Department of Transportation Federal Highway Administration <i>Geotechnical Engineering Circular No. 7: Soil Nail Walls - Reference Manual – FHWA-NHI-14-007</i> , February 2015.
FHWA-NHI-10-024 and NHI-10-025 Guidelines	U.S. Department of Transportation Federal Highway Administration <i>Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes – Volume I and II, FHWA-NHI-10-024 and FHWA NHI-10-025</i> , November 2009.
Forestry Engineering Manual	Ministry of Forests, Lands, Natural Resource Operations and Rural Development <i>Engineering Manual</i> , July 26, 2019.
Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia	BC Ministry of Energy and Mines <i>Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia</i> , August 1998.
Highway Capacity Manual	Transportation Research Board <i>Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis</i> , 2016.
Highway Corridor Management Specifications for Highway Concessions	BC Ministry of Transportation <i>Highway Corridor Management Specifications for Highway Concessions</i> , Oct 2004.
Highway Maintenance Specifications	BC Ministry of Transportation and Infrastructure <i>Highway Maintenance Agreement Service Area 12 Schedule 1 Section 6 General Specifications SA12</i> , Nov 2018.
Highway Maintenance Specifications for Highway Concessions	BC Ministry of Transportation <i>Highway Maintenance Specifications for Highway Concessions</i> , Oct 2004.
Highway Maintenance Specifications Local Area Specifications	BC Ministry of Transportation and Infrastructure <i>Highway Maintenance Agreement Schedule 1 Section 7 Local Area Specifications SA12</i> , Nov 2018.
ISO/IEC 17025	International Organization for Standardization <i>ISO/IEC 17025 Testing and Calibration Laboratories</i> , 2017.
Land Capability Classification for Agriculture in British Columbia	Ministry of Environment and Ministry of Agriculture and Food <i>Land Capability Classification for Agriculture in British Columbia</i> , April 1983.
Land Development Guidelines for the Protection of Aquatic Habitat	Department of Fisheries and Oceans Canada and Ministry of Environment, Lands and Parks <i>Land Development Guidelines for the Protection of Aquatic Habitat</i> , 1992.
Landscape Policy and Design Standards	BC Ministry of Transportation <i>Landscape Policy and Design Standards</i> , 1991.
Local Area Specifications for the Kicking Horse Canyon Concession	BC Ministry of Transportation <i>Local Area Specifications for the Kicking Horse Canyon Concession</i> , May 2005.
Manual of Aesthetic Design Practice	BC Ministry of Transportation <i>Manual of Aesthetic Design Practice</i> , 1991.
Manual of Control of Erosion and Shallow Slope Movement	BC Ministry of Transportation <i>Manual of Control of Erosion and Shallow Slope Movement, Vancouver Island Highway Project</i> , August 22, 1997.
Manual of Standard Traffic Signs and Pavement Markings	BC Ministry of Transportation <i>Manual of Standard Traffic Signs and Pavement Markings</i> , September 2000.
Ministry Jurisdictional Atlas	BC Ministry of Transportation <i>Lower Mainland – Howe Sound District Jurisdictional Atlas, Corporation of Delta and City of Richmond</i> .

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Short Form	Document Name
NFPA 780	National Fire Protection Association <i>780 Standard for the Installation of Lightning Protection Systems</i> , 2020.
Nursery Stock Standards	Canadian Nursery Landscape Association <i>Canadian Standards for Nursery Stock</i> , 9th Edition, February 28, 2017.
ODOT Rockfall Catchment Area Design Guide	Oregon Department of Transportation <i>Rockfall Catchment Area Design Guide - Final Report SPR-3(032), Metric Edition</i> , 2001.
Pavement Surface Condition Rating Manual	BC Ministry of Transportation and Infrastructure <i>Pavement Surface Condition Rating Manual, Fifth Edition</i> , August 2016.
Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials	Natural Resources Canada <i>Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials</i> , 2009.
Protocols for Rare Plant Surveys	E-Flora BC: Electronic Atlas of the Plants of British Columbia [www.eflora.bc.ca] Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia <i>Protocols for Rare Vascular Plant Surveys</i> , 2008.
PTI DC35.1-14	Post-Tensioning Institute <i>DC35.1-14: Recommendations for Prestressed Rock and Soil Anchors</i> , 2014.
PTI DC45.1-18	Post-Tensioning Institute <i>DC45.1-18 Recommendations for Stay Cable Design, Testing, and Installation</i> , 2018.
PTI M50.2-00	Post-Tensioning Institute <i>M50.2-00 Anchorage Zone Design</i> , 2000.
PTI TAB.1-06	Post-Tensioning Institute <i>TAB.1-06 Post-Tensioning Manual, Sixth Edition</i> , 2006.
Raptor Conservation	Ministry of Forests, <i>Lands and Natural Resource Operations and Ministry of Environment Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia</i> , 2013.
Recognized Products List	BC Ministry of Transportation <i>Recognized Products List</i> , January 1, 2019 Edition.
Recognized Sign Suppliers	BC Ministry of Transportation and Infrastructure <i>Appendix 4 - Recognized Sign Suppliers</i> , 2019.
Report Finding an Archaeological Artifact or Human Remains - Archaeology	BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development. <i>Report Finding an Archaeological Artifact or Human Remains - Archaeology</i> .
Road Safety Audit Guidelines	BC Ministry of Transportation <i>Road Safety Audit Guidelines</i> , April 1, 2004.
Security Schedule	BC Ministry of Transportation and Infrastructure <i>Security Schedule</i> , August 2019.
Silvicultural Systems Handbook for British Columbia	BC Ministry of Forests <i>Silviculture Systems Handbook for British Columbia</i> , March 2003.
Silviculture Manual	BC Ministry of Forests <i>Silviculture Manual</i> , 1999.
Specifications for Standard Highway Sign Materials, Fabrication and Supply	BC Ministry of Transportation <i>Specifications for Standard Highway Sign Materials, Fabrication and Supply</i> , July 2008.
Standard Electrical Equipment Maintenance Manual	BC Ministry of Transportation <i>DRAFT Maintenance Manual for Standard Electrical Equipment</i> , March 2001.
Standards and Best Practices for Instream Works	BC Ministry of Water, Land and Air Protection <i>Standards and Best Practices for Instream Works</i> , March 2004.
Structure Parameters for Delivery by Engineers-of-Record on Ministry Projects	South Coast Region, <i>Structure Parameters for Delivery by Engineers-of-Record on Ministry Projects</i> , December 11, 2008.

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Short Form	Document Name
TAC Geometric Design Guide	Transportation Association of Canada <i>Geometric Design Guide for Canadian Roads</i> , 2019.
TAC Manual of Uniform Traffic Control Devices	Transportation Association of Canada <i>Manual of Uniform Traffic Control Devices for Canada</i> , 2014.
TAC Road Safety Audit Guide	Transportation Association of Canada <i>Canadian Road Safety Audit Guide</i> , 2001.
TASARM	Canadian Avalanche Association <i>Technical Aspects of Snow Avalanche Risk Management - Resources and Guidelines for Avalanche Practitioners in Canada</i> , 2017.
Technical Bulletin DS15001	BC Ministry of Transportation and Infrastructure <i>Design Vehicles – Over-Length Configurations</i> , Technical Bulletin DS15001.
Technical Bulletin DS13001	BC Ministry of Transportation and Infrastructure <i>Cable Barrier (Median and Roadside)</i> , Technical Bulletin DS13001.
Technical Bulletin GM02001	BC Ministry of Transportation and Highways <i>Rock Slope Design Technical Bulletin GM02001</i> .
Technical Bulletin TE-2000-03	BC Ministry of Transportation <i>Sign Illumination</i> , Technical Bulletin TE-2000-03.
Technical Bulletin TE-2000-12	BC Ministry of Transportation and Infrastructure <i>Preformed Detector Loops (PDF)</i> , Technical Bulletin TE-2000-12.
Technical Bulletin TE-2001-02	BC Ministry of Transportation <i>Advance Warning Sign Placement and Timing in Construction Zones</i> , Technical Bulletin TE-2001-02.
Technical Bulletin TE-2001-06	BC Ministry of Transportation <i>Clarification of the Use of Reflective Tape Borders on Traffic Signal Backboards</i> , Technical Bulletin TE-2001-06.
Technical Bulletin TE-2001-07	BC Ministry of Transportation <i>Vehicle Underpass Lighting</i> , Technical Bulletin TE-2001-07.
Technical Bulletin TE-2001-08	BC Ministry of Transportation <i>Design Criteria for All Cantilever, Sign Bridge and Custom Pole Structures</i> , Technical Bulletin TE-2001-08.
Technical Bulletin TE-2002-01	BC Ministry of Transportation <i>Audible Effects of High Visibility Delineation</i> , Technical Bulletin TE-2002-01.
Technical Bulletin TE-2002-03	BC Ministry of Transportation <i>Post Mounted Flasher Application</i> , Technical Bulletin TE-2002-03.
Technical Bulletin TE-2002-07	BC Ministry of Transportation <i>Interim Bicycle Guidelines for Traffic Signals</i> Technical Bulletin TE-2002-07.
Technical Bulletin TE-2004-01	BC Ministry of Transportation <i>Revisions to Electrical and Traffic Engineering Manual (December 2003)</i> , Technical Bulletin TE-2004-01.
Technical Bulletin TE-2005-02	BC Ministry of Transportation <i>Revisions to Electrical and Traffic Engineering Manual (December 2003)</i> , Technical Bulletin TE-2005-02.
Technical Bulletin TE-2005-04	BC Ministry of Transportation <i>Web Camera Design, Installation and Commissioning Specifications</i> , Technical Bulletin TE-2005-04.
Technical Bulletin TE-2005-07	BC Ministry of Transportation <i>Clarification of the Use of Green Arrow Signal Displays on Traffic Signals at Interchanges</i> , Technical Bulletin TE-2005-07.
Technical Bulletin TE-2005-09	BC Ministry of Transportation <i>Revisions to Electrical and Traffic Engineering Manual (December 2003)</i> , Technical Bulletin TE-2005-09.

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Short Form	Document Name
Technical Bulletin TE-2006-01	BC Ministry of Transportation <i>Uninterruptible Power Supplies (UPS) at Signalized Intersections and at Traffic Control or Warning Devices Interconnected with Railways</i> , Technical Bulletin TE-2006-01.
Technical Bulletin TE-2006-02	BC Ministry of Transportation and Infrastructure <i>Initiation of Ministry of Transportation Cellular Communication Accounts (PDF)</i> , Technical Bulletin TE-2006-02
Technical Bulletin TE-2006-03	BC Ministry of Transportation <i>Traffic Signal Uninterruptible Power Supply Material Standards</i> , Technical Bulletin TE-2006-03.
Technical Bulletin TE-2006-04	BC Ministry of Transportation <i>Traffic Signal Uninterruptible Power Supply Maintenance Standards</i> , Technical Bulletin TE-2006-04.
Technical Bulletin TE-2006-05	BC Ministry of Transportation <i>Use of Countdown Pedestrian Signals</i> , Technical Bulletin TE-2006-05.
Technical Bulletin TE-2007-02	BC Ministry of Transportation <i>Traffic Signal/Railway Signal Interconnects</i> , Technical Bulletin TE-2007-02.
Technical Bulletin TE-2007-03	BC Ministry of Transportation <i>Communication Conduit</i> , Technical Bulletin TE-2007-03.
Technical Bulletin TE-2007-04	BC Ministry of Transportation and Infrastructure <i>Priority Assessment for Wire Theft Deterrent Treatment for New Designs and Projects in the Construction Phase (PDF)</i> , Technical Bulletin TE-2007-04
Technical Bulletin TE-2008-01	BC Ministry of Transportation and Infrastructure <i>Uninterruptible Power Supplies (UPS) at Signalized Intersections and at Traffic Control or Warning Devices Interconnected with Railways (PDF)</i> , Technical Bulletin TE-2008-01.
Technical Bulletin TE-2009-01	BC Ministry of Transportation and Infrastructure <i>Replacement of Type III Sag Glass Luminaire Fixtures with Type III Flat Glass Luminaire Fixtures (PDF)</i> , Technical Bulletin TE-2009-01.
Technical Bulletin TE-2009-02	BC Ministry of Transportation and Infrastructure <i>Supply of Pedestrian Pushbuttons (PDF)</i> , Technical Bulletin TE-2009-02.
Technical Bulletin TE-2010-01	BC Ministry of Transportation and Infrastructure <i>Alignment Pins and Holes on Small Round Plastic Junction Boxes (PDF)</i> , Technical Bulletin TE-2010-01.
Technical Bulletin TE-2010-02	BC Ministry of Transportation and Infrastructure <i>Service Disconnect Switches on BC Hydro Poles (PDF)</i> , Technical Bulletin TE-2010-02.
Technical Bulletin TE-2011-01	BC Ministry of Transportation and Infrastructure <i>Use of ‘Canadian Melody’ Audible Pedestrian Signals (PDF)</i> , Technical Bulletin TE-2011-01.
Technical Bulletin TE-2012-01	BC Ministry of Transportation and Infrastructure <i>Use of Aluminum Electrical Conductions (PDF)</i> , Technical Bulletin TE-2012-01.
Technical Bulletin TE-2012-04	BC Ministry of Transportation and Infrastructure <i>Wire Theft Prevention Strategies (PDF)</i> , Technical Bulletin TE-2012-04.
Technical Bulletin TE-2012-05	BC Ministry of Transportation and Infrastructure <i>Use of 300 mm Flashing Beacons on Signs (PDF)</i> , Technical Bulletin TE-2012-05.
Technical Bulletin TE-2012-06	BC Ministry of Transportation and Infrastructure <i>Amendment to TE-2005-04: ‘Web Camera Design, Installation, and Commissioning Specifications’ RE: Mounting Cameras on Frangible & Breakaway Bases (PDF)</i> , Technical Bulletin TE-2012-06.

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Short Form	Document Name
Technical Bulletin TE-2013-01	BC Ministry of Transportation and Infrastructure <i>Operation of No-Left-Turn and No-Right-Turn Blank-Out Signs During Rail Pre-emption (PDF)</i> , Technical Bulletin TE-2013-01.
Technical Bulletin TE-2013-02	BC Ministry of Transportation and Infrastructure <i>Countdown Pedestrian Signals (PDF)</i> , Technical Bulletin TE-2013-02.
Technical Bulletin TE-2015-01	BC Ministry of Transportation and Infrastructure <i>Installation of Pre-emption Indicating Lights with Type P6 Traffic Controller Cabinets (PDF)</i> , Technical Bulletin TE-2015-01.
Technical Bulletin TE-2015-02	BC Ministry of Transportation and Infrastructure <i>Transition to LED Roadway Lighting (PDF)</i> , Technical Bulletin TE-2015-02.
Technical Bulletin TE-2016-02	BC Ministry of Transportation and Infrastructure <i>Installation of Radar Vehicle Detection Sensors (PDF)</i> , Technical Bulletin TE-2016-02.
Technical Bulletin TE-2016-03	BC Ministry of Transportation and Infrastructure <i>Installation of Rectangular Rapid Flashing Beacons (PDF)</i> , Technical Bulletin TE-2016-03.
Technical Bulletin TE-2016-04	BC Ministry of Transportation and Infrastructure <i>Installation of Speed Reader Boards</i> , Technical Bulletin TE-2016-04.
Technical Bulletin TE-2016-05	BC Ministry of Transportation and Infrastructure <i>Installation of Bluetooth Readers (PDF)</i> , Technical Bulletin TE-2016-05.
Technical Bulletin TE-2016-06	BC Ministry of Transportation and Infrastructure <i>Installation of Illuminated Bollards (PDF)</i> , Technical Bulletin TE-2016-06.
Technical Bulletin TE-2016-07	BC Ministry of Transportation and Infrastructure <i>Installation of Microwave (Wi-Fi) Radios (PDF)</i> , Technical Bulletin TE-2016-07.
Technical Bulletin TE-2016-08	BC Ministry of Transportation and Infrastructure <i>Electrical Power Meters for MoTI Services (PDF)</i> , Technical Bulletin TE-2016-08.
Technical Bulletin TE-2017-01	BC Ministry of Transportation and Infrastructure <i>LED Roadway Lighting Fixture Procurement (PDF)</i> , Technical Bulletin TE-2017-01.
Technical Bulletin TE-2018-02	BC Ministry of Transportation and Infrastructure <i>Interim ITS Field Network Switches Procurement</i> , Technical Bulletin TE-2018-02.
Technical Bulletin TE-2018-03	BC Ministry of Transportation and Infrastructure <i>NEMA TSI Traffic Controller Cabinet Rehabilitation Program</i> , Technical Bulletin TE-2018-03.
Technical Circular T-01/06	BC Ministry of Transportation <i>Text Based “Do Not Enter” and “Wrong Way” Signs – Application at Interchanges</i> , February 15, 2006.
Technical Circular T-01/15	BC Ministry of Transportation and Infrastructure <i>Pavement Structure Design Guidelines</i> , January 26, 2015.
Technical Circular T-01/16	BC Ministry of Transportation and Infrastructure <i>Introduction of the 2015 Interim Traffic Management Manual for Work on Roadways</i> , March 1, 2016.
Technical Circular T-02/02	BC Ministry of Transportation <i>Manual of Standard Traffic Signs & Pavement Markings</i> , February 1, 2002.
Technical Circular T-02/04	BC Ministry of Transportation <i>Road Safety Audit (RSA) Policy</i> , March 8, 2004 and <i>Clarification Road Safety Audit (RSA) Policy</i> , March 17, 2004.
Technical Circular T-02/09	BC Ministry of Transportation and Infrastructure <i>Temporary Pavement Markings</i> , January 6, 2009.
Technical Circular T-02/10	BC Ministry of Transportation and Infrastructure <i>New Computer Aided Drafting Standards</i> , March 1, 2010.

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Short Form	Document Name
Technical Circular T-02/12	BC Ministry of Transportation and Infrastructure <i>Guidelines on the Use of Speed Reader Boards (SRB) in Work Zones</i> , April 26, 2012.
Technical Circular T-02/13	BC Ministry of Transportation and Infrastructure <i>Cable Barrier</i> , August 7, 2013.
Technical Circular T-03/02	BC Ministry of Transportation <i>Policy on Accommodating Persons with Disabilities</i> , October 15, 2002.
Technical Circular T-03/07	BC Ministry of Transportation <i>Sign Sheeting Materials</i> , August 7, 2007.
Technical Circular T-03/14	BC Ministry of Transportation and Infrastructure <i>Update to the Ministry of Transportation and Highways Utility Policy Manual (1995)</i> , May 6, 2014.
Technical Circular T-04/13	BC Ministry of Transportation and Infrastructure <i>Evaluating the potential for acid rock drainage and metal leaching at quarries, rock cut sites and from stockpiled rock or talus materials used by the MOTI</i> , September 15, 2013.
Technical Circular T-04/17	BC Ministry of Transportation and Infrastructure <i>Geotechnical Design Criteria</i> , March 22, 2017
Technical Circular T-04/18	BC Ministry of Transportation and Infrastructure <i>Update to the Ministry's Electrical and Traffic Engineering Design Guidelines - Section 400 regarding Pedestrian Operations</i> , September 5, 2018.
Technical Circular T-04/19	BC Ministry of Transportation and Infrastructure <i>Resilient Infrastructure Engineering Design - Adaptation to the Impacts of Climate Change and Weather Extremes</i> , March 27, 2019.
Technical Circular T-05/17	BC Ministry of Transportation and Infrastructure <i>Use of Reclaimed Asphalt Pavement in Construction and Paving Projects</i> , July 20, 2017
Technical Circular T-05/18	BC Ministry of Transportation and Infrastructure <i>Design Exception Process</i> , September 24, 2018.
Technical Circular T-06/08	BC Ministry of Transportation <i>Roundabout Policy (update)</i> , November 12, 2008.
Technical Circular T-06/09	BC Ministry of Transportation and Infrastructure <i>Engineer of Record and Field Review Guidelines</i> , July 30, 2009.
Technical Circular T-06/14	BC Ministry of Transportation <i>Policy for New Keep Right Signing and Pavement Marking for Multi-lane Highways and Passing/Climbing Lanes on Two Lane Highway</i> , September 2014.
Technical Circular T-06/15	BC Ministry of Transportation <i>Climate Change and Extreme Weather Event Preparedness and Resilience in Engineering Infrastructure Design</i> , June 22, 2015.
Technical Circular T-07/05	BC Ministry of Transportation <i>Signing and Markings for Multi-lane Roundabouts</i> , July 27, 2005.
Technical Circular T-07/09	BC Ministry of Transportation and Infrastructure <i>Record Drawings</i> , April 21, 2010.
Technical Circular T-07/17	BC Ministry of Transportation and Infrastructure <i>C-035 CONSTRUCTION PROJECT SIGNS (November 2017 Update) Bilingual Federal C-035 Signs</i> , November 21, 2017.
Technical Circular T-10/05	BC Ministry of Transportation <i>Policy Manual for Supplemental Signs</i> , October 21, 2005.
Technical Circular T-12/06	BC Ministry of Transportation and Infrastructure <i>Review of Roundabouts by the Chief Engineer's Office</i> , September 5, 2006.

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Technical Circular T-15/06	BC Ministry of Transportation <i>New Standards for Sign Fonts (Clearview Type Font) and Update to Sheeting reflectivity standards on Guide and Custom Signs (ASTM Type 9/3 and ASTM Type 9/9)</i> , September 5, 2006.
Technical Circular T-16/06	BC Ministry of Transportation <i>Guidelines for the Operation of Changeable Message Signs (CMSs) and Portable Changeable Message Signs (PCMSs)</i> , October 19, 2006.
Technical Guidance on Contaminated Sites	BC Ministry of Environment and Climate Change Strategy <i>Technical Guidance on Contaminated Sites, Version 2.0</i> , November 1, 2017.
Technical Memorandum GM02001	BC Ministry of Transportation and Infrastructure <i>Technical Memorandum GM02001 Rock Slope Design</i> , September 17, 2002.
Traffic Management Guidelines for Work on Roadways	BC Ministry of Transportation and Infrastructure <i>Traffic Management Guidelines for Work on Roadways</i> , 2001
Traffic Management Manual	BC Ministry of Transportation <i>Traffic Management Manual for Work on Roadways</i> , 2015 Office Edition, Interim.
Trans-Canada Highway Coordination Plan	BC Ministry of Transportation and Infrastructure <i>Trans-Canada Highway Coordination Plan, October 2019</i> .
Transport Canada Railway Clearance Standard	Transport Canada <i>Standard Respecting Railway Clearance</i> , May 1992.
Ungulate Guard Standard Drawings	BC Ministry of Transportation and Infrastructure <i>Ungulate Guard Standard Drawings 9000-1 to 9000-10</i> , 2008.
Utility Policy Manual	BC Ministry of Transportation <i>Utility Policy Manual</i> , 1998.
Water and Air Baseline Monitoring Guidance Document	BC Ministry of Environment <i>Water and Air Baseline Monitoring Guidance Document for Mine Proponents and Operators</i> , June 2016.
Wildlife at Risk – EA Best Practice Guide	Canadian Wildlife Service – Environment Canada <i>Environmental Assessment Best Practice Guide for Wildlife at Risk in Canada</i> , February 2004.
Wildlife Exclusion Systems	BC Ministry of Transportation and Infrastructure <i>Wildlife Exclusion Systems</i> , 2014.
Wildlife Jump-Out Drawing	BC Ministry of Transportation and Infrastructure <i>Wildlife Jump-out Drawing E101-101, Rev A</i> .

**APPENDIX B
FACTUAL GEOTECHNICAL DATA**

Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
0830	Sitkum Consulting Ltd.	“Golden Hill Pit #1098 – Technical Information Report”, Letter to BC Ministry of Transportation & Infrastructure, June 24, 2008	Gradation tables. Tables in Quality and Soundness Section.
0830	Sitkum Consulting Ltd.	“Golden Hill Pit #1098 – Technical Information Report”, Letter to BC Ministry of Transportation & Infrastructure, March 18, 2009	Gradation tables. Tables in Quality and Soundness Section.
0830	Sitkum Consulting Ltd.	“Crozier Pit No. 1108 – July 2016 Pit Update Report”, Report to BC Ministry of Transportation & Infrastructure, July 18, 2016	Reference to degradation values from 2004 testing in Area 2. Test results under Area 2 Aggregate Quality.
0830	Sitkum Consulting Ltd.	“Crozier Pit No. 1108 – October 2017 Pit Update Report”, Report to BC Ministry of Transportation & Infrastructure, December 12, 2017	2017 Pit Survey an update of volumes (dated information).
0830	Wood Environment & Infrastructure Solutions	“Highway 95/1 Stockpile Development Plan, Kicking Horse Phase 4, Highway 1, Golden, BC”, Report to WSP Canada Inc., April 16, 2019	Tables 1, 2, 3 and 5, 7, 8, 9, 10. Appendix B: Wood Test Pit Logs excluding any information identified as estimates, excluding estimates of density in description, excluding interpretations of origin such as fill or till. Appendix C: Laboratory Test Results Appendix F: Borehole and Test Pit Coordinates. Subject in all cases to other limitations as stated in report, and testing methods and standards as noted in report.
0830	Wood Environment & Infrastructure Solutions	“Golden Hill Pit - Development Plan Update, Kicking Horse Phase 4, Highway 1, Golden, BC”, Report to WSP Canada Inc., May 16, 2019	Appendix B: MOT Summary Logs excluding any information identified as estimates, excluding estimates of density in description, excluding interpretations of origin such as fill or till. Appendix B: Wood Borehole Logs excluding any information identified as estimates, excluding estimates of density in description, excluding interpretations of origin such as fill or till.
0935	Geocon Ltd.	“Soil and Water Conditions, Canadian Pacific Railway Bridge at Mile 31.8, Golden British Columbia”, Report to Foundation of Canada Engineering Corporation Limited (FENCO), October 24, 1957	Office Report on Soil Exploration Boring 1 and 2: Soil log descriptions except soil density where estimated. Locations of borings on plan.

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Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
0935	Department of Highways	“Landslide Investigation, C.P.R. Bridge Mile 31.8 Mountain Subdivision, Golden B.C.” Report by C. O. Brawner, Research & Development Branch, December 1958	Drill logs. Appendix 1: Logs of horizontal drain holes. Appendix 2: Water level readings. Appendix 3: Piezometer movements. Drawing 568.A: Slide movement measurements. Drawing 568.D: Hole locations.
0935	Ministry of Transportation	“Ministry of Transportation, Cache Creek to the Rockies Program, Yoho (5 Mile) Bridge & Approaches Project, Geotechnical Design Report”, Report to Urban Systems, May 2002	Appendix A: 5 Mile Hill Rockfall Information Report, Dec, 2001 Appendix B: Rock Cut Design Summary Report, May 2002: Stereonets on Figures B1 to B5 excluding interpretations (eg., possible release plane or potential wedge failure). MOTI field discontinuity information sheets. Appendix D: Soil Summary Logs: Logs. Appendix E: Rock Core Logs: Logs. Appendix F: Rock Core Photographs: Photos (subject to limitations of reproduction). Appendix G: Test Pit Summary Logs: Test pit logs except interpretations of density. Appendix H: Laboratory Analysis Results: Test results.
0935	Ministry of Transportation	“August 24, 2004 Debris Flow, Hwy 1, Top of 5 Mile Hill (LKI Seg 0990, KM 7.88), 6.4 km East of Golden BC”, Internal Note to File, Erin Moxon P.Eng., September 6, 2004	Description of debris flow event. Interpretation of past events not included.
0935	Frontier Geosciences Inc	“Seismic Refraction Investigation, Kicking Horse Canyon, Phase 3, Golden, B.C.” Report to Focus Corporation Ltd., November 2004	Site Plans – East and West: Locations of geophysics survey lines. Figures 3 to 60: Seismic velocities measured using seismic refraction methods and plotted at various points. Does not include interpretation lines.
0935	Craig H. B. Leitch, Ph.D., P.Eng.	“Kicking Horse Canyon Project, Phase 3 West, Geology of the Kicking Horse Canyon, Golden to Yoho Bridge”, Report to Focus Corporation Ltd., May 2005	Figures A.1, A.2, A.3, A.4: Geologic measurements at various points defined on maps. Appendix B: Stereoplots. Appendix D: Discontinuity Data except column labelled “Comments”.

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Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
0935	Golder Associates Ltd.	“Kicking Horse Canyon, Hydraulic Testing Program”, Report to Focus Corporation Ltd., November 29, 2005	Water level measurements during drilling (Table 1). Test data on Figures 4a, 4b, 5a, 5b, 6a, 6b, 7a, 8a, 9a, 10a, 16a, 11a, 12a, 13a, 14a, 15a. Figure 16b: Injection data. Appendix I and II: Testing data.
0935	Frontier Geosciences Inc.	“Seismic Refraction Investigation, Kicking Horse Canyon, Phase 3, Golden, B.C.” Report to Focus Corporation Ltd., September 2005	Site Plans – East and West: Locations of geophysics survey lines. Figures 3 to 59: Seismic velocities measured using seismic refraction methods and plotted at various points. Does not include interpretation lines.
0935	Frontier Geosciences Inc.	“Seismic Refraction Investigation, Kicking Horse Highway Project, Dart Creek Area, Golden, B.C.” Report to Focus Corporation Ltd. September 2006	Site Plan: Locations of geophysics survey lines. Figures 2 to 12: Seismic velocities measured using seismic refraction methods and plotted at various points. Does not include interpretation lines.
0935	Thurber Engineering Ltd.	“Kicking Horse – Phase 3 Canyon Geotechnical Services, Design Memorandum No. 8, Falling Head Testing”, Memorandum to Focus Corporation Ltd., February 10, 2007	Table 1: Columns labelled Test Hole, Depth, Base of Sand, Top of Sand, Material. Other columns not included. Records of “Reduced Data” for the various wells (Test Holes) for which falling head tests were run.
0935	Thurber Engineering Ltd.	“Kicking Horse Canyon Project – Phase 3 Canyon – West Portal to Yoho Bridge – Preliminary Engineering – Geotechnical Data Report”, Report to Focus Corporation Ltd., March 21, 2007	Appendices A to F: Test hole logs and test pit logs except interpretations of faults, origin (such as fill), and other conditions under Description column. Appendix H: Piezometer Readings and Falling Head Test Results: Only data included. Interpretation / analysis and calculations not included. Appendix I: Water Testing Results: Test results. Appendix J: Rock & Soil Strength Testing Results (Point Load, UCS, Cerchar, Triaxial): Test data. K. Rock Petrography Reports (X-ray diffraction, Petrography): Approximate percentages of minerals via X-Ray diffraction. Appendix L: Test Hole Location Figures (L-1 to L-5): Test hole locations.

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Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
0935	Craig H. B. Leitch, Ph.D.,P.Eng.	“Kicking Horse Canyon Project, Phase 3 West, Geology of the Kicking Horse Canyon, Golden to Yoho Bridge (Revised June 28, 2007)”, Report to Focus Corporation Ltd., June 28, 2007	Figures A.1, A.2, A.3, A.4: Geologic measurements at various points defined on maps. Appendix B: Stereoplots. Appendix D: Discontinuity Data except column labelled “Comments”.
0935	Thurber Engineering Ltd.	“Kicking Horse Canyon Project – Phase 3 Canyon – West Portal to Yoho Bridge – Preliminary Engineering – Geotechnical Data Report (2007 Addendum)”, Report to Focus Corporation Ltd., December 19, 2007	Appendix A: 2007 Test Hole Logs: Test hole logs except interpretations of faults, origin (such as fill), and other conditions under Description column. Table A-1: 2007 Test Hole Summary. Appendix C. Piezometer and Slope Indicator Readings. Appendix D. Rock Strength Testing Results (Point Load, UCS and UCS Photos): Strength test results. Appendix E. Test Hole Location Figures (E-1 to E-5).
0935	Thurber Engineering Ltd.	“Kicking Horse Canyon Project – Phase 3 West – Golden Hill to West Portal – Preliminary Engineering – Additional Data - 2009 Geotechnical Investigations”, Report to Focus Corporation Ltd., April 30, 2009	Appendix A: Table A-1: Test hole summary Borehole logs. Appendix B: Grain size Analysis test results. Appendix C: Permeability test results (interpretation not included). Appendix D: Test Hole Locations.
0935	Thurber Engineering Ltd.	“Kicking Horse Canyon Project – Phase 3 Hill to Portal, 4 Km Retaining Wall – Geotechnical Services”, Letter to Focus Corporation Ltd., July 8, 2010	Borehole logs. Site Plan: Borehole locations.
0935	Thurber Engineering Ltd.	“Kicking Horse Canyon Project – 2010 Geotechnical Laboratory Services – Crushed Bedrock Core”, Letter to Focus Corporation Ltd., July 16, 2010	Table of Laboratory Test Results. Detailed lab test results in Appendix.
0935	Thurber Engineering Ltd.	“KHCP – 4 KM Wall & Approaches, Geotechnical Services, Memorandum No. 2, 4 km Wall Fill Embankment, Site Inspection & Lab Testing”, Memorandum to Focus Corporation Ltd., June 15, 2011	Direct Shear Test Results.
0935	Thurber Engineering Ltd.	“Kicking Horse Canyon Project – 4 km Wall and Approaches, Technical Memorandum No. 45, Test Hole Logs for Slope Inclinator and Piezometer Holes”, Memorandum to Focus Corporation Ltd., October 3, 2012	Borehole logs. Interpretation of origin not included as factual data (e.g., fill).

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION
Appendix B: Factual Geotechnical Data**

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Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
0935	Thurber Engineering Ltd.	“Kicking Horse Canyon Project – Phase 4 Canyon – Geotechnical Data Report”, Report to BC Ministry of Transportation & Infrastructure, March 31, 2016	Appendix A: Table A-1 2015 test hole summary. 2015 test hole logs except interpretations of faults, origin (such as fill), and other conditions under Description column. Appendix C: Table C-1 water level data. Appendix D: Table D-1 Point load testing results. Table D-2 Unconfined compressive strength testing results. Appendix E: Site location plan (Figures E-1 to E-4).
0935	Thurber Engineering Ltd.	“Rock Core Sorting, Hwy 1, Kicking Horse Canyon, Golden BC”, Letter to BC Ministry of Transportation & Infrastructure, October 26, 2016	Inventory of stored rock core samples.
0935	Thurber Engineering Ltd.	“LKI 5 to LKI 8 Instrumentation Monitoring Summary, Kicking Horse Canyon Project Golden, BC”, Report to BC Ministry of Transportation & Infrastructure, November 1, 2016	Table 1: Water Level Data. Figures 1 and 2: Locations of instruments not including other information such as slides and centrelines of highway alternatives. Slope Indicator readings.
0935	Thurber Engineering Ltd.	“Technical Memorandum No. 114, Rock Fill Instrumentation Results (to May 3, 2018), Kicking Horse Canyon Project 4 km Wall and Approaches”, Memorandum to BC Ministry of Transportation & Infrastructure, May 9, 2018	Instrumentation monitoring data. Figure 1: Instrument locations and surveyed crack locations.
0935	Wood Environment & Infrastructure Solutions	“Kicking Horse Canyon Phase 4 – Instrumentation Monitoring October 2018”, Memo to WSP Canada Inc., November 28, 2018	Appendix B: Piezometer water level readings. Appendix C: Slope Inclinometer Readings. Appendix D: Digital Data (separate from report).
0935	Surface Search Inc.	“2018 Kicking Horse Canyon Geophysics Program Report”, Report to Wood Environment & Infrastructure Solutions, February 5, 2019	Table 1: Electrode spacing. Drawings 1 and 2 showing locations of geophysics lines. Drawings 3 to 29 showing contours or measured resistance using ERT. Also, GPR returns. Does not include interpretation lines and notes.
0520	Minesite Drainage Assessment Group Ltd.	“Kicking Horse Canyon Highway Improvement Project – Phase 3 West – Prediction of Metal Leaching and Acid Rock Drainage – Volume 1 Main Report and Volume 2 Appendices” Report to The Focus Corporation Ltd., March 21, 2007	Geochemistry test results for various rock samples and on-site water analyses.

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Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
0525	Rescan Environmental Services Ltd.	“Kicking Horse Canyon Project – Conceptual Design of Tunnel Rock Storage Facility” Report to Focus Corporation Ltd., March, 2008	Table 5.3-2: Root zone Soil Quality Parameters. Figure 5.4.3: Onsite Flow Measurements. Appendix B – Soil Analytical Results.
0520	Hemmera Envirochem Inc.	“KHCP4 – Type D Material Assessment for Metal Leaching/Acid Rock Drainage”, Memorandum to Ministry of Transportation and Infrastructure, May 8, 2019	Table 1: Sample Locations Tables 2 to 7: Analytical Results. Figures 1 to 4: Sample Locations.
0520	Hemmera Envirochem Inc.	“KHCP4 – Type A Material Assessment for Metal Leaching/Acid Rock Drainage”, Memorandum to Ministry of Transportation and Infrastructure, September 11, 2019	Table 1: Sample Locations. Tables 2 to 7: Analytical Results.

**KICKING HORSE CANYON PROJECT – PHASE 4
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**APPENDIX C
BACKGROUND IP AND THIRD PARTY IP**

Nil.

**SCHEDULE 2
REPRESENTATIVES, REVIEW PROCEDURE AND CONSENT PROCEDURE**

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SCHEDULE 2: REPRESENTATIVES, REVIEW PROCEDURE AND CONSENT PROCEDURE

**PART 1
PROVINCE'S REPRESENTATIVE**

1.1 Appointment of Province's Representative

- (a) The Province, by notice to the Design-Builder delivered pursuant to Schedule 19 [Closing Deliveries] shall appoint the Province's Representative to act as its agent in relation to the Project, including in relation to Design, Construction and all other aspects of the Project Work. The Province's Representative shall be entitled to exercise the functions set out in Section 1.3 [Functions of Province's Representative] of this Schedule.
- (b) During any period when there is no Province's Representative, the functions which would otherwise be performed by the Province's Representative shall be carried out by such other person as the Province may designate by notice to the Design-Builder, and such other person shall be treated in all respects as the Province's Representative under this Agreement during such period. The Province shall use all reasonable efforts to give reasonable advance notice of any such designation to the Design-Builder where practicable.
- (c) Except as expressly stated in this Agreement, the Province's Representative does not have any authority to relieve the Design-Builder of any of its obligations under this Agreement or any other Province Project Document.
- (d) The Design-Builder and the Design-Builder's Representative, except as otherwise notified by the Province to the Design-Builder and subject to Section 1.1(e) of this Schedule, are entitled to treat any act of the Province's Representative which is authorized by this Agreement or any other Province Project Document as being expressly authorized by the Province, and shall not be required to determine whether any express authority has in fact been given.
- (e) Any decision by the Province's Representative is specific to the circumstances to which it relates, and shall not be construed as binding on, or limiting any other decision to be made by, the Province's Representative, whether in the same or similar circumstances or otherwise.
- (f) In the exercise of any of its functions the Province's Representative may:
 - (i) refer any matter to the Province or any other person contemplated in Section 2.3 [Referral by Province's Representative] of this Schedule for advice or determination;
 - (ii) rely upon any advice received or determination made following a reference pursuant to Section 1.1(f)(i) of this Schedule;
 - (iii) rely on any other advice that the Province's Representative considers necessary or appropriate in the circumstances; and
 - (iv) designate any other person to attend any inspection, test or other activity that is permitted to be attended by the Province's Representative under the terms of this Agreement.

SCHEDULE 2: REPRESENTATIVES, REVIEW PROCEDURE AND CONSENT PROCEDURE

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- (g) The Province's Representative shall work together with the Design-Builder's Representative in the spirit of partnering and cooperation.

1.2 Change of Province's Representative

The Province may at any time and from time to time by notice to the Design-Builder terminate the appointment of any Province's Representative or appoint one or more substitute Province's Representatives. Any such notice shall specify the effective date of such termination or substitution, and the Province shall use all reasonable efforts to give reasonable advance notice of any such appointment to the Design-Builder where practicable.

1.3 Functions of Province's Representative

The functions which may be performed by the Province's Representative under this Agreement include the following:

- (a) monitor the Project, and the Design-Builder's performance of the Project Work in accordance with the Project Requirements, by any means, including the system of inspection, testing, surveys, certification, review and audits set out in this Agreement, including in Part 11 [Province's Access, Monitoring and Step-In Rights], Schedule 4 [Design and Construction], Schedule 7 [Quality Management] and Schedule 17 [Records and Reports];
- (b) attend site and other progress and technical meetings (including in the company of such other Province representatives, consultants, contractors and/or advisors as the Province's Representative considers appropriate) and receive and review minutes and reports;
- (c) monitor and review the obtaining and, where applicable, renewal or extension by the Design-Builder of Permits pursuant to Section 4.18 [Permits], and the compliance by the Design-Builder with Laws, Permits and the Requirements of Interested Parties;
- (d) request Province Changes, including Minor Works, in accordance with Section 7.1 [Province Changes], receive and consider the Design-Builder Proposals, including Minor Works, in accordance with Section 7.2 [Design-Builder Proposals], and negotiate and make all consequential decisions on behalf of the Province, including countersign Change Certificates under Schedule 11 [Changes], in respect of such Province Changes and the Design-Builder Proposals;
- (e) make and receive claims of Supervening Events pursuant to Part 8 [Supervening Events], and negotiate and make all consequential decisions on behalf of the Province in respect of such claims;
- (f) monitor the performance by the Design-Builder of the Design-Builder's Environmental Obligations in accordance with Schedule 6 [Environmental Obligations];
- (g) audit and monitor the Design-Builder's Quality Management System;
- (h) inspect and audit the Records;

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- (i) monitor the performance by the Design-Builder of all of its other requirements under this Agreement, including the Indigenous Requirements in accordance with Schedule 22 [Indigenous Requirements];
- (j) perform all such functions as may be ascribed to the Province’s Representative under this Agreement or any other Province Project Document, or otherwise under the Project Requirements;
- (k) receive and deal with all matters submitted to the Review Procedure or the Consent Procedure pursuant to any provision of this Agreement or any other Province Project Document or otherwise under the Project Requirements;
- (l) perform any other functions under this Agreement or any other Province Project Document or otherwise under the Project Requirements, which are to be carried out by the Province; and
- (m) perform such other functions in respect of this Agreement or any other Province Project Document as the Province may notify to the Design-Builder from time to time.

**PART 2
REVIEW PROCEDURE AND CONSENT PROCEDURE**

2.1 Review Procedure

- (a) Any proposed document (including any Design Data) or proposed course of action on the part of the Design-Builder which, under the terms of this Agreement or any other Province Project Document, either:
 - (i) is expressly required to be submitted to the Province’s Representative pursuant to the Review Procedure or to the Province’s Representative for review in accordance with or pursuant to the Review Procedure; or
 - (ii) unless the parties agree otherwise, in the case of Schedule 4 [Design and Construction], Schedule 6 [Environmental Obligations] or Schedule 7 [Quality Management], is required to be submitted to the Province’s Representative for consideration, without specifying whether such submission is to be under the Review Procedure or the Consent Procedure,shall be submitted to the Province’s Representative accompanied by the proposed document (including any Design Data) or statement of a proposed course of action, and the following procedures (together, the “**Review Procedure**”) shall apply (provided, in the case of any document or proposed course of action submitted to the Review Procedure in accordance with the Design and Certification Procedure, any specific procedures set out therein shall also apply).
- (b) The Province’s Representative shall as soon as practicable and, subject to Section 2.4 [Request for Further Information] of this Schedule, in any event within 14 days of actual receipt thereof (or such other period as may be specified in this Agreement or other Province Project Document, as the case may be, for any particular case, and provided that, in the event receipt is after 5:00 p.m. Pacific time on any Business Day, such time

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period shall be calculated as if receipt had been on the next following Business Day) return one copy of the relevant submission document endorsed “received” or (subject to Sections 2.5 [Objection or Rejection in Province’s Discretion] and 2.6 [General Grounds for Objection or Rejection] of this Schedule, as applicable in each case) “received with comments” or “comments”. In the case of any submission document returned endorsed “received with comments” or “comments”, the Province’s Representative shall also provide with such returned document such comments.

- (c) The Design-Builder may proceed to implementation in the case of a submission document endorsed “received”.
- (d) The documents or proposed course of action accompanying a submission document returned endorsed “received with comments” shall be amended by the Design-Builder in accordance with such comments (but need not be re-submitted to the Province’s Representative except by their issuance to the Province’s Representative pursuant to Section 2.1(i) of this Schedule) and once so amended the Design-Builder shall proceed to implementation subject to Section 2.9 [Early Commencement of Work] of this Schedule unless the Design-Builder disputes that any such comment is on grounds permitted by Section 2.6 [General Grounds for Objection or Rejection] of this Schedule if applicable to such submission document, in which case the Design-Builder may refer the matter to the Dispute Resolution Procedure within 10 days of the Design-Builder’s receipt of such comments but not thereafter. If it is then resolved in accordance with the Dispute Resolution Procedure that any such comment was not on such permitted grounds, then such submission document will thereupon be deemed to have been endorsed “received” and otherwise such submission document shall thereupon be revised and implemented by the Design-Builder pursuant to this Section 2.1. If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 10 day period, the Design-Builder shall be deemed to have accepted the comments of the Province’s Representative and such submission document shall thereupon be revised and implemented by the Design-Builder pursuant to this Section 2.1.
- (e) The documents or proposed course of action accompanying a submission document returned endorsed “comments” shall be revised by the Design-Builder and re-submitted to the Province’s Representative pursuant to this Section 2.1 within 14 days of the Design-Builder’s receipt of such comments (or such other time period as agreed in writing by the Province’s Representative), together with the relevant submission document, unless the Design-Builder disputes that any such comment is on grounds permitted by Section 2.6 [General Grounds for Objection or Rejection] of this Schedule if applicable to such submission document, in which case the Design-Builder may refer the matter to the Dispute Resolution Procedure within 10 days of the Design-Builder’s receipt of such comments but not thereafter. If it is then resolved in accordance with the Dispute Resolution Procedure that any such comment was not on such permitted grounds, then such submission document will thereupon be deemed to have been endorsed “received” and otherwise such submission document shall thereupon be revised and re-submitted by the Design-Builder pursuant to this Section 2.1. If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 10 day period, the Design-Builder shall be deemed to have accepted the comments of the Province’s Representative and such submission document shall thereupon be revised and re-submitted by the Design-Builder pursuant to this Section 2.1.

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- (f) If, subject to Section 2.4 [Request for Further Information] of this Schedule, the Province’s Representative fails to return any such submission document (including any re-submitted submission document) duly endorsed within 14 days of actual receipt thereof (or such other period as may be specified in this Agreement or other Province Project Document, as the case may be, for any particular case), then it shall be deemed to have returned such submission document to the Design-Builder marked “received”.
- (g) A reference in this Agreement or other Province Project Document to there being “no objection” under the Review Procedure in relation to a particular matter means that such matter has been submitted in accordance with the provisions of this Section 2.1 and returned (or deemed returned) with an endorsement of “received” or returned with an endorsement of “received with comments”, in the latter case the matter having been amended in accordance with such comments.
- (h) Documents or courses of action the subject of a submission pursuant to this Section 2.1 and returned (or deemed returned) endorsed:
 - (i) “received” shall be adhered to; or
 - (ii) “received with comments” shall, once amended in accordance with the comments, be adhered to,except to the extent that there has been no objection to any subsequent change or amendment thereto submitted in accordance with this Section 2.1.
- (i) The Design-Builder shall ensure that two copies and electronic versions of all documents, including all drawings, numbered appendices, specifications and schedules, that have been modified by the Design-Builder in accordance with the Review Procedure are issued to the Province’s Representative, prior to the commencement of any Project Work to which such documents relate, except in the circumstances provided for in Section 2.8 [Early Commencement of Project Work] of this Schedule.
- (j) Once all applicable disputes arising in respect of any decision made by the Province’s Representative under the Review Procedure have been resolved in accordance with this Section 2.1, such decision shall, subject only to Section 2.13(a)(iii), be final.

2.2 Consent Procedure

- (a) Any proposed document or proposed course of action on the part of the Design-Builder which, under the terms of this Agreement or other Province Project Document, is required to be submitted to the Province’s Representative pursuant to the Consent Procedure or to the Province’s Representative for consent in accordance with or pursuant to the Consent Procedure, shall be submitted to the Province’s Representative, accompanied by the proposed document or statement of a proposed course of action, and the following procedures (together, the “**Consent Procedure**”) shall apply.
- (b) The Province’s Representative shall as soon as practicable and, subject to Section 2.4 [Request for Further Information] of this Schedule, in any event within 30 days of actual receipt thereof (or such other period as may be specified in this Agreement or other Province Project Document, as the case may be, for any particular case, and provided

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that, in the event receipt is after 5:00 p.m. Pacific time on any Business Day, such time period shall be calculated as if receipt had been on the next following Business Day) return one copy of the relevant submission document endorsed “accepted” or (subject to Sections 2.5 [Objection or Rejection in Province’s Discretion] or 2.6 [General Grounds for Objection or Rejection] of this Schedule as applicable in each case) “rejected”. In the case of any submission document returned endorsed “rejected”, the Province’s Representative shall also provide with such returned document the grounds for such rejection.

- (c) The Province’s Representative shall have the right at its option to impose conditions to the acceptance of a submission document pursuant to Section 2.2(b) of this Schedule, which conditions shall be required to be reasonable having regard to the relevant circumstances save in the case of an acceptance to which Section 2.5 [Objection or Rejection in Province’s Discretion] of this Schedule applies.
- (d) The Design-Builder may proceed to implementation in the case of a submission document endorsed “accepted” and such implementation must be in accordance with any conditions imposed pursuant to Section 2.2(c) of this Schedule unless, where conditions have been imposed by the Province’s Representative pursuant to s. 2.2(c) of this Schedule, the Design-Builder disputes the reasonableness of any condition imposed in which case the Design-Builder may refer the matter to the Dispute Resolution Procedure within 10 days of the Design-Builder’s receipt of such acceptance with conditions but not thereafter. If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 10 day period, the Design-Builder shall be deemed to have accepted the conditions of the Province’s Representative and such submission document shall then only be implemented in accordance with the conditions imposed by the Province’s Representative.
- (e) Unless otherwise specified in this Agreement or other Province Project Document, as the case may be, for any particular case, the documents or proposed course of action accompanying a submission document endorsed “rejected” shall not be implemented by the Design-Builder unless revised by the Design-Builder and re-submitted to the Province’s Representative pursuant to this Section 2.2 within 14 days of the Design-Builder’s receipt of such rejection (or such other time period as agreed in writing by the Province’s Representative) together with the relevant submission document and it is subsequently returned endorsed “accepted”.
- (f) In the case of a submission endorsed “rejected”, if the Design-Builder disputes that any such rejection (including a deemed rejection pursuant to Section 2.2(g) of this Schedule) is on grounds permitted by Section 2.6 [General Grounds for Objection or Rejection] of this Schedule, if applicable to such submission document, the Design-Builder may refer the matter to the Dispute Resolution Procedure within 10 days of the Design-Builder’s receipt of such rejection but not thereafter. If it is then resolved in accordance with the Dispute Resolution Procedure that any such rejection or deemed rejection:
 - (i) was not on such permitted grounds, then such submission document will thereupon be deemed to have been endorsed “accepted”, and the rejection or deemed rejection of such submission document on grounds that were not such permitted grounds shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply; or

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- (ii) was on such permitted grounds, then such submission document shall not be implemented by the Design-Builder unless revised by the Design-Builder and re-submitted to the Province's Representative pursuant to this Section 2.2 and subsequently returned endorsed "accepted".

If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 10 day period, the Design-Builder shall be deemed to have accepted the rejection and such submission document shall not be implemented by the Design-Builder unless revised by the Design-Builder and re-submitted to the Province's Representative pursuant to this Section 2.2 and subsequently returned endorsed "accepted".

- (g) If, subject to Section 2.4 [Request for Further Information] of this Schedule, the Province's Representative fails to return any such submission document (including any re-submitted submission document) duly endorsed within 30 days of actual receipt thereof (or such other period as may be specified in this Agreement or other Province Project Document, as the case may be, for any particular case), then it shall be deemed to have returned such submission document to the Design-Builder marked "rejected", and such rejection shall be deemed to have been made by the Province's Representative in reliance upon grounds set out in Sections 2.5 [Objection or Rejection in Province's Discretion] and 2.6 [General Grounds for Objection or Rejection] of this Schedule as applicable to such submission document.
- (h) Documents or courses of action the subject of a submission pursuant to this Section 2.2 and returned (or deemed returned) endorsed "accepted", including any conditions imposed by the Province's Representative under Section 2.2(c) of this Schedule, shall be adhered to, except to the extent that there has been "acceptance" of any subsequent change or amendment thereto submitted in accordance with this Section 2.2.
- (i) The Design-Builder shall ensure that two copies and electronic versions of all documents, including all drawings, numbered appendices, specifications and schedules, that have been modified by the Design-Builder in accordance with the Consent Procedure are issued to the Province's Representative prior to the commencement of any Project Work to which such documents relate.
- (j) Once all applicable disputes arising in respect of any decision made by the Province's Representative under the Consent Procedure have been resolved in accordance with this Section 2.2, such decision shall, subject only to Section 2.13(a)(iii), be final.

2.3 Referral by Province's Representative

The Province's Representative may, in reviewing and dealing with any matter, refer such matter to the Province or any of its employees, agents, advisors, consultants, or contractors or subcontractors of any tier, and any review, consideration, decision, belief, opinion or determination referred to herein in relation to the Province's Representative may be that of the Province's Representative or any such person upon whose review, consideration, decision, belief, opinion or determination the Province's Representative relies. The Province's Representative may also, by written notice to the Design-Builder from time to time, designate an employee, advisor, consultant, contractor or other person to whom any specific submission or class of submissions is to be delivered by the Design-Builder and the Design-Builder shall comply with any such designation in making submissions under the Review Procedure and the Consent Procedure, as applicable, and, where a submission is delivered in accordance with any such

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designation, shall provide the Province's Representative with a copy of the transmittal of the submission to the designated person at the same time as the submission is delivered to that person.

2.4 Request for Further Information

- (a) The Province's Representative, acting reasonably and without unreasonable delay, may request in writing, and if so requested the Design-Builder shall promptly and in any event no later than 21 days following such request submit, any further or other information, data and documents which may be reasonably required by the Province's Representative for a full appreciation of a submission under Section 2.1 [Review Procedure] or Section 2.2 [Consent Procedure] of this Schedule and its implications, and shall take all such steps as may be reasonably required to satisfy the Province's Representative that the proposed document or proposed course of action complies with this Agreement or other Province Project Document, as the case may be, and is appropriate.
- (b) If the Province's Representative makes a written request for further or other information, data or documents under this Section 2.4, then the time periods referred to in Section 2.1 [Review Procedure] or Section 2.2 [Consent Procedure] of this Schedule, as the case may be, shall not commence to run until such time as the Design-Builder has submitted the requested information, data or documents to the Province's Representative in satisfaction of the request.

2.5 Objection or Rejection in Province's Discretion

Subject to Sections 2.6 [General Grounds for Objection or Rejection] of this Schedule, or as may otherwise be expressly provided in this Agreement or other Province Project Document, the Province's Representative may make comments in relation to or reject, as applicable, any Review Procedure or Consent Procedure submission in its discretion.

2.6 General Grounds for Objection or Rejection

If any provision of this Agreement or other Province Project Document expressly provides that the Province's Representative will act reasonably or not act unreasonably in granting its approval or consent with respect to a submission, the Province's Representative may make comments in relation to or reject, as applicable, any Review Procedure or Consent Procedure submission on any one or more of the following grounds:

- (a) that the Design-Builder has not provided all information, data and documents required (including any information, data and documents required by the Province's Representative pursuant to Section 2.4 [Request for Further Information] of this Schedule) in respect of such submission;
- (b) that the adoption of the proposed document or proposed course of action would or might reasonably be expected to:
 - (i) conflict or be inconsistent with the statutory, public or other duties or functions of the Province or BCTFA;
 - (ii) give rise to a breach, or be in breach, of any Laws;

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- (iii) not satisfy, comply with or conform to any provision or requirement set out in this Agreement or any other Project Document;
 - (iv) not satisfy, comply with or conform to Good Industry Practice;
 - (v) materially and adversely affect the ability of the Design-Builder to perform any of its obligations under this Agreement or under any other Project Document and/or materially and adversely affect any right or obligation of the Province under this Agreement or any other Province Project Document or the ability of the Province to enforce any such right or perform any such obligation; or
 - (vi) materially and adversely affect the risks or costs to which the Province is exposed in respect of the Project;
- (c) any other grounds applicable to the submission that are expressly set out in this Agreement; or
 - (d) any other reasonable grounds,

and the Province's Representative shall always be entitled to make such comments or reject, as the case may be, on the foregoing grounds notwithstanding any other provision in this Agreement or any other Province Project Document.

2.7 Optional Standards

- (a) If any Ministry Standard or other standards or specifications which are incorporated into the Project Requirements contain options from which a choice can be made, any choice by the Design-Builder of any one option set out therein shall satisfy the Project Requirements in that regard, and the Province's Representative shall not object to the choice of such option on that basis, unless any such option is otherwise excluded or limited by the terms of the Project Requirements.
- (b) If following a choice by the Design-Builder in accordance with Section 2.7(a) of this Schedule, as expressed or reflected in a submission to the Province's Representative, the Province's Representative requires another such option to be adopted which the Design-Builder has not chosen, the Province's Representative shall request a Province Change under Section 7.1 [Province Changes].

2.8 Early Commencement of Project Work

- (a) The Design-Builder may proceed with a component of the Project Work which is the subject of a submission under the Review Procedure prior to the completion of the Review Procedure in accordance with Section 2.1 [Review Procedure] of this Schedule, provided that:
 - (i) in the case of any Construction, the requirements set out in Section 2.13 [No Construction] of Part 3 of Schedule 4 shall have been satisfied in respect of such component of the Project Work; and

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- (ii) in all cases, any such action shall be taken at the sole risk of the Design-Builder and the Design-Builder shall in any event remain responsible for complying with the outcome of the Review Procedure, once it is completed in accordance with Section 2.1 [Review Procedure] of this Schedule, at the Design-Builder's sole cost and expense, including any and all reconstruction, alterations, modifications or other remedial work to the Project Work already completed as may be necessary to comply with such outcome.

- (b) In no circumstances shall the Design-Builder proceed with any component of the Project Work in respect of which a submission has been made under the Consent Procedure (including where the Project Work involves providing such submission to a Governmental Authority) prior to the completion of the Consent Procedure in accordance with Section 2.2 [Consent Procedure] of this Schedule.

PART 3

DESIGN-BUILDER'S REPRESENTATIVE, KEY INDIVIDUALS AND OWNERSHIP

3.1 Design-Builder's Representative

- (a) The Design-Builder shall appoint a competent and qualified person to act as the Design-Builder's Representative and its agent in connection with the Project. Such appointment shall be subject to acceptance by the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld.

- (b) The Design-Builder's Representative shall:
 - (i) have extensive experience managing the development, design and construction phases of large, complex, design-build- projects comparable to the Project;
 - (ii) serve as the single point of contact for the Design-Builder to the Province, BCTFA and the Province's Representative for all purposes under this Agreement and all other Province Project Documents;
 - (iii) be an employee of, or an independent contractor directly engaged by, the Design-Builder;
 - (iv) reside in the vicinity of the Project Site and be located at the Project Site; and
 - (v) devote all working time, energy and skill to the Project and to carrying out the duties of the Design-Builder's Representative.

- (c) The Design-Builder's Representative shall be directly responsible for and fully engaged in, and shall not, except in accordance with Section 3.2 [Change of Design-Builder's Representative] of this Schedule, abdicate or delegate to any other employee or representative of the Design-Builder the performance of the Design-Builder's obligations under this Agreement and the other Province Project Documents and all aspects of the Project Work, including:
 - (i) the stewardship of the Design-Builder and of the Project Work; and

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- (ii) the contract management of all Subcontractors contracting directly with the Design-Builder, and the oversight of the contract management of all other Subcontractors, including addressing and communicating to the Province's Representative any issues raised by the Subcontractors in respect of the Project Work.
- (d) The Design-Builder's Representative shall have full authority to act on behalf of the Design-Builder for all purposes of the Project, and the Province, BCTFA and the Province's Representative:
 - (i) are entitled to treat any act of the Design-Builder's Representative in connection with this Agreement or any other Province Project Document as being expressly authorized by the Design-Builder, and shall not be required to determine whether any express authority has in fact been given; and
 - (ii) may refuse to recognize any act in connection with this Agreement or any other Province Project Document of any employee or representative of the Design-Builder other than the Design-Builder's Representative.
- (e) The Design-Builder's Representative shall work together with the Province's Representative in the spirit of partnering and cooperation.

3.2 Change of Design-Builder's Representative

- (a) The Design-Builder shall appoint, with the prior acceptance of the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld, a substitute the Design-Builder's Representative to serve in the place and stead of the Design-Builder's Representative during any temporary absence of the Design-Builder's Representative to ensure that at all times during the Term there is an accepted Design-Builder's Representative available and, until the Total Completion Date, located at the Project Site.
- (b) The appointment of the Design-Builder's Representative shall not be terminated by the Design-Builder for any reason without prior notice to and the prior acceptance, not to be unreasonably withheld, of the Province's Representative pursuant to the Consent Procedure to both such termination and to the appointment of a substitute the Design-Builder's Representative, provided that, in the case of death or serious illness of the Design-Builder's Representative, such notice to and acceptance by the Province's Representative shall take place as soon as practicable upon the Design-Builder's Representative ceasing to act.

3.3 Key Individuals

- (a) The Design-Builder represents to the Province that the following are the Key Individuals for the Project as at the Effective Date:
 - (i) Design-Builder's Representative: _____ ;
 - (ii) Design Manager: _____ ; and

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(iii) Construction Manager:

Within 60 days after the Effective Date, the Design-Builder shall submit to the Province's Representative, for acceptance in accordance with the Consent Procedure, the Design-Builder's proposed Quality Director, Communications Director, Environmental Manager, Indigenous Contracting and Employment Coordinator, Senior Geotechnical Engineer, Senior Rock Engineer and Railway Coordinator.

(b) For each of the:

(i) Quality Director, Communications Director, Environmental Manager, Indigenous Contracting and Employment Coordinator, Construction Manager and Railway Coordinator, such Key Individual shall:

- (A) be either an employee of, or an independent contractor directly engaged by, the Design-Builder or a Partner;
- (B) report directly to the Design-Builder's Representative;
- (C) be specifically designated for the purpose of such role; and
- (D) be instructed and enabled by the Design-Builder to act in a fair and impartial manner in carrying out such role,

and the Design-Builder shall not, without the prior acceptance of the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld:

- (E) change any such Key Individual's job specification or responsibilities; or
- (F) permit any such Key Individual to be employed or engaged, as the case may be, by any person in connection with the Project other than the Design-Builder; and

(ii) Quality Director, Communications Director, Senior Geotechnical Engineer and Railway Coordinator, the Design-Builder shall not, without the prior acceptance of the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld, permit any such Key Individual to be located at any location other than the Project Site.

(c) The Design-Builder's Representative will be required at all times throughout the Term. All other Key Individuals shall be required at all times until the Total Completion Date. The Design-Builder shall use all reasonable efforts to ensure that the Key Individuals remain available to perform their respective duties during the applicable periods of time required pursuant to this Section 3.3(c).

(d) If for any reason a Key Individual (other than the Design-Builder's Representative, in which case the provisions of Section 3.2 of this Part 3 shall apply) of this Schedule resigns, becomes unavailable or otherwise needs to be replaced (other than for vacation or other reasonable temporary absence provided there is reasonable coverage of the Key

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Individual's duties during such vacation or other reasonable temporary absence) to perform the Key Individual's duties then the Design-Builder will use all reasonable efforts to appoint a replacement with equivalent qualifications and experience to the unavailable Key Individual and the Design-Builder shall not replace such Key Individual without the prior acceptance of the Province's Representative, pursuant to the Consent Procedure, such acceptance not be unreasonably withheld.

- (e) The Design-Builder acknowledges that the success of the Project to both the Design-Builder and the Province is dependent on the retention at all times of the Key Individuals, and that if any of the Key Individuals are not available and are not replaced as required by this Agreement, the Province will not be obtaining the quality and level of Project Work assumed to be included in the payments to be made to the Design-Builder hereunder, may suffer losses and damages associated with the Project Work that are difficult to quantify in advance and that are reflected in the payments set out in Section 3.3(f)(i) below, that the Province may incur internal administrative and personnel costs and out-of-pocket costs reflected in Section 3.3(f)(ii) below and the Province may alternatively deem a Change as reflected in Section 3.3(f)(iii) below.
- (f) Except in circumstances where the Design-Builder has provided a temporary substitute acceptable to the Province acting reasonably in accordance with this Part 3, if the position of any Key Individual is unfilled for more than 5 weeks during a period when such Key Individual is required pursuant to Section 3.3(c) of this Schedule the following shall apply:
 - (i) Prior to the Total Completion Date, any such failure to fill the relevant Key Individual position shall be a Non-Compliance Event and for each such Key Individual position the Design-Builder shall pay to the Province in respect thereof an amount equal to \$7,000 per week, or part thereof commencing on the day after the last day of the 5th week that the position remains unfilled.
 - (ii) In addition to the remedy under Section 3.3(f)(i) of this Schedule as applicable, the Design-Builder will pay the Province's reasonable internal administrative and personnel costs and all reasonable out-of-pocket costs related to any measures the Province considers are reasonably incurred in relation to the position being unfilled, including the costs to ensure that the Design-Builder meets the Project Requirements and for the Province's Representative to review and consider any replacement under this Section 3.3, provided that the maximum liability of the Design-Builder under this Section 3.3(f)(ii) will be \$7,000 per week or part thereof commencing on the day the Key Individual position is first unfilled.
 - (iii) The Province, at its election, may at any time deem the unfilled position of a Key Individual to be a Change that does not affect any requirements to otherwise comply with this Section 3.3 and upon such election the further liability of the Design-Builder under Sections 3.3(f)(i) and (ii) will cease and the Province will be credited with the amount of the cost (including wages, benefits, fees and other costs) that would have been incurred by the Design-Builder, in respect of the Key Individual plus a Mark-up as set out in Section 2.4(d) of Schedule 11 [Changes].
- (g) If at any time pursuant to the Project Requirements or otherwise as determined by the Province at its discretion, a Key Individual is required to attend a meeting related to the

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Project and the Key Individual is not available to attend or does not attend, the Province may postpone the meeting and any resulting delay is at the sole risk of the Design-Builder.

- (h) No one person may act as more than one Key Individual at any one time.

3.4 Design-Builder Ownership Information

- (a) The Design-Builder is Kicking Horse Canyon Constructors (GP), a British Columbia general partnership, of which the three partners are Aecon Constructors, a division of Aecon Construction Group Inc., Parsons Inc. and Emil Anderson Construction (EAC) Inc., and which is formed by a General Partnership Agreement dated as of September 1, 2020.
- (b) Aecon Construction Group Inc. is a Canadian corporation amalgamated on January 1, 2012 and extraprovincially registered in British Columbia on April 10, 2012,
- (c) Parsons Inc. is a Canadian corporation amalgamated on December 26, 2015 and extraprovincially registered in British Columbia on June 22, 2016,
- (d) Emil Anderson Construction (EAC) Inc. is a British Columbia corporation incorporated on March 27, 2003,

**SCHEDULE 3
PROJECT SCHEDULE**

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Appendix A Project Schedule

**PART 1
GENERAL PROVISIONS**

1.1 Diligent Performance of Project Work

The Design-Builder shall:

- (a) commence the Project Work promptly following the Effective Date;
- (b) pursue the Project Work diligently to ensure that each of the milestone events for the completion of the Project Work, in each case as identified in the Project Schedule, as amended from time to time in accordance with Section 1.2 [Project Schedule] of this Schedule, is achieved at or before the time specified therefor in the Project Schedule, as so amended by the Design-Builder; and
- (c) perform the Project Work in material conformity with the Works Schedule, as amended from time to time in accordance with Section 1.3 [Works Schedule] of this Schedule, and with the Construction Management Plan, as amended from time to time in accordance with Section 1.6 [Construction Management Plan] of this Schedule.

1.2 Project Schedule

- (a) The Project Schedule sets out the schedule in accordance with which the Design-Builder is to carry out the Project Work provided for in the Project Requirements.
- (b) The Design-Builder shall submit to the Province's Representative for review in accordance with the Review Procedure an update of the Project Schedule to reflect any extension of any dates included therein as agreed or determined in accordance with Part 7 [Province Changes and Design-Builder Proposals] or Part 8 [Supervening Events], or any proposed amendments to the Project Schedule contemplated by Section 6.16(e).
- (c) If in the reasonable opinion of the Province or the Design-Builder at any time the actual progress of the Project Work does not conform with the Project Schedule, then, within 10 days of being so advised by the Province or (if earlier) becoming aware of such nonconformity, the Design-Builder shall:
 - (i) provide the Province's Representative with a report identifying the reasons for such nonconformity with the Project Schedule;
 - (ii) submit to the Province's Representative for review in accordance with the Review Procedure a revised Project Schedule, which shall:
 - (A) be in accordance with Good Industry Practice;
 - (B) satisfy the Design and Construction Requirements; and
 - (C) provide for the Project Work to be pursued diligently in accordance with Section 1.1 [Diligent Performance of Project Work] of this Schedule.
- (d) The Province may at any time, as a Province Change pursuant to Part 7 [Province Changes and Design-Builder Proposals], request a revision to the Project Schedule to accelerate the performance of the Project Work or any component thereof.

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1.3 Works Schedule

- (a) The Design-Builder shall prepare and submit to the Province’s Representative for review in accordance with the Review Procedure:
 - (i) within 60 days of the Effective Date, an initial Works Schedule showing both the resource loading and the critical path, and which shall be in all respects consistent with the Project Schedule;
 - (ii) at the same time as a revised Project Schedule is submitted in accordance with Section 1.2(b), 1.2(c) or 1.2(d) of this Schedule, a revised Works Schedule showing both the resource loading and the critical path in respect of each such revised Project Schedule, and which shall be in all respects consistent with such revised Project Schedule; and
 - (iii) on the first Business Day of each month:
 - (A) a revised Works Schedule showing both the resource loading and the critical path reflecting the actual progress of the Project Work to the date of submission and the expected progress of the Project Work thereafter, including up to and including the achievement of Substantial Completion and Total Completion;
 - (B) a detailed narrative of the revised Works Schedule, which includes sections dedicated to the resource loading and the critical path respectively; and
 - (C) a detailed time-distance schedule that graphically presents the schedule for the Project in TILOS format.
- (b) Other than in the circumstances referred to in Section 1.3(a) of this Schedule, if the Design-Builder wishes to make any amendment to the Works Schedule or if in the opinion of the Province or the Design-Builder at any time the actual progress of the Project Work does not conform with the Works Schedule in any material respect then, prior to making any such amendment or within 15 days of being so advised by the Province or (if earlier) becoming aware of such nonconformity, the Design-Builder shall:
 - (i) provide the Province’s Representative with a report identifying the reasons for such amendment to or nonconformity with the Works Schedule and a narrative recovery plan (which shall include resource requirements, working hours and shifts and contingency actions) to remedy such nonconformity; and
 - (ii) submit to the Province’s Representative for review in accordance with the Review Procedure a revised Works Schedule showing the critical path for the Project Work.
- (c) The initial Works Schedule and any revised Works Schedule submitted in accordance with this Section 1.3 shall be submitted in both PDF format and .xer file format and shall:

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- (i) provide a detailed breakdown of the Project Work into details of Design and Construction indicating:
 - (A) the sequencing of activities required by this Agreement;
 - (B) a breakdown of the Works Schedule into the main Design components including, as a minimum, the Design for each of the following:
 - (1) the roadway for Highway 1 and each access road, including the Dart Creek Forest Service Road, separately;
 - (2) each Bridge;
 - (3) each wall;
 - (4) Construction staging;
 - (5) the Surplus Disposal Site;
 - (6) environmental works;
 - (7) Utility Work;
 - (C) the key dates for Design submissions;
 - (D) a breakdown of the Works Schedule into the main Construction components including, as a minimum, the following:
 - (1) each major rock cut;
 - (2) each element of road construction including embankment construction to subgrade, graveling, paving, barriers, line painting and signing;
 - (3) each Bridge separately;
 - (4) each wall separately;
 - (5) each access road, including the Dart Creek Forest Service Road, separately;
 - (6) the Surplus Disposal Site;
 - (7) Utility Work;
 - (8) environmental Permits and works;
 - (9) establishment of pre-cast facilities and other production and support facilities; and
 - (10) other significant Project Work functions on the critical path;

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- (E) the early and late start completion date for each activity;
 - (F) the proposed duration in working days for each activity;
 - (G) free float and total float time for each activity, including reasonable allowances for the occurrence of events which may delay the Project Work;
 - (H) the dependency of each activity on other activities; and
 - (I) the critical path schedule;
- (ii) provide a breakdown into sub-activities such that the duration of any sub-activity is not more than the amount which, based upon the nature of the activity, the Province's Representative reasonably requires to readily monitor the status and progress of such sub-activity and the Project Work, and in any event is not more than 15 days unless a longer duration is required given the nature of the sub-activity and is consistent with Good Industry Practice;
 - (iii) include the number of working days and hours, with identification of days when Construction will not proceed, such as days that are not Business Days;
 - (iv) include a schedule of Permits, detailing when each Permit will be required and when application will be made for each Permit;
 - (v) be in accordance with Good Industry Practice;
 - (vi) satisfy the Design and Construction Requirements;
 - (vii) be in sufficient detail so as to enable the Province to resource itself appropriately and so as to permit the Province to plan adequately for the availability of external resources to enable the Province to comply with its obligations under this Agreement, including under Schedule 4 [Design and Construction];
 - (viii) be in all respects consistent with the Project Schedule;
 - (ix) provide for the Project Work to be commenced and pursued diligently in accordance with Section 1.1 [Diligent Performance of Project Work] of this Schedule; and
 - (x) include all additional information reasonably requested by the Province so as to enable the Province to monitor the progress of the Project Work.

1.4 Conflict between Project Schedule and Works Schedule

The Works Schedule shall be provided for the information of the Province and the Province's Representative. In the event of any conflict between the Project Schedule and the Works Schedule, the Project Schedule shall, unless otherwise agreed by the Province in its discretion, prevail.

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1.5 Construction Management Plan

- (a) The Design-Builder shall prepare and submit to the Province’s Representative for review in accordance with the Review Procedure, within 60 days after the Effective Date, a plan (the “**Construction Management Plan**”) which shall describe how the key components of the Construction will be carried out and the connection to the Works Schedule including, at a minimum, the following:
- (i) identify and describe construction methodologies and work procedures for significant Project Work before initial implementation and when subject to change for, including the following:
 - (A) access to facilitate rock excavation, Foundation, Substructure, Superstructure and Retaining Structure construction;
 - (B) rock and other slope excavation and stabilization including haul and disposal of waste materials;
 - (C) installation of temporary and permanent rock fall protection including protection of CP;
 - (D) debris flow/flood mitigation during construction;
 - (E) aggregate/borrow pit operations, production and reclamation;
 - (F) disposal sites/stockpiles;
 - (G) geotechnical field investigations;
 - (H) geotechnical instrumentation;
 - (I) protection of the public, workers and Infrastructure including CP infrastructure;
 - (J) Foundation and Substructure construction including piles, ground anchors and other supporting structures;
 - (K) Construction of Superstructure including formwork, girder erection/launching, deck joint installation and Wearing Surface placement;
 - (L) care of ground water and surface water including control of sedimentation;
 - (M) implementation of detours, lane shifts and other traffic management operations;
 - (N) protection of the environment; and
 - (O) communications;

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- (ii) identify and describe post construction methodologies and work procedures for significant post construction Project Work between Substantial Completion and the end of the General Project Work Defect Warranty Period before initial implementation and when subject to change for, including the following:
 - (A) final baseline settlement surveys of walls and structures at Substantial Completion and at end of General Project Work Defect Warranty Period.;
 - (B) pavement roughness survey;
 - (C) Falling Weight Deflectometer (FWD) pavement structure strength survey;
 - (D) updated pit development plans for Golden Hill pit;
 - (E) waste disposal site surveys; and
 - (F) end of warranty inspections of the Project Work; and
- (iii) for each of the components set out in paragraphs (i) and (ii) above, include details to describe each of the following:
 - (A) key issues and constraints affecting Construction and strategies to manage such issues and constraints;
 - (B) construction sequencing and staging including details to describe implementation of temporary roadway alignments and detours, lane and/or closures, temporary works, temporary bridges and barge facilities, laydown areas, material supply routes, fabrication facilities and sources, and batching plants;
 - (C) excavation management identifying controls being adopted to avoid or minimize impacts to known archaeology sites, as well as other sites that may be encountered during construction;
 - (D) construction approach to managing the interface between the Project Work and the Concessionaire, CP and EMS access requirements in accordance with Schedule 18 [Interface Requirements], Article 5 [Operation and Maintenance] and Article 3 [CP Interface] of Part 1 of Schedule 4, and Part 4 [Traffic Management] of Schedule 4;
 - (E) proposed construction and erection strategy for all Structures including associated roadway and CP traffic management requirements;
 - (F) list of all relevant permits required;
 - (G) utility relocation, protection, installation and co-ordination;
 - (H) description of the construction controls to be used to comply with the requirements of Schedule 6 [Environmental Obligations], including noise

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and vibration mitigation during Construction (including pile installation), hours of work and limits on vibrations caused by Construction operations; and

- (I) monitoring programs for adjacent existing facilities such as buildings, utilities and other facilities.
- (b) If the Design-Builder wishes to make any amendment to the Construction Management Plan, the Design-Builder shall:
- (i) provide the Province's Representative with a report identifying the reasons for such amendment to the Construction Management Plan; and
 - (ii) submit to the Province's Representative for review in accordance with the Review Procedure a revised Construction Management Plan.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 3: PROJECT SCHEDULE**

*Commercial in Confidence
Execution*

**APPENDIX A
PROJECT SCHEDULE**

Project Schedule Milestone	Date
Effective Date	November 6, 2020
Substantial Completion Date	November 30, 2023
Total Completion Date	May 31, 2024

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**PART 1
GENERAL PROVISIONS**

ARTICLE 1 REFERENCE DOCUMENTS

1.1 Application of DBSS

The Project Work shall be carried out in accordance with the DBSS, subject to Section 1.3 [Order of Precedence] of this Part and with the following amendments to the DBSS:

- (a) Section 125 [Value Engineering – Proposal Guidelines] shall not apply;
- (b) any and all reference to “approval by the Ministry Representative” in the DBSS, in terms of acceptance of materials, work methodology or end product, shall be construed as meaning “approval by the Designer”;
- (c) any and all reference in the DBSS to the submission of material to the Ministry Representative “for approval”, “for acceptance”, or other qualifying phrase with similar connotation, is to be construed as the Province’s Representative retaining the right to object to the submission material as set out in the Review Procedure; and
- (d) when required under the DBSS to submit for approval by the Ministry Representative samples of any products which are not included on the Recognized Products List, to the extent the Design-Builder proposes to use any such products, the Design-Builder shall submit such samples to the Province’s Representative in accordance with the Review Procedure.

1.2 Reference Documents

Without limiting any other provision in the Agreement, the Reference Documents shall apply to the Project Work as described in this Schedule.

1.3 Order of Precedence

Unless otherwise expressly provided in this Schedule, if there is any conflict between any of the provisions of this Agreement and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the provisions of this Agreement;
- (b) DBSS; and
- (c) any other applicable Reference Documents.

1.4 Province’s Design

The Province makes no representation or warranty whatsoever, express or implied, that the design or concepts for the Project Work developed by the Province comply with the Project Requirements and any use by the Design-Builder of any or all aspects of the Province’s design or concepts in performing the Project Work shall be entirely at the Design-Builder’s own risk.

ARTICLE 2 DESIGN AND CONSTRUCTION

2.1 Responsibility for Design and Construction

The Design-Builder shall be responsible for the Design and the Construction, including completion, commissioning and testing, all of which shall be carried out in strict accordance with the Design and Construction Requirements and in such a manner as to comply with this Agreement and all other applicable Project Requirements.

2.2 [Not Used]

2.3 Key Individuals

The following Key Individuals shall be subject to the applicable requirements of Section 3.3 [Key Individuals] of Schedule 2, and shall have the experience and qualifications as set out below:

- (a) The Design Manager shall have extensive experience leading multi-disciplinary design teams on large transportation projects of comparable scope, scale and complexity to the Project.
- (b) The Senior Geotechnical Engineer shall be a Professional Engineer with a minimum of 15 years of geotechnical design experience and shall have served in the same role on design-build and/or public-private partnership projects of comparable scope, scale and complexity to the Project.
- (c) The Construction Manager shall have extensive experience leading multi-disciplinary construction teams on large transportation projects of comparable scope, scale and complexity to the Project.
- (d) The Senior Rock Engineer shall be a Professional Engineer with a minimum of 15 years of rock engineering experience including rock fall mitigation and rock slope stability and stabilization.

2.4 Province, BCIB and CP Project Office

- (a) The Design Builder shall make available to the Province, from 60 days after the Effective Date until 30 days after the Total Completion Date, at the Design Builder's sole cost and expense, a minimum of 2,000 square feet of office space, 100% of which shall be in proximity to the Design Builder's field construction office, providing the Province with secure, unrestricted access and including the following:
 - (i) one boardroom;
 - (ii) five enclosed offices;
 - (iii) 15 secure parking stalls; and
 - (iv) washrooms and kitchen facilities, including sink, fridge, microwave and dishwasher.

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- (b) The Project office provided by the Design Builder pursuant to Section 2.4(a) of this Part shall be within 10 km of the Project Site and shall be climate controlled and include sufficient office furnishings and equipment, including data connection but excluding internal computer and telephone network systems, to permit the use thereof by the Province.
- (c) The Design Builder shall make available to BCIB, from 60 days after the Effective Date until 30 days after the Total Completion Date, at the Design Builder's sole cost and expense, a minimum of 780 square feet of office space in close proximity to the Design Builder's persons responsible for employee relations matters on site, providing BCIB with secure, unrestricted access and including the following:
 - (i) one boardroom;
 - (ii) three enclosed offices;
 - (iii) five secure parking stalls; and
 - (iv) washrooms and kitchen facilities, including sink, fridge, microwave and dishwasher.
- (d) The Project office provided by the Design Builder pursuant to Section 2.4(c) of this Part shall be within 10 km of the Project Site and shall be climate controlled and include sufficient office furnishings and equipment, including data connection but excluding internal computer and telephone network systems, to permit the use thereof by BCIB.
- (e) The Design Builder shall make available to CP, from 60 days after the Effective Date until 30 days after the Total Completion Date, at the Design Builder's sole cost and expense, a minimum of 240 square feet of office space, providing CP with secure, unrestricted access and including the following:
 - (i) two enclosed offices; and
 - (ii) two secure parking stalls.
- (f) The Project office provided by the Design Builder pursuant to Section 2.4(e) of this Part shall be within 10 km of the Project Site and shall be climate controlled and include sufficient office furnishings and equipment, including data connection but excluding internal computer and telephone network systems, to permit the use thereof by CP.

ARTICLE 3 CP INTERFACE

3.1 CP Agreement and CP Reference Documents

- (a) The Design-Builder:
 - (i) acknowledges the terms of the CP Agreement;
 - (ii) shall comply with, observe and abide by and to cause its Subcontractors and employees of any of them to comply with, observe and abide by the terms of the CP Agreement if and to the extent such terms are expressly set out in this

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Agreement, including in this Article, or compliance with such terms by the Design-Builder is expressly provided for in this Agreement, including in this Article;

- (iii) shall not do or omit to do or permit to be done or omitted anything that would result in the Province being in default of any terms of the CP Agreement; and
 - (iv) shall provide all such assistance as is required by the Province, acting reasonably, in connection with any Dispute (as that term is defined in the CP Agreement) between the Province and CP under the CP Agreement, and, subject only to Section 18.1 [Disputes] of this Agreement, shall be bound by the resolution of any such Dispute in accordance with the CP Agreement.
- (b) Without limiting any other requirements of this Agreement, the Design-Builder shall prepare all submissions in respect of the Design-Builder Railway Protection Measures to be implemented on the CP Lands so as to be consistent with, and shall carry out all Project Work that is to be performed on the CP Lands, including all construction methods pertaining thereto, in accordance with, the following Reference Documents (together, the “**CP Reference Documents**”):
- (i) CP Specification No. SP-TS-2.39;
 - (ii) CP Track Monitoring Requirements for Third Party Projects;
 - (iii) CP Protection of Structures Adjacent to Railroad Tracks;
 - (iv) CP Operational Constraint for Work On, Above or Below Railway Right of Way;
 - (v) CP Guidelines for Excavations on CPR Property;
 - (vi) CP Track Movement Monitoring Guidelines for Trenchless Pipe Installation;
 - (vii) CP Minimum Safety Requirements;
 - (viii) CP Utility Specification and Application Process;
 - (ix) CP Third Party Flagging Information Guide; and
 - (x) CP Requirements for Culverts.

3.2 Railway Impact Assessment Report

- (a) By no later than 60 days after the Effective Date, the Design-Builder shall prepare and submit to the Province’s Representative, for consent by the Province in accordance with the Consent Procedure (such Consent Procedure to incorporate the procedure for consent by CP pursuant to Section 8.5 of the CP Agreement), a report (the “**Railway Impact Assessment Report**”), consistent in substance with ISO 31000: 2018 (or equivalent generally-accepted risk management program), to assess design, construction and operational impacts of the Project Work on the CP Lands, CP facilities and the Railway Operations and to address, at a minimum, the issues identified in the Performance Requirements set out Section 3.6

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[Performance Requirements] of this Part and, to the extent not already so identified, the following issues:

- (i) requisite access to the CP Lands before, during and after Construction;
- (ii) the Design-Builder's Construction Management Plan for working on the CP Lands and considering Section 3.3(e) of this Part;
- (iii) traffic management protocol for CP work crews transiting the Project Site on Highway 1;
- (iv) protection of the CP Lands and CP facilities including track and Railway Operations during Construction;
- (v) all reasonable efforts to ensure no interference with Railway Operations;
- (vi) surface drainage and groundwater changes within and from the Project Site as may affect the CP Lands;
- (vii) communication and coordination with CP during Construction;
- (viii) environmental protection measures in relation to the CP Lands during Construction;
- (ix) utility impacts on the CP Lands during Construction;
- (x) CP track availability;
- (xi) compliance of Construction with Laws relating to railway safety; and
- (xii) each detonation of explosives that could potentially have an impact on the CP Lands, the CP infrastructure or Railway Operations (each, a "**Restricted Detonation**") to be carried out in accordance with Section 3.6(h)(iv) of this Part, and all other detonations of explosives that are not Restricted Detonations,

and shall include both relevant narrative description and illustrative drawings, as applicable. This initial submission of the Railway Impact Assessment Report shall include all areas of the Project and address, at a conceptual level, all issues identified in Sections 3.2(a)(i) through 3.2(a)(xii) of this Part.

- (b) The Design-Builder shall incorporate into the Design mitigation measures for all impacts identified in the Railway Impact Assessment Report.
- (c) Continuously during Design, the Design-Builder shall monitor its efforts to mitigate the risks to the Railway Operations or the CP Lands identified in the Railway Impact Assessment Report and, subject to Section 3.2(d) of this Part, within five days after each of the following milestones is achieved:
 - (i) completion of all Interim Designs; and

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- (ii) completion of all Final Designs,

prepare and submit to the Province's Representative an updated Railway Impact Assessment Report for review by the Province in accordance with the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement) to report on the status of such mitigation efforts and on any new issues that may impact the Railway Operations or the CP Lands which the Design-Builder has identified during Design (including proposed mitigations to address such new issues).

- (d) The Design-Builder may from time to time, at its discretion, submit the updated Railway Impact Assessment Reports referred to in Section 3.2(c) of this Part upon completion of all Interim Designs or Final Designs, as the case may be, for a particular Project segment according to the approximate track mile intervals indicated in the Table Of Railway Protection Requirements (each, a "**Construction Segment**") in order to advance the review of the updated Railway Impact Assessment Report for Construction Segments which the Design-Builder deems to be a priority in accordance with the Design-Builder's construction schedule. Subsequent submittals of updated Railway Impact Assessment Reports pursuant to Section 3.2(c) of this Part may add to previously-updated Railway Impact Assessment Reports in an organized, logical and stepwise manner as the Design work progresses for other Construction Segments.
- (e) The Design-Builder may, at its discretion, develop and submit with the initial or any updated Railway Impact Assessment Report any number of identified construction means and methods proposed to be available to be utilized by the Design-Builder within each Construction Segment or other logical element of the Project Work depending on the actual ground conditions encountered as Construction progresses. Any of such identified construction means and methods, once consented to or reviewed by, as applicable, the Province and CP in the applicable initial or updated Railway Impact Assessment Report, may then be used by the Design-Builder, upon notification to the Province's Representative and the CP Field Representative, within such Construction Segment or Project Work element as different ground conditions are encountered as Construction progresses.
- (f) In the event that the Design-Builder proposes to use:
- (i) any substantially new construction means and methods in any Construction Segment or Project Work element; or
- (ii) any construction means and methods in a different Construction Segment or Project Work element than the Construction Segment or Project Work element in respect of which such construction means and methods was proposed to be available in any Railway Impact Assessment Report,

the Design-Builder shall notify the Province's Representative and the CP Field Representative of such proposed use of such construction means and methods and, if reasonably determined to be required by the Province's Representative and the CP Field Representative, shall prepare and submit to the Province's Representative prior to the implementation of such proposed use an updated Railway Impact Assessment Report for review by the Province in accordance with the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement) identifying such proposed use of such construction means and methods.

3.3 Conditions Precedent to Commencement of Construction on CP Lands

The Design-Builder acknowledges and agrees that it shall be a condition precedent to commencement of any specific Construction on any specific part of the CP Lands that:

- (a) the Design-Builder has first submitted the updated Railway Impact Assessment Report required upon the completion of all Final Designs for the applicable Construction Segment within which such Construction will take place, in accordance with Sections 3.2(c) and 3.2(d) of this Part;
- (b) the Design-Builder has met the requirements of Section 3.6(b) of this Part in respect of the specific part of the CP Lands within which such Construction will take place;
- (c) the Design-Builder has secured all approvals, permits and authorizations required under applicable Laws for such Construction on the specific part of the CP Lands within which such Construction will take place;
- (d) the Design-Builder has provided the preliminary schedule for flagging referred to in Section 3.8(e) of this Part; and
- (e) **[the Design-Builder has obtained from CP, if required, a licence or other permit to enter onto such specific part of the CP Lands to perform the relevant Construction.]**

3.4 Communication and Coordination with CP

- (a) The Design-Builder shall appoint a competent and qualified person to act as its railway coordinator and risk assessment manager (the **“Railway Coordinator”**) in respect of railway matters relating to the Project. Such person shall be a Key Individual for the Project in accordance with Section 3.3 [Key Individuals] of Schedule 2.
- (b) By no later than 60 days after the Effective Date, the Design-Builder shall prepare and submit to the Province’s Representative, for consent by the Province in accordance with the Consent Procedure (such Consent Procedure to incorporate the procedure for consent by CP pursuant to Section 8.5 of the CP Agreement), a CP Communication and Engagement Plan. Such plan shall include, but not be limited to, a protocol for communicating and engaging with CP on such a basis as to efficiently manage the exchange of information relating to those aspects of the Construction that may affect the Railway Operations or the CP Lands. Such communication and engagement protocol shall address, at minimum, a process for reporting safety concerns, ground and drainage condition reports, notification to CP of access requests and notification of Emergency Situations.
- (c) The Railway Coordinator shall:
 - (i) be responsible, during Design and Construction, for communicating and coordinating with the CP Field Representative;
 - (ii) coordinate with CP the performance of those parts of the Project Work that may impact Railway Operations to assure the safe, timely, efficient and successful interface of such work;

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- (iii) act as Design-Builder’s direct point of contact with CP during Design and Construction;
 - (iv) attend, on behalf of the Design-Builder, all regular and ad-hoc meetings between the Province and CP as contemplated by the CP Agreement, except where the Province determines that the Design-Builder’s participation is not required;
 - (v) ensure all requisite inspections of CP facilities are completed in a timely manner, all as contemplated by the CP Agreement;
 - (vi) ensure all requisite monitoring equipment is installed and maintained, and the relevant data collected therefrom, all as contemplated by Section 3.6 [Performance Requirements] of this Part and the CP Agreement; and
 - (vii) ensure the Design-Builder’s compliance with this Article 3 and the CP Agreement.
- (d) The Design-Builder acknowledges and agrees that the Province may provide to the CP Field Representative the Design-Builder’s progress reports and Project meeting minutes, subject to any and all redactions of confidential matters from such reports and minutes as the Province determines to be appropriate.
- (e) The Design-Builder acknowledges and agrees that it will cooperate with the Province and CP in order to allow the Design-Builder and the Province to fulfill their respective obligations under this Agreement, and for the Province and CP to fulfill their respective obligations under the CP Agreement, recognizing that coordination of the Design-Builder’s employees, agents, personnel and contractors with CP’s employees, agents, personnel and contractors is an important component of the Project Schedule and the timing of the Project Work under this Agreement and the CP Agreement.

3.5 Paramourcy of Public and Party Safety

- (a) The parties acknowledge and agree that the safety of the public, the parties, CP, the parties’ and CP’s respective employees and agents, are and must be paramount at all times during the term of this Agreement.
- (b) The Design-Builder further acknowledges that CP is responsible for maintaining continuous Railway Operations in order to meet its service requirements as set out in the *Canada Transportation Act* (Canada) and its service obligations to its customers; accordingly, the Design-Builder agrees to perform its obligations pursuant to this Agreement using all reasonable efforts not to cause Interference or an Emergency Situation.

3.6 Performance Requirements

- (a) In addition to, and without derogating from, the Design-Builder’s obligation to meet or exceed the Performance Requirements described below in this Section 3.6, the Design-Builder shall, by using the baseline criteria for specific railway protection requirements (the “**Railway Protection Baseline Criteria**”) described in the table of mitigations (the “**Table of Railway Protection Requirements**”) attached to this Schedule as Appendix H [Table of Railway Protection Requirements], develop “Design-Builder Technical Mitigations” (the

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“**Design-Builder Railway Protection Measures**”), also as described in the Table of Railway Protection Requirements, relating to all such Railway Protection Baseline Criteria. The Design-Builder shall submit to the Province’s Representative:

- (i) for the consent of the Province pursuant to the Consent Procedure (such Consent Procedure to incorporate the procedure for consent by CP pursuant to Section 8.5 of the CP Agreement) any and all Design-Builder Railway Protection Measures that are proposed to be implemented on the CP Lands; and
 - (ii) for the review of the Province pursuant to the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement), any and all Design-Builder Railway Protection Measures that are proposed to be implemented on lands other than the CP Lands.
- (b) The Design-Builder shall not commence Construction in any specific part of the CP Lands unless and until the Province has consented pursuant to the Consent Procedure (such Consent Procedure to incorporate the procedure for consent by CP pursuant to Section 8.5 of the CP Agreement) to the applicable Design-Builder Railway Protection Measures that are proposed to be implemented on such CP Lands.
- (c) The Design-Builder shall not commence Construction in any specific part of the Project Site (each such part being identified in the Table of Railway Protection Requirements) unless and until the Province has reviewed pursuant to the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement) to the applicable Design-Builder Railway Protection Measures.
- (d) The Design-Builder Railway Protection Measures on the CP Lands shall be constructed during CP’s normal train schedule pursuant to the CP Agreement.
- (e) All Design-Builder Railway Protection Measures on the CP Lands may, at CP’s discretion, be constructed by CP or CP’s contractors and/or may, in accordance with Section 3.7(f)(i) of this Part, be removed from the Project Work, and accordingly:
 - (i) the Design-Builder shall submit to the Province’s Representative in accordance with the Consent Procedure no later than 30 days after the Effective Date an allocation of the total Cost Item Amount for Cost Item 5.1 as set out in Appendix B [Progress Measurement Principles] to Schedule 10 to provide for a separate individual lump sum Cost Item Amount for each individual Design-Builder Railway Protection Measure included in Cost Item 5.1; and
 - (ii) if CP chooses to have any of the Design-Builder Railway Protection Measures on the CP Lands constructed by CP or CP’s contractors and/or if any of the Design-Builder Railway Protection Measures on the CP Lands are removed from the Project Work in accordance with Section 3.7(f)(i) of this Part:
 - (A) the Contract Price will be reduced by the applicable individual lump sum Cost Item Amount determined in accordance with Section 3.6(e)(i) of this Part for each such Design-Builder Railway Protection Measure; and

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- (B) the construction of each such Design-Builder Railway Protection Measure shall not form part of the Project Work for the purposes of this Agreement.

The Design-Builder shall meet the following performance requirements (the “**Performance Requirements**”) for protection of the Railway Operations, the CP infrastructure and the CP Lands during Construction:

(f) Inspection

- (i) Prior to commencement of Construction in any Construction Segment, the Design Builder and the Province shall, together with the CP Field Representative, complete a joint visual inspection of the CP Lands and CP infrastructure in the vicinity of such Construction Segment, the Design Builder shall organize and lead the inspection and shall document all findings in a report entitled “Pre-Construction Condition Survey of Existing CP Infrastructure and CP Lands”, and the Design-Builder shall submit such report to the Province’s Representative, for review by the Province in accordance with the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement). The “Pre-Construction Condition Survey of Existing CP Infrastructure and CP Lands” report shall include, but shall not be limited to, the following:

- (A) tunnel portals and interiors/linings;
- (B) rail bridges;
- (C) all drainage infrastructure including ditches and culverts;
- (D) all rock and soil slopes;
- (E) all trackwork and related infrastructure;
- (F) all existing rock fall mitigation measures including, but not limited to, rock catchment fences, berms, and stopping walls; and
- (G) areas of existing rock fall accumulation at track level and source areas in and above the CP Lands.

(g) Monitoring

The assessment of progressive damage or failure before, during and following Construction including high hazard areas, the reporting of results and response to any detected movement, shall be as follows:

- (i) Prior to commencement of Construction, the Province shall complete at least two (pre-Construction) high density LiDAR surveys, including orthophotos, of the slopes below Highway 1 to the Kicking Horse River for the entire length of the Project Site, to establish a baseline and capture all pre-existing conditions. The repeatable accuracy of such LiDAR surveys shall be approximately +/- 50 mm.

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The Province shall install permanent benchmarks and targets to assist in accurately georeferencing successive LiDAR surveys. The Province shall also prepare a report on any differential movement occurring between the pre-Construction surveys, including maps identifying the changes.

- (ii) During snow-free months while Construction is underway, the Province shall complete monthly high-density LiDAR surveys, including orthophotos, of the slopes below Highway 1 to the Kicking Horse River for the entire length of the Project Site, to the same standard of accuracy as described in Section 3.6(g)(i) above.
- (iii) Following completion of the pre-Construction and during Construction high density LiDAR surveys described in Sections 3.6(g)(i) and (ii) above, the Province shall provide the survey outputs to the Design-Builder and CP in the form of a factual report documenting any differential movement occurring between the pre-Construction LiDAR survey and the most recent LiDAR survey, including maps identifying the changes.
- (iv) The Province shall complete high-density LiDAR surveys, including orthophotos, for specific rock slope monitoring of the high hazard areas between approximate CP mileage 30.8 and 31.2 (below Blackwall Bluffs) and between approximate CP mileage 31.87 and 32.5 (west end of Project area), weekly, during periods of active Construction which might affect those slopes. Following completion of such surveys, the Province shall provide the survey outputs, including maps showing condition changes, to the Design Builder and CP. If, upon review of such surveys, the Province or CP believes there are unexpected movements or indications of unfavourable movements that may be reasonably assumed to have been caused by Construction, the Province shall require the Design-Builder to assess the situation and adjust the Design-Builder's means and methods of Construction accordingly to the reasonable satisfaction of the Province's Representative and the CP Field Representative.
- (v) The Design Builder shall complete the following specific slope monitoring of rock, loose rock and scree and areas of ravelling slopes of the areas between approximate CP mileages 29.45 and 29.72, 30.03 and 30.52, 30.78 and 31.37 (below Blackwall Bluffs) and between approximate CP mileages 31.87 and 32.5 (west end of Project area) during periods of active Construction which might affect those slopes:
 - (A) Synthetic Aperture Radar designed for continuous slope movement monitoring. The equipment shall be ground based with a minimum range accuracy of 0.75 m and a cross range accuracy of 4.4 mrad with minimum accuracy of 0.1 m.
 - (B) Doppler Radar: In addition to and in consultation with manufacturers and with input from the Province, the Design-Builder shall consult with radar suppliers to determine whether the present status of doppler radar for rock fall detection is such that the radar would provide additional useful information.

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Following completion of such surveys, the Design-Builder shall provide the results and data to the Province's Representative. If, upon review of such surveys, the Province or CP believes there are unexpected movements or indications of unfavourable movements that may be reasonably assumed to have been caused by Construction, the Province shall require the Design-Builder to assess the situation and adjust the Design-Builder's means and methods of Construction accordingly, to the reasonable satisfaction of the Province's Representative and the CP Field Representative.

(h) **Blasting and Grading**

- (i) The Design-Builder shall ensure that blasting and all other Project Work operations do not cause ground vibrations which exceed the peak particle velocity of 50 mm/sec measured at the property line of the CP Lands. With the exception of vibration monitors in tunnels or at other specifically selected points, the Design-Builder shall locate vibration monitoring locations in general proximity to the blast, such locations to generally be located downslope of the blast and in no cases to be more than 50 m laterally from a location directly downslope of the blast. The Design-Builder shall place vibration monitors in both tunnels for all blasts. The Design-Builder shall conduct vibration monitoring for all blasting operations. If the property line of the CP Lands is not readily accessible, the Design Builder may measure the peak particle velocity at the top of slope at an accessible location outside the property line of the CP Lands and at another location within the property line of the CP lands, such as at the CP track level, and use this information to calculate an estimate of the peak particle velocity at the property line of the CP Lands by interpolation. The Design-Builder shall track blasting results over time and update the interpolation equations as required. The Design-Builder shall, within four hours after each blast, provide all applicable peak particle velocity measurements and calculations to the Province and CP.
- (ii) To the extent that the Design-Builder maintains Construction-generated ground vibrations, including ground vibrations caused by blasting operations, at a peak particle velocity of 50 mm/sec or less at the property line of the CP Lands, the Design-Builder shall not be responsible for any damage caused to the CP Lands or CP infrastructure by such ground vibrations triggering release of rock fall from within the CP Lands or causing or triggering a geohazard within the CP Lands, provided that, for greater clarity, the Design-Builder shall be responsible for any damage to the CP Lands or the CP infrastructure or interference with Railway Operations, in each case caused by such ground vibrations triggering release of rock fall from outside the CP Lands or causing or triggering any other geohazard outside the CP Lands. To the extent that the Design-Builder fails to maintain Construction-generated ground vibrations, including blasting operations, at a peak particle velocity of 50 mm/sec or less at the property line of the CP Lands, the Design-Builder shall be responsible for any damage caused to the CP Lands or CP infrastructure by such ground vibrations to the extent they exceed a peak particle velocity of 50 mm/sec at the property line of the CP Lands.
- (iii) If Construction activities by the Design-Builder cause ground vibrations that exceed a peak particle velocity of 50 mm/sec at the property line of the CP

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Lands, the Design Builder shall forthwith stop the applicable Construction activities that have caused the unacceptable ground vibrations, and organize and lead an inspection, together with the Province’s Representative and the CP Field Representative, of the CP infrastructure and CP Lands where the ground vibrations so exceeded a peak particle velocity of 50 mm/sec. The Parties shall compare the results of the inspection to the “Pre-Construction Condition Survey of Existing CP Infrastructure and CP Lands” and the Design-Builder shall repair, at its own cost and expense, any damage caused by such excessive ground vibrations.

(iv) Each Restricted Detonation must only be undertaken with required track protection in place as provided in the applicable blasting procedures and monitoring plan under Section 3.8(d) of this Part, and in accordance with the following:

(A) In this Section 3.6(h)(iv), an “**Available Track Window**” means any period during which no trains are transiting through the CP railway corridor in the vicinity of the Project Site. The identification of each Available Track Window will be provided to the Design-Builder by CP approximately 24 hours prior to such Available Track Window and confirmed no less than four hours in advance.

(B) The Design-Builder shall assume that three 45 minute Available Track Windows will be available to carry out Restricted Detonations between 30 minutes prior to sunrise and 30 minutes after sunset on each day in accordance with the following:

- (1) from September 15 to November 30, seven days per week;
- (2) from December 1 to March 31, Monday to Friday only; and
- (3) from April 1 to May 31, seven days per week,

in each case excepting the periods described in Section 1.7 [Statutory Holidays and Special Events] of Part 4 of this Schedule, and with each such Available Track Window coinciding with an available Full Closure as indicated in Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures] of Part 4 of this Schedule.

(C) The Design-Builder may, at the Design-Builder’s discretion and with required track protection in place as provided in the applicable blasting procedures and monitoring plan under Section 3.8(d) of this Part, be able to carry out Restricted Detonations:

- (1) by utilizing additional Available Track Windows that may be available in addition to the three daily Available Track Windows described in Section 3.6(h)(iv)(B) of this Part, and accordingly carrying out additional Closures and Stoppages in accordance with Part 4 [Traffic Management] of this Schedule between 30 minutes prior to sunrise and 30 minutes after sunset on any day

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referenced in Section 3.6(h)(iv)(B) of this Part where such additional Available Track Windows are available; and

- (2) wherever an Available Track Window coincides with an available Full Closure as indicated in Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures]:
 - (I) between 30 minutes after sunset and 30 minutes before sunrise on any day referenced in Section 3.6(h)(iv)(B);
 - (II) at any time from June 1 to September 14; and
 - (III) at any time on Saturdays and Sundays from December 1 to March 31.
- (D) The Design-Builder will restrict Restricted Detonations to Available Track Windows.
- (E) The Design-Builder shall plan each Restricted Detonation to incorporate the following sequence of work, in the order provided, such that the blast is achievable within each Available Track Window:
 - (1) traffic on Highway 1 is stopped;
 - (2) railway traffic has cleared the work area and required track protection is in place as provided in the applicable blasting procedures and monitoring plan under Section 3.8(d) of this Part;
 - (3) the detonation of explosives is initiated and completed;
 - (4) confirmation is received that the detonation of explosives proceeded as planned and there are no undetonated explosives within the blast or, if there are any undetonated explosives, any hazards related to such undetonated explosives have been mitigated;
 - (5) the slopes between the work area and the CP tracks are free from any hazardous condition and it is safe for workers to enter the area below the blast site; and
 - (6) the tracks are inspected by CP for any debris or other damage that may have been caused by the blast.
- (F) Provided that the Design-Builder has provided written notice to the Province's Representative at least 48 hours in advance that it intends to carry out Restricted Detonations during the Available Track Windows to be made available on any specific day in accordance with Section 3.6(h)(iv)(B) of this Part, the unavailability of all or any of the Available Track Windows on such day shall have the following consequences:

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- (1) if one or no Available Track Windows meeting the requirements of Section 3.6(h)(iv)(B) of this Part are made available on such day, such unavailability of Available Track Windows shall constitute a Compensation Event; or
- (2) if only two Available Track Windows meeting the requirements of Section 3.6(h)(iv)(B) of this Part are made available on such day, such unavailability of Available Track Windows shall constitute a Relief Event,

and in each case the applicable provisions of Part 8 [Supervening Events] shall apply.

- (G) No Supervening Event will arise in the event that the Design-Builder is unable to carry out any Restricted Detonations in any of the circumstances contemplated in Section 3.6(h)(iv)(C) of this Part.
- (v) Blasting activities other than Restricted Detonations may be undertaken by the Design-Builder in accordance with the applicable requirements of this Agreement at any time, during or outside of any Available Track Window
- (vi) The Design-Builder shall ensure that all Construction means and methods do not cause, and do not have the potential of triggering, generating or increasing the frequency and magnitude of, geohazards to the CP Lands or CP infrastructure, whether during or post-Construction. The Design-Builder shall ensure that all Construction activities, including blasting operations, do not cause any unintended alteration to, or placement of any debris or materials on, the slope between Highway 1 and the CP tracks, that increases the geohazard risk to CP existing as at the Effective Date. The Design-Builder shall prevent any Construction equipment, material, rock fall, and fly rock from leaving the Project Site and entering the CP Lands and interfering with the CP tracks or the Railway Operations.
- (vii) Ground disturbances caused by the Design-Builder for the Project works, including temporary disturbance during construction and permanent disturbance for post construction, must not increase the volume of loose material available to be mobilized between Highway 1 and the CP tracks during periods of surface water runoff.
- (i) Drainage
 - (i) The Design-Builder shall ensure, wherever possible, that drainage is not concentrated in any location such that calculated peak flow increases within the CP Lands from the applicable level(s) existing at the Effective Date. If the calculated peak flow does so increase from the applicable level(s) existing at the Effective Date, the Design-Builder shall assess, and upgrade, in order to accommodate such increased flow, the hydrotechnical performance of the drainage systems within the CP Lands or Province Lands including, but not limited to, those under or along the CP tracks. The Design-Builder shall so assess (and upgrade, as required) all drainage infrastructure on the CP Lands,

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including erosion protection works, to applicable CP standards identified in Section 7.1 [Order of Precedence] of Part 2 of this Schedule and all drainage infrastructure on the Province Lands, to applicable Province standards identified in Section 7.1 [Order of Precedence] of Part 2 of this Schedule.

- (ii) The Design-Builder shall ensure, where practicable, that all temporary and permanent drainages are directed away from the slope between Highway 1 and the CP Lands.

(j) **Landslide Risks**

The Design-Builder's Design must address all identified Landslide risks to the CP Lands, CP infrastructure and the Railway Operations. The Design-Builder shall conduct monitoring prior to and during Construction to ensure there is no destabilization of identified and potential Landslides. If a Landslide is triggered or reactivated during Construction, the Design-Builder shall carry out the required repair works to stabilize the Landslide in accordance with Section 8.10B [Landslides] so that the Landslide does not cause an Interference.

(k) **Avalanche and Debris Flow Hazards**

- (i) The Design-Builder must ensure that any clearing and/or fill Construction that it undertakes for Construction will not result in new or larger Avalanche start zones being created between the east bound highway shoulder and the CP track. Where required, the Design-Builder shall provide stabilization for the Avalanche start zone(s).
- (ii) The Design-Builder's Design must ensure that any of the Design-Builder's proposed Construction modifications to the slope between Highway 1 and the CP tracks or above Highway 1 do not increase the downslope Avalanche hazard to CP Lands and the Railway Operations. The Design Builder shall submit to the Province's Representative, for review by the Province in accordance with the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement), all analysis and calculations associated with its assessment of the downslope Avalanche hazard, as part of its detailed Design submission.
- (iii) The Design-Builder's Design must ensure that any of the Design-Builder's proposed Construction modifications to the drainage systems between Highway 1 and the CP tracks or above Highway 1 do not increase the downslope debris flow risk to CP Lands and the Railway Operations. The Design Builder shall submit to the Province's Representative, for review by the Province in accordance with the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement), all analysis and calculations associated with its assessment of the downslope debris flow risk, as part of its detailed Design submission.

(l) Flagging

- (i) The Design-Builder shall be responsible for provision of all railway flagging in accordance with the CP Third Party Flagging Information Guide. The Province has issued notification to CP to provide flagging Sunday to Saturday to cover 11.25 hours of flagging protection, allowing for the fact that travel time from Golden to the Project Site will reduce the available site flagging time within a 12 hour shift.
- (ii) If the Design-Builder requires additional flagging protection due to extended hours or work at multiple locations, the Design-Builder shall provide additional notice to CP in accordance with the CP Third Party Flagging Information Guide, provided that the Design-Builder shall, in its railway-related Construction schedule provided in accordance with Section 3.10 [Railway-Related Construction Schedule] of this Part:
 - (A) not assume that CP is able to provide more than three flaggers at any one time for the Project; and
 - (B) account for the flagger’s annual vacation time of four weeks.

3.7 Review and Consent

- (a) Without limiting any other submission requirements set out in this Part, the Design-Builder shall submit to the Province’s Representative information and documentation related to any and all aspects of the Design and Construction that have or may have an impact on the CP Lands or the Railway Operations:
 - (i) for review or consent by the Province in accordance with the Review Procedure or the Consent Procedure, as applicable, and
 - (ii) in accordance with the procedure for review or consent by CP in accordance with Section 8.5 or 8.6 of the CP Agreement, as applicable,

in each case in accordance with Table 3.7a below:

Table 3.7a

Schedule/ DBSS Reference	Article/ Section Reference	Submission Document Name	Province Review Procedure or Consent Procedure	CP Review or Consent under CP Agreement
DBSS	135	Site-Specific Safety Plan and Emergency Response Plan	Review	Review
4	Part 1, 4.2 & 4.5	Protection of Utilities and Utility Works relating to: (a) Utility crossing encasements on CP Lands (b) Utility relocation on CP Lands	Consent Consent	Consent Consent

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Schedule/ DBSS Reference	Article/ Section Reference	Submission Document Name	Province Review Procedure or Consent Procedure	CP Review or Consent under CP Agreement
4	Part 2, 7.2	Drainage Design Report (a) Components not on CP Lands (b) Components on CP Lands	Consent Consent	Review Consent
4	Part 2, 12.3	Climate Change Adaptation Report	Review	Review
4	Part 3, 1.1	Design Management Plan	Consent	Review
4	Part 3, 2.8.5	Geotechnical Design Reports (a) Components not on CP Lands (b) Components on CP Lands	Review Consent	Review Consent
4	Part 3, 2.8.7	Avalanche Hazard Assessment and Design Report	Review	Review
4	Part 3, 2.15	Temporary Works on CP Lands	Consent	Consent
4	Part 4, 4	Traffic Management Plan	Consent	Review
DBSS	415 & 421	Bridge Girder Erection Drawings	Review	Review
6	2.5	Construction Environmental Management Plan (a) First Submission (b) Updates	Consent Review	Review Review
7	Appendix E	Environmental Quality Management Plan	Consent	Review
7	Appendix F	Health and Safety Program Quality Management Plan	Consent	Review
9	2.2	Design-Builder Communication Protocol (First Submission & Updates)	Consent	Review

- (b) Pursuant to the Review Procedure (as modified in and for the purposes of this Part), the Province shall, as soon as practicable and, subject to Section 2.4 [Request for Further Information] of Schedule 2, in any event within 2 days of actual receipt thereof, forward one copy of the relevant submission document to CP or its designated consultant for review by CP. The Province shall, within 20 days of actual receipt of the submission document from the Design-Builder, return to the Design-Builder one copy of the relevant submission document endorsed “received” or “received with comments” or “comments”. Subject to the right of the Province under Section 8.6(c)(ii) of the CP Agreement to authorize the Design-Builder to proceed notwithstanding any comments received by CP, in the case of any submission document returned endorsed “received with comments” or “comments”, the Province’s Representative shall also provide with such returned document, in addition to the Province’s own comments (if any), any applicable comments provided by CP.

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- (c) Pursuant to the Consent Procedure (as modified in and for the purposes of this Part), the Province shall as soon as practicable and, subject to Section 2.4 [Request for Further Information] of Schedule 2, in any event within 2 days of actual receipt thereof, forward one copy of the relevant submission document to CP for review or consent by CP, as the case may be. The Province shall, within 30 days of actual receipt of the submission document from the Design-Builder, return to the Design-Builder one copy of the relevant submission document endorsed as “accepted” or “rejected”. Subject to the right of the Province under Section 8.5(d)(ii)(B)(1) or Section 8.6(c)(ii), as the case may be, of the CP Agreement to authorize the Design-Builder to proceed notwithstanding any comments or rejection received by CP, in the case of any submission document returned endorsed “accepted” with comments, the Province’s Representative shall also provide with such returned document, in addition to the Province’s own comments (if any), any applicable comments provided by CP, and, in the case of any submission document returned endorsed “rejected”, the Province shall also provide with such returned document the grounds for such rejection.
- (d) Without limiting any right of the Design-Builder to refer any matter to the Dispute Resolution Procedure in accordance with Schedule 2 [Representatives, Review Procedure and Consent Procedure], in the event that:
- (i) CP makes a request pursuant to Section 8.7(a) of the CP Agreement for any further or other information, data, documents or steps; or
 - (ii) any submission document provided by the Design-Builder pursuant to the Review Procedure or the Consent Procedure in accordance with this Part is returned endorsed:
 - (A) “received with comments” or “comments” provided by CP;
 - (B) “accepted” but with comments provided by CP; or
 - (C) “rejected” by CP,

and in each case the Province has required compliance by the Design-Builder with such request, comments or rejection provided by CP, the Design-Builder may dispute that the request for such further or other information, data, documents or steps is reasonable, or that the provision of any such comments or such rejection by CP is on grounds permitted by Section 8.8 of the CP Agreement, as the case may be, by referring the matter to the Dispute Resolution Procedure within 10 days of the Design-Builder’s receipt of such request for further or other information, data, documents or steps or returned submission document, as applicable, but not thereafter, and the Design-Builder acknowledges and agrees to CP’s participation in any resulting proceedings in respect of such Dispute in accordance with the Dispute Resolution Procedure. If it is then resolved in accordance with the Dispute Resolution Procedure that:

- (iii) the request for such further or other information, data, documents or steps:
 - (A) was not reasonable, then the Design-Builder shall not be required to provide such further or other information, data, documents or steps and the request therefor by CP shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply; or

- (B) was reasonable, then the Design-Builder shall provide such further or other information, data, documents or steps; or
- (iv) the provision of any such comments or any such rejection by CP, as applicable:
 - (A) was not on such permitted grounds, then such submission document will thereupon be deemed to have been endorsed “received” or “accepted”, as the case may be, and the provision of such comments or the rejection of such submission document by CP shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply; or
 - (B) was on such permitted grounds, then such submission document shall be revised and re-submitted by the Design-Builder pursuant to the Review Procedure or the Consent Procedure, as the case may be.
- (e) In the event that the Design-Builder is required to revise and re-submit any submission document as a result of any comments provided by CP or any rejection by CP, then, if and to the extent that any such revision and re-submission impacts the design, quality or scope of the Project Work or the Design and Construction or any part thereof so as to exceed any applicable standard, measure or other requirement specified in the applicable Performance Requirement set out in Section 3.6 [Performance Requirements] of this Part, the Province shall issue a Province Change in respect of such impacts and the provisions of Part 7 [Province Changes and Design-Builder Proposals] shall apply accordingly, except that the amount of the Change in Costs that the Design-Builder shall be entitled to receive resulting from all such Province Changes during the Term shall be determined in accordance with Table 3.7e below:

Table 3.7e

Change in Costs from all such Province Changes during the Term	Province Share of Change in Costs	Design-Builder Share of Change in Costs	Maximum Cumulative Design-Builder Share of Change in Costs during Term
Applicable to first \$500,000	0%	100%	\$500,000
Applicable to next incremental \$2,000,000	50%	50%	\$1,500,000
Applicable to amount over \$2,500,000	100%	0%	\$1,500,000

- (f) In the event that, notwithstanding that the Province has provided consent to any submission pursuant to this Article that is required in accordance with the Consent Procedure (as modified in and for the purposes of this Part), CP has not, within 45 days following the provision of such consent by the Province, taken all such actions as are required from CP, including providing any consent in accordance with Section 8.5 of the CP Agreement or issuing any licence or other permit to enter onto the CP Lands, as in each case may be required in order to permit the Design-Builder to proceed to implementation of the relevant submission, or CP gives a notice under Section 9.6 of the CP Agreement that prevents the Design-Builder from proceeding to the implementation of the relevant submission, then:

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- (i) if such submission impacts only the performance of any Design-Builder Railway Protection Measures on the CP Lands, then the Design-Builder Railway Protection Measures so impacted shall cease to form part of the Project Work; or
 - (ii) otherwise, such failure of CP to take such actions, or the provision of such notice by CP, as applicable, shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.
- (g) The Design Builder acknowledges that the Province will engage with CP or its designated consultant(s), as the Province determines appropriate, during the conduct of the Review Procedure or Consent Procedure, as the case may be, for all submissions provided by the Design-Builder in accordance with this Part.
- (h) The Design-Builder shall provide the submission documents identified in Table 3.7h below to the Province’s Representative, for the Province’s and CP’s respective records.

Table 3.7h

Schedule/ DBSS Reference	Article/ Section Reference	Submission Document Name	Purpose
4	Part 3, 2.8	Final Design Submissions for: (a) Roadway and drainage (b) Structures (c) Geotechnical relating to geohazard mitigations (d) Avalanche hazard mitigations (e) Site restoration (f) Environmental including Environmental Design Drawings	Record
4	Part 3, 2.12	IFC Drawings for: (a) Roadway and drainage (b) Structures (c) Geotechnical relating to geohazard mitigations (d) Avalanche hazard mitigations (e) Site restoration (f) Environmental including Environmental Design Drawings	Record
4	Appendix A, 1	Record drawings for: (a) Roadway and drainage (b) Structures (c) Geotechnical relating to highway geohazard mitigations (d) Avalanche highway hazard mitigations (e) Site restoration (f) Environmental including Environmental Design (g) All works undertaken on CP Lands	Record

3.8 Managing Interference with Railway Traffic

- (a) The Design-Builder shall use all reasonable efforts to ensure that the Construction does not at any time cause or necessitate any unplanned interruption or stoppages of CP railway traffic.
- (b) The Design-Builder shall use all reasonable efforts to ensure that the Construction does not at any time cause Interference or the occurrence of an Emergency Situation.
- (c) The Design-Builder shall prepare and submit to the Province's Representative, for the consent of the Province in accordance with the Consent Procedure (such Consent Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement), a progressive blasting procedures and monitoring plan for each rock cut location requiring a Restricted Detonation, specific to protection of CP infrastructure, CP Lands and Railway Operations, including, in accordance with Section 3.6(h)(iv) of this Part:
 - (i) each proposed Restricted Detonation; and
 - (ii) the Design-Builder's proposal for the required track protection to be put in place for each such Restricted Detonation.

The Design-Builder shall not conduct any Restricted Detonation at any such rock cut location unless and until the Province has consented pursuant to the Consent Procedure to the applicable blasting procedures and monitoring plan for such rock cut location.

- (d) By no later than 60 days after the Effective Date, the Design-Builder shall provide to the Province's Representative, for review by the Province in accordance with the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to Section 8.6 of the CP Agreement), a preliminary schedule for any required flagging necessary to undertake any Construction. The Design-Builder acknowledges that scheduling and approval of such flagging shall be in the sole, absolute and unfettered discretion of CP.
- (e) The Design-Builder shall provide two hi-rail excavators or gradalls on standby, one stationed at Mile 31.9 and the other at Mile 29.9 at the east end of the Project Site, complete with associated equipment and qualified operators available within 60 minutes upon a call up by CP or the Province during all Construction operations that could pose a risk to CP infrastructure, CP Lands or Railway Operations, including, but not limited to, blasting and downslope access construction and excavations.

3.9 Highway 1 Traffic Management

- (a) Without limiting the generality of Part 4 [Traffic Management] of this Schedule, the Design-Builder shall allow CP access to and along Highway 1 through the Project Site so that CP can move CP emergency services, crews and contractors required for maintenance of the Railway Operations on the following basis:
 - (i) The Design-Builder shall provide access to CP in the event of an Emergency Situation on a priority, but not guaranteed, basis. Such access shall be on the same basis as for emergency services, as described Section 1.6(b) of Part 4

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[Traffic Management] of this Schedule. The Design-Builder shall use all reasonable efforts to provide to CP safe passage as promptly as possible.

- (ii) The Design-Builder shall make all reasonable efforts to provide access to CP train crews on a priority, but not guaranteed, basis. Pursuant to the CP Agreement, CP shall be required to advise the Design-Builder no less than twenty-four (24) hours in advance of the need to transfer CP train crews and the approximate time that such transfer will occur. The Design-Builder shall be permitted to delay or deny such access if it considers that it cannot then provide to CP safe passage.
 - (iii) The Design-Builder shall provide access for CP maintenance crews, including contractors, in accordance with Part 4 [Traffic Management] of this Schedule.
- (b) The Design-Builder shall coordinate Construction of any CP accesses with the CP Field Representative to avoid interference with the Railway Operations.

3.10 Railway-Related Construction Schedule

- (a) By no later than 60 days after the Effective Date, the Design-Builder shall prepare and submit to the Province's Representative for review by the Province in accordance with the Review Procedure (such Review Procedure to incorporate the procedure for review by CP pursuant to the CP Agreement) a baseline Construction schedule consistent in substance with the Works Schedule described in Schedule 3 [Project Schedule] and capturing all Construction works that potentially could impact the CP Lands or the CP Operations, including:
- (i) construction of the Design-Builder Railway Protection Measures on the CP Lands and on the Project Site adjacent to the CP Lands;
 - (ii) road construction activities that potentially could impact Railway Operations;
 - (iii) structure construction activities that potentially could impact Railway Operations;
 - (iv) storm drainage construction and utility relocations on the CP Lands; and
 - (v) drilling and blasting, earthworks and Structure construction adjacent to the CP Lands.
- (b) The Design-Builder shall also provide to the Province's Representative and CP Field Representative its construction three-week look-ahead schedules and all schedule updates during the Construction. All schedules shall be prepared in native Primavera .xer or an equivalent format satisfactory to the Province and CP.

3.11 Drainage

The Design-Builder shall ensure that the Design and Construction of any drainage facilities required in connection with the Project meet the requirements of Article 7 [Drainage Design Criteria] of Part 2 of this Schedule.

3.12 Temporary Catchment Fencing or Barrier Systems

The Design-Builder shall ensure that the Design and Construction of any temporary catchment fencing or barrier system that is required in connection with Construction activities meet;

- (a) the performance requirements specified in Section 3.6(h)(vi) of this Part, if such catchment fencing or barrier system is to be installed on the Project Lands; or
- (b) the applicable requirements of CP, if such catchment fencing or barrier system is to be installed on the CP Lands.

3.13 Design-Builder Responsibility for Certain CP Costs

The Design-Builder shall be responsible for all costs and expenses incurred by CP in connection with the following:

- (a) all requisite railway flagging for all Construction that may reasonably be expected to cause a potential hazard to the Railway Operations, as determined by CP; and
- (b) all Design-Builder Railway Protection Measures, other than those removed from the Project Work as contemplated in Section 3.6(e)(ii) of this Part.

and if either the Province or BCTFA is invoiced or otherwise charged directly for any such costs or expenses, the Province or BCTFA (as the case may be) may pay such costs and expenses and, subject always to the Province's right of set-off pursuant to Section 10.4 [Province's Right of Set-Off], the Design-Builder, upon demand, shall forthwith reimburse the Province or BCTFA, as applicable, for any amount so paid.

3.14 Performance Measures

Table 3.14 below sets out performance measures to be met by the Design-Builder in relation to all project requirements of this Article 3 for protection of the Railway Operations, the CP tracks and the CP Lands during Construction and the applicable timing for each such performance measure, where applicable.

In respect of any performance measure set out in such Table 3.14 with a designation of "Minor", "Moderate", "Major", or "Severe" in a column entitled "Performance Mechanism Index", such designation indicates, in respect of the performance measure corresponding to such designation, the basis on which NCE Points and Default Points will be assigned in accordance with Part 5 [NCE Points and Default Points] of Schedule 10 to this Agreement.

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Table 3.14

Performance Measure	Reference of this Article	Deliverables/Performance Requirement	Timing	Performance Mechanism Index
PDC3.14a	3.2(c)	Final updated Railway Impact Assessment Report covering all Construction Segments	Within five days after each of the following milestones is achieved: (i) completion of all Interim Designs; and (ii) completion of all Final Designs, for all Construction Segments.	Major
PDC3.14b	Table 3.7a	Site-Specific Safety Plan and Emergency Response Plan	Initial plan no later than 60 days following the Effective Date	Major
PDC3.14c	3.4	Railway Communication and Engagement Plan	Initial plan no later than 60 days following the Effective Date	Moderate
PDC3.14d	3.6	Blasting and all other Project Work operations must not cause ground vibrations which exceed peak particle velocity of 50 mm/sec measured at the property line of the CP Lands].	Each blast	Severe
PDC3.14e	3.6	The Design-Builder must prevent any rock fall caused by Construction from leaving the Project Site and entering the CP Lands and interfering with the CP tracks or Railway Operations.	Each event	Severe
PDC3.14f	3.6	If a landslide is activated during Construction, the Design-Builder shall carry out the required repair works to stabilize the Landslide in accordance with Section 8.10B [Landslides] so that the Landslide does not affect the Railway Operations.	Complete required repair works as per agreement with the Province's Representative and CP Field Representative	Severe

Performance Measure	Reference of this Article	Deliverables/Performance Requirement	Timing	Performance Mechanism Index
PDC3.14g	3.6	The Design-Builder shall perform and document joint visual inspections, with CP and the Province, of all items listed in Section 3.6(f) of this Part prior to and after Construction.	Complete joint visual inspections no later than 60 days following the Effective Date	Moderate

3.15 Compliance with Other CP Agreement Provisions

Without limiting any other obligations of the Design-Builder set out in this Article, the Design-Builder will comply with, observe and abide by the terms of the following provisions of the CP Agreement:

- (a) paragraph (b)(i) of Section 8.7 [CP Request for Further Information];
- (b) paragraphs (b), (d) and (e) of Section 9.4 [CP Field Representative];
- (c) Section 9.5 [Cost and Quality of Road Authority Work on Railway Lands];
- (d) paragraphs (b) and (c) of Section 9.6 [Inconsistencies between Road Authority Work on Railway Lands and Approved Documents];
- (e) Section 9.7 [As-Is Basis];
- (f) Section 9.9 [Liens];
- (g) Section 12.2 [CP Rights Regarding Emergency Situation or Railway Interference];
- (h) Section 12.3 [Notice and Stoppage of Work for CP Incident];
- (i) Paragraphs (a), (b) and (c) of Section 13.1 [CP Rights Regarding Emergency Situation or Railway Interference]; and
- (j) Section 15.1 [Confidentiality].

ARTICLE 4 UTILITIES

4.1 Design-Builder Responsibility

The Design-Builder shall not construct, install or permit the construction or installation of any Utilities on, in, under or over the Project Site or any part thereof without the prior consent of the Province (which consent may be given or withheld in the discretion of the Province); provided that the Design-Builder shall not be in default under this Section as a result of the exercise by a Utility Supplier of its rights under a Utility Agreement or as a result of any Utility Work carried out in compliance with this Article and any other relevant provisions of this Agreement. Without limiting the generality of the foregoing, at no time shall the Design-Builder use or permit the use of the Project Site or any Project Infrastructure for gas, oil or other petroleum product pipelines or infrastructure in connection therewith (other than those (if any)

existing on the Effective Date) without the prior written consent of the Province (which consent may be given or withheld in the discretion of the Province).

4.2 Protection of Utilities

Except for Utility Work carried out in compliance with this Article and any other relevant provisions of this Agreement, all Utilities located as at the Effective Date or thereafter on, in, under or over the Project Site (including Utilities within any excavation) are to remain in service and be protected and preserved by the Design-Builder during and after the performance of the Project Work and any other works carried out in the course of the Project.

4.3 Location

The Design-Builder shall be responsible for confirming the actual locations of all Utilities now or hereafter located on, in, under or over the Project Site and the Project Infrastructure and ensuring that its Subcontractors and employees of any of them are made aware of such locations as necessary to ensure compliance at all times with the provisions of this Schedule. The Design-Builder shall not rely on location plans, as-built drawings supplied by Utility Suppliers or other similar documents for confirming locations of Utilities.

4.4 Utility Policy Manual

The Design-Builder shall abide by, observe, comply with and perform and cause its Subcontractors and employees of any of them to abide by, observe, comply with and perform the terms of all applicable sections of the Utility Policy Manual.

4.5 Utility Work

- (a) The Design-Builder shall be responsible for securing all temporary and permanent Utilities required in connection with or as part of the Project Work, and for all Utility Work to be carried out in connection with or as part of the Project Work.
- (b) Subject to the rights of Utility Suppliers under the Utility Agreements, all Utility Work shall be carried out by or under the supervision of and at the risk and expense of the Design-Builder and without limiting the generality of the foregoing, the Design-Builder shall be responsible for:
 - (i) obtaining from the relevant Utility Supplier, any Relevant Authority or any other Interested Party all rights of entry or access to the relevant Utilities that are necessary or expedient in connection with the Utility Work;
 - (ii) identifying all requirements in respect of the Utility Work, including determining the most effective strategies for undertaking the Utility Work;
 - (iii) liaising, arranging, co-ordinating and entering into all necessary agreements with relevant Utility Suppliers, Relevant Authorities and other Interested Parties in connection with the Utility Work, including obtaining any necessary consents or approvals in connection therewith, providing access for inspections and providing information and plans during and following completion of the Utility Work;

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- (iv) ensuring that all Permits in connection with the Utility Work are obtained, including preparing all required documentation in connection therewith and ensuring that such Permits are maintained and, to the extent necessary, updated following completion of any Construction Activities;
 - (v) observing and complying with any instructions or directions relating to the Utility Work that may be issued by the Province, including where issued by the Province expressly on behalf of a relevant Utility Supplier, Relevant Authority or other Interested Parties;
 - (vi) securing or causing to be secured the entry into or execution of all relevant construction and maintenance agreements, service contracts, and other agreements in connection with the Utility Work;
 - (vii) when any Utility Work affecting Utilities referred to in a Utility Agreement are to be carried out, the Design-Builder shall, prior to commencing such Utility Work and in accordance with any notice requirements provided under the relevant Utility Agreements, give written notice to the relevant Utility Supplier confirming that the Utility Work is being carried out by or on behalf of the Design-Builder pursuant to this Agreement; and
 - (viii) all electrical distribution or transmission and all telecommunication crossings whether underground or overhead.
- (c) The Design-Builder shall maintain, protect and relocate, to accommodate the Design, the existing overhead BC Hydro distribution line and Telus cable located on poles along the side of the existing Highway 1, and install all ducts and complete all related civil works, all in accordance with the Utility Agreements and in conformity with all applicable BC Hydro and Telus standards.
- (d) The Design-Builder shall supply and install two - 50 mm diameter RPVC communication conduits and one - 50 mm diameter RPVC ITS power conduit as per Section 602.5.2 of the Electrical and Traffic Engineering Manual, for the full length of the Project. Conduit roadway crossings are not required.
- (e) Ministry power and communications conduits may be buried under the paved Shoulder in either fill or rock cut sections, using a minimum depth of cover of 900 mm (measured from top of pavement to top of concrete encasement), provided:
- (i) the conduits are fully encased in concrete in accordance with the Canadian Electrical Code, Rule 12-012 [Underground Installations], Subrule 3, with a minimum concrete compressive strength of 5 MPa at 28 days; and
 - (ii) the concrete encasement is not located within the pavement structure.

The minimum depth of cover for BC Hydro and Telus conduits in the paved Shoulder shall be as per the requirements of BC Hydro and/or Telus, but shall not be less than 900 mm. Ministry, BC Hydro, and/or Telus conduits, whether or not encased in concrete, shall not be located above (or within) the reinforced zone of MSE walls.

4.6 Design-Builder Responsible for Utility Costs

The Design-Builder shall:

- (a) contract directly with the relevant suppliers for all electricity, telephone and communications services and any other Utilities and services supplied to the Project Site and/or used or consumed in the conduct of the Project Work and pay for all costs and expenses of such Utilities and services;
- (b) notwithstanding any contrary provisions in existing Utility Agreements related to payment responsibilities, be responsible for all costs and expenses arising from or in connection with the Utility Work, including being responsible for compensating BC Hydro for 50% of BC Hydro's cost for the early procurement of submarine (armoured) cable required by the Design-Builder for the temporary relocation of BC Hydro's overhead distribution line,

and if either the Province or BCTFA is invoiced or otherwise charged directly for any such costs or expenses, the Province or BCTFA (as the case may be) may pay such costs and expenses and the Design-Builder, upon demand, shall forthwith reimburse the Province or BCTFA, as applicable, for any amount so paid.

4.7 Province Assistance with Utility Matters

- (a) Without prejudice to Section 4.10 [New and Amended Utility Agreements] of this Part, and provided the Design-Builder has taken and continues to take all reasonable steps to obtain and to satisfy any conditions or requirements for obtaining from the relevant Utility Supplier, Relevant Authority, private owner or other person the rights of entry or access to any Utilities, or any other action, necessary or expedient to carry out any Utility Work required for the conduct of the Project Work within a reasonable time and on reasonable terms, then the Design-Builder may request the assistance of the Province (at the expense of the Design-Builder) in obtaining such rights of entry, access or other action, in which event the Province, to the extent it has the legal ability to do so under existing Laws, shall use reasonable efforts to provide such assistance.
- (b) In the event of a dispute between the Design-Builder and a Utility Supplier as to whether the Design-Builder is entitled to the benefit of or to exercise rights under any Utility Agreement which dispute, despite the reasonable and diligent efforts of the Design-Builder, has not been resolved within a reasonable period of time, the Province, at the request and expense of the Design-Builder, shall use reasonable efforts subject to the scope of the Province's legal rights under the terms of the relevant Utility Agreement to assist the Design-Builder in taking the benefit of or exercising the relevant rights under the Utility Agreement.
- (c) For further clarity, the assistance which the Design-Builder may request that the Province consider providing in accordance with and subject to the limitations of this Section may include the facilitation by the Province of processes associated with and contemplated therein for the resolution of disputes or the acquisition or exercise of rights associated with Utility Work or Utility Agreements, and may also include, where permitted in accordance with the terms of any Utility Agreement without the consent of the relevant Utility Supplier, the assignment of rights under such Utility Agreement to the Design-Builder.

4.8 Utility Agreements

In the exercise of its rights and performance of its obligations under this Agreement the Design-Builder agrees to comply with, observe and abide by and to cause its Subcontractors and employees of any of them to comply with, observe and abide by the terms of all Utility Agreements (whether existing on the Effective Date or entered into or amended thereafter in accordance with Section 4.10 [New and Amended Utility Agreements] of this Part). The Design-Builder shall not do or omit to do or permit to be done or omitted anything that would result in the Province or BCTFA being in default of any terms of the Utility Agreements.

4.9 Rights under Utility Agreements

Unless otherwise expressly set out in this Agreement, the Design-Builder shall be responsible for satisfying itself as to the extent to which it is entitled to take the benefit of or exercise rights under any Utility Agreement and, without limiting any other disclaimer or release of liability provided herein, the Province makes no representation or warranty whatsoever in that regard.

4.10 New and Amended Utility Agreements

The Province and BCTFA may enter into new Utility Agreements or amendments to existing Utility Agreements (which may include the grant of new Encumbrances or the amendment of existing Encumbrances affecting the Project Site or any part thereof) after the Financial Submittal Date to permit or facilitate the design, construction, installation, operation, repair, management, maintenance, rehabilitation, reconstruction and/or relocation of any existing or new Utilities. If the Province or BCTFA enters into any such new Utility Agreement or amendment that affects the Project Site or the conduct of the Project Work, the Province shall:

- (a) give notice to the Design-Builder and provide the Design-Builder with particulars of the effect of the new Utility Agreement or amendment as it relates to the Project Site and the conduct of the Project Work;
- (b) use or cause to be used reasonable efforts to include provisions in the new Utility Agreement or amendment requiring the Utility Supplier to use reasonable efforts in exercising its rights thereunder as they relate to the Project Site so as to avoid or, if unavoidable, minimize physical disruption to the operation of the Project Infrastructure or physical damage to the Project Infrastructure; and
- (c) unless such new Utility Agreement was entered into to facilitate the Project Work, as part of or for the purposes of the acquisition of Province Lands pursuant to Schedule 8 [Lands] or affects only the Additional Lands, issue in respect of such new Utility Agreement a Province Change and the provisions of Part 7 [Province Changes and the Design-Builder Proposals] shall apply accordingly.

4.11 Indemnity by Design-Builder

The Design-Builder shall indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, in respect of any and all Direct Losses and Claims (except only to the extent such Direct Losses and Claims are caused directly by a Province Non-Excusable Event), which the Province and the Province Indemnified Persons, or any of them, may suffer or incur arising as a result of the provision of any assistance by the Province to the Design-Builder in accordance with either Section

4.7(a) or Section 4.7(b) of this Part, regardless of whether or not the Design-Builder ultimately obtains the relevant rights of entry, access or other action, or is able to take the benefit of or exercise any rights under the relevant Utility Agreement, as the case may be.

ARTICLE 5 OPERATION AND MAINTENANCE

5.1 Responsibility for Operation and Maintenance - General

The Design-Builder shall carry out the operation and maintenance of the Project Infrastructure (the “**Operation and Maintenance**”) in accordance with the requirements set out in this Article in such a manner as to comply with this Agreement from the Effective Date to the Substantial Completion Date or, if earlier, the Termination Date.

5.2 Operation and Maintenance – Clarifications

- (a) The Design-Builder shall not be responsible for routine winter maintenance of the Project Infrastructure, which will continue to be provided by the Concessionaire’s Operator in accordance with the requirements set out in the Concession Agreement, including:
 - (i) the Highway Maintenance Specifications for Highway Concessions;
 - (ii) the Highway Corridor Management Specifications for Highway Concessions; and
 - (iii) the Local Area Specifications for the Kicking Horse Canyon Concession.
- (b) The Design-Builder shall be responsible for maintaining all Structures within the Project Site in accordance with the Highway Maintenance Specifications.
- (c) The Design-Builder shall be responsible for removing debris from behind the Yoho Great Wall (Structure No. 4447R) and the Rock Wall Extension (Structure 4447E) in accordance with Section 2.1 (Retaining Structure Maintenance) of the Local Area Specifications for the Kicking Horse Canyon Concession.

5.3 Operation and Maintenance - Specifications

The Design-Builder shall carry out Operation and Maintenance in accordance with the Highway Maintenance Specifications and the Highway Maintenance Specifications Local Area Specifications with the following amendments:

- (a) Any and all references to “Contractor” are to be construed as the Design-Builder.
- (b) Section 1.2, Services, b) Quantified Maintenance Services is replaced by the following:

“Consist of the planned maintenance, repair, replacement or new installation of all infrastructure identified as Quantified Maintenance Services in Schedule 1 Specifications and includes work activities that are reasonably predictable or seasonal, that are of a minor restorative nature.”
- (c) The following items shall not apply to the Design-Builder:

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- (i) Section 1.2 Services, c) Additional Maintenance Services;
 - (ii) Section 2 Routine Maintenance Services Cap; and
 - (iii) Section 3 Warranty.
- (d) Section 1.4, Specification Format, the 6th bullet, Routine Maintenance Service Cap and the 7th bullet, Warranty, shall not apply.
- (e) Section 1.5, Interpretation, e) is replaced by the following:
- “When the statements “as directed by the Province”, “as approved by the Province”, or “as determined by the Province” are used, this means the Province may provide the direction, approval or determination from the Province’s Representative in accordance with the Consent Procedure”
- (f) With reference to the Highway Maintenance Specifications, maintenance services that shall apply to the Design-Builder (Included) and shall not apply to the Design-Builder (Excluded) are set out in Table 5.3a as follows:

Table 5.3a

Highway Maintenance Specifications	Maintenance Services
1 Surface Maintenance	
1.01 Asphalt Pavement Maintenance	Included
1.02 Surface Treatment	Excluded
1.03 Highway and Shoulder Grading and Re-Shaping	Included
1.04 Dust Control and Base Stabilization	Excluded
1.05 Surface and Shoulder Graveling	Included
1.06 Road Base Maintenance	Included
1.07 Surface Cleaning	Included
1.08 Debris Removal	Included
1.09 Cattle Guard System Maintenance	Included*
1.10 Raised Hard Surfaced Infrastructure and Safety Device Maintenance	Included
1.11 Railway Crossing Approach Maintenance	Excluded
2 Drainage Maintenance	
2.01 Ditch Maintenance	Included
2.02 Drainage Appliance Maintenance	Included
2.03 Shore, Bank and Watercourse Maintenance	Included
3 Winter Maintenance	
3.01 Highway Snow Removal	Excluded

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Highway Maintenance Specifications	Maintenance Services
3.02 Snow and Ice Bonding Prevention and Control	Excluded
3.03 Other Snow Removal and Ice Control ⁽¹⁾	Excluded
3.04 Snow Avalanche Response	Excluded
4 Roadside Maintenance	
4.01 Vegetation Control	Included
4.02 Brush, Tree and Danger Tree Removal	Included
4.03 Litter Collection and Graffiti Removal Maintenance	Included
4.04 Rest Area Facility Maintenance (Truck Parking Site)	Excluded
4.05 Fence Maintenance	Included
4.06 Roadside Catchment Appurtenances Maintenance	Included
5 Traffic Maintenance	
5.01 Sign System Maintenance	Included
5.02 Temporary Pavement Markings and Eradication	Included
5.03 Traffic Management	Refer to Part 4 [Traffic Management] of this Schedule
6 Structures Maintenance	
6.01 Bridge Deck Maintenance	Included*
6.02 Structures Cleaning Maintenance	Included
6.03 Structures Drainage Maintenance	Included
6.04 Bridge Joint Maintenance	Included*
6.05 Bridge Bearing Maintenance	Included*
6.06 Bailey and Acrow Bridge Maintenance	Included*
6.07 Structure Minor Coating	Included*
6.08 Concrete Structure Maintenance	Included*
6.09 Steel, Aluminum and Multiplate Structure Maintenance	Included
6.10 Bridge Piling Maintenance	Included*
6.11 Retaining Wall Maintenance	Included
6.12 Bridge Railing Maintenance	Included*
6.13 Timber Truss Bridge Maintenance	Excluded
6.14 Timber and Log Bridge Maintenance	Excluded
7 Network Management	
7.01 Highway Incident Response	Refer to Part 4 [Traffic Management] of this Schedule
7.02 Major Event Response	Refer to Part 4 [Traffic Management] of this Schedule

Highway Maintenance Specifications	Maintenance Services
7.03 Highway Inspection	Refer to Part 4 [Traffic Management] of this Schedule
7.04 Highway Safety Patrol	Refer to Part 4 [Traffic Management] of this Schedule
7.05 Communications	Refer to Part 4 [Traffic Management] of this Schedule

Notes:

* Only as it pertains to new Infrastructure built by the Design-Builder that forms part of the Project Infrastructure used by the public.

- (g) With reference to the Highway Maintenance Specifications Local Area Specifications, maintenance services that shall apply to the Design-Builder (Included) and shall not apply to the Design-Builder (Excluded) are set out in Table 5.3b as follows:

Table 5.3b

Highway Maintenance Specifications Local Area Specifications	Maintenance Services
1 SELKIRK	
1.01 Definitions	
1.02 Communications Centre - Revelstoke	Excluded
1.03 Highway Crossing Infrastructure	Included
1.04 Invasive Plants Management	Included
1.05 Salt Containment Infrastructure Maintenance	Excluded
1.06 Snow Avalanche Response – 38100 Highway 1 West of Revelstoke	Excluded
1.07 Snow Avalanche Response – 38100 Highway 1 East of Revelstoke	Excluded
1.08 Snow Avalanche Traffic Management	Excluded
1.09 Snow Shed Maintenance	Excluded
1.10 Vehicle Inspection Station Maintenance	Excluded

- (h) The Summer Classification shall be “1” and the Winter Classification shall be “A”.

5.4 [Not Used]

5.5 Operation and Maintenance Manager

- (a) The Design-Builder shall designate an Operation and Maintenance Manager (the “**Operation and Maintenance Manager**”), who shall be responsible for:

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- (i) day-to-day Operation and Maintenance of Project Infrastructure in accordance with the requirements set out in this Article;
 - (ii) incorporating local user and stakeholder input into the Operation and Maintenance of the Project Infrastructure; and
 - (iii) coordinating and planning Operation and Maintenance activities with all adjacent operators.
- (b) The Operation and Maintenance Manager shall have the following experience:
- (i) directly overseeing the operation and maintenance, during construction, of transportation infrastructure comparable to the Project Infrastructure;
 - (ii) managing the day-to-day operations of highways and facilities; and
 - (iii) managing maintenance resources, including labour, equipment, material, facilities, suppliers and subcontractors.

5.6 Operation and Maintenance Plan

The Design-Builder shall develop, implement and update an operation and maintenance plan (the “**Operation and Maintenance Plan**”) that demonstrates compliance with the requirements of this Article. The Operation and Maintenance Plan shall be submitted to the Province’s Representative no later than 60 days from the Effective Date in accordance with the Review Procedure, and shall include but not be limited to the following:

- (a) detailed description of the roads and detours including road name, length;
- (b) mapping that displays the road and detour locations and extents of the Project Site;
- (c) the Design-Builder’s specific approach, processes, resources, work programming, facilities and activities for meeting its Operation and Maintenance responsibilities;
- (d) applicable specifications for the Operation and Maintenance activities performed;
- (e) details regarding the maintenance and operation of all New Project Infrastructure including rock fall and avalanche catchment installations such as ditches and attenuators;
- (f) organizational structures for achieving the Operation and Maintenance work;
- (g) format of Operation and Maintenance Records; and
- (h) references to any other relevant documents and management plans.

**PART 2
DESIGN AND CONSTRUCTION REQUIREMENTS**

ARTICLE 1 LANING AND GEOMETRICS DESIGN CRITERIA

1.1 Order of Precedence

The Design for the laning and geometrics of Highway 1 and all access roads shall be in accordance with the criteria contained in this Article and the following codes and standards, and if there is any conflict between criteria contained in this Article and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the applicable Ministry Technical Circulars and Ministry Technical Bulletins;
- (c) BC Supplement to TAC;
- (d) TAC Geometric Design Guide;
- (e) DBSS; and
- (f) Forestry Engineering Manual.

1.2 General Requirements

- (a) The Design-Builder's Design for the Project Infrastructure shall be based on good engineering practices.
- (b) The laning and geometrics design criteria for the Project Infrastructure are set out in this Article.
- (c) For the purposes of the design of the New Project Infrastructure, Highway 1 shall be designed to the Provincial functional classification of a Primary Highway and a design classification of rural arterial divided (RAD).
- (d) Highway 1 shall be designed and constructed to have a minimum two travel lanes per direction.

1.3 Geometric Design Criteria

1.3.1 Highway 1 Design Criteria

Table 1.3.1 [Highway 1 Geometric Design Criteria] provides the highway geometric design criteria that shall be applied for the Design and Construction of Highway 1. Site specific additional requirements and/or exceptions (if any) to these requirements shall be in accordance with Section 1.3.2 [Highway 1 Design Notes] of this Part.

Table 1.3.1: Highway 1 Geometric Design Criteria

Element	Design Criteria	Notes
Design Classification	RAD	
Functional Classification	Primary	
Posted Speed	100 km/h	
Design Speed	100 km/h	
Basic Lanes	4	
Minimum Radius	440 m	See Section 1.3.2.1 of this Part
Equivalent Min. K Factor - Sag - Crest	45 Sag 52 Crest	See Section 1.3.2.2 of this Part
Maximum Grade	6%	See Section 1.3.2.2 of this Part
Minimum Grade	0.5% highway / 1.0% Bridges	See Section 1.3.2.2 of this Part
Maximum Superelevation	0.06 m/m	
Stopping Sight Distance	185 m	See Section 1.3.2.3 of this Part
Decision Sight Distance	315 m	See Section 1.3.2.4 of this Part
Lane Width	3.7 m	
Median Width	2.6 m with CMB	See Section 1.3.2.5 of this Part
Paved Shoulder Width - Outside - Inside	2.5 m outside 1.0 m inside	See Section 1.3.2.6 of this Part
Median Taper Ratio	60:1	
Clear Zone	9.0 m w/ 4:1 foreslope or CRB	See Section 1.3.2.7 of this Part
Design Vehicle	WB-20	

1.3.2 Highway 1 Design Notes

1.3.2.1 Horizontal Curves

- (a) The minimum horizontal curve radii for Provincial rural arterials shall be based on a maximum Superelevation of 6%, in accordance with the BC Supplement to TAC.
- (b) Minimum horizontal curve radii shall be increased on downgrades by 10% for each 1% increase in vertical grade over 3%, in accordance with Section 330 of the BC Supplement to TAC.
- (c) The radius of successive horizontal curves shall not be 50% less, nor 150% greater than the radius of the preceding curve unless a segmental spiral is provided.

1.3.2.2 Vertical Alignment

- (a) K-values for sag vertical curves and crest vertical curves shall be in accordance with the TAC Geometric Design Guide.
- (b) Minimum K-values for sag vertical curves shall be for non-illuminated roadways.

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- (c) Minimum K-values for crest vertical curves shall be based on 1.08 m driver height and 0.6 m tail light height.
- (d) The minimum gradient on vertical tangents shall be 0.5% on the highway and 1.0% on Bridge Decks.
- (e) Within vertical curves the cross slope shall be no less than 0.5%, wherever the longitudinal gradient is in a transition zone and less than 0.5%.
- (f) Bridges shall be located away from the low point of a sag curve in the vertical alignment of the road profile.
- (g) The maximum grade shall be 6% with the following two exceptions only:
 - (i) at the east end of the Project Site adjacent to the existing retaining wall between approximately LKI 8.3 and LKI 9.0, a maximum grade of 7.2% will be permitted to match the existing highway grade through this section; and
 - (ii) between LKI 8.0 and LKI 8.3, a maximum grade of 8.0% will be permitted.

1.3.2.3 Stopping Sight Distance

- (a) The minimum stopping sight distance provided in Table 1.3.1 [Highway 1 Geometric Design Criteria] of this Part is for level roadway.
- (b) The design value for stopping sight distance shall be adjusted for grades in accordance with Equation 2.5.3 of the TAC Geometric Design Guide.
- (c) A reduction in the lateral stopping sight distance due to median barrier, roadside barrier and Bridge parapets to an 80 km/h design speed will be acceptable. At locations where median barrier obstructs sight distance, the median and inside shoulder widths shall be modified in accordance with Section 1.3.2.5(b) and 1.3.2.6(b) of this Part.
- (d) A graphical method shall be used to determine the achieved stopping sight distance for each travel lane. The graphical method shall use a finished grade design model. The design model used shall include the roadway Superelevation and the height and location of any obstructions such as concrete median and roadside barriers, cut slopes, and upslope retaining walls that could obstruct sight lines.

1.3.2.4 Decision Sight Distance

Decision sight distance defined by Table 2.5.6 Column C of the TAC Geometric Design Guide shall be used.

1.3.2.5 Median Width

- (a) A 2.6 m wide paved median with CMB shall be provided except as modified in accordance with Section 1.3.2.5(b) of this Part.

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- (b) The paved median width shall be increased on horizontal curves where the stopping sight distance is reduced below what is required for 100 km/h design speed, and shall be increased in accordance with Section 630.02 note 6 from the BC Supplement to TAC.

1.3.2.6 Paved Shoulder Widths

- (a) The outside paved shoulder width shall be 2.5 m.
- (b) The inside paved shoulder width shall not be less than 1.0 m.

1.3.2.7 Clear Zone Requirements

Clear Zone distances and side slope treatments on Highway 1 shall be established in accordance with Section 620 of the BC Supplement to TAC. Clear Zone distance shall be minimum 9.0 m with a 4:1 front slope. Concrete barrier shall be provided where Clear Zone requirements cannot be met.

1.3.2.8 Traffic Barriers and Railings

- (a) Traffic barriers shall be placed in accordance with the BC Supplement to TAC.
- (b) Concrete median barrier shall be installed along Highway 1 in the median. For median locations on Structures, see Article 3 [Structural Design Criteria] of this Part.
- (c) Barrier setback to downslope retaining walls shall be in accordance with Figure 440.G of the BC Supplement to TAC.
- (d) Concrete roadside barrier flares shall be designed in accordance with Section 640 of the BC Supplement to TAC. The approach barrier flare dimensions shall be in accordance with Table 640.A of the BC Supplement to TAC.
- (e) All other barrier transitions and terminations (including traffic barriers with ends protected by terminals, or impact attenuators) shall be in accordance with AASHTO MASH, Test Level 3.
- (f) Fencing for pedestrians and cyclists shall be installed in accordance with Section 660 of the BC Supplement to TAC.

1.3.2.9 Zone of Intrusion

- (a) Zone of Intrusion (ZOI) criteria as defined in Section 7.6.2.6 of the TAC Geometric Design Guide shall be provided for different types of roadside obstacles or hazards as follows:
 - (i) Rigid hazards shall be located outside the cargo box ZOI as defined for a TL-4 barrier in Section 7.6.2.6 and Figure 7.6.3 of the TAC Geometric Design Guide. Examples of a rigid hazard include bridge piers or columns, abutments, upslope retaining walls, overhead signs, utility poles, and high mast lighting including structures that are not equipped with a breakaway support.

The rigid hazard shall be shielded from vehicle impact over their full length by a rigid F-shaped concrete barrier with a minimum height of 810 mm. A rigid

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concrete barrier is defined as being either cast-in-place with structural foundation, pinned, or otherwise not designed to move when impacted.

ZOI barrier protection for rigid hazards shall extend a minimum of 3 m up and downstream of any location of potential vehicle snagging on the hazard. The barrier height transition to and from the adjoining barriers shall be no steeper than 1(V):10(H).

Rigid hazards may be located inside the above-noted ZOI provided that any location of potential vehicle snagging is shielded by a concrete barrier that reduces the vehicle ZOI. The use of a barrier that reduces the vehicle ZOI requires written acceptance from the Province's Representative in accordance with the Consent Procedure. The Design-Builder shall provide evidence that the proposed concrete barrier reduces the ZOI through demonstrated history of use and acceptance by an authority having jurisdiction.

- (ii) When shielded, large roadside signs, luminaires, utility pole guy wires and other structures equipped with a breakaway support shall be located outside the truck cab ZOI as defined for a TL-4 barrier in Section 7.6.2.6 and Figure 7.6.3 of the TAC Geometric Design Guide. Large roadside signs are defined in Section 7.5.5.2 of the TAC Geometric Design Guide.

ZOI barrier protection for these hazards shall extend a minimum of 3 m upstream of any location of potential vehicle snagging on the hazard. The barrier height transition to and from the adjoining barriers shall be no steeper than 1(V):10(H).

- (iii) Small roadside signs are not subject to a ZOI limitation. Small roadside signs are defined in Section 7.5.5.3 of the TAC Geometric Design Guide and include small signs equipped with wooden and telespar breakaway supports.

- (b) For structural components of Bridges with a Superstructure load path above the Bridge Deck, including through-arch and through-truss spans, see requirements in Article 3 [Structural Design Criteria] of this Part. For cable-supported Structures, see requirements in Article 4 [Design of Cable-Supported Structures] of this Part.

1.3.2.10 Emergency and Maintenance Median Opening

A 20 m median opening for emergency and maintenance vehicles shall be provided within 500 m of the mid point of the Project alignment. The 20 m opening shall be measured from the end of the impact attenuator to the end of the impact attenuator. The median opening shall be located a minimum of 150 meters away from any access intersection. Decision sight distance to the median opening shall be provided. Signing requirements for the emergency and maintenance median opening are provided in Article 8 [Signing and Pavement Marking Design Criteria] of this Part.

1.3.2.11 Impact Attenuators

Impact attenuator shall be installed at both ends of the emergency and maintenance median opening. The impact attenuators shall be one of the products on the Recognized Product List, non-gating, designed for 100 km/h and must meet AASHTO MASH, Test Level 3.

1.3.2.12 Access for Maintenance

For avalanche and rock catchment ditches that are 6 m wide or greater, gravel access pads shall be provided to allow access for maintenance vehicles. The gravel access pads shall conform to the following criteria:

- (a) The gravel access pad shall be 4.0 m wide.
- (b) The grade of the access pad shall not be greater than 12.0%.
- (c) The access pad shall be located behind precast concrete barriers that can be easily removed when access is required.
- (d) For ditches that are 500 m or less in length then only one access pad is required.
- (e) For ditches that are greater than 500 m in length then two or more access pads will be required. An access pad shall be provided at a maximum spacing of 500 m.
- (f) The access pad shall have a minimum thickness of 450 mm of granular base material.
- (g) The minimum length of the gravel access pad shall be 10 meters at highway grade plus an adequate length of the ramp required for a tandem dump truck to safely access the ditch from the highway grade for both drive-in and back-in operations.

Any upslope benches or ditches within close proximity to the highway where water, rock or snow can accumulate and directly affect the functionality of the highway or rock fall / avalanche mitigation systems shall include provision for access including a continuous 2 m wide machine access for cleanout.

1.3.3 Access Roads

- (a) There are three existing accesses within the Project Site that shall be reconstructed as part of the Project Work:
 - (i) CP access located at LKI 4.9;
 - (ii) Dart Creek Forest Service Road access located at LKI 6.2; and
 - (iii) CP access located at LKI 8.5.
- (b) A new maintenance access shall be provided between LKI 6.5 and 7.5. The maintenance access shall be designed as a Type-1A access in accordance with Chapter 730 of the BC Supplement to TAC with a minimum throat width of 6.0 m.
- (c) All access intersections shall be designed as right-in and right-out configuration, and no left turns shall be permitted.
- (d) The access intersections noted in Section 1.3.3(a) of this Part shall be designed as Type-1B accesses with a minimum 9.0 m throat width in accordance with Chapter 730 of the BC Supplement to TAC.

1.3.4 CP Access Road Design Criteria

Where the highway improvement work results in the need to reconstruct a section or portion of the CP access roads, the design criteria in Table 1.3.4 [CP Access Road Geometric Design Criteria] shall apply. The two CP access roads are located at LKI 4.9 and LKI 8.5. The design shall be carried out in accordance with Section 510 Low-Volume Roads of the BC Supplement to TAC and the following design criteria.

Table 1.3.4 CP Access Road Geometric Design Criteria

Element	Design Criteria	Notes
Classification	Low Volume Road (LVR)	
Posted Speed	n/a	
Design Speed	30 km/h	
Basic Lanes	2-Lane Gravel Top	
Minimum Radius	30 m	
Equivalent Min. K Factor - Sag - Crest	4 Sag 3 Crest	
Maximum Grade	17%	See Section 1.3.5.1 of this Part
Maximum Superelevation	0.06 m/m	
Stopping Sight Distance	30 m	
Road Width	5.0 / 6.0 m Gravel Top	See Section 1.3.5.2 of this Part

1.3.5 CP Access Road Design Notes

1.3.5.1 Maximum Grade

The grade of the CP access roads along the approach to Highway 1 shall not exceed 4.0%. The approach grade shall extend 15 m back from the edge of pavement on Highway 1.

1.3.5.2 Road Width

The road width for the CP access road located at LKI 4.9 shall be 5.0 m. The road width for the CP access road located at LKI 8.5 shall be 6.0 m.

1.3.6 Dart Creek Forest Service Road Design Criteria

Where the highway improvement work results in the need to reconstruct a section or portion of the Dart Creek Forest Service roads, the design criteria in Table 1.3.6 [Dart Creek Forest Service Road Geometric Design Criteria] shall apply. The Dart Creek Forest Service roads are located at LKI 6.2. The design shall be carried out in accordance with the Forestry Engineering Manual Section 3.5.2 Road Design Criteria Table 3-2 and the following design criteria.

Table 1.3.6 Dart Creek Forest Service Road Geometric Design Criteria

Element	Design Criteria	Notes
Classification	FSR	
Posted Speed	n/a	
Design Speed	20 km/h	
Basic Lanes	1-Lane Gravel Top	
Minimum Radius	15 m	
Equivalent Min. K Factor - Sag - Crest	4 Sag 3 Crest	
Maximum Grade		See Section 1.3.7.1 of this Part
Favourable Sustained Grade	16%	
Favourable Short Pitch (<100 m)	20%	
Adverse Sustained Grade	9%	
Adverse Short Pitch (<100 m)	12%	
Favourable - Switchbacks	8%	
Stopping Sight Distance	40 m	
Road Width	4.0 m	See Section 1.3.7.2 of this Part

1.3.7 Dart Creek Forest Service Road Design Notes

1.3.7.1 Maximum Grade

The grade of the Dart Creek Forest Service Road along the approach to Highway 1 shall not exceed 4.0%. The approach grade shall extend 15 m back from the edge of pavement on Highway 1.

1.3.7.2 Road Width

The road width shall be widened around curves in accordance with Table 3-3 of the Forestry Engineering Manual.

1.3.7.3 Dart Creek Water Collection Access

- (a) The existing water collection area by the Dart Creek Forest Service Road shall be reinstated at its current location or at an alternate location, in the form and site acceptable to the Province’s Representative, if impacted by the construction of the Project Work. A single access for both Dart Creek Forest Service Road and the water collection area shall be provided. A separate access point on the Highway 1 to access the Dart Creek water collection area is not permitted. The access road to the Dart Creek water collection area shall be a 4.0 m wide gravel road. A turnaround facility at the end of the road to allow an HSU design vehicle to turnaround using a 3-point turn shall also be provided.
- (b) The Design-Builder shall take all reasonable measures to protect the Dart Creek water quality and quantity from damage by Construction activities.

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- (c) The Design-Builder is permitted to close the Dart Creek water collection area during Construction. The Province will provide an alternative source of potable water during all times that access to the Dart Creek water collection area is closed by Construction activities.
- (d) The Dart Creek water collection apparatus shall be reinstated at its current location or at an alternate location, in the form and site acceptable to the Province's Representative, if it is impacted by the construction of the Project Work. The water collection apparatus shall be constructed to provide equal or better functionality as the existing system. This shall include but not be limited to:
 - (i) an aquifer fed collection pipe;
 - (ii) a water discharge pipe supported at an elevation nominally 3m above grade that delivers water at the same or better rate as that existing prior to construction; and
 - (iii) the discharge pipe support shall be protected from vehicle impact.

1.3.8 Existing Highway 1 – LKI 6.5 to LKI 7.5

The existing Highway 1 width between approximately LKI 6.5 and LKI 7.5 shall be retained in the New Project Infrastructure from back of ditch to crest of down slope, except those portions of existing Highway 1 that form part of the new Highway. The existing Highway 1 shall be retained in accordance with the following:

- (a) The resulting rock fall and debris flow risk to CP Lands shall be maintained at or below the existing rock fall and debris flow risk in accordance with Article 5 [Geotechnical] of this Part.
- (b) The resulting avalanche risk to CP Lands shall be maintained at or below the existing avalanche risk in accordance with Article 10 [Snow Avalanche Design Criteria] of this Part.
- (c) The existing bin wall at approximately LKI 7.36 shall be removed and replaced. The new Structure shall be in accordance with the applicable standards contained in Article 3 [Structural Design Criteria] of this Part.
- (d) The existing culvert at approximately LKI 7.36 shall be removed and replaced. The replacement culvert shall have the same capacity as the existing culvert. A trash rack shall be provided at the upstream end of the culvert. The replacement culvert shall be in accordance with the applicable standards contained in Article 7 [Drainage Design Criteria] of this Part.
- (e) Maintenance access shall be provided at the east end where the existing retained section of Highway 1 intersects with the New Project Infrastructure. The maintenance access shall be in accordance with Section 1.3.2.12 [Access for Maintenance] and Section 1.3.3 [Access Roads] of this Part.
- (f) The existing asphalt pavement shall be removed and the surface graded to ensure positive drainage.

1.3.9 Existing Highway 1 – Other Locations

Portions of existing Highway 1 that are retained in the New Project Infrastructure at the completion of construction shall have maintenance access and be in accordance with the following:

- (a) The resulting rock fall and debris flow risk to CP Lands and travelling public shall be maintained at or below the existing rock fall and debris flow risk in accordance with Article 5 [Geotechnical] of this Part.
- (b) The resulting avalanche risk to CP Lands and travelling public shall be maintained at or below the existing avalanche risk in accordance with Article 10 [Snow Avalanche Design Criteria] of this Part.
- (c) Access for maintenance vehicles shall be provided to the bottom of any permanent rock fall / avalanche mitigation systems, including ditches. The maintenance access shall be in accordance with Section 1.3.2.12 [Access for Maintenance] of this Part.
- (d) The existing asphalt pavement shall be removed and the surface graded to ensure positive drainage.

ARTICLE 2 PAVEMENTS

2.1 Order of Precedence

Pavement design and construction shall be in accordance with the criteria contained in this Article and the Reference Documents, and if there is any conflict between the criteria contained in this Article and any Reference Document, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) Technical Circular T-01/15; and
- (c) the DBSS.

2.2 General Requirements

- (a) Where Technical Circular T-01/15 refers to the Standard Specifications for Highway Construction, the corresponding sections of the DBSS shall apply. Designs using crushed granular equivalency (CGE) factors are not permitted. The use of alternate pavement design methodologies such as the mechanistic empirical design method is not precluded. Guidelines for parameters for design are given in Section 3.6 of Technical Circular T 01/15 and shall be considered as minimum criteria. Resilient moduli for subgrades are given in Table 3 of Technical Circular T 01/15 and shall be considered as maximum values unless directly determined by resilient modulus testing or by back calculation from falling weight deflectometer (FWD) testing.
- (b) Pavement structural design for Highway 1 shall be carried out for a “Pavement Structure Type A” as defined in Technical Circular T 01/15. The minimum final design thickness of asphalt pavement shall be 150 mm under the Travelled Lanes and 100 mm under the paved

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Shoulders. The minimum thickness of select granular sub-base (SGSB) in rock cut subgrade areas shall be 300 mm.

- (c) Further to DBSS Section 165.09 and 194.27, all temporary access, detour and/or haul roads associated with the Project shall be designed, constructed and operated in accordance with the requirements of Part 4 [Traffic Management] of this Schedule.
- (d) Detours for Highway 1 traffic shall be paved.

2.3 Reference Documents

As per Appendix A [Reference Documents] to Schedule 1.

2.4 Asphalt Pavements

- (a) Only asphalt pavements shall be accepted.
- (b) Sulphur modified asphalt pavements are not permitted.
- (c) Graded aggregate seal coat is not permitted.
- (d) Final Travelled Lanes and Shoulders shall be paved with new asphalt.
- (e) Asphalt overlays, if any, shall have a minimum thickness of 40 mm.
- (f) Existing asphalt pavement shall be removed in accordance with Section 2.5 [Use of Existing Asphalt Pavement] of this Part, where it would underlie the new Highway 1.
- (g) Except for Highway 1, in areas where there is an increase in the road elevation, new pavements may be constructed without removal of the existing asphalt provided that a 150 mm minimum thickness of new base course gravel is placed on top of the existing asphalt and the slope of the underlying existing asphalt permits drainage without ponding of water on top of the existing asphalt surface.
- (h) All asphalt paving of final roadways shall be conducted in accordance with DBSS 502.
- (i) Asphalt used as a levelling course, curb or traffic island shall be conducted in accordance with DBSS 502.
- (j) All milling shall be conducted in accordance with DBSS 511 (Cold Milling).
- (k) Shoulder build-up as outlined below shall mean the material placed on the crushed base course along the Shoulders and abutting the lower course(s) of pavement prior to paving the Shoulder.
- (l) Prime coats on prepared granular bases and tack coats between successive lifts of asphalt pavement are required and shall be applied as per DBSS 502.
- (m) The pavement shall include a Ministry approved asphalt cement meeting the requirements of DBSS 952 except as modified herein.

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- (n) Top lift asphalt paving shall consist of a Class 1 -16 mm medium mix with a PG64-34 polymer modified asphalt cement. All other lifts of asphalt paving shall consist of 19 mm medium mix with PG64-34 polymer modified asphalt cement.
- (o) An antistrip additive, chosen by the Design-Builder from the Recognized Products List, shall be added to all asphalt mixes.

2.5 Use of Existing Asphalt Pavement

The Province is taking initiatives to reduce greenhouse gas emissions and has identified the re-use of the existing asphalt pavement as a reduction strategy. All existing asphalt pavements removed from the existing Highway 1 shall be fully utilized within the Project in accordance with the following:

- (a) Contrary to DBSS 505, the top lift of asphalt pavement shall have zero percent (0%) Recycled Asphalt Pavement (RAP).
- (b) Where the material is to be used in RAP, only asphalt pavement material milled from the Travelled Lanes will be permitted.
- (c) The Design-Builder may produce crushed base course (CBC), select granular sub-base (SGSB), shoulder build-up or shoulder aggregate by milling the existing pavement and combining it with other natural aggregate products. All milled material used for these purposes shall be thoroughly mixed with other granular aggregate material. The amount of asphalt coated milled material by mass shall not exceed thirty percent (30%) of the final product; excepting the top 150 mm of CBC which shall have a maximum of fifty percent (50%) asphalt coated particles.
- (d) The Design-Builder shall ensure the milled material meets the specifications for the intended product in accordance with DBSS 202;
- (e) The Design-Builder shall only incorporate ripped pavement in embankment construction provided the ripped material is broken to a maximum size of 150 mm. The resulting material shall be thoroughly mixed with other borrow material and shall be placed as embankment.
- (f) The Design-Builder may utilize material produced by reclaiming asphalt pavement and some or all of the underlying gravels as SGSB or shoulder build-up. The amount of asphalt coated particles by mass shall not exceed thirty percent (30%) of the final product; excepting the top 150 mm of CBC which shall have a maximum of fifty percent (50%) asphalt coated particles. The Design-Builder shall ensure the reclaimed asphalt and base material meets the specifications for the intended product in accordance with DBSS 202. Combination with other natural aggregate may be necessary to meet the specification. Aggregate materials that are provided in accordance with DBSS 202 and that contain asphalt coated particles shall be tested for conformance with the relevant gradation specifications after the addition of the asphalt coated particles.
- (g) In areas where the existing Highway 1 is to be retained in the New Project Infrastructure, the existing pavement shall be removed and the surface graded to ensure positive drainage. In areas where the existing Highway 1 is not to be retained in the New Project Infrastructure, the existing pavement shall be removed and scarifying of exposed subgrade shall be

performed and the surface graded to ensure positive drainage. Scarifying shall be in accordance with DBSS 165.09.03 and DBSS 751. Contrary to DBSS 751.31.04, scarified surfaces shall be re-vegetated with seeding in accordance with Section 9.3 [Landscaping Requirements] of this Part.

2.6 Tarping Paving Aggregates

As part of the Province's initiative to reduce greenhouse gas emissions, stockpiles of paving aggregates shall be protected from exposure to excess moisture from rain and snow.

- (a) The Design-Builder shall tarp all pavement aggregate stockpiles produced between September 1 and April 1. Upon completion of the production process, tarps shall be placed on the stockpiles to minimize erosion and moisture infiltration. In addition, all paving aggregate stockpiles not utilized prior to September 1 shall be tarped;
- (b) For stockpiles utilized between September 1 and April 1, the Design-Builder shall ensure these stockpiles are protected from inclement weather by re-tarping at the end of each shift.
- (c) The Design-Builder shall supply tarps made of impervious material with a preference for re-useable, recyclable or bio-degradable material. When using several tarps to cover a stockpile surface, the tarps shall be started at the bottom by placing the lowermost tarp first and laying successive tarps in an overlapping shingle fashion to shed water and prevent seepage through the edges.
- (d) Tarps shall be secured to prevent them from being dislodged by the weather. Regular inspections shall be carried out by the Design-Builder to ensure tarps are being properly retained and that no holes, tears or rips are present. Tarps that have been damaged or removed or are otherwise not functioning as required shall be promptly rectified by the Design-Builder.
- (e) Prior to constructing the paving aggregate stockpiles, the Design-Builder shall ensure that the bases of the stockpile sites are sloped to facilitate positive drainage away from the stockpiles. If necessary, drainage ditching shall be installed around the perimeter of stockpiles to maintain drainage of the base of the stockpiles.
- (f) The Design-Builder shall determine and document the moisture content of individual stockpiles during production and prior to asphalt production. Testing frequency shall be a minimum of one moisture test per sub-lot per product. Test data shall be provided to the Province's Representative upon request.

2.7 Pavement Acceptance at Substantial Completion

- (a) Pavement acceptance at Substantial Completion shall be based on a walkover survey carried out with the Province's Representative, roughness testing as per Section 2.7.1 [Roughness] of this Part, and an assessment of structural adequacy by testing with a falling weight deflectometer as per Section 2.7.2 [Pavement Structural Capacity] of this Part.
- (b) The walkover survey of the final pavement with the Province's Representative shall be carried out within one month of Substantial Completion to identify workmanship defects as

per DBSS 502.32 and Section 6.6 [Inspection for Substantial Completion] of Part 3 of this Schedule.

- (c) These acceptance criteria are in addition to the requirements outlined in DBSS 502, and acceptance of the Project Work for the purpose of Substantial Completion requires that all of these criteria have been satisfied and that the workmanship defects have been repaired in manner acceptable to the Province's Representative.

2.7.1 Roughness

- (a) Roughness testing using the International Roughness Index (IRI) shall be conducted at the end of Construction in accordance with DBSS 502, however contrary to DBSS 502 the Design-Builder shall be responsible for conducting the testing.
- (b) The roughness criteria identified in this Article shall take precedence over the DBSS;
- (c) The roughness for all travel lanes shall have an IRI measured in accordance with the DBSS of:
 - (i) less than or equal to 0.8 m/km in 10% of Sub-Lots;
 - (ii) less than or equal to 1.0 m/km in 25% of Sub-Lots;
 - (iii) less than or equal to 1.2 m/km in 95% of Sub-Lots; and
 - (iv) less than or equal to 1.6 m/km in 100% of Sub-Lots.
- (d) Contrary to the DBSS, excluded surfaces shall be limited to:
 - (i) pavement surfaces within 3 m of a Bridge end;
 - (ii) concrete surfaced Bridges; and
 - (iii) concrete surfaced Bridge approach slabs.
- (e) All pavements must be smooth, free of bumps, segregation and obvious defects.

2.7.2 Pavement Structural Capacity

In addition to the requirements outlined in DBSS 502, the following shall apply:

- (a) The Design-Builder shall carry out a pavement surface deflection survey using a falling weight deflectometer (FWD) in accordance with ASTM D4694 and ASTM D4695.
- (b) Tests shall be carried out at a frequency not exceeding 50 m along each Travelled Lane of new or rehabilitated roads. The test points shall be staggered by one-half the spacing along adjacent lanes.
- (c) Testing shall only be carried out between May 1 and October 30, and the temperature of the pavement layers shall above 0°C.

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- (d) Load applications shall consist of a seating load of approximately 20 kN, and loads of 30 kN, 40 kN and 50 kN.
- (e) This testing shall be analyzed in accordance with AASHTO Guide for Design of Pavement Structures and a pavement completion report containing the information in Section 2.9 [Pavement Design and Construction Reporting] of this Part shall be provided to verify that the constructed pavement structure meets the design requirements for structural adequacy during the design life of the pavement.

2.8 Pavement Acceptance at End of General Project Work Defect Warranty Period

- (a) The Design-Builder shall conduct pavement surface distress and rutting surveys between 90 days and 40 days prior to the end of the General Project Work Defect Warranty Period and the results shall be reported not less than 30 days prior to the end of the General Project Work Defect Warranty Period, or at times agreed with the Province's Representative.
- (b) Pavement surface distress surveys shall be conducted and reported in accordance with the Pavement Surface Condition Rating Manual. The Pavement Surface Distress Index (PDI) as described in the Pavement Surface Condition Rating Manual shall be calculated using the current Ministry PDI model. Within each 50 m section, the PDI shall meet or exceed 8.5 on a scale of 1 to 10 (10 being best), at the end of the General Project Work Defect Warranty Period. Without reducing overall pavement thickness, the Design-Builder shall rectify, in accordance with the remedial Project Work outlined in DBSS 502, any pavement within the sections which do not meet or exceed a PDI of 8.5.
- (c) Rut depth measurements shall be made on final pavements using automated or manual surveying equipment. Without reducing overall pavement thickness, for any pavement that is rutted in any wheel path, in excess of 10 mm, the Design-Builder shall rectify the Project Work in accordance with DBSS 502.

2.9 Pavement Design and Construction Reporting

- (a) The Design Management Plan, as described in Article 1 [Design Management Plan and Technical Appraisal Forms] of Part 3 of this Schedule, shall contain a work plan outlining the issues, risks and assumptions to be clarified and addressed and planned activities specific to pavement assessment and design, including, but not limited to, the following:
 - (i) a description of the scope and methodology of the proposed site investigations, laboratory and field testing to obtain specific information for the structural design of the pavement and for provision of recommendations for construction of the pavement;
 - (ii) a description of the methodology for carrying out the pavement design; and
 - (iii) a description of methodology for inspections and testing during construction to validate designs including assumptions and recommendations, and also at Substantial Completion and at the end of the General Project Work Defect Warranty Period, to confirm the pavement engineering aspects of the Project Work satisfy acceptance criteria.

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- (b) A Pavement Design Report shall be prepared for the Project and submitted to the Province's Representative in accordance with Article 2 [Design Submissions, Review and Reports] of Part 3 of this Schedule.
- (c) In addition to the requirements listed elsewhere in this Schedule 4 and the DBSS, the Design-Builder shall submit the following documentation for pavement construction:
 - (i) results of roughness testing carried out at the end of pavement construction, as per Section 2.7.1 [Roughness] of this Part;
 - (ii) results of falling weight deflectometer (FWD) testing at Substantial Completion, as per Section 2.7.2 [Pavement Structural Capacity] of this Part; and
 - (iii) results of a pavement surface distress and rutting survey; carried out prior to the end of the General Project Work Defect Warranty Period, as per Section 2.7 [Pavement Acceptance at Substantial Completion] of this Part and Article 6 [Construction Certification] of Part 3 of this Schedule.
- (d) All reports and drawings shall be sealed by a qualified Professional Engineer.

ARTICLE 3 STRUCTURAL DESIGN CRITERIA

3.1 Order of Precedence

- (a) The Design and Construction of Structures shall be in accordance with the criteria contained in this Article and the following codes and standards. If there is a conflict between the criteria contained in this Article and any Reference Documents, the following shall apply in descending order of precedence:
 - (i) the criteria contained in this Article;
 - (ii) Bridge Standards and Procedures Manual, including the BC Supplement to CAN/CSA-S6-14;
 - (iii) DBSS;
 - (iv) CAN/CSA-S6-14; and
 - (v) AASHTO LRFD Bridge Design Specifications.
- (b) For segmental concrete Bridges, items not covered by the above-noted documents shall be designed in accordance with the following, in descending order of precedence:
 - (i) AASHTO Guide Specifications for Design and Construction of Segmental Concrete Bridges; and
 - (ii) PTI TAB.1-06.
- (c) For cable-supported Structures, minimum design requirements and criteria documents are provided in Article 4 [Design of Cable-Supported Structures] of this Part.

3.2 General Requirements

The following general requirements shall apply to all Structures.

3.2.1 Acceptable Products

All products used on the Project shall meet the applicable Project Requirements and shall be in accordance with the intent of the Recognized Product List. The use of products that are not on the Recognized Products List requires written acceptance from the Province's Representative in accordance with the Consent Procedure.

3.2.2 Unacceptable Materials and Systems

The following are not permitted to be used on the Project:

- (a) stay-in-place metal formwork, including steel Bridge Decking;
- (b) aluminium, steel grid or composite sandwich Bridge Decking;
- (c) impressed current cathodic protection system;
- (d) modular Bridge Deck joints;
- (e) Bridge Deck heating systems;
- (f) timber components;
- (g) proprietary composite steel/concrete girders;
- (h) full-depth precast Bridge Deck panels;
- (i) fibre reinforced polymer Bridge Deck systems;
- (j) fibre reinforced polymer, epoxy coated, galvanized or proprietary reinforcement;
- (k) asphaltic plug Bridge Deck joints;
- (l) unbonded post-tensioning tendons;
- (m) mechanically stabilized earth (MSE) walls with dry cast concrete block facings;
- (n) metal bin walls;
- (o) hog fuel (wood waste);
- (p) shredded rubber (such as from tires) as fill;
- (q) two stage MSE walls, as referenced in Section 6.15.2.1 of the BC Supplement to CAN/CSA-S6-14; and

- (r) previously used materials.

Exposed steel sheet pile walls and MSE walls with wire facings are only permitted with the consent of the Province's Representative in accordance with the Consent Procedure. These systems may only be considered where: (i) not supporting Highway 1; (ii) not visible to the public; and (iii) not be exposed to chlorides.

3.2.3 Structure Identification Numbers

Structure identification numbers, as assigned by the Province's Representative, shall be incorporated into the Structures in accordance with Ministry standard practices. The Province will make available the numeral forms for the Design-Builder's use when the Design-Builder is required to imprint an identification number into concrete portions of the Structure. The Design-Builder shall return the numeral forms to the Province's Representative in good clean condition upon completion of the Project.

3.3 New Structures - General

This section includes the requirements for all new Structures required for the Project.

3.3.1 Design for Structures

The following requirements shall apply to all new Structures:

- (a) The live load classification shall be BCL 625.
- (b) For fatigue design, the greater of site-specific traffic forecasts over the Design Life of the Structure and Class A Highway ADTT shall be used.
- (c) Any Structures designed to provide protection against avalanches and rock fall shall be designed in accordance with the recommendations of a specialist experienced in the design of these Structures and is a Professional Engineer licensed in the Province of BC.
- (d) For seismic design, all Structures supporting Highway 1 shall be classified as "Major-Route Bridges" and shall be designed in accordance with CAN/CSA-S6-14. All other Structures (not on or supporting Highway 1) shall be classified as "Other Bridges". If performance-based seismic design is required, the EGBC Seismic Design Guidelines shall apply to this Project.
- (e) Design criteria for cable-supported Structures are provided in Article 4 [Design of Cable-Supported Structures] of this Part.

3.3.2 Design Life

- (a) All permanent Structures shall be designed to have a durability that ensures a minimum Design Life of 75 years in accordance with CAN/CSA-S6-14 without replacement of any major components, including Bridge Deck, girders, Substructure and Foundations.
- (b) The Design of any replaceable Bridge components, including bearings and Bridge Deck joints, shall allow for inspection and maintenance access as well as ease of replacement.

3.3.3 Design of Structures for Snow and Avalanches

- (a) Structures shall be designed for both lateral and vertical loading from Avalanches, Avalanche deposits, accumulations of snow from snowfall, sluffing of accumulations and plowed snow, and be designed in accordance with the following:
 - (i) Avalanche loading on a Structure shall be determined in accordance with Article 10 [Snow Avalanche Design Criteria] of this Part;
 - (ii) Avalanche and snow loading shall be considered an Exceptional Load “F” in accordance with Table 3.1 in CAN/CSA-S6-14; and
 - (iii) Bridges, Major Retaining Walls, and Avalanche Mitigation Structures shall be designed for a minimum 1 in 300-year Avalanche event, except that Avalanche Mitigation Structures may be designed for a minimum 1 in 100-year Avalanche event when:
 - (A) not providing protection to a Bridge;
 - (B) not directly supporting Highway 1; or
 - (C) not located within 5 m (measured horizontally) of a Travelled Lane on Highway 1.
- (b) All structural components subject to Avalanche loading shall be designed such that undesirable failure modes such as brittle collapse or buckling are avoided.
- (c) Design of Avalanche mitigation measures such as ditches shall include a minimum 1 m deposit of compacted snow already in place at time of the Avalanche design event, for locations where access for maintenance has been provided in accordance with Article 1 [Laning and Geometrics Design Criteria] of this Part.

3.3.4 Design of Structures Supporting Rock Fall Attenuator Systems

Rock fall attenuator systems shall be designed in accordance with Article 5 [Geotechnical] of this Part. Structures supporting rock fall attenuators shall be designed in accordance with the requirements of this Article. For design of these supporting Structures, the rock fall loading shall be considered an Exceptional Load “F” in accordance with Table 3.1 in CAN/CSA-S6-14.

3.3.5 Inspection and Maintenance Access

- (a) Components that are not completely accessible using conventional and readily available inspection equipment, such as man lifts and snoopers trucks, shall be provided with permanent access that is suitable for inspection and maintenance activities. Permanent standard size door access shall be provided to and inside hollow abutments and piers and towers to allow inspection and maintenance.
- (b) All access to interiors of Structures shall be blocked for wildlife access.

- (c) A minimum 6.0 m horizontal clearance shall be provided between the pier and abutment wall face to facilitate inspection access.

3.3.6 Clearances

- (a) The minimum vertical clearance between top of finished roadway and overhead obstructions shall be 5.5 m. The Design shall ensure that the minimum vertical clearances are met throughout the Design Life of all Structures without additional intervention, such as jacking or pavement removal.
- (b) Structural components including bridge piers, retaining walls, and poles shall be outside the Clear Zone of Highway 1, in accordance with Article 1 [Laning and Geometrics Design Criteria] of this Part, unless protected from vehicle collision over their full length by a rigid concrete barrier. Requirements to protect structural and non-structural components in the Zone of Intrusion are included in Article 1 [Laning and Geometrics Design Criteria] of this Part.
- (c) Structural components of Bridges with a Superstructure load path above the Bridge Deck, including through-arch and through-truss spans, shall have a minimum clearance from the Structural Barrier to the Structural component as shown in Figure 3.3.6. For cable-supported Structures, see Article 4 [Design of Cable-Supported Structures] of this Part.

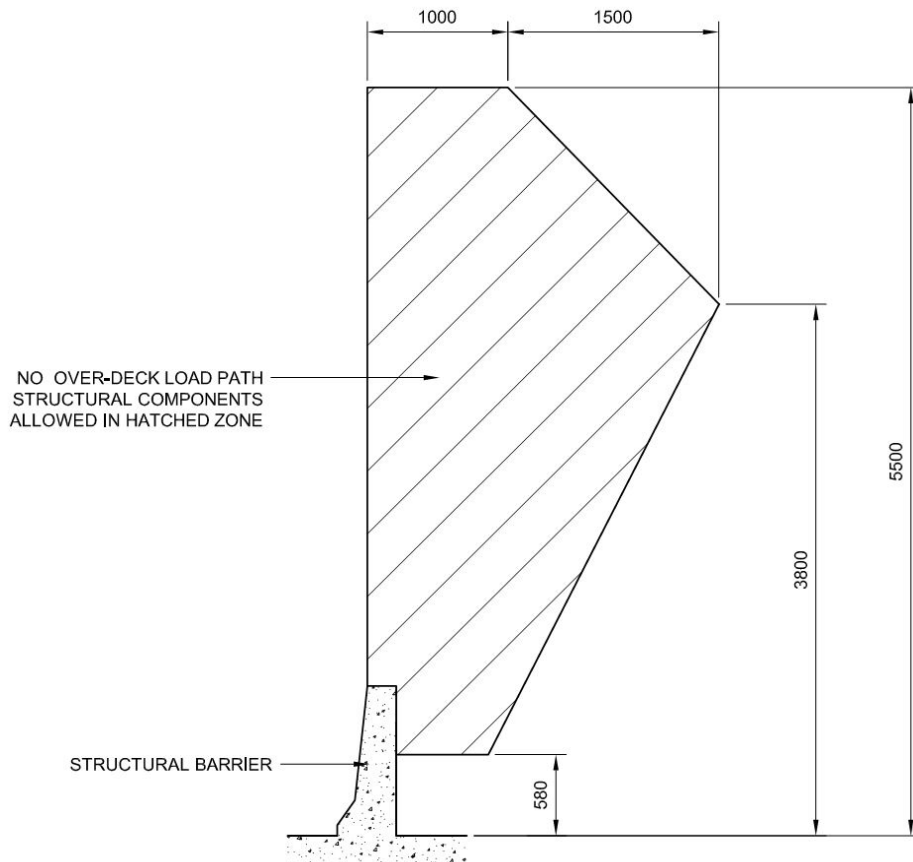


Figure 3.3.6: Clearance to Structural Components of Bridges with a Load Path Above the Bridge Deck

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- (d) All Structures spanning over Highway 1 shall be clear span. Substructure components shall not be allowed in the median of Highway 1.
- (e) The minimum vertical clearance below all Bridge soffits shall accommodate a 1 in 300-year event that takes into account both previously deposited snow on the ground as well as the flowing Avalanche snow. Previously deposited snow on the ground shall include:
 - (i) snowfall accumulation;
 - (ii) 1 m depth of snow plowed from the Bridge; and
 - (iii) prior Avalanche deposits, which may be deposits either from large flow avalanches from the Avalanche Path above, or small loose snow Avalanches from adjacent slopes (commonly referred to as sluffs).

The analysis shall be completed in accordance with the requirements of Article 10 [Snow Avalanche Design Criteria] of this Part.

3.3.7 Aesthetics

- (a) Structures shall be designed in accordance with the guidelines in the Manual of Aesthetic Design Practice using a “Baseline” classification. Aesthetic consideration shall include but not be limited to the overall Structure form, harmony in element dimensions, shapes, finishes, columns, and relationship to the surroundings.
- (b) All formed concrete surfaces, including both cast-in-place and precast components, that are visible from Highway 1 shall have a consistent pattern finish throughout the Project corridor. The patterned finish shall be “Fractured Fin” and an example of the finish shall be submitted to the Province’s Representative for acceptance prior to Construction.
- (c) All structural concrete surfaces that are finished using sprayed concrete (such as shotcrete), and are visible from Highway 1, shall have the appearance of a natural rock finish. The natural rock finish shall be achieved by using a stamp (or similar) or hand-trowelling to achieve the appearance of natural rock jointing. An example of the finish shall be submitted to the Province’s Representative for acceptance prior to Construction. Examples of recently-constructed shotcrete walls with finishes that would be acceptable to the Province are contained in the memo titled “KHCP4 Recent Examples of Shotcrete Walls with Natural Rock Finishes in BC” included in the Data Room.
- (d) A patterned concrete finish is not required for retaining wall areas that are not visible from Highway 1 (such as obscured by an adjacent precast concrete barrier).
- (e) Anti-graffiti finish shall be applied to all exposed concrete surfaces that are visible from Highway 1 as per DBSS 308. This requirement does not apply to concrete barriers.
- (f) The tops of all walls shall be finished with a smooth top line to provide an aesthetically pleasing appearance. All MSE walls shall have a cast-in-place concrete coping.
- (g) Structural steel and concrete interfaces shall be detailed or protected such that no rust staining on the concrete occurs.

3.3.8 Foundations

- (a) Structures shall be designed such that all Foundation deformations, clearances, and other performance requirements in this Agreement are met over the Design Life of the Structure.
- (b) Relevant SLS and ULS load combinations for piles as well as details of pile splices and tips shall be indicated on the Design drawings. Anticipated pile tip elevation and corresponding pile lengths shall be shown on the drawings. Maximum (highest elevation) pile tip elevations and corresponding minimum pile lengths shall be shown on the drawings.
- (c) Piling shall be aligned so that the finished pile is straight from end to end.
- (d) All field splice welding of steel piles shall conform in quality and workmanship to the latest edition of CAN/CSA W59. The weld area shall be dry and wind free during welding and shall cool without chilling following welding. The welding shall be undertaken by a company approved by the Canadian Welding Bureau to the requirements of CAN/CSA W47.1 Division 2 or better.
- (e) Sufficient lengths of pile above cut-off shall be allowed so that no part of the pile damaged during installation remains in the completed Project Work.
- (f) All steel pipe piles shall be temporarily capped after installation for safety reasons.
- (g) Material for H piles and end plates for pipe piles shall conform to CAN/CSA-G40.21-M, Grade 300W. Steel pipes for pipe piles shall conform to ASTM A252, Grade 3 or API 5L Grade (X42 or X52). Previously used or coated H piling or pipe piles are not permitted. The boron content of steel pipes shall not exceed 0.0008%. Steel pipes produced to ASTM A252 are subject to the following additional requirements:
 - (i) piles with seams shall be fabricated with full penetration butt welds;
 - (ii) chemical analysis of the material shall show an equivalent carbon content of less than 0.43%, and a total carbon content of less than 0.3%.
 - (iii) the full length of external welds and reasonable accessible internal welds shall be visually inspected in accordance with CAN/CSA W59 clause 11;
 - (iv) alignment deviations shall be less than 3 mm; and
 - (v) welds shall be ultrasonically tested by an independent testing firm in accordance with CAN/CSA W59 clause 11.
- (h) Mill certificates and non-destructive testing records, confirming seam weld quality, shall be submitted to the Province's Representative. Manufacturer's identification marks on the pile shall be readily identifiable on the Project Site and shall match the heat numbers on the mill certificates provided. Sections of pile shorter than 3 m shall not be used except to finish a pile to final cut off elevation.
- (i) Where mill test reports originate from a mill outside Canada or the United States of America, the Design-Builder shall have mill test reports verified by a certified laboratory in Canada by

testing the material to the specified material standards, including boron content. The testing laboratory shall be certified to ISO/IEC 17025 by an organization accredited by the Standards Council of Canada for the tests required. Samples for testing shall be collected by personnel employed by the certified laboratory. A verification letter shall be provided by the certified laboratory that includes but not limited to, the applicable mill test reports, testing standards, date of verification testing, and declaration of material compliance with the Design and Construction Requirements of this Article. The verification letter shall be signed by an authorized officer of the certified laboratory.

- (j) Unless otherwise specified by the Design-Builder, the maximum horizontal tolerance from locations shown on the Design drawings for piles shall be 75 mm at the ground or water line. The maximum deviation from plumb or specified batter below water or ground line shall be 20 mm per metre.
- (k) The Design-Builder shall maintain pile-driving records as directed by the Province's Representative and in accordance with the Inspection and Testing Plan.
- (l) Material and construction specifications for deep Foundation elements, including testing requirements and acceptable criteria, shall be developed and included in the geotechnical design submissions.
- (m) Design and construction of drilled shafts, piles, rock sockets, and other deep Foundation elements not covered by CAN/CSA-S6-14 and BC Supplement to CAN/CSA-S6-14, shall be in accordance with AASHTO LRFD Bridge Design Specifications.

3.3.9 Piers, Abutments, Wing Walls and Return Walls

Water ingress into or onto the Substructures or abutment wall backfill from the Superstructure above shall be prevented. Joints between the Superstructure (including end diaphragm) and the Substructure shall be waterproofed.

3.3.10 Structural Steel

- (a) The grade for steel Superstructure members shall be AT for plates and A for rolled sections.
- (b) All structural steel components above the Bridge Deck shall be considered as exposed to de-icing chemicals and shall be coated in accordance with the BC Supplement to CAN/CSA-S6-14.
- (c) Steel shall have a boron content not exceeding 0.0008%. Where mill test reports originate from a mill outside Canada or the United States of America, the Design-Builder shall have mill test reports verified by a certified laboratory in Canada by testing the material to the specified material standards, including boron content. The testing laboratory shall be certified to ISO/IEC 17025 by an organization accredited by the Standards Council of Canada for the tests required. Samples for testing shall be collected by personnel employed by the certified laboratory. A verification letter shall be provided by the certified laboratory that includes at a minimum, the applicable mill test reports, testing standards, date of verification testing, and declaration of material compliance with the Design and Construction Requirements of this Article. The verification letter shall be signed by an authorized officer of the certified laboratory.

- (d) All components fabricated outside of Canada or the United States of America shall be shipped to a shop located in Canada that is certified by the Canadian Welding Bureau in accordance with CAN/CSA W47.1 to Division 1 and by the Canadian Institute of Steel Construction in the category of steel Bridges for re-inspection and testing. The components shall be in a condition that facilitates all re-inspection and testing requirements. The re-inspection and testing at the Canadian shop shall be completed in accordance with DBSS 421. The Design-Builder shall also arrange for inspection by a CAN/CSA 178.2 Level III certified welding inspector accredited with CAN/CSA W47.1/W59 to inspect all components to ensure that they were undamaged during transportation and shop assembly.

3.3.11 Corrosion Protection for Steel Below Ground

- (a) For each steel surface either (i) exposed to soil, or (ii) at the interface or below the water table, the Design-Builder shall determine the corrosion mitigation approach using a specific analysis prescribed by a corrosion specialist. If the mechanism to address corrosion is to add sacrificial thickness for each exposed surface of the steel components, then losses shall be computed using a 100-year Design Life, based on the following rates:

Galvanization Loss	> 15 micrometers/year for first two years > 4 micrometers/year for subsequent years
Carbon Steel Loss	> 12 micrometers/year after zinc depletion

- (b) Steel piles shall be sized for a corrosion allowance of at least 3 mm over the life of the Structure for each exposed face. Coated piles shall not be allowed.
- (c) The prescribed loss rates and corrosion allowance may be refined if a detailed corrosion analysis is undertaken. Detailed corrosion analysis shall include soil corrosivity testing and analysis shall be undertaken by, or under the supervision of, a NACE-certified corrosion professional.

3.3.12 Reinforcing Steel

- (a) All reinforcing steel shall be stainless where required for corrosion protection as per Section 8.11.2.3 of the BC Supplement to CAN/CSA-S6-14.
- (b) Connectors for reinforcing bars shall be mechanical couplers without bar offset, and shall be the same material as bars to be spliced, and shall be in accordance with the DBSS 412.34.03.
- (c) Only one type of black bar shall be used for the Project (such as W or R).
- (d) Welded splices or joints in reinforcing steel shall not be permitted.

3.3.13 Prestressing Steel

- (a) Prestressing strands shall be seven wire, uncoated, low relaxation, Grade 1860 MPa ultimate.
- (b) Prestressing strands shall be nominal 12.7 mm, 15.2 mm or 15.7 mm diameter.

- (c) Unbonded strands shall not be used.

3.3.14 Concrete

- (a) All concrete Project Work shall be in accordance with DBSS 211 and 413, unless otherwise modified by this Article. All precast concrete including footings, pile caps, ballast walls, wall panels, girders, and Bridge Deck panels shall be in accordance with DBSS 415.
- (b) Site specific testing for sulphate exposure shall be conducted by the Design-Builder. Further to DBSS 211.04.02.01, Type GUL (General Use Limestone) Cement may be used for concrete components, subject to the determination of an acceptable site exposure category and material compliance testing. GUL cement is not permitted for elements with a very severe sulphate exposure, or in any concrete girders (prestressed, post-tensioned, or cast-in-place). The Design-Builder shall determine the sulphate exposure class of all concrete elements as defined in Table 3 [Additional Requirements for Concrete Subjected to Sulphate Attack] of CAN/CSA A23.1 based on the tests required in Table 3.3.14a [Required Material Testing] of this Section. General Use (GU) and GUL cement must have a C₃A content of greater than 4.0% (by standard Bogue calculation) or 5% by mill certificate, and GUL cement shall have a Blaine Fineness of less than 480 m²/kg.
- (c) The Design-Builder shall complete all testing related to the site exposure and material compliance. Testing shall be completed as follows, in accordance with the methods defined in Table 3.3.14a [Required Material Testing]:

Table 3.3.14a: Required Material Testing

Material	Test Description	Applicable Test Methods
Native Soil	Sulphate content, chloride content	CAN/CSA A23.2-B ASTM C1218*
Surface Water	pH, sulphate content	CAN/CSA A23.2-2B
Groundwater	pH, sulphate content	CAN/CSA A23.2-2B
Rock	pH, sulphate content	CAN/CSA A23.2-2B Technical Circular T-04/13
Concrete Aggregate	Sulphate content	CAN/CSA A23.2-3B CAN/CSA A23.1 Appendix P
Recycled Concrete Aggregate	Sulphate content	CAN/CSA A23.2-8B
Aggregate as defined in SS 202	Sulphate content, chloride content	CAN/CSA A23.2-B ASTM C1218*

* Typically used for mortar or concrete but can be adapted for soil.

- (i) Soils Testing
- (A) Soils shall be sampled within close proximity to all concrete elements (less than 100 m) to a depth representative of the concrete Foundation elements.
- (B) Soil sampling may be completed by borehole or test pits.

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- (C) As a minimum, sampling shall be at a depth between 0.3 m and 1.2 m and at the groundwater table, or within 1.5 m below the lowest groundwater elevation.
 - (D) Below 1.2 m depth, sampling shall include each significant change in subsurface material or at representative intervals to the end of the borehole/test pit unless groundwater is encountered.
 - (E) If the same soil layer is continuous across the site, it is not necessary to obtain samples of the same soil unit from all boreholes/test pits.
 - (F) Combining samples from different layers to create composite or bulk samples is not permitted.
 - (G) Sampling for linear Structures (such as retaining walls) shall consider length as well as depth. As a minimum, one sample shall be obtained for each 100 m of wall length.
 - (H) Sampling of soils through permanent free-standing bodies of water is not required.
 - (I) Collected samples shall be representative of the site conditions within the project limits.
- (ii) Water Testing
- (A) Water samples shall be collected and tested from all surface water bodies within 350 m of the concrete element.
 - (B) If available, groundwater samples from wells or piezometers within 350 m of the concrete element shall be collected and tested. Purging of the well shall be completed as per the requirements for water quality testing.
- (iii) Aggregate Testing
- (A) The Design-Builder shall be responsible for and shall provide the Province's Representative with current certified results for all of the applicable aggregate tests as outlined in Table 211-D [Required Aggregate Testing for Normal Density Coarse and Fine Aggregate (Per Individual Product and Aggregate Source)] of Section 211 of the DBSS.
 - (B) Samples of imported material placed adjacent to or in the vicinity of concrete elements shall be tested. Imported material could be random fill, borrow, aggregates, concrete mix aggregates, recycled aggregates, and aggregates defined in Section 202 of the DBSS.
 - (C) In addition to the requirements of Section 211 of the DBSS, all aggregate shall be tested for sulphate content in accordance with CAN/CSA A23.2-3B. The aggregates shall have a sulphate content less than the identified exposure category unless approved by the Province's Representative.

- (d) Concrete mix design parameters for mixes utilizing GUL cement shall conform to Table 3.3.14b [Concrete Mix Design Parameters] unless otherwise consented to by the Province's Representative in accordance with the Consent Procedure. Mixes utilizing GU cement shall conform to Table 8.4 [Maximum Water to Cementing Materials Ratio] of the BC Supplement to CAN/CSA-S6-14.

Table 3.3.14b: Concrete Mix Design Parameters

Classification	Minimum Compressive Strength at 28 days (MPa)	Nominal Maximum Size of Coarse Aggregate (mm)	Air Content (%)	Slump (mm)	Maximum W/C _m Ratio by Mass
Superstructure Concrete: Bridge Deck, Approach Slab, Barriers					
• GUL ⁽¹⁾⁽³⁾⁽⁴⁾	35	28 ⁽²⁾	6 ± 1	50 ± 20	0.38
Substructure Concrete: Piers, Abutments, Retaining Walls, Pipe Pile Infill, Working Floors					
• GUL with Low to Moderate Sulphate Exposure ⁽¹⁾⁽⁴⁾	30	28	5 ± 1	50 ± 20	0.45
• GUL with Severe Sulphate Exposure ⁽¹⁾⁽⁶⁾	30	28	5 ± 1	50 ± 20	0.40
Keyways between Box Stringers					
• GUL ⁽¹⁾⁽⁵⁾	35	14	6 ± 1	20 ± 10	0.38
Concrete Slope Pavement					
• GUL with Low to Moderate Sulphate Exposure ⁽²⁾⁽⁴⁾	30	20	5 ± 1	30 ± 20	0.45
• GUL with Severe Sulphate Exposure ⁽²⁾⁽⁵⁾	30	20	5 ± 1	30 ± 20	0.40

Table Notes:

- (1) Superplasticizers or high range water reducers shall not be used.
- (2) The maximum proportion of aggregate passing the 5 mm screen shall be 37-38% of the total mass of aggregate.
- (3) The total cement content shall not exceed 380 kg/m³.
- (4) The addition of 15% Type F fly ash by mass of cementing materials is required.
- (5) The addition of 12% Type F fly ash and 8% silica fume by mass of cementing materials is required.
- (6) The addition of 25% Type F fly ash shall by mass of cementing materials is required.

3.3.15 Bridge Decks

- (a) The wearing surface of new highway Bridge Decks shall be exposed concrete with no waterproofing membrane or asphalt overlay. For cable-supported Structures, see requirements in Article 4 [Cable-Supported Structure Design Criteria] of this Part.

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- (b) The minimum specified top cover shall be 60 mm, as per Table 8.11.2.3.2 [Corrosion Protection for Top Mat Reinforcing Steel for Bridge Decks, Parapets, Curbs and Approach Slabs] of the BC Supplement to CAN/CSA-S6-14.
- (c) All Bridge Deck concrete shall be in accordance with Section of 211 and 413 of the DBSS unless otherwise modified in this Article .
- (d) Public traffic shall not be allowed on the Bridge Deck until the Bridge Deck concrete is a minimum of 28 days old. No de-icing salts shall be used on the Bridge Decks and approach slabs until the concrete is 28 days old.
- (e) The chloride penetrability of Bridge Decks, approach slabs and Structural Barriers shall meet the requirements of Table 211-K of the DBSS. Primary testing shall be carried out on trial mixes prior to any concrete being placed in the Bridge Decks, approach slabs or Structural Barriers. Results of chloride penetrability tests shall be documented and included in the mix design submittal and quality control records.
- (f) The tops and both faces of Structural Barriers and the exposed outside edges of the Bridge Deck shall be treated with a silane solution. Silane surface treatment shall conform to DBSS 418.

3.3.16 Bridge Deck Joints

- (a) Bridge Decks shall be designed to minimize the occurrence of joints.
- (b) Bridge Deck joints shall be dimensioned and detailed to allow enough space for joints to be inspected, maintained, and replaced without permanent modifications to the Structure.
- (c) Integral and semi-integral abutments shall be designed to allow for movement at the interface between the approach slab and the approach roadway pavement structure.
- (d) Each joint seal shall be supplied in a single length, without splices. Before the joint seal is installed, the joint seal and armouring shall be thoroughly cleaned and all moisture removed. The seal shall be installed in accordance with the manufacturer's recommendations.
- (e) Bridge Deck joints shall be tested to demonstrate water-tightness.

3.3.17 Deck Drainage

- (a) Drainage devices shall be provided on approach roadways to intercept runoff water prior to reaching Bridge Decks, abutments, and joints.
- (b) Bridge Deck drains shall be provided to ensure drainage in accordance with the BC Supplement to CAN/CSA-S6-14.
- (c) Runoff water from all Bridges shall be discharged in accordance with the drainage and environmental requirements of this Agreement. Direct discharge over water channels, within 5.5 m of Railways, multi-use paths, or roadways is not permitted.
- (d) The diameter of drain pipes installed in Bridge Decks shall not be less than 200 mm.

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- (e) Box girders and other Structure members with internal voids shall be detailed to ensure no standing water accumulates.
- (f) Bridge Deck drain pipes shall not run through the voids of hollow structural members.
- (g) Drainage water from a Structure shall not be discharged behind a Substructure or Foundation.
- (h) The drainage system shall be sufficiently robust to resist damage during cleaning, and shall be capable of resisting typical chemicals from highway spillages.

3.3.18 Approach Slabs

- (a) Approach slabs shall be designed to ensure a smooth transition between the abutment and the approach roadway. Approach slabs shall be supported entirely on approach fills. Where required by the BC Supplement to CAN/CSA-S6-14, approach slabs shall be provided at all abutments. Approach slabs shall have the same concrete mix, rebar type, and cover to reinforcing steel as Bridge Decks.
- (b) A “jump slab” or “jump span” (such as a short end span between the abutment and adjacent pier) is not a replacement for an approach slab and shall be considered as a Bridge span. Procedures for jacking and repair of jump slabs and approach slabs in case of settlement shall be included in the Bridge Final Design submission.

3.3.19 Slope Protection

Erosion resistant slope protection shall be provided under end spans of Bridges.

3.3.20 Structural Barriers and Railings

- (a) Rigid Structural Barriers shall be provided on both edges and over the full length of all Bridges. Traffic barriers (which are not Structural Barriers) shall be in accordance with Article 1 [Laning and Geometrics Design Criteria] of this Part.
- (b) The test level required for Structural Barriers shall be determined in accordance with CAN/CSA-S6-14 and the BC Supplement to CAN/CSA-S6-14. Structural Barriers shall be “F” Shape as described in the BC Supplement to CAN/CSA-S6-14. In no case shall the test level for Structural Barriers be less than TL-4. For determination of the barrier exposure index using CAN/CSA-S6-14, the “Superstructure height” that is required to determine the “Superstructure height factor” (Ks) shall be calculated as the sum of (i) the vertical height measured from top of Bridge Deck to finished ground directly below edge of Bridge Deck; and (ii) the vertical height measured from finished ground directly below edge of Bridge Deck to the toe of the unrecoverable slope. An unrecoverable slope is an embankment slope steeper than 4(H):1(V).
- (c) All Structural Barriers shall include three 50 mm diameter RPVC conduits embedded at the base of the Structural Barrier in accordance with the BC Supplement to CAN/CSA-S6-14. Junction boxes shall be installed in the Structural Barrier to service all embedded conduits. The Design-Builder shall install a pull-string to confirm continuity of the conduits for their full length between junction boxes.

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- (d) Bicycle height protection of not less than 1.37 m shall be provided on all Structural Barriers on Highway 1 where a vertical drop of more than 0.5 m is present behind the barrier. Railings shall comply with the requirements CAN/CSA-S6-14 and the BC Supplement to CAN/CSA-S6-14. Railings shall be adjusted to produce uniform height and smooth alignment.
- (e) Railings for pedestrian safety shall be provided in all locations where a pedestrian may be exposed to a vertical drop of more than 0.5 m.

3.3.21 Bearings

- (a) Supply, fabrication and installation of bearings and bearing assemblies shall meet the technical requirements specified in the Appendix to Volume 7 of the Bridge Standards and Procedures Manual.
- (b) Enough space and strength shall be provided for bearings to be inspected, maintained and replaced without modification to the Structure. Design of bearings shall allow for future replacement during night-time closure of a maximum of two lanes of traffic.
- (c) Bearings shall be restrained from “walking” under design service loading.
- (d) Bearing seats shall be designed to be free from water ponding.
- (e) Bearings comprised of stainless steel sliding surfaces, PTFE, or mechanical components shall be protected by means that can be easily removed for inspection.

3.4 New Retaining Walls

3.4.1 General

In addition to the requirements for new Structures, the following shall apply to all new retaining walls:

- (a) Structural design shall be performed in accordance with this Schedule 4, the BC Supplement to CAN/CSA-S6-14, and CAN/CSA-S6-14.
- (b) Reinforced soil slopes steeper than 45 degrees shall be considered as Retaining Structures.
- (c) Walls required to retain Bridge embankments adjacent to the Bridge Foundations shall be considered abutment walls.
- (d) Extensible reinforcement is not permitted for use in abutment walls and wingwalls.
- (e) Geotextiles are not permitted for use as soil reinforcement.
- (f) Steel used in wire facing or soil reinforcing components of all MSE walls shall be galvanized and shall have a minimum additional thickness accounting for corrosion.
- (g) Additional anchors, tie-backs, soil reinforcing straps installed for new walls or modifications of existing walls shall allow for future inspection and testing. The number of additional

elements provided for future testing for each Retaining Structure shall be equal to 2% of the number required by design but not less than 2 additional elements shall be provided.

- (h) All MSE walls that are visible from Highway 1 shall have segmental precast concrete facing panels and a cast-in-place concrete coping along the top of the walls. The minimum soil reinforcement length for walls supporting or influenced by the abutment footings shall be the greater of 60% of the distance from the top of the levelling pad to the road surface plus 2 m or the minimum length required by the AASHTO LRFD Bridge Design Specifications. Any soil reinforcing within a 1:1 slope of an abutment footing or pile cap shall be considered as influenced by the footing.
- (i) MSE walls with non-extensible reinforcement and segmental precast concrete facing panels are permitted to a maximum height of 12 m measured from the top of the levelling pad to the top of concrete coping. Only accepted products in the category “Bridge Abutments are Supported by Retaining MSE Walls (True Abutments)” of the Recognized Products List are permitted to the 12 m height limit. Otherwise, the requirements of the BC Supplement to CAN/CSA-S6-14 and Recognized Products List shall apply.
- (j) For soil nail walls, the Design shall be in accordance with FHWA Circular No. 7 and shotcrete shall be in accordance with Section 209 of the DBSS.
- (k) Interlocking concrete gravity block walls are acceptable for use as an MSE wall subject to the product manufacturing requirements and height restrictions listed in the category “Retaining Walls (Supporting Loads)” of the Recognized Products List. Consistency of finish shall be maintained with the use of the same concrete mix (individual blocks shall not contain cold joints) and the same type of form oil for the entire project. The top course of blocks shall be flat topped.
- (l) In addition to the quality control requirements of DBSS 211, the Design-Builder shall extract four cores from one block for every 50 blocks prior to delivery to the Project Site. The cores shall be standard cylinder sizes of 100 mm diameter and 200 mm high. Three of these cores shall be tested for compressive strength in accordance with CAN/CSA A23.2-14C and CAN/CSA A23.2-9C, and shall be evaluated in accordance with CAN/CSA A23.1. The fourth core shall be tested for air void analysis in accordance with ASTM C457. If the compressive strength or air void analysis does not meet the required specifications, the entire 50 blocks will be rejected at the Design-Builder’s cost. The Design-Builder shall be responsible for ensuring that the test results are traceable to each of the 50-block lot tested. The cores shall be taken in the middle of the block along the back face so that the block may still be used if specifications are met. The cored holes shall be patched with a repair product approved by the Province’s Representative. Blocks without traceable testing documentation will not be accepted for use on the Project.

3.4.2 Drainage for Walls

Adequate drainage shall be provided for all walls in accordance with Section 2.8 of the BC Supplement to CAN/CSA-S6-14. Drainage water shall be discharged onto a scour resistant surface or splash pad at a location acceptable to the Province’s Representative. The end of drainage pipes shall be capped with a screen to prevent wildlife access.

3.5 Existing Structures

- (a) The following existing Structures shall be removed in accordance with Article 12 [Demolition, Removals and Disposal] of this Part.

- (i) 04441R Five Mile Bin Wall (approx. LKI 7.40)

The Five Mile Bin Wall materials were sampled for laboratory analysis. This analysis identified that the wall coating contains lead. A report of this sampling and analysis is included in the Data Room.

- (b) The following existing Structures shall be removed or left in place consistent with the requirements of the Project Agreement.

- (i) 04448R Yoho Retaining Wall No. 2 (approx. LKI 8.72)

- (ii) 04449R Yoho Retaining Wall No. 4 (approx. LKI 8.94)

Should these Structures be required for the Project Work, they shall meet the requirements of this Article 3 [Structural Design Criteria] of this Part.

- (c) For abandoned Structures buried in highway fills under Travelled Lanes, the Design-Builder shall determine the necessary depth of demolition to ensure rideability and durability of the upgraded Infrastructure. Abandoned Structures buried in highway fills shall be demolished to a minimum depth of 1 m below the finished ground level and removed.

- (d) The following existing Structures shall be retained as part of the Project Work:

- (i) 04447R Yoho Rock Catch Wall No. 1 (approx. LKI 8.42)

- (ii) 04447E Yoho Rock Catch Extension to Wall No. 1 (approx. LKI 8.94)

Should these existing Structures (04447R, 04447E) require modification, they shall be upgraded to meet the requirements of Article 3 [Structural Design Criteria] of this Part.

3.6 Sign Structures

The Design-Builder shall design, fabricate, and install Structures for Signs in accordance with the BC Supplement to CAN/CSA-S6-14, CAN/CSA-S6-14, and the Electrical and Signing Materials Standards. Levelling nuts below the base plates shall not be permitted.

ARTICLE 4 CABLE-SUPPORTED STRUCTURE DESIGN CRITERIA

4.1 General

This Article provides supplemental design criteria for cable-supported Structures, in addition to the requirements of other articles in this Schedule and the applicable codes and standards.

4.2 Cable-Stayed Bridges

4.2.1 Order of Precedence

In addition to the requirements of this Schedule and the applicable codes and standards, the Design and Construction of cable-stayed Bridges shall conform to the requirements and guidelines provided in the following codes, standards and guides. If there is a conflict between the criteria contained in this Schedule and any Reference Document, the following shall apply in descending order of precedence:

- (a) the Criteria contained in this Schedule;
- (b) PTI DC45.1-18;
- (c) PTI M50.2-00;
- (d) Bridge Standards and Procedures Manual, including the BC Supplement to CAN/CSA-S6-14;
- (e) DBSS;
- (f) CAN/CSA-S6-14;
- (g) AASHTO LRFD Bridge Design Specifications; and
- (h) ASCE Guidelines for Design of Cable-Stayed Bridges.

4.2.2 Requirements for Cable-Stayed Bridges

Requirements for cable-stayed Bridges include, but are not limited to, the following:

- (a) Cable-stayed Bridges shall be designed for a minimum Design Life of 100 years.
- (b) Stay cables shall be parallel strand with individual high-density polyethylene (HDPE) coated seven-wire galvanized steel strands inside an HDPE stay cable outer pipe. Steel for stay cables shall be 15.2 mm or 15.7 mm nominal diameter low relaxation strands, weldless, seven-wire strand conforming to ASTM A416, Grade 1860.
- (c) The following exceptions to the PTI DC45.1-12 shall apply:
 - (i) high strength bars shall not be used for the main tension elements of the stay cables;
 - (ii) steel pipe cable sheathing shall not be used for stay cables except for additional mechanical protection at roadway level;
 - (iii) epoxy coated wires are not permitted; and
 - (iv) Portland cement grout is not permitted as a corrosion protection barrier.

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- (d) Cable anchor head shall be sized and detailed to accommodate a minimum of 5% additional number of strands for future needs.
- (e) The Structure including cables shall be aerodynamically stable throughout the Design Life and during Construction. Stay cables shall be provided with damping to prevent vibrations from occurring, with the ability for modification to permit increased levels of damping, if required.
- (f) Further to CAN/CSA-S6-14, Clause 3.10.5, wind design and tunnel testing shall be performed as follows:
 - (i) All wind tunnel tests shall be carried out at a wind tunnel laboratory experienced with doing the required type of aerodynamic test. The laboratory shall have a proven record for both section model tests and full aeroelastic tests at similar scale and for cable stayed bridges.
 - (ii) The tunnel used for the wind tunnel test shall be either a closed circuit wind tunnel or a closed tunnel with reverse flow outside the tunnel. Open test sections shall not be allowed.
 - (iii) A section model test of the Bridge Deck shall be conducted at a geometric scale of 1:100 or greater (e.g. 1:50). The test shall include all Bridge Deck appurtenances and other structural components relevant for the wind load on the Bridge Deck. The test shall include both construction phases and final stage. Both static and dynamic test shall be carried out. The dynamic test shall cover full scale wind speed in the range of 4-25 m/s for vortex induced vibration measurements. For wake buffeting response measurements, the maximum wind speed in the tunnel shall correspond to 110% of the design wind speed at Bridge Deck level and in addition to this the dynamic test shall be used to determine the critical flutter wind speed provided it is below 100 m/s. If test and numerical analysis shows that the critical flutter wind speed exceeds 100 m/s it shall only be determined based on numerical analysis.
 - (iv) The section model test for the completed Bridge shall include traffic on the Bridge in addition to the test for no traffic.
 - (v) A full aeroelastic test shall be carried out for the completed Bridge and at the most critical Construction stage(s). The scale of the model shall be 1:150 or greater and for the Construction stage test(s) all relevant Construction equipment shall be included in the test (e.g. lifting gantries, tower cranes, underslung working platforms and containers on the Bridge Deck). Both smooth and turbulent flow shall be tested. The turbulence intensity and wind profile for the turbulent flow shall be based on analysis of the local wind conditions at the site.
 - (vi) From the section model test the static force coefficients (drag, lift and moment), as well as the derived values of the lift and moment coefficient, shall be determined. The aerodynamic derivatives shall be calculated based on the section model test in turbulent flow, and both the section model test and full aeroelastic model test shall be used to assess the risk of vortex induced vibration. The results of the full aeroelastic test shall be verified based on numerical analysis of

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dynamic behaviour of the Bridge using the results from the section model test as input parameters for the analysis.

- (vii) All results of the wind tunnel test and wind design shall be reported in an aerodynamic test report and each test setup shall be documented by photos and videos of all dynamic tests.
- (g) Cable vibrations and their effects shall be addressed in the Design. A sufficiently detailed cable vibration analysis (including modal analysis of the cable system) must be performed as part of the bridge design to identify the potential for cable vibration. The following factors must be examined:
 - (i) dynamic properties of the stay cables;
 - (ii) dynamics of the structural system;
 - (iii) geometry of the cable layout;
 - (iv) cable spacing;
 - (v) exposure conditions; and
 - (vi) estimated scruton numbers (Sc).
- (h) Rotation on the cable-stayed Bridge Deck about the longitudinal axis of the bridge centerline shall be evaluated for all ultimate load combinations. The maximum factored deck rotation measured from horizontal at any point along the Bridge span shall be limited to 3.0 degrees.
- (i) The effects of creep and shrinkage are to be included for cable-stayed bridges as a permanent load for all limit states.
- (j) Cables are not permitted over travelled lanes and shoulders.
- (k) Cables and Structure shall be designed to avoid ice build-up falling into traffic.
- (l) The Structure shall be designed such that avalanches do not impact the cables or run out on the cable-supported Bridge Deck.
- (m) Design for cables and the Structure shall include effects of rain, ice build-up, or snow removal operations on cables, including their effects on cable vibrations and fatigue life.
- (n) In addition to considering the thermal effects and thermal gradient effects in accordance with CAN/CSA-S6-14 for structural design, temperature differential between cables and Bridge Deck, and cables and towers shall be considered. A minimum of 10° C temperature differential shall be applied for white stays and 20°C for black stays.
- (o) All cable systems shall be designed to be replaceable while maintaining traffic. Cable stays shall be capable of being removed and replaced one at a time with the Bridge carrying full design vehicle live load on the travelled lanes, except that the single lane adjacent to the cable-plane may be closed to traffic during cable replacement. Cables and anchorages shall

be designed to permit strand-by-strand removal and replacement of their cable stays. Cable stays shall be accessible for inspection along their full length.

- (p) The Structure shall be designed to withstand the sudden loss of any stay cable (or pair of stay cables, if used in pairs) or tie down in an elastic manner. The cable loss dynamic force (CLDF) shall be taken as a minimum of 2.0 times the static force in the cable prior to the sudden loss event or a lower value not less than 1.5, if determined by dynamic analysis of the Structure. For the purposes of computing the CLDF, live load shall be positioned to maximize the tension force in the cable prior to loss.
- (q) The Structure shall be designed to survive the loss of one stay cable (or pairs of stay cables, if used in pairs) immediately adjacent to the first lost stay cable (or pair of stay cables) without the collapse of the Structure. In this situation, the Structure shall be required to carry 10% of the design factored vehicle live load with a dead load factor of 1.1. Repairable local damage is acceptable. The cable loss dynamic force shall be considered for only one of these two adjacent stay cables (or pairs of stay cables, if used in pairs) at a time. The loss of two adjacent stay cables (or pairs of stay cables, if used in pairs) shall be considered as an extreme accidental or intentional event.
- (r) The stay cable forces shall not be less than 10% of the tension dead load under all load cases.
- (s) All cables shall terminate inside the tower using appropriate anchorages. Saddles shall not be used.
- (t) Cable connections and adjacent components shall be designed to exceed the breaking load of the cables at the ultimate limit state.
- (u) Design of cable stays shall allow for the effects of rotation at the anchorages under both static and dynamic loads.
- (v) Stay cables and tie downs shall be verified for the stress effects due to combined axial loads and bending with a resistance factor of $\phi = 0.78$. This resistance factor shall also apply to accidental, seismic and cable loss load cases.
- (w) Combined tension and bending in stays shall be checked at the ultimate limit state to ensure that under the design load combinations, stresses in extreme fibres do not exceed the yield strength of individual wires.
- (x) Cables shall be designed against fatigue failure allowing for combined tension and bending (concurrent longitudinal and transverse bending). Fatigue design curves for the cables shall be established from a test program meeting the requirements of CAN/CSA-S6-14 and PTI. Design of the cable anchorage zones shall be based on local stresses determined by a finite element analysis. The fatigue resistance of each anchorage shall not be less than that of the corresponding cable.
- (y) Tie-down systems shall be designed to permit the removal and inspection of a reference strand in each tie-down cable without affecting the tie-down capacity. Tie-down systems shall have redundancy to permit replacement without closure of the Bridge.

- (z) Fire protection shall be provided to a height of 10m above deck for all cable stays and vandalism protection shall be provided to a height of 3 m above deck for all cable stays.

4.2.3 Corrosion Protection

- (a) Stay cables shall be corrosion protected using a three-phase system consisting of:
 - (i) galvanizing of individual wires;
 - (ii) a corrosion resistant blocking medium surrounding the wires and filling the space inside the outer protective sheathing; and
 - (iii) an outer protective sheathing resistant to the effects of weather and ultraviolet light. The sheathing shall also cover the socket cable entry area. Sheathing shall be high density polyethylene pipe (HDPE) conforming to ASTM D3035 or ASTM F714. White or light-coloured HDPE pipe may be used if the Design-Builder can demonstrate to the Province's Representative that the selected pipe has demonstrated ultra-violet resistance equal to or better than black pipe. Proposed use of HDPE pipe shall be submitted to the Province's Representative in accordance with the Consent Procedure.
- (b) Recycled polyethylene shall not be used for production of sheathing;
- (c) The corrosion protection system shall provide protection during Construction installation of the cables and during the Design Life of the Structure;
- (d) Steel pipe sheathing shall not be used except as required to harden the lower parts of the cables;
- (e) The Bridge Deck shall be reinforced concrete and have a waterproofing membrane selected from the Hot Rubberized Asphalt Membrane Systems Category of the Recognized Product List, and 100 mm of asphalt.

4.3 Requirements for Suspension Bridges

- (a) Self-anchored suspension Bridges are not permitted.
- (b) The Design shall allow for future deck replacement. The details of the deck replacement methodology shall be documented and provided to the Province's Representative as part of the Final Design submission.
- (c) The design shall be based on the state-of-the-art practices in North America.
- (d) The following shall apply to suspension Bridges as a minimum:
 - (i) suspension cables and hangers shall comprise an assembly of high strength steel;
 - (ii) loads in cables induced by prestressing to adjust a lack of fit in the Structure shall be included in the ultimate limit state of the Structure;

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- (iii) anchorages shall be designed to carry the breaking load of the cables and hangers;
- (iv) Design of hangers shall allow for the effects of rotation at the anchorages under both static and dynamic loads;
- (v) combined tension and bending in the cables and hangers shall be checked at the ultimate limit state to ensure that under the specified load combinations stresses in extreme fibres do not exceed the factored yield strength of individual wires;
- (vi) hangers and their anchorages shall be designed and constructed to be replaceable and shall be accessible along their full length for inspection;
- (vii) the Structure shall be designed to account for anchor pull out and cable creep;
- (viii) further to CAN/CSA-S6-14, Clause 3.10.5, wind tunnel testing shall be performed in accordance with the requirements given in this Article for cable-stayed Bridges;
- (ix) cable saddles and anchorages shall be accessible for inspection and maintenance;
- (x) cables are not permitted over roadways;
- (xi) cables and Structure shall be designed to avoid ice build-up falling into traffic;
- (xii) the Structure shall be designed such that avalanches do not impact the cables or run out on the cable-supported Bridge Deck;
- (xiii) Design for cables and the Structure shall include effects of rain, ice build-up, or snow removal operations on cables, including their effects on cable vibrations and fatigue life; and
- (xiv) the Bridge Deck shall be reinforced concrete and have a waterproofing membrane selected from the Hot Rubberized Asphalt Membrane Systems Category of the Recognized Product List, and 100 mm of asphalt.

4.4 Requirements for Towers

Requirements for towers of cable-supported Structures include, but are not limited to, the following:

- (a) Exposed bolts required for splicing steel are not permitted on the outside of the tower.
- (b) The effects of the slenderness of the tower shall be fully allowed for in the calculation of design load effects and resistance.
- (c) Analyses of the tower taking account of second order deformations shall be undertaken. The section properties used in the analysis shall be appropriate to the level of stress in the section (cracked or uncracked). Tension stiffening shall be included or excluded, whichever is the most conservative for the load effect under consideration. The analysis shall consider Foundation flexibility.

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- (d) In addition to other loads, allowance for notional errors in plumb and straightness of the tower columns shall be included in all load combinations. For Design purposes, the notional errors at height H shall at a minimum be taken as:
 - (i) for error in plumb over the height of the tower: $H/1000$; and
 - (ii) for sinusoidal deviation of straightness relative to a straight line drawn between the tower top and tower base: maximum of $H/1500$ at mid height.
- (e) The above notional errors shall be applied in the most severe direction for the load combination being considered.
- (f) When evaluating slenderness, the above notional errors shall be applied in addition to any variation from plumb and straightness as a result of the erection sequence and creep and shrinkage of the tower.
- (g) Partial load coefficients shall not be applied to the above notional geometrical errors.
- (h) The Structure shall be protected against lightning strikes in accordance with NPFA 780.

4.5 Durability Plan

- (a) The Design-Builder shall develop and implement a detailed durability plan for the Design of all cable-supported Structures, including all replaceable and non-replaceable components. The Design-Builder shall include the durability plan in the Interim Design and with the Design Data in the Final Design submissions for all cable-supported Structures.
- (b) At a minimum, the durability plan shall include:
 - (i) a Design approach to ensuring that all non-replaceable components will be able to achieve their Design Life;
 - (ii) identification of each structural component with the corresponding environmental exposure conditions for each component, including the following conditions: buried, submerged, exposed to atmosphere, and exposed to corrosive chemicals;
 - (iii) identification of relevant degradation and protective mechanisms for each structural component;
 - (iv) quantification of time-to-degradation, including corrosion, fatigue, creep and chloride ingress, for the identified degradation mechanisms and resistances to these mechanisms with respect to time. The quantification models used shall be listed in the plan. Models shall, at a minimum, use a probabilistic approach to evaluate the time-related changes in performance depending on the component, environmental conditions, and any proposed protective measures;
 - (v) confirmations of standards used in the Design;
 - (vi) demonstration of the expected Design Life of each structural component, based on the proposed material, exposure condition, relevant degradation mechanism,

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and any proposed protective measures, taking into account the planned inspection and maintenance schedule;

- (vii) a statement that the cable-supported Structure has been designed and constructed to accommodate the use of de-icing chemicals or materials (as identified in the Recognized Products List) and abrasive grit materials while conforming to the Project requirements. The Design-Builder shall assume the use of de-icing chemicals in verification of the required Design Life for components;
- (viii) details of any corrosion allowances and thresholds used;
- (ix) details of the level of reliability or probability of the Design Life of each component as well as the expected interval of replacement or renewal of the protective measures within the Design Life (including thickness of coats and the number of times to re-coat paint that protects steel members);
- (x) explanation of what will be done during Construction to ensure that suitably high quality products are achieved (including uniformity of compaction of the concrete, maintaining air entrained voids during placement and finishing, adequacy of concrete cover, proper curing for the element, and temperature control, inspection and testing of steel);
- (xi) explanation of specific measures taken to enhance the reliability and robustness of single load path structures;
- (xii) list of the manufacturers of all proposed coatings, inhibitors, sealers, and membranes;
- (xiii) schedule for corrosion inspection of the structural components;
- (xiv) demonstration of how cables, cable stays, tie downs and corresponding sheaths will achieve their required Design Life.
- (xv) identification of and proposed maintenance schedule for items and materials that are potentially vulnerable to corrosion;
- (xvi) identification of and proposed maintenance schedule for items and materials that are potentially vulnerable to degradation due to environmental factors, including ultraviolet radiation, freeze-thaw cycles and abrasion; and
- (xvii) drawings signed and sealed by a Bridge Structural Engineer showing how components can be maintained and how components can be replaced.

4.6 Access for Operations, Inspections and Maintenance

4.6.1 Access - General

As a minimum, the following access shall be provided for all cable-supported Structures:

- (a) elevator and stair access in all tower legs;

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- (b) stair access in all hollow piers/columns greater than 10 m in height and ladder access for heights between 10 m and 3 m;
- (c) inspection and maintenance shuttle access along the inside of box girders used for the main span;
- (d) under bridge access for inspection, maintenance and re-coating of the Bridge Superstructure;
- (e) gantry access to inspect the full length of all cables;
- (f) rope access to the inside and outside surfaces of towers, the outside of cable anchorages and for operation of the cable snow and ice removal system;
- (g) perimeter edge of the top of all towers shall be enclosed by fencing with galvanised perforated steel mesh infill and handrails, with the handrails being designed to allow for rope access over the handrail;
- (h) walkways between the tower legs to facilitate access to the cable snow and ice removal system without having to cross travelled lanes; and
- (i) walkways, ladders and platforms suitable to access, maintain and replace all cable anchorages, shock transmission devices, bearings, joints, lighting and other components needing inspection and maintenance.

4.6.2 Access Equipment

All access equipment shall meet the following requirements:

- (a) Access equipment shall meet all Health and Safety Laws including CSA standards applicable to the use and environmental conditions where the equipment will be stored and used.
- (b) Access equipment shall be fully powered for all movements. The equipment shall be controllable by a single operator for all functions. Controls shall be ergonomically located.
- (c) As a minimum, all access equipment shall have the following safety features:
 - (i) clearly labelled load capacity; and
 - (ii) overload sensing system;
 - (iii) emergency stop devices, including brakes accessible by the operator;
 - (iv) emergency telephone, accessible by the operator; and
 - (v) operational and emergency lighting.

4.6.3 Tower Elevators

The following requirements apply to tower elevators required for all cable-supported Structures:

- (a) All elevators shall be rack and pinion type.
- (b) Elevators shall have a variable speed with speeds between 0 m/s and 1.2 m/s. The maximum speed shall be achievable at all locations.
- (c) Elevators shall have 700 kg pay-load capacity.
- (d) Elevator cars shall be sized for at least 4 passengers and have a minimum internal floor plan area of 1.05 m².
- (e) As a minimum, landing enclosures shall be required for each elevator to access tower base, deck level, crossbeams and each anchorage platform.
- (f) An access control system shall be installed to restrict access to and use of the elevator by authorized persons only.
- (g) The elevator shall not be used for Construction.
- (h) Where ladders and platforms are in proximity to the operating envelope of the elevator, removable protective barriers shall be provided to prevent injury from collision between lift and personnel.
- (i) Elevators shall have a centrifugal brake that can be operated from inside the car to allow the car to be manually lowered to the next landing in case of a power failure.
- (j) Elevator cars shall be equipped with an escape access through the roof of the car and a protective barrier around the perimeter of the roof of the car.
- (k) Elevator design shall be in accordance with ASME A17.1/CSA B44. Each elevator shall have appropriate safety certification.
- (l) Elevators shall have selective collective automatic operation controls as defined in ASME A17.1/CSA B44.

4.6.4 Stairs, Ladders and Platforms

- (a) Stair access shall be provided in each tower leg and in all hollow piers used for cable-supported Structures. Where there is insufficient space for stairs, ladders shall be provided. Access doors shall be provided at the base of each pier.
- (b) Platforms shall be provided for stairs and ladders at a spacing that meets the requirements of Good Industry Practice and all applicable Health and Safety Laws.
- (c) At each cable anchorage level, a permanent platform shall be provided inside the tower.
- (d) Hand rails and fall arrest systems shall be provided for all stairs, ladders and platforms.

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- (e) Access to deck level cable anchorages shall be provided with suitable ladders and platforms.
- (f) Access to the top of piers, bearing locations and shock transmission devices shall be provided with suitable ladders and platforms, including sufficient space around the bearings and shock transmission devices for replacement and safe inspection and maintenance, to permit maintenance without having to bend or crawl under the superstructure and without modification to the Structure.

4.6.5 Snow and Ice Removal Operations

- (a) Access shall be provided for the operation of the cable snow and ice removal system. This access shall include sufficient space to allow rope access technicians to work overhead and to allow retrieval and re-loading of collars without interference with traffic.
- (b) An enclosed area shall be provided within each tower leg. These areas shall be heated and include sufficient space to accommodate seating for three people and two lockers to store rope access equipment;
- (c) A fenced compound, of minimum size 20m x 30m with lockable gate and granular base, shall be provided for the operation of the cable snow and ice removal system and include a building for operators. The compound shall have vehicle access from a public road.
- (d) At a minimum, the compound building shall accommodate a twelve-person crew and be provided with the following:
 - (i) insulation and heating;
 - (ii) ventilation;
 - (iii) power;
 - (iv) lighting;
 - (v) potable water;
 - (vi) internet connection;
 - (vii) control system to operate the cable snow and ice removal system;
 - (viii) furnished with new chairs, tables, fridge, microwave and kettle;
 - (ix) change rooms with single tier metal lockers; and
 - (x) washroom facilities.
- (e) The compound building shall be designed to meet the requirements of the BC Building Code.

4.6.6 Shuttle

- (a) Box-type Superstructures used for the main span of cable-supported Structures shall be furnished with one motorized shuttle per box running on rails inside the box. The shuttle shall be capable of carrying a minimum of 2 persons and a total payload of at least 500 kg over the entire length of the span.
- (b) Shuttles shall be designed and constructed in conformance with Health and Safety Laws.
- (c) Shuttles shall have an electric variable speed drive (varying from 0 to 4 m/s). A lockable speed limiter shall be provided to allow the maximum speed to be reduced if required.
- (d) Shuttles shall be powered by one or more standard rechargeable traction (truck) type batteries. All cables, plugs, transformers and other components necessary to recharge the battery from the 110V electrical power points provided within the Superstructure shall be provided.
- (e) Shuttles shall be fitted with headlights at both ends and with an operating audible alarm. The headlights and alarm shall automatically be activated whenever the shuttle is in motion.
- (f) Shuttles shall be fitted with a motor brake, mechanical brake, dead-man's pedal and all safety devices required by applicable regulations.
- (g) Shuttles shall be provided with an automatic stop at the ends of the running rails (if running rails are required). The rails shall have sufficient overrun beyond the automatic stop to prevent the shuttle reaching the end of the rail.

4.6.7 Under Bridge Access

- (a) The Design-Builder shall develop and provide under-bridge access to the soffit of all cable-supported Structures to allow inspection, maintenance, repairs and re-painting. This access shall be provided by a movable permanent gantry or gantries.
- (b) Permanent gantries shall meet the following requirements:
 - (i) An inspection gantry shall consist of a minimum 2 m wide platform with sufficient vertical clearance to allow inspections and be self-propelled with master controls within the gantry platform, be easily accessible from the top of the Bridge Deck and be able to reach full length and full width of the Bridge Superstructure.
 - (ii) Gantries shall have a minimum carrying capacity of not less than 10 persons and a 1500 kg point load at any location on the platform.
 - (iii) Corrosion protection for the gantries, rails and attachment points shall be galvanised.
 - (iv) Inspection gantry and components shall be certified and ready for use prior to the Substantial Completion Date.

4.6.8 Cable Inspection Gantry and Unmanned Inspection Device

- (a) An unmanned inspection system shall be provided for use for routine inspections of the cables.
- (b) A cable cradle inspection gantry shall be provided to allow visual inspection of all cables. The gantry shall not be permanently mounted on the cables.
- (c) The cable cradle inspection gantry shall run the full length of any cable.
- (d) All components, fixings and facilities of the inspection systems shall be replaceable.
- (e) The gantry cradle shall be of sufficient size for two inspection persons plus relevant hand tools and equipment.
- (f) The gantry shall have a variable travelling speed between zero and nine metres per minute.
- (g) The gantry shall carry its own generator to power the hoist and shall also supply 13A 110v sockets for small electrical tools.
- (h) Distance sensors or other appropriate sensors shall be provided for the gantry to instantaneously detect and show the real-time position of the gantry relative to the tower. This information shall be shown on the display of the gantry control panel.
- (i) The gantry shall be provided with an automatic stop at the top and bottom ends of the cables.
- (j) The superimposed safe working load of the cradle shall be a minimum 300 kg.
- (k) The gantry shall be designed to operate in a wind speed of 15 m/s whilst fully loaded. An anemometer shall be provided on the gantry to measure the wind speed. An audible and visual warning signal shall be given when the wind speed reaches 10 m/s.

4.6.9 Rope Access and Hoists for Towers

- (a) All necessary equipment and installations for rope access shall be provided such that the following locations are accessible:
 - (i) locations for all components of the cable snow and ice removal system;
 - (ii) external concrete surfaces of each tower leg; and
 - (iii) external concrete surfaces of each pier.
- (b) All structural anchors shall be in stainless steel to grade A4-80 complying with ASTM F738 (with a minimum molybdenum content of 2.5%).
- (c) Fixed access for inspection of structural anchors shall be provided and the structural anchors shall be positioned in easily accessible locations.

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- (d) The Design-Builder shall submit to the Province’s Representative, in accordance with the Review Procedure, a detailed rope access strategy plan for the locations listed above. The plan shall include the following details for each location:
 - (i) access to the rope access dropping point;
 - (ii) type and location of structural anchors; and
 - (iii) inspection and maintenance record of anchors.
- (e) The rope access system shall be designed with consideration of safety and emergency response planning, particularly in relation to rescuing persons in the event of a fall. The Design shall be coordinated with and informed by emergency response planning and the associated plans developed by the Design-Builder in accordance with this Agreement.
- (f) A fall arrest system shall be provided at cross beams and across the top of each pier, except for those areas designated as emergency exit points, in which case, a permanent handrail system shall be provided.
- (g) Towers shall be provided with permanent motorized hoists and access hatches to allow jacks to be positioned in the towers for re-jacking of the cable stays and operation of the cable snow and ice removal system. Hoists shall be installed to accommodate lifting of equipment from deck level up to all cable snow and ice removal system rope access points.

4.6.10 Bridge Snow and Ice Removal

4.6.10.1 General

- (a) The Design-Builder shall develop and provide bridge components to prevent snow or ice from falling from the cables, tower cross beams and other bridge elements of cable-supported Structures onto the traffic lanes. Components of the bridge snow and ice removal system shall include:
 - (i) use of a cable snow and ice removal system;
 - (ii) methods to remove snow and ice from or prevent the accumulation of snow and ice on overhead elements including but not limited to cables, towers and tower cross beams;
 - (iii) live high-definition video with pan, tilt and zoom features for monitoring of cables, tower cross beams, snow depth measuring device and other overhead elements;
 - (iv) predictive environmental modelling and forecasting including a weather station compatible with the Ministry road weather information system;
 - (v) installation of a snow depth measuring device on the tower top supporting the weather station; and

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- (vi) operation and maintenance procedures for all components of the bridge snow and ice removal system shall be included in an operation and maintenance manual.
- (b) The Design-Builder shall provide and commission a live, electronic, internet-based system to monitor the cable snow and ice removal system and associated infrastructure and components, including cameras and weather stations. The system shall:
 - (i) provide live access to current information on the status of cable snow and ice removal system activities;
 - (ii) collect data and provide reports of cable snow and ice removal system actions taken, including confirmation that collars have reached the collar attenuators and how many collars are available to drop for each cable; and
 - (iii) be located such that monitoring equipment is accessible for maintenance without disrupting traffic.

4.6.10.2 Cable Snow and Ice Removal System Requirements

- (a) The Design-Builder shall provide a system for the removal of snow and ice accretion from cables, as consistent with the system identified in the Port Mann Bridge Snow Removal and Ice Management System Reference Document, including the corresponding electrical, instrumentation and control systems. The system shall be supplied with a full complement of collars and an additional 10% for storage. The system shall be designed to travel the length of each cable from the tower anchorage to a location no greater than 3 m above the deck anchorage.
- (b) Actuators shall have a minimum IP code of IP66S, as defined in CAN/CSA-C22.2 No. 60529.
- (c) The control systems shall be able to report in real time, the exact number of collars available to be dropped at any given time.

4.6.11 Services

The following services shall be provided on cable-supported Structures:

- (a) auxiliary power suitable for running all elements of the Bridge that require power, including all components of the bridge snow and ice removal system and compound.
- (b) permanent lighting with permanent power supply for access routes and access chambers;
- (c) emergency lighting along all emergency routes; and
- (d) Utilities and empty conduit, in accordance with this Agreement.

ARTICLE 5 GEOTECHNICAL

5.1 Order of Precedence

Geotechnical investigation and design shall be in accordance with the criteria contained in this Article and the Reference Documents, and if there is any conflict between the criteria contained in this Article and any Reference Document, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) Technical Circular T-04/17;
- (c) Bridge Standards and Procedures Manual, including the BC Supplement to CAN/CSA-S6-14;
- (d) DBSS; and
- (e) CAN/CSA-S6-14.

5.2 General Requirements

The Design-Builder shall be responsible for all geotechnical investigations and interpretations of all data required for the design and construction of the Project Work. This shall also include geotechnical investigations and design for all temporary and permanent material stockpiles, surplus material/waste landfills and disposal sites.

5.3 Reference Documents

As per Appendix A [Reference Documents] and Appendix B [Factual Geotechnical Data] of Schedule 1.

5.4 Geohazards

- (a) The Project corridor is located within a narrowly constrained steep alpine valley. Significant natural hazards exist including snow avalanche, rock falls, debris flow/flood and landslides, many of which originate well above the existing highway. There are also significant over-steepened bedrock and colluvial slopes downslope of the existing highway which are prone to sliding, raveling and erosion. This Article describes requirements for assessment, design and mitigation of geohazards (rock falls, debris flows/floods and landslides). Requirements related to snow avalanches are described in Article 10 [Snow and Avalanche Design Criteria] of this Part.
- (b) The Design-Builder shall carry out investigations and studies to identify, analyze and design construction measures to mitigate the risks from geohazards to the Project Infrastructure as described in this Article. The Design-Builder shall incorporate mitigation measures so there is no increase in risk to the travelling public during Construction. The Design-Builder shall also identify geohazards that may pose new or increased risks to the CP Lands and CP operations because of the Project Work, and shall incorporate, in accordance with Article 3 [CP Interface] of Part 1 of this Schedule, mitigation measures into the completed Project Work to ensure there is no net increase in any such risk.

- (c) Geohazard analyses shall include an assessment of the magnitude-frequency of hazard events, probability of occurrence, assessment of the risk, and estimation of design forces (static and dynamic) and dimensions for proposed Structures as required for design of mitigation works. Design and construction measures shall be incorporated into the Project Work to ensure debris flow/flood events do not damage Structures nor encroach onto the Travelled Lanes such that they present a danger to users. The Design and Construction shall include measures to prevent a minimum 75-year return period debris flow/flood from extending past the westbound fog line of the new highway. Structures that support the new highway shall be designed to withstand a minimum 300-year return period debris flow/flood event in accordance with CAN/CSA-S6-14. Debris flow/flood mitigation structures not directly supporting the new highway shall be designed for a minimum 100-year event. Design of mitigation measures for geohazards shall also consider the potential interrelation between various natural hazards at the same location (including the potential effect of avalanche on rock fall mitigation works, or the potential for a combination of debris flow/floods and avalanches in the same path/channel).
- (d) Design for debris flows/floods shall be carried out using the Debris Flow Control Structures for Forest Engineering.
- (e) Requirements for assessment and design of measures to mitigate rock fall hazard from areas above the constructed Project Work are described in Section 5.11 [Rock Fall Mitigation Design] of this Part and shall be considered in conjunction with rock cut design and construction. For existing slopes above the new highway that will not be affected by construction of the highway or its structures, a stability condition equal to or greater than that which currently exists (the ambient condition) is acceptable. The Design-Builder shall incorporate mitigation measures into the Project Work for existing geohazards identified in this Article so there is no increase in geohazard risk to the Project Infrastructure. However, where natural rock fall from otherwise unaffected slopes above the work area may impact the new highway or its structures, then mitigation design shall be implemented as described in this Article. Slopes above the highway that are modified by construction will be analyzed and designed according to Section 5.8 [Slope Stability – Slopes and Embankments] of this Part.
- (f) The Design-Builder shall also assess existing slopes and slope failures below the highway and mitigate the potential risk to affect the constructed Project Work. This assessment and mitigation shall include the potential risk for new or temporary construction works to cause ground movement of (or rock fall from) existing fill, colluvial and rock slopes. For existing slopes below the new highway that will not directly support the highway or its Structures, a stability condition equal to or greater than that which currently exists (the ambient condition) shall be required. However, consideration must be given to where such slopes may naturally retrogress and cause movement of the highway or its Structures. Where the factor of safety for such slopes is determined by the Design-Builder to be less than 1.2, then the slope (unless it can be avoided), the highway and its Structures shall be designed and constructed using the minimum factors of safety described in Section 5.8 [Slope Stability - Slopes and Embankments] of this Part and movement tolerances described in Section 5.7 [Settlement and Deformation] of this Part.
- (g) The Design-Builder shall consider the potential for valley-scale landslides having deep-seated failure surfaces (in this context, failure surfaces greater than 15 m deep) and extending over a substantial portion of the overall valley wall from above the highway

construction disturbance area to below the highway construction disturbance area. Where such potential landslide surfaces cannot be practically addressed according to the minimum factors of safety described in Section 5.8 [Slope Stability – Slopes and Embankments] of this Part and movement tolerances described in Section 5.7 [Settlement and Deformation] of this Part, the Design-Builder's geotechnical analysis and design shall demonstrate that construction of the new highway will be net neutral to or better than the ambient global stability condition and in no case shall the minimum factor of safety be less than 1.2.

5.5 Geotechnical Seismic Design

Geotechnical seismic design shall be carried out according to Section 6.0 of Technical Circular T-04/17. The horizontal seismic coefficient (k_h) shall be equal to one half of the peak ground acceleration divided by gravitational acceleration (g).

5.6 Foundations

- (a) Design of shallow and deep Foundations shall be completed using Limit States Design procedures outlined in CAN/CSA-S6-14 and the BC Supplement to CAN/CSA-S6-14. In the case of any conflicting design criteria, Article 3 [Structural Design Criteria] of this Part shall govern.
- (b) Structures shall be founded on (i) bedrock or dense to very dense/hard native soils, or (ii) pile Foundations extending to bedrock or dense to very dense/hard native soils. Structures shall be founded such that bearing, stability, and settlement criteria are achieved for the Design Life of the Structures. In the case of an MSE wall Structure, if it is demonstrated through soil-structure analyses that bearing, stability, and settlement criteria are achieved for the Design Life of the MSE wall Structure, the entire MSE reinforced backfill envelope would not have to be founded on bedrock or dense to very dense/hard native soils, nor on piles. East of LKI 7.9, where native soils may not necessarily meet the definition of "dense", "very dense", and "hard" soils as defined in the Canadian Foundation Engineering Manual, Structures founded on competent native soils such that the required bearing, stability, and settlement criteria are achieved for the Design Life of the Structures will be acceptable.
- (c) Design and construction of drilled shafts, piles, rock sockets and other deep Foundation elements not covered by CAN/CSA-S6-14 and the BC Supplement to CAN/CSA-S6-14, shall be according to the AASHTO LRFD Bridge Design Specifications.
- (d) Soil and rock anchors permanently included in Structures shall be PTI – Class I Double Corrosion Protected (DCP) as defined in PTI DC35.1-14. Installation and testing of soil and rock anchor systems shall also be according to PTI DC35.1-14.
- (e) Rock anchors, and all related hardware, permanently included in a shotcrete facing shall meet the corrosion protection requirements of Section 3.3.11 [Corrosion Protection for Steel Below Ground] of this Part. Rock anchors, and all related hardware, shall be hot dipped galvanized to ASTM A123 or ASTM A153. Steel reinforcing bars used as rock anchors or dowels shall be hot dipped galvanized in accordance with Sections 206 and 412 of the DBSS.
- (f) Foundations for retaining walls, including MSE walls, shall also include the following minimum criteria:

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- (i) a minimum 1.2 m wide horizontal bench in front of all MSE walls on sloping ground (4H:1V or steeper);
- (ii) a minimum burial depth of 0.6 m below ground in front of all MSE walls; for MSE walls adjacent to roadways the burial depth would be measured from top of subgrade; and
- (iii) sufficient depth of cover as required for external stability, erosion, and frost protection.

5.6A Geotechnical Baseline Areas

For purposes of the Geotechnical Baseline Assumptions, the Geotechnical Baseline Areas are defined by polygons in plan view as digitally defined in drawings (the “**Geotechnical Baseline Area Polygon Drawings**”), drawn around areas of Foundations for Structures (such as piers, abutments and walls) that will underlie and provide support for the new highway. For MSE Structures, the polygon encompasses the MSE footprint as well as the Foundation for the MSE facing panels. The geotechnical baseline is for the geologic top of bedrock within the polygons only. A PDF version of the Geotechnical Baseline Area Polygon Drawings is attached as Appendix G [Geotechnical Baseline Area Polygon Drawings] to this Schedule, and the AutoCAD Civil 3D version of the Geotechnical Baseline Area Polygon Drawings is posted in the Data Room.

5.6B Geotechnical Baseline Assumptions

The following baseline assumptions apply to the Geotechnical Baseline Areas:

- (a) The baseline for top of bedrock shall only be used for the design of Foundations (i.e. footings and piles) for downslope Structures that support the new highway. The baseline shall not be used for the design of anchor lengths or types for downslope Structures, or for the design of upslope Structures, rock cut design, overburden cut slope design, rock cut volume estimates or any other purposes.
- (b) The baseline for top of bedrock is the geologic top of bedrock surface that is first encountered from excavation or drilling. The surface and underlying rock mass have variable weathering, strength and competency conditions. It should be noted that the bedrock surface and, in many cases, much of the rock below the bedrock surface, does not meet the definition of “Solid Rock” as per Section 201.11.01 of DBSS.
- (c) The Design-Builder shall be responsible for the evaluation of rock conditions and the appropriate Foundation design for Structures relative to the *in-situ* rock conditions.
- (d) The baseline top of bedrock is provided in the form of surface contours at 1 m intervals in the Geotechnical Baseline Area Polygon Drawings.

5.6C Consequences of Different Geotechnical Conditions

- (a) Following the Effective Date, the Design-Builder shall complete such investigation of geotechnical site conditions as it considers appropriate, including excavating test pits and drilling to bedrock where feasible.

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- (b) If the actual top of bedrock surfaces in relation to the Geotechnical Baseline Areas differ from the baseline top of bedrock surfaces indicated by the Geotechnical Baseline Assumptions, then the following principles shall apply separately in respect of each major Structure (Bridges and retaining walls) comprised within the Geotechnical Baseline Areas (each, an “**Affected Structure**”):
- (i) Where the actual top of bedrock surfaces for such Affected Structure are more favourable than the baseline top of bedrock surfaces indicated by the Geotechnical Baseline Assumptions, the Design-Builder shall retain any benefits resulting from such more favourable conditions.
 - (ii) Where the actual top of bedrock surfaces for such Affected Structure are less favourable than the baseline top of bedrock surfaces indicated by the Geotechnical Baseline Assumptions, the Design-Builder shall revisit the initial Design concept for the Foundations for such Affected Structure to confirm assumptions and explore potential alternatives, including a review of:
 - (A) bedrock structural details;
 - (B) structural systems, whether MSE walls or Bridge-type structures;
 - (C) highway alignment impacts;
 - (D) construction methodology; and
 - (E) Foundation options,to determine whether further development of the Design concepts relating to the Foundations for such Affected Structure is required.
 - (iii) Where the Design-Builder determines that no further development of the Design concepts relating to the Foundations for an Affected Structure is required in the circumstances set out in Section 5.6C(b)(ii) above, then:
 - (A) if the actual top of bedrock surfaces for such Affected Structure are less favourable than the baseline top of bedrock surfaces indicated by the Geotechnical Baseline Assumptions by less than or equal to 1.5 m, the Design-Builder shall bear any additional costs related to the less favourable conditions; or
 - (B) if the actual top of bedrock surfaces for such Affected Structure are less favourable than the baseline top of bedrock surfaces indicated by the Geotechnical Baseline Assumptions by more than 1.5 m, and could not reasonably and in accordance with Good Industry Practice have been anticipated based on any information available to the Design-Builder with respect to the geological conditions in or in the vicinity of the applicable Geotechnical Baseline Area (and which information shall include any information obtained from any drill holes conducted by the Design-Builder prior to the Financial Submittal Date), such

circumstances shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply.

- (iv) Where the Design-Builder determines that further development of the Design concepts relating to the Foundations for an Affected Structure is required in the circumstances set out in Section 5.6C(b)(ii) above, then the Design-Builder shall initiate a value engineering process for the further joint collaborative development of such Design concepts by the Province and the Design-Builder. Potential solutions shall be priced by the Design-Builder and the most cost effective option selected for construction, with the consent of the Province, and:
 - (A) if the less favourable actual top of bedrock surfaces for such Affected Structure could not reasonably and in accordance with Good Industry Practice have been anticipated based on any information available to the Design-Builder with respect to the geological conditions in or in the vicinity of the applicable Geotechnical Baseline Area (and which information shall include any information obtained from any drill holes conducted by the Design-Builder prior to the Financial Submittal Date), such circumstances shall constitute a Compensation Event and the provisions of Part 8 [Supervening Events] shall apply; and
 - (B) the Province will arrange to have geotechnical, structural and geometric engineering representatives available throughout any such Design process, providing compliance review and feedback on application of the value engineering process and other solutions as the Design-Builder's Design evolves through Construction to address such unforeseen ground conditions.

5.7 Settlement and Deformation

- (a) Settlement and deformation analysis of Structures and embankments shall be performed. Settlement analysis (including that for new fills) shall consider the influence of underlying geological conditions, including that from pre-existing fills and colluvial soils. Foundations for Structures shall be designed such that their lateral deformations, total and differential settlements are compatible with the function and performance requirements of the Structures over their Design Life (75 years).
 - (i) Bridges: The maximum permissible long-term Foundation settlement of any Bridge abutments and adjacent wing walls and/or retaining walls shall be 50 mm. The maximum permissible long-term longitudinal grade break (change in longitudinal grade) at any support point over the length of a Structure shall be 0.5%. Long-term differential settlement between adjacent Substructure elements, between the ends of any individual Substructure element or between abutments and adjacent wing walls and/or retaining walls shall not be more than half of the maximum permissible long-term Foundation settlement. For this Article, “long-term” is defined as a period of time measured from the Substantial Completion Date to the end of Design Life (75 years).
 - (ii) All Other Areas:. Structures that are not Bridges and embankments shall be designed such that their total settlements post the Substantial Completion Date

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shall be less than 200 mm over the Design Life (75 years), as measured on the finished highway pavement surface. The maximum lateral deflection of the top of retaining walls at any one location shall be 25 mm at the end of the General Project Work Defect Warranty Period and 50 mm at the end of the Design Life. The face batter of retaining walls at the end of the General Project Work Defect Warranty Period and at the end of the Design Life shall not be steeper than the design batter.

For Structures that are not Bridges, differential settlements measured at the top of retaining walls or ground surface behind retaining walls, or (in the case of MSE walls) at the perimeter of reinforced backfill zones, shall be limited to 1:200 (0.5%) over 5 m transverse to centreline and 1:400 (0.25%) over 5 m parallel to centreline, as measured on the finished highway pavement surface at the end of the General Project Work Defect Warranty Period.

Differential settlements induced by and/or occurring within embankments shall be limited to 1:200 (0.5%) over 5 m transverse to centreline and 1:400 (0.25%) over 5 m parallel to centreline, as measured on the finished highway pavement surface at the end of the General Project Work Defect Warranty Period.

The above settlement criteria do not apply for the existing highway embankment area from LKI 4.20 to LKI 4.40 and from LKI 9.05 to 9.29, provided new fill heights are less than 1.2 m as measured from toe of new fill to top of the outside edge of pavement.

- (b) As part of the Final Design submission, the Design-Builder shall provide an estimate of the absolute and differential settlements expected at (i) Substantial Completion Date; (ii) end of General Project Work Defect Warranty Period; and (iii) end of Design Life (75 years). This estimate shall be provided at:
 - (i) all Bridge abutment, pier and end of approach slab locations; and
 - (ii) along the length of each fill and Major Retaining Wall, at 5.0 m intervals parallel Highway 1.
- (c) The Design-Builder shall institute a monitoring program to measure the absolute and differential settlements and lateral deformations at locations corresponding to the above-noted estimates. As a minimum, survey shall be completed within 30 days of Substantial Completion and 30 days prior to the General Project Work Defect Warranty Period expiring and in accordance with all provisions of Schedule 5 [Project Work Defects and Warranties]. The Design-Builder shall provide the Province's Representative with accurate survey measurements established from permanent survey control points with elevations and horizontal coordinates taken to 1.0 millimetre accuracy. The survey information shall include a sketch plan showing survey control locations and descriptions as well as the location of survey information taken on the Structures.
- (d) Should surveyed settlements or deformations exceed estimated values, the Design-Builder shall submit a plan to the Province's Representative in accordance with the Consent Procedure to mitigate excess future settlements and deformations to ensure the estimated settlements and deformation at end of Design Life can be achieved. Once accepted by the

Province's Representative, the Designer-Builder shall complete all mitigation measures listed in the plan prior to the end of the General Project Work Defect Warranty Period.

5.8 Slope Stability – Slopes and Embankments

- (a) Slope and embankment global stability design shall meet the values in Table 6.2b [Resistance Factors, Consequence Factors and Factors of Safety for Global Stability of Embankments] contained in the BC Supplement to CAN/CSA-S6-14. The global stability assessment, analysis and design of all slopes and Structures supporting the new highway shall use a “High” consequence factor, excepting between LKI 7.90 and LKI 9.29 where a “Typical” consequence factor shall be used. Slopes and structures located upslope of the highway, shall be analyzed and designed using a “Typical” consequence factor, excepting where those slopes will be unaffected by Construction in which case the ambient stability condition is acceptable.
- (b) The ambient stability condition is acceptable downslope of the highway from LKI 4.20 to LKI 4.40 and from LKI 9.05 to 9.29, provided new fill heights are less than 1.2 m as measured from toe of new fill to top of the outside edge of pavement.
- (c) Slopes excavated in material other than intact bedrock shall not be constructed steeper than 34 degrees unless designed as Strengthened Earthworks, and in accordance with FHWA Circular No. 7, or other published procedure that has been approved by the Province's Representative.
- (d) Where the slope face is greater than 45 degrees, the design shall be in accordance with Article 3 [Structural Design Criteria] of this Part. Strengthened Earthworks that use proprietary systems shall only use those listed on the current Recognized Product List. Use of a TECCO mesh system (or equivalent) for Strengthened Earthworks and/or overburden slope face retention are not permitted.
- (e) Finished excavated and embankment slopes, whether in whole or in part, shall be free of deformation including shallow slope movement, piping, slumping, erosion or other forms of distress. If necessary, remedial work shall be carried out within the General Project Work Defect Warranty Period to achieve these conditions.

5.9 Geotechnical Instrumentation

- (a) The geotechnical design shall identify and include provisions for geotechnical instrumentation systems (including piezometers, slope inclinometers, settlement gauges, movement hubs and load cells) and monitoring programs required before, during and after the completion of Construction, for Design and performance monitoring purposes.
- (b) In addition to instrumentation required for Design and Construction of the Project Work, the Designer-Builder shall also be responsible for maintaining and monitoring pre-existing geotechnical instrumentation for at least the following locations:
 - (i) Phase 4 - Canyon Section (as described in Wood: Kicking Horse Canyon Phase 4 – Instrumentation Monitoring October 2018, 28 November 2018):

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- Slope Inclinometers: TH00-13, TH00-14, TH07-2, TH07-10, TH15-3, TH15-4, TH15-9, TH15-11
- (ii) Phase 3W – 4 Km Wall Area (as described in Thurber: Rock Fill Instrumentation Results to May 3, 2018, Technical Memorandum No. 114, May 2018):
- Slope Inclinometers: SI12-8, SI-9, SI10, SI11, SI12, SI13
 - Movement Hubs: Nail1, Nail2, Nail3, Nail4, M6, M7, M8, R7, R20, R21, R22, R23, R24
- (c) The Design-Builder shall monitor these locations prior to the commencement of Construction and no less than quarterly thereafter during Construction and the General Project Work Defect Warranty Period, unless otherwise agreed to by the Province's Representative. The Design-Builder shall replace any of the above listed installations should they be disrupted or damaged by the Design-Builder's activities, unless otherwise agreed to by the Province's Representative. Within 3 days after each monitoring event, the Design-Builder shall provide a report (including trend plots of movement over time) depicting the results of each monitoring event to the Province's Representative.

5.10 Rock Slope Design

- (a) Rock excavation and slope design shall include stability analyses, cut slope angles, ditch configuration for rock fall containment and provision of recommendations for slope support/stabilization and protection measures necessary to optimize the stability and rock fall control for the Project.
- (b) For rock masses where potential failure mechanisms are structurally controlled, kinematic stability analysis shall be performed. Design cut slopes shall be oriented to remove systematic discontinuity sets that are detrimental to global stability. Where slope orientation measures alone are insufficient to remove systematic discontinuity sets or where it is not practical to remove systematic discontinuity sets, then mitigating slope support measures shall be included. Limit equilibrium stability analysis shall be performed on dominant kinematically possible failure mechanisms to determine support requirements to achieve the minimum factors of safety in Table 6.2b [Resistance Factors, Consequence Factors and Factors of Safety for Global Stability of Embankments] of the BC Supplement to CAN/CSA-S6-14.
- (c) For rock masses that are not structurally controlled, limit equilibrium stability analysis using circular search methods shall be performed to ensure new rock cuts achieve the factors of Safety in Table 6.2b [Resistance Factors, Consequence Factors and Factors of Safety for Global Stability of Embankments] of the BC Supplement to CAN/CSA-S6-14.
- (d) Where rock mass stability may be governed by either rock mass strength or structural control, the Design-Builder shall perform both analyses.
- (e) The nature and thickness of the overburden, in particular, talus deposits and those containing cobbles and boulders, as well as the upper weathered zone of the rock mass, shall also be considered in the cut stability design and for the necessity of rock fall hazard mitigation. Where slopes steeper than 34 degrees are required in soil, colluvium, or weathered rock at

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the top of rock cuts, those slopes shall be designed and constructed as Strengthened Earthworks, as described in Section 5.8 [Slope Stability – Slopes and Embankments] of this Part.

- (f) Rock cut designs shall include ditch design based on geometric criteria proposed for the Project. Ditches below new rock cuts shall be designed in consideration of the geometric criteria proposed for the Project and achieve a minimum 95% retention rate for potential rock fall sourced from new rock cuts. Slope irregularities in the finished cuts, whether intentionally constructed or not, shall be considered in design of the ditch sections.
- (g) The following references shall be consulted when developing rock fall containment ditch design:
 - (i) Technical Bulletin GM02001, Figure 440.H;
 - (ii) ODOT Rockfall Catchment Area Design Guide; and
 - (iii) Ritchie (1963) Ritchie, A.M., 1963. The evaluation of rock fall and its control. Highway Record. Vol 17.
- (h) The catchment dimensions given therein are considered to be minimum preliminary design values. Final detailed design of rock cuts shall be based on a site-specific geotechnical investigation and shall take priority over the requirements outlined in Technical Bulletin GM02001.
- (i) If 95% retention of rock falls sourced from the finished rock cuts cannot be achieved by slope and standard ditch geometry alone, then additional mitigation shall be incorporated, such as but not limited to: modified ditch width cross sections, roadside barriers, rock face support, slope drapery, rock fall attenuators and machine accessible road level rock fall stopping fences. However, the minimum ditch catchment widths shall be those given in Table 1 of Technical Bulletin GM02001, and for rock cut heights greater than 24 m, the minimum ditch catchment width shall be 8 m, unless the slope is also designed with a rock fall attenuator in which case the minimum ditch width for rock fall purposes shall be 6 m.
- (j) All rock excavations, rock slope construction, rock slope support and rock fall mitigation systems shall be constructed in accordance with DBSS 204, 206, 207, 208 and 209, except as modified herein. Components of rock catch fences and drape mesh systems used in conjunction with rock cut construction shall be sourced from the Recognized Products List.
- (k) Rock slopes and excavation material shall be assessed for potential acid rock drainage or metal leaching as described in Section 2.8.9 [Environmental Design] of Part 3 of this Schedule and Section 2.7 [ARD/ML Material Management Plan] of Schedule 6.

5.11 Rock Fall Mitigation Design

- (a) Mitigation measures for natural rock fall originating from slopes above the design cuts, or surficial deposits potentially destabilized because of Construction access and design cuts, shall be designed and incorporated into the Project Work. Such mitigation measures are required for at least the following general locations:

- (i) LKI 4.40 to LKI 4.85;
 - (ii) LKI 5.25 to LKI 5.65; and
 - (iii) LKI 6.30 to LKI 7.10.
- (b) The Design-Builder shall carry out investigations and studies to determine the potential volume, block sizes, mass, velocity, and frequency of rock fall originating from above design cut slopes which if unmitigated would impact Structures or the Travelled Lanes of the new highway. The Design-Builder shall perform rock fall trajectory analyses.
- (c) Mitigation of rock fall from above the design cut slopes shall consist of suspended hybrid rock fall attenuator systems suspended at or near the crest of constructed cuts such that a minimum of 95% of individual rock fall boulders or blocks originating from above that reach the plane of the attenuator are intercepted and, if having a total impact energy equal to or less than the Service Energy Level (SEL) criteria listed in Table 5.11, are redirected into machine accessible catchment and cleanout ditch areas below. A maximum of 5% of rocks reaching the plane of the attenuator may go over the attenuator. The Design of rock fall mitigation systems shall also consider and include features to mitigate potential loading effects and damage from avalanche hazards.

Table 5.11: Required Minimum Service Energy (SEL) for Rock Fall Attenuators

Location (LKI)	Minimum SEL* (kJ)
4.40 to 4.85	3,000
5.25 to 5.65	3,000
6.30 to 7.10	3,000

* Attenuator components to be sourced from a rock fall catch fence system tested/rated to MEL = 2 x SEL.

- (d) Rock fall attenuator systems shall consist of a linear series of anchored and tied-back steel posts founded at or near the crest of a rock cut or on a supporting Structure. The posts shall support one or more horizontal top steel bearing ropes or cables from which steel rock fall net or mesh panels shall be suspended from a height and location required to intercept and redirect rock falls from above. These panels shall have the required strength, inertia, lateral resistance and length to intercept and redirect individual rock fall boulders or blocks (up to the SEL criteria listed in Table 5.11) down the face of the rock cut into ditch catchment/cleanout areas. Typically, there is a primary net component consisting a relatively wide aperture, high capacity steel cable or ring mesh panels suspended from the bearing rope within the initial rock fall impact zone. The primary net may be backed by an outer secondary net consisting of a relatively small-aperture, lighter duty mesh designed to intercept smaller rock fragments that may pass through the apertures of the primary net.
- (e) Attenuator systems shall be designed and constructed to intercept and redirect individual rock boulders or blocks (up to the SEL criteria listed in Table 5.11) without significant damage that impairs the effectiveness of the system. Acceptable attenuator systems shall consist of components provided by manufacturers regularly engaged in the production and supply of rock fall protection mesh and fence systems, as listed in the Recognized Products List. The attenuator components (nets and posts) shall be sourced from rock fall catch fence systems that have been tested and certified under ETAG 027, or an equivalent standard

accepted by the Province's Representative in accordance with the Consent Procedure, to a Maximum Energy level (MEL) of at least two times the SEL listed in Table 5.11. Nets used for attenuators shall have been tested with the following parameters:

- (i) Service Energy Level (SEL) for at least a 5 m fence height tested in accordance with ETAG 027 (or equivalent) shall be equal to or greater than the criteria listed in Table 5.11.
 - (ii) Maximum Energy Level (MEL) for at least a 5 m fence height tested in accordance with ETAG 027 (or equivalent) shall be at least twice the SEL.
 - (iii) A maximum of two base anchors per post shall have been used in the ETAG 027 certification testing.
 - (iv) There shall have been no deformation of the posts during tests of the catch fence to the Maximum Energy Level (MEL) and no gaps between net and post after rock impact during tests.
 - (v) There shall have been no sacrificial elements in the test configuration that allowed the primary netting to disengage from the bearing ropes.
 - (vi) There shall have been no separation of the net from the perimeter cables after the MEL rock impact.
 - (vii) Maximum net deflection or elongation as detailed by ETAG 027 shall not have exceeded 8 m.
 - (viii) Residual fence height after impact as detailed by ETAG 027 shall have been a minimum of 50% of original height.
- (f) In order to facilitate future maintenance and repair after snow avalanches, and/or rock falls of magnitudes in excess of the SEL criteria listed in Table 5.11, the components of the attenuator systems shall be durable and modular to allow easy removal and reinstallation of components on a seasonal basis if required. The following features are required:
- (i) Base plates for posts shall be designed to be mounted on the vertical or near-vertical rock face (or other Structure) at or near the crest of the rock face, utilizing a grout or concrete pad for Foundation stabilization as necessary. In areas where avalanche hazard is not a consideration, base plates for posts may be mounted above the crests of rock faces.
 - (ii) Solid threadbars (rigid anchors) shall be used for base plate anchors. The solid threadbar anchors shall be a minimum of 6 m in length and have a minimum diameter of 44 mm.
 - (iii) Post base plate areas shall be fitted with steel anchor protection plates welded on the upslope side of the base plates.
 - (iv) Posts shall be steel H-beams, with a minimum size of HEA 300, HEB 240 or from a fence system rated/tested at an MEL of at least two times SEL,

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- (whichever is greater), fitted with climbing rungs spaced 0.3 to 0.5 m apart on posts.
- (v) Posts shall be hinged at base.
 - (vi) Individual posts shall be easily removable from the system without the need to remove the bearing rope beforehand. Bearing rope may be attached to the top of the post using, for example, a removable shackle.
 - (vii) Upon removal of upslope retaining ropes, post tops to be able to rotate down unimpeded to face of the slope (or Structure) below the attenuator, (requires base plate angle to match the slope face or Structure angle below).
 - (viii) Hollow core anchors shall not be used.
 - (ix) Cable anchors or solid threadbar anchors with flexible heads (flexible anchors) shall be used for all support cables/ropes. Solid threadbar anchors shall be a minimum of 6 m in length and have a minimum diameter of 44 mm. Cable anchors shall have the same pullout capacity as 6 m long 44 mm dia. solid threadbars.
 - (x) If friction, braking or other deformable sacrificial elements are included in the system, they shall be designed such that they are not activated, require service or replacement for impacts of individual rock fall boulders or blocks not exceeding the SEL criteria listed in Table 5.11.
 - (xi) Primary attenuator nets shall be fastened to bearing rope using shackles only. Primary nets shall be supported only by the bearing rope. The lower half of the primary nets shall be easily removed for replacement as needed.
 - (xii) Secondary net material shall be single twist steel mesh with a maximum opening clearance of 65 mm formed with minimum 3 mm diameter wire with a minimum wire tensile strength of 1770 N/mm². Secondary net material shall be installed on the highway side of the primary nets.
 - (xiii) Secondary attenuator nets shall be fastened near the top of primary nets using shackles. There shall be no intermediate fasteners. The lower half of secondary nets shall be easily removed for replacement as needed.
 - (xiv) Bottoms of nets shall be a minimum of 2 m above highway final pavement surface (or equivalent access grade).
 - (xv) Vertical net panel seams shall be easily disconnected for replacement as needed.
 - (xvi) All steel components shall be hot dipped galvanized to ASTM A123 or ASTM A153 where applicable, compatible with a minimum 50-year design life.
- (g) Further, the acceptance for rock fall attenuator systems shall be based upon:
- (i) either:

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- (A) a full-scale field-testing program of the provided system involving at least one dozen impacts of at least 50% of the SEL; or
- (B) performance of at least three comparable rock fall mitigation systems installed within the last decade; and
- (ii) the engineering basis for the design and dimensioning of the attenuator systems to be provided for this Project.
- (h) Additional details of the above rock fall attenuator acceptance criteria are provided in Section 2.8.5 [Geotechnical Design] of Part 3 of this Schedule.
- (i) Rock fall mitigation for upslope source areas may also serve downslope cuts and be considered in downslope rock cut design and rock fall catchment.
- (j) In all cases, and in addition to the requirements of Article 5 [Operation and Maintenance] of Part 1 of this Schedule, rock fall catchment, retention, and attenuator system design and configuration shall include provisions for maintenance including machine access for cleanout of accumulated rock fall material required to maintain mitigation system effectiveness.

5.12 Aggregate Sources

- (a) The Ministry's stockpile site at Highway 1 and 95, Golden Hill Pit, and Crozier Pit may be used for sourcing construction aggregates and granular borrow. All activities within the stockpile site at Highway 1 and 95, Golden Hill Pit, and Crozier Pit shall comply with the conditions described in the most recent Pit Development Plan for each of these areas. If the Design-Builder intends to make use of any of these areas, the Design-Builder shall submit a pit use plan to the Province's Representative in accordance with the Review Procedure at least three weeks prior to proposed use, which shall include, as a minimum the following:
 - (i) site plan showing proposed locations and magnitudes of excavations, stockpiles, unsuitable materials and other products;
 - (ii) location and types of plant;
 - (iii) proposed schedule for operations in the pit; and
 - (iv) stormwater and environmental management, reclamation and other relevant information concerning pit operations.
- (b) At the end of Construction, the Design-Builder shall produce a site survey and updated version of the Pit Development Plan for each area used.
- (c) The Design-Builder acknowledges that other contractors have been granted access to and extraction and usage rights to the stockpile site at Highway 1 and 95, Golden Hill Pit, and Crozier Pit, including the Concessionaire's Operator, and that usage rights to Crozier Pit have also been granted to the Concessionaire.

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- (d) It is the Design-Builder's responsibility to coordinate its activities with the Ministry and others who maintain rights within the pits.
- (e) Further to DBSS 202.06, use of the stockpile site at Highway 1 and 95, Golden Hill Pit, and Crozier Pit are optional and are not "designated pits".
- (f) Access to Golden Hill Pit is via a recently (2018) upgraded pit access road from Golden, Donald Upper Road. The pit access road subgrade consists of sandy gravel with some silt. The road structure consists of approximately 0.3 m of compacted pit run sand and gravel overlain by approximately 0.10 m of compacted -20 mm crushed gravel. The running surface consists of a 0.15-0.20 m thickness of compacted asphalt millings (for trafficability and dust control). The pit access road right-of-way (easement) is partially fenced and also contains municipal, electrical, and communications utility infrastructure. If the Design-Builder elects to use Golden Hill Pit, then the following conditions apply:
 - (i) access shall be via the existing pit access road; there shall be no direct access to Golden Hill Pit from the adjacent Highway 1 right-of-way;
 - (ii) the Design-Builder shall comply with all terms and conditions of the right-of-way / easement agreements and permits related to the establishment of the pit access road;
 - (iii) the Design-Builder shall operate and maintain the pit access road in a condition comparable to or better than exists at the time of initial use for Project Work;
 - (iv) the pit access road is used by adjacent private dwellings north of the road;
 - (v) the Design-Builder shall be responsible for the safety of the road and shall allow access to and not damage, municipal, electrical, and communications infrastructure within the right-of-way; and
 - (vi) upon completion of Project Work, the Design-Builder shall return the access road and its right-of-way in a condition comparable to or better than existed prior to the start of Project Work.
- (g) Where the Design-Builder elects to obtain any materials from a quarry, the Design-Builder shall carry out an assessment for potential acid rock drainage or metal leaching as described in Section 2.8.10 [Environmental Design] of Part 3 of this Schedule.

5.13 Geotechnical Design and Construction Reporting

- (a) The Design Management Plan shall contain a work plan outlining the issues, risks, proposed analysis approach and assumptions to be clarified and addressed in subsequent geotechnical assessment, analysis and design, with description of the proposed site assessment (field studies, mapping, subsurface investigations and instrumentation) and methodology to obtain additional site-specific information for the geotechnical design of excavations, embankments, Structures, final rock cuts, rock fall protection, debris flow/flood mitigation, surplus material disposal sites/landfills and other elements of the Project Work, and including, as a minimum:

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- (i) a topographic plan showing the locations of proposed boreholes, test pits or other exploration procedures;
 - (ii) a description of the design element and purpose of the exploration associated with each exploration location;
 - (iii) details of the proposed explorations including depth, sampling, in-situ testing and any installed instrumentation; and
 - (iv) details of proposed laboratory testing.
- (b) For every submission pertaining to Structures, earthworks, rock slopes, disposal sites and any element having a geotechnical design requirement, a Geotechnical Design Report shall be submitted to the Province's Representative in accordance with Section 2.8.5 [Geotechnical Design] of Part 3 of this Schedule.
- (c) In addition to the other requirements of this Schedule and the DBSS, the Design-Builder shall submit the following documentation for Construction activities:
- (i) Geotechnical Safe Work Plans – Geotechnical assessments and required measures to protect workers, the public and adjacent infrastructure (including CP infrastructure) from natural hazards and construction induced instability during construction.
 - (ii) Soil and Rock Anchors – Installation and testing records for all permanent soil and rock anchors incorporated into the Project Work. The locations and configurations of all such anchors shall be indicated on the Record drawings for the associated Structures.
 - (iii) Foundations – Installation and testing records for all permanent pile and drilled shaft or rock socket type Foundations incorporated into the Project Work, including the results of any load testing and down-hole installation inspection;
 - (iv) Rock Fall Events - Records of rock fall events during construction including geotechnical assessment of performance and recommended modifications to temporary and permanent rock fall protection systems as a result of those events;
 - (v) Geotechnical Instrumentation - Prior to the start of Construction a baseline measurement of pre-existing geotechnical instrumentation (as described in Section 5.9 [Geotechnical Instrumentation] of this Part) shall be carried out and results reported to the Province's Representative. The Design-Builder shall report subsequent monitoring events for all geotechnical instrumentation with a frequency acceptable to the Province's Representative. Upon Substantial Completion, the Design-Builder shall provide a final instrumentation report summarizing the results of all instrumentation monitoring, an inventory, and a location plan for all installations, along with provision of electronic data files suitable for subsequent monitoring by the Province.
 - (vi) Settlement and Deformation – Results of surveys as described in Section 5.7 [Settlement and Deformation] of this Part.

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- (vii) Rock Fall Protection Systems – For permanent rock fall protection systems (attenuators, stopping fences), the following is required for each installation:
 - (A) copies of ETAG 027 certification and/or testing records for rock fall fence system components, as described in Section 5.11 [Rock Fall Mitigation Design] of this Part;
 - (ii) Record drawings for each installation; and
 - (iii) an operations and maintenance manual for each installation.
 - (viii) Pit Development Plans - Upon completion of Construction the Design-Builder shall carry out a topographic survey and prepare an updated Pit Development Plan for each Ministry source used for Construction. As a minimum, the Pit Development Plan will illustrate areas and volumes used by the Design-Builder for extraction, remaining stockpile materials and volumes, waste/overburden stripping areas, and any reclamation activities carried out since initial use of the source by the Design-Builder.
 - (ix) Waste Disposal and Landfill Sites - An operation, monitoring and maintenance manual for all permanent waste disposal and landfill sites.
- (d) All geotechnical drawings and reports shall be sealed by a qualified Professional Engineer.

ARTICLE 6 SURPLUS DISPOSAL SITE CRITERIA FOR ARD/ML

6.1 Order of Precedence

Surplus Disposal Site Design and Construction shall be in accordance with the criteria contained in this Article and the following codes and standards and, if there is any conflict between the criteria contained in this Article and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article and in Schedule 6 [Environmental Obligations];
- (b) Ministry Technical Circulars and Technical Bulletins, including Technical Circular T-04/13;
- (c) DBSS;
- (d) Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia;
- (e) Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials; and
- (f) Environmental Constraint Drawings.

6.2 General Design Basis

- (a) The Design-Builder's AQP responsible for the design of any Surplus Disposal Site facility composed of potentially acid generating and/or metal leaching (“**ARD/ML**”) Type A (rock) and D (soil) material shall:

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- (i) be a Geotechnical Engineer; and
 - (ii) use the Type A and D ARD/ML characterization as a basis for the design of Surplus Disposal Site stockpile(s) to prevent runoff or seepage from the Surplus Disposal Site adversely affecting the receiving environment.
- (b) The Design-Builder's plans and designs for the Surplus Disposal Site shall take into consideration all geotechnical, environmental and other requirements, including those identified on the Environmental Constraint Drawings, and shall be signed and sealed by a Geotechnical Engineer.
- (c) Surplus Disposal Site mitigation for potentially acid generating rock shall be in accordance with Section 6.1 [Order of Precedence] of this Part.
- (d) The Design-Builder's AQP shall be responsible for implementing the design and overall management of the facilities detailed within the ARD/ML Material Management Plan as described in Section 2.7 [ARD/ML Material Management Plan] of Schedule 6.
- (e) To monitor compliance with Surplus Disposal Site design, the Design-Builder's AQP shall complete and submit quarterly field reviews ("**Surplus Disposal Site Quarterly Field Reports**") during Surplus Disposal Site stockpile construction in accordance with the requirements of Section 2.5 [Environmental Plans and Reports] of Schedule 6.

6.3 Reporting Requirements for ARD/ML

The Design-Builder shall provide the reports listed below for management of ARD/ML material to meet BC freshwater aquatic life standards:

- (a) for material characterization, an ARD/ML Prediction Assessment report;
- (b) for Surplus Disposal Site characterization, a Geotechnical Site Investigation report;
- (c) for Surplus Disposal Site Design, the ARD/ML Material Management Plan in accordance with Section 2.7 [ARD/ML Material Management Plan] of Schedule 6; and
- (d) for Surplus Disposal Site monitoring and maintenance, the Surplus Disposal Site Annual Monitoring and Maintenance Reports during the General Project Work Defect Warranty Period in accordance with Section 2.5 [Environmental Plans and Reports] of Schedule 6.

6.4 Rock Cuts

- (a) The Design-Builder shall monitor runoff and drainage quality from fresh rock cuts with sampling as follows:
 - (i) collected in highway drains at suitable locations or directly from the rock cut / drainage holes;
 - (ii) analyzed for pH, conductivity (in situ and lab analysis) and total metals (lab analysis);

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- (iii) collected monthly during construction and quarterly during the General Project Work Defect Warranty Period;
 - (iv) recorded sample location co-ordinates and estimate the flow at the time of sampling; and
 - (v) presented in quarterly field reviews of potential ARD/ML material management, provided that, should lab and field-measured pH values for the rock-cut runoff /drainage be less than pH 5 in three consecutive monitoring events, and/or total metal concentrations exceed the BC Water Quality Guidelines – Aquatic Life by a factor of ten, the Design-Builder shall notify the Province’s Representative and propose and implement effective mitigation measures.
- (b) The measures to mitigate ARD/ML material from the fresh rock cuts shall:
- (i) be developed by the Design-Builder’s AQP;
 - (ii) on new rock cuts and blasted material that expose rock that has not previously been determined to be ARD/ML, the AQP or delegate shall review the freshly exposed material and, if geologic observations indicate the possibility of ARD/ML material, representative rock samples shall be obtained and tested to determine the potential for ARD/ML conditions, in accordance with Technical Circular T-04/13;
 - (iii) provision shall be made for identifying blasted materials that are ARD/ML so they are not used for fill or other construction materials;
 - (iv) include water treatment (including reactive limestone media installed in drains); covering the rock cuts (including shotcrete/gunite) or a risk assessment shall be conducted by the Design-Builder to demonstrate acceptable risk to the receiving environment;
 - (v) include testing in accordance with the Reference Documents including Technical Circular T-04/13; and
 - (vi) be summarised in an evaluation (including water quality monitoring before and after the remediation) that is certified by the AQP and presented to the Province’s Representative.

6.5 ARD/ML Potential in Private Quarries

- (a) For any materials sourced for the Project from a private quarry, the Design-Builder’s AQP shall:
 - (i) be responsible for collecting representative rock samples from the specific areas of the quarry being developed; and
 - (ii) carry out laboratory analysis to test the potential for ARD/ML conditions, in accordance with Technical Circular T-04/13.

- (b) A report summarizing the results of the ARD/ML evaluation is to be certified by the AQP and presented to the Province's Representative. The AQP shall ensure that the evaluation reasonably represents the conditions within the proposed quarry development areas. Where the assessment indicates that ARD/ML materials are not present, no further work is required. Where the assessment indicates that ARD/ML material is present, they shall not be used in Construction.

ARTICLE 7 DRAINAGE DESIGN CRITERIA

7.1 Order of Precedence

Drainage Design and Construction shall be in accordance with the criteria contained in this Article and the following codes and standards and, if there is any conflict between the criteria contained in this Article and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the applicable Ministry Technical Circulars and Ministry Technical Bulletins;
- (c) BC Supplement to TAC;
- (d) BC Supplement to CAN/CSA-S6-14;
- (e) Bridge Standards and Procedures Manual;
- (f) DBSS;
- (g) Culvert and Fish Passage Fact Sheet;
- (h) Environmental Best Practices for Highway Maintenance Activities;
- (i) Forestry Engineering Manual; and
- (j) CP Requirements for Culverts.

7.2 General Design Basis

The Design description and performance criteria of the proposed drainage system shall be provided in a drainage design report to be submitted to the Province's Representative pursuant to the Consent Procedure. The Design of the drainage system shall be based on the following requirements:

- (a) The Design-Builder shall be responsible for developing design flows using methodology compliant with BC Supplement to TAC and BC Supplement to CAN/CSA S6-14.
- (b) Design flows shall consider climate change as per Technical Circular T-04/19 and the criteria specified in Article 12 [Climate Change Adaptation] of this Part.
- (c) The Design-Builder shall confirm calculated design flows for Dart Creek with on-site inspection of the stream channel capacity.

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- (d) The Design-Builder shall design all drainage systems in accordance with Article 3 [CP Interface] of Part 1 of this Schedule.
- (e) The Design-Builder shall not allow Project runoff to increase erosion potential in the receiving environment by providing appropriate energy dissipation and scour protection at all discharge locations (including culvert outlets, storm sewer outfalls and spillways). If adequate energy dissipation and scour protection is not feasible, debris control structures are required to prevent damage to downstream infrastructure.
- (f) No drainage shall be released onto unstable slopes as per the criteria indicated in Article 5 [Geotechnical] of this Part.
- (g) The Design-Builder shall design drainage ditches in accordance with Section 1000 of the BC Supplement to TAC, the TAC Geometric Design Guide and the following additional criteria:
 - (i) convey peak 100-year return stormwater flows while maintaining water levels a minimum of 350 mm below the top of pavement;
 - (ii) convey peak 10-year return stormwater flows while maintaining water levels below the bottom of the adjacent highway SGSB layer;
 - (iii) ditches adjacent to unstable slopes shall be lined to prevent infiltration;
 - (iv) ditches shall be designed in conjunction with requirements for avalanche control and rock fall requirements while maintaining minimum hydraulic capacity for conveying peak design flows;
 - (v) ditches adjacent to potential acid rock generating areas shall incorporate appropriate environmental mitigations (such as lining with limestone and impervious liners); and
 - (vi) where avalanche catchment ditches are required in accordance with Section 10.2 [Avalanche Mitigation Measures] of this Part, ditch design shall meet the requirements of both Section 1000 of the BC Supplement to TAC and Section 10.2 [Avalanche Mitigation Measures] of this Part.
- (h) Where existing ditching requires filling, ditch re-location shall be considered as the first option, but if not feasible, flow shall be accommodated within piped systems with attenuation, and allowable velocities.
- (i) The Design-Builder shall incorporate drainage infrastructure along retaining walls to ensure no water is directly discharged over the walls.
- (j) Where the proposed highway pavement is super elevated, the Design-Builder shall not allow the pavement runoff from one side of the four-lane highway median to be discharged across the surface of the opposing traffic lanes.
- (k) Minimum longitudinal and cross fall grades shall be in accordance with the TAC Geometric Design Guide to prevent ponding of water on the road way.

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- (l) Catch-basin gratings shall not be in the travelled portion of the highway.
- (m) Catch-basins and spillways shall have a maximum spacing of 100 m.
- (n) Catch-basins shall only be used where spillways are deemed not feasible (including along median barriers and adjacent to retaining walls).
- (o) Runoff adjacent to retaining walls shall be intercepted immediately beyond the end of the retaining wall or before the end of the curb or barrier by catch basin or other suitable means and directed a minimum of 5 m away from embankment slopes to prevent embankment erosion.
- (p) All culverts shall be designed for a minimum structural design service life of 75 years. The Design-Builder shall undertake the necessary analysis to demonstrate that the minimum structural Design Life criteria is met.
 - (i) Due to the potential risk of ARD in the project vicinity, water quality data including pH, hardness, and resistivity shall be collected by the Design-Builder to justify the selection of appropriate culvert material to ensure the minimum structural Design Life is met.
 - (ii) No existing highway drainage appliances/infrastructure are to be retained.
 - (iii) The Design-Builder shall incorporate standard highway maintenance access for all highway cross culverts which permits removal of obstacles and debris from within the culvert and at the culvert ends.
- (q) The Design-Builder shall consider mitigations for debris flow for all highway cross culverts within debris flow geohazard area in accordance with Article 5 [Geotechnical] of this Part, including provisions to:
 - (i) ensure all debris that enters the culvert will safely pass through the culvert, or
 - (ii) prevent the entrance of debris into the culvert if debris cannot safely pass through the culvert.
- (r) The Design-Builder shall incorporate mitigations to prevent freezing of highway cross culverts during the winter.

7.3 Stormwater Quality Criteria

- (a) The Design-Builder shall meet applicable stormwater quality criteria as outlined in the Design-Builder's Construction Environmental Management Plan, including the Erosion and Sediment Control Plan, required under Schedule 6 [Environmental Obligations] of this Agreement.
- (b) The Design-Builder shall carry out the Project Work in a manner that protects and maintains surface and groundwater resources, both within and outside the Project Site, including drinking water sources and infrastructure (private groundwater wells).

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- (c) The Design-Builder shall be responsible for planning, scheduling and performing the Project Work in such a manner that the quality and quantity of water flowing from the Project Site, is, at all times, acceptable to all relevant Environmental Authorities, and shall take immediate action to correct any deficiency in water quality.

7.4 Approved and Non-Approved Products

- (a) Products incorporated into the permanent drainage system shall be limited to those identified in the Recognized Products List.
- (b) Products excluded from use in the permanent drainage system include, but are not limited to:
 - (i) flumes; and
 - (ii) pumps.

7.5 Others' Drainage Infrastructure

- (a) Drainage infrastructure upgrades associated with the Project will potentially have impacts on:
 - (i) CP Lands;
 - (ii) Dart Creek Forest Service Road; and
 - (iii) Dart Creek water licenses.
- (b) The Design-Builder shall meet the following requirements to mitigate potential impacts to others:
 - (i) If the drainage discharge point is changed from the existing locations at any time during the Project Work, the Design-Builder shall be responsible for the upgrade or construction of any infrastructure required, including infrastructure outside the Project Site, to prevent flooding and not increase erosion potential in receiving systems.
 - (ii) The Design-Builder shall meet all requirements of this Agreement, including Article 3 [CP Interface] of Part 1 of this Schedule, in respect of the Design and Construction of the drainage infrastructure upgrades associated with the Project.
 - (iii) Potential new cross culverts under the Dart Creek Forest Service Road shall be designed in accordance with the Forestry Engineering Manual.
 - (iv) The Design-Builder shall ensure the final drainage design accommodates the water access point at Dart Creek and all associated Dart Creek water licenses.

ARTICLE 8 SIGNING AND PAVEMENT MARKING DESIGN CRITERIA

8.1 Order of Precedence

Signing and Pavement Marking shall be designed and installed in accordance with the criteria contained in this Article, the requirements of DBSS and the following codes and standards, and if there is any conflict between the criteria contained in this Article and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the applicable Ministry Technical Circulars and Ministry Technical Bulletins;
- (c) Catalogue of Standard Traffic Signs;
- (d) Manual of Standard Traffic Signs and Pavement Markings;
- (e) Specifications for Standard Highway Sign Materials, Fabrication and Supply,
- (f) Traffic Management Manual;
- (g) DBSS; and
- (h) Manual of Uniform Traffic Control Devices for Canada.

8.2 Materials

- (a) All signs shall be new except for service and attraction signs as set out in Section 8.4(b) of this Part, with the prior written consent of the Province.
- (b) Standard signs shall be from the Catalogue of Standard Traffic Signs.
- (c) Signs shall be sourced from the suppliers listed in the Recognized Sign Suppliers.
- (d) Paint shall be supplied in accordance with the DBSS, and the traffic paint products shall be from the Recognized Products List.

8.3 Guide Signing

- (a) There are no existing guide signs within the Project Site and no new guide signs are anticipated.
- (b) G-104 km reference markers shall be installed at 1 km intervals continuing from the down-kilometer ends.

8.4 Regulatory and Other Signing

- (a) Standard regulatory signage, warning and information signs shall be in accordance with the Manual of Standard Traffic Signs and Pavement Markings.

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- (b) Existing service and attraction signs shall be relocated to suit the New Project Infrastructure.
- (c) The Design-Builder shall install regulatory and advisory signage on Highway 1 using cantilever sign structures in accordance with the Cantilever Sign Structures Drawings. Alternative cantilever sign structures will be considered subject to approval by the Province's Representative.
- (d) The Design-Builder shall maintain positive signage to services and attractions that are presently named on existing service and attraction signs on Highway 1 throughout the duration of Construction; and until such time that the new service and attraction signs are installed. The existing signage shall be removed following the installation of the new signs.
- (e) Draft sign records shall be produced by the Design-Builder for acceptance prior to final sign record preparation.

8.5 Emergency and Maintenance Opening Median Signing

- (a) The Design-Builder shall install W-054-L Hazard Marker – left signs on the front face of each impact attenuator.
- (b) The Design-Builder shall install R-009-1 Do Not Enter symbol signs on the last piece of median barrier adjacent to the impact attenuator. The signs shall be installed in both directions and shall be orientated to face traffic approaching the median opening.
- (c) The Design-Builder shall install R-019-x No U-turn symbol sign and a R-019-Tx Except Maintenance and Authorized Vehicles tab on the median barrier and roadside shoulder. The signs shall be installed in both directions, be located 90 m in advance of the median opening and be oriented to face traffic approaching the median opening.

8.6 Avalanche Signing

- (a) The Design-Builder shall install I-198-3 Avalanche Path marker signs at each Avalanche Path. The sign shall identify the Avalanche Path number and be installed on the upslope side of the road attached to a rock face or other suitable surface so that the sign is visible from the roadway.
- (b) The Design-Builder shall install up to four P-066-1 No Stopping symbol Avalanche Area signs at locations to be determined by the Ministry after the road Design has been finalized. The signs shall be installed on the roadside shoulder of the highway in both directions.
- (c) The Design-Builder shall install up to four W-106 End Avalanche Area signs at locations to be determined by the Ministry after the road Design has been finalized. The signs shall be installed on the roadside shoulder of the highway in both directions.

8.7 Pavement Markings

- (a) Pavement markings shall meet the requirements of the Manual of Standard Traffic Signs and Pavement Markings and the relevant Ministry Technical Circulars and Technical Bulletins.

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- (b) Pavement marking materials shall be listed on the Recognized Products List and be installed when the condition of the road surface is appropriate to the material being applied in accordance with the manufacturer's specifications.
- (c) Temporary Pavement Markings shall be supplied and installed in accordance with Section 4 of the Traffic Management Manual. Painted temporary lines are not permitted on the final pavement surface.
- (d) Final permanent pavement line painting on Highway 1 will be done by a Pavement Marking contractor retained by the Province and at the Province's cost. The Design-Builder shall coordinate with the Province's Representative to identify the earliest possible opportunity for such markings to be placed and to accommodate the line painting service.

8.8 Post Mounted Delineators

The Design-Builder shall supply and install post mounted delineators on open Shoulder sections in accordance with the Manual of Standard Traffic Signs and Pavement Markings. The post mounted delineators shall be equipped with reflectors made from ASTM Type 9 sheeting. Flexible post mounted delineators are an acceptable alternative to rigid post mounted delineators.

8.9 Reflectors on Barriers

Reflectors shall be of a type listed on the Recognized Product List and installed at the spacing in accordance with the Manual of Standard Traffic Signs and Pavement Markings. Reflectors shall be side mounted on roadside and median barriers. Reflectors designed only for side mounting shall be used.

8.10 Raised Pavement Markings

Raised Pavement Markings shall not be allowed on the Project.

8.11 Rumble Strips

Shoulder rumble strips shall be installed in accordance with Section 650 of the BC Supplement to TAC.

ARTICLE 9 LANDSCAPE AND SITE RESTORATION DESIGN CRITERIA

9.1 Order of Precedence

The Design-Builder shall design and implement landscaping and site restoration works in accordance with Permits, the criteria contained in this Article, the requirements of DBSS and the following codes and standards, and if there is any conflict between the criteria contained in this Article and any of the Reference Documents, the following shall apply, in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) DBSS, including 700, 751, 754 and 757;
- (c) Manual of Aesthetic Design Practice;
- (d) Landscape Policy and Design Standards;

- (e) AASHTO R 52-6;
- (f) Silvicultural Systems Handbook for British Columbia; and
- (g) Nursery Stock Standards.

9.2 Landscaping Classification and Objectives

The overall highway aesthetic classification for this Project shall be “Baseline Highway”, as defined in the Manual of Aesthetic Design Practice, with the general landscape design level standard designated as “Rural”, as described under “Landscape Design Standards” in the Landscape Policy and Design Standards. The landscape treatments outlined for these categories shall be applied as appropriate to all areas of the Project identified in accordance with Section 9.3.5(h) of this Part, with the focus of the landscape Design and Construction directed, but not limited to:

- (a) the revegetation of the back slope of ditch areas;
- (b) plantings between the ditch and the highway right of way line, including the establishment of general ground cover in accordance with Section 754 of the DBSS;
- (c) the preservation of existing native vegetation;
- (d) revegetation with low maintenance, primarily indigenous tree, grass and shrub species;
- (e) grading to match adjacent ground levels; and
- (f) drainage to promote long-term survival of plantings.

9.3 Landscaping Requirements

The Design and Construction of the landscaping and site restoration works shall comply with the criteria set out in this Schedule and Schedule 6 [Environmental Obligations], including Section 2.5(m) of Schedule 6.

9.3.1 Conservation of Existing Vegetation

The Design-Builder shall preserve, to the extent possible, native trees and understory plants in areas outside the actual roadwork footprint that do not present traffic safety concerns or affect Infrastructure integrity. Where trees must be removed in areas adjacent to the roadway footprint the Design-Builder shall implement “close cut clearing/no grubbing” practices to retain the existing vegetation roots, to minimize soil disturbance, and to encourage re-growth of the plants. Trees with a diameter breast height of 30 cm that are removed as a part of the Project Work shall be replaced within the Project Site at a minimum ratio of 1:1.

9.3.2 Integration of “Hard” and “Soft” Landscape Elements

The Design-Builder shall design and construct the landscape and site restoration such that the earthworks, plantings and Infrastructure blend with the conditions of the adjacent terrain, and complement the main roadwork features. The Design-Builder shall address transition points, and provide practical solutions for both good appearance and low maintenance; and

9.3.3 Retaining Walls and Hardscape Surfacing

- (a) Where retaining walls and hardscape surfacing, (such as Bridge abutment aprons) are required in areas visible from a public roadway, the Design-Builder shall incorporate design treatments for these Structures that are aesthetically appealing. Hardscaped areas shall have pleasing surface texturing, patterning, and/or relief appropriate for the situation. Design treatments shall follow a consistent theme for the particular section of roadway, and if suitable, for the entire Highway corridor.
- (b) This work shall be complementary to, and in accordance with all applicable references in the Table of Commitments.

9.3.4 Landscape and Restoration Planting

- (a) All areas of the Project Site disturbed during the Project Work and for which landscaping and site restoration is required in accordance with the criteria set out in this Schedule and Schedule 6 [Environmental Obligations] shall be covered with organic stripping material and topsoil, the soil graded out to a minimum depth of 100 mm and seeded in accordance with Section 9.3.5 [General Planting Requirements] or Section 9.3.7 [Enhanced Site Restoration] of this Part. Organic stripping shall be material removed from the Project Site during clearing and grubbing operations, and/or imported from other sources, as necessary to achieve the required depth.
- (b) For landscaping purposes, primarily mass planted indigenous trees and shrubs shall be used within all highway right-of-way areas. Shrub-only planting shall be utilised where the AQP determines that tree planting is not suitable.
- (c) Plantings shall be provided along all disturbed roadside areas within the Highway, between the back slope of the ditch and the highway right of way property line.
- (d) Plantings shall be designed with plants that improve wildlife habitat diversity and control drainage. Where these plantings may serve other specific screening requirements, plants shall be selected on a best fit basis for the particular purpose.
- (e) Where functional plantings are required to provide screening to augment highway structural components, suitable indigenous plant selections appropriate for the application shall be used.
- (f) Where existing vegetation in “environmentally sensitive areas” as shown on the Environmental Constraint Drawings is impacted or removed, it shall be replaced with similar plant material to mitigate the loss.
- (g) Where planting is proposed for environmental reasons such as riparian vegetation restoration/enhancement, habitat compensation, or other such requirement, this work shall take precedence over opportunities for general landscape planting, and shall be carried out in accordance with Schedule 6 [Environmental Obligations] of this Agreement. Where general landscape plantings are in close proximity to environmental revegetation, the Design-Builder shall design and construct the landscaping to be complementary to and coordinated with the environmental works.

- (h) Remnants of old road surfaces or Structures that are not retained as part of the New Infrastructure shall be removed, and the areas occupied suitably prepared and planted and/or seeded, in accordance with this Schedule.

9.3.5 General Planting Requirements

- (a) All areas scheduled for planting shall receive plant stock that is appropriately selected and sized for the particular application. Planting areas should take into consideration the limitations to its successful establishment, such as the ability to provide water and existing ground conditions, as well as any specific functional requirements.
- (b) Where there is sporadic existing desirable vegetation growing in the vicinity of the areas to be planted, it is to be retained and new plant stock shall be installed around it.
- (c) Invasive plants growing in areas where Project Work is being undertaken shall be removed.
- (d) There may be sections of right of way where existing desirable plants are growing in mass and preclude the installation of new plantings. These areas shall be left as is and planting shall continue beyond these established areas.
- (e) Plant material shall be installed per the DBSS requirements, except as specified herein. Some locations may require trenching and removal of existing poor material and replacement with topsoil rather than preparation of individual planting holes. Existing grass and undesirable competitive vegetation shall be removed prior to planting.
- (f) Basic Site Restoration treatments shall be used along the new Highway corridor to provide aesthetically pleasing grading and finishing of disturbed land, and to revegetate existing soils in these areas with grass, ground covers and other vegetation, for the purpose of minimizing surface erosion, minimizing spread of invasive and noxious weeds, minimizing maintenance requirements and providing self-sustaining vegetative ground cover with appropriate provenance as determined by the AQP.
- (g) Trees shall be installed at a minimum planting density of one tree per 10 m², shrubs shall be installed at a minimum planting density of three shrubs per 10 m² and the quantities and sizes of trees and shrubs determined from the criteria provided in Table 9.3.5 [Basic Site Restoration – Planting Criteria] of this Part.
- (h) Tree and shrub stock shall be provided as part of Basic Site Restoration for all areas of the Project Site where their installation does not conflict with traffic safety considerations, including sight distance, and where slopes are less than 1V:1.25H (80% slope).
- (i) Planting shall be in accordance with the applicable sections of Volumes I – III of the Silviculture Manual and DBSS 751 and 754.
- (j) Seedlings shall be planted into existing soil and potted material shall be planted with topsoil supplied for each planting hole. All planting holes shall receive:
 - (i) one – 10 gr. Size Leapstart Bio Pak Forest Pro fertilizer packet, 16-6-8 polyurethane coated formulation, with minor nutrients, or equal pre-approved by the Province’s Representative;

- (ii) prior to planting, all plant stock foliage shall be treated with a preparation of blood-based animal repellent formulation “Plantskyyd” (www.treeworld.com) or equivalent pre-approved by the Province’s Representative per manufacturer’s recommendations; and
 - (iii) following planting, all potted plant stock shall be protected by mechanical barriers able to withstand large animal impacts during the General Project Work Defect Warranty Period.
- (k) Limber Pine shall be protected and retained within the Project Site as shown on the Environmental Constraint Drawings. Where Limber Pines must be removed, the Vegetation Management and Site Restoration Plan shall specify one of the two following options:
- (i) Limber Pine cones shall be collected for reseeding/propagated for replanting in accordance with this Agreement; or
 - (ii) Limber Pine seedlings shall be sourced as per direction from the Province’s Representative.
- (l) Groupings of trees shall be inter-plantings of the species noted in Table 9.3.5 [Basic Site Restoration – Planting Criteria] of this Part:

Table 9.3.5 Basic Site Restoration - Planting Criteria

Plant Material	Size	Plant Quantities
Interior Douglas Fir (<i>Pseudotsuga menziesii</i>)	27 cm pot	15% of total
Rocky Mountain Juniper (<i>Juniperus scopulorum</i>)	27 cm pot	10% of total
Lodgepole Pine (<i>Pinus contorta</i>)	27 cm pot	10% of total
White Spruce (<i>Picea glauca</i>)	25 cm pot	5% of total
Trembling Aspen (<i>Populus tremuloides</i>)	1 gal pot	15% of total
NW White Birch (<i>Betula papyrifera</i>)	1 gal pot	15% of total
Douglas Maple (<i>Acer glabrum</i>)	1 gal pot	10% of total
Sitka Alder (<i>Alnus crispa</i>)	1 gal pot	10% of total
Limber Pine (<i>Pinus flexilis</i>)	27 cm pot	10% of total

9.3.6 Revegetation Seeding

- (a) The default treatment for mitigating surface soil erosion shall be the establishment of grass by hydraulic application of seed with wood fibre mulch, fertilizer, and tackifier onto existing soils.
- (b) All disturbed ground that is to be revegetated and that shall not otherwise be receiving only tree planting or shrub planting, bark mulch or hard surfacing, shall be promptly re-graded and seeded with grass. Where existing soils are excessively compacted, or otherwise not conducive to supporting a healthy cover of grass, these areas shall be suitably scarified prior to seeding.
- (c) Areas that are highly susceptible to wind or water erosion shall employ erosion control measures adequate to protect the site until grass or other vegetation is established.

- (d) Areas impacted by placement of pre-load or stockpiled materials shall be graded and seeded promptly after removal of the materials.
- (e) Basic Site Restoration seeding shall be in accordance with Table 9.3.6 [Grass Seed Specification for Basic Site Restoration] of this Part:

Table 9.3.6 Grass Seed Specification for Basic Site Restoration

Grass Seed Mix:	Quantity by Weight
Tall Wheatgrass	25%
Newhy Wheatgrass	15%
Slender Wheatgrass	10%
Polar Northern Wheatgrass	10%
Tall Fescue	10%
Hard Fescue	10%
Fults Alkali Grass	10%
Alfalfa	10%

- (f) Pursuant to DBSS 757.35, the following shall be the rates of application for Basic Site Restoration seeding:
 - (i) grass seed mix – 60 kg per ha;
 - (ii) fertilizer – 300 kg per ha;
 - (iii) wood fibre mulch and tackifier – applied at manufacturer’s recommended rate;
 - (iv) Nurse Crop Grass (*Axcella Annual Ryegrass*) – 25 kg per ha; and
 - (v) Perennial Lupine (*Lupinus perenne*) – 5 kg per ha.
- (g) A biotic soil media product (such as “ProGanics™ Biotic Soil Media™ or equivalent recognized product) shall also be hydraulically applied to all areas receiving hydraulically applied seeding, ensuring that the seed is mixed with the biotic soil media product immediately prior to application, and that the seed and biotic soil media product slurry is applied prior to the mulch/tackifier slurry in a two-step process in accordance with DBSS 757.02.
- (h) An alternate seed mix, without legumes (alfalfa), shall be applied to roadside areas inside the fenced area within the wildlife exclusion area (including travelled roadway and ditches). The difference in proportions of seed shall be distributed evenly between the wheatgrass varieties.

9.3.7 Enhanced Site Restoration

- (a) The primary goal of Enhanced Site Restoration treatment is to provide functional grading and finishing of disturbed land, to revegetate existing soils with grass, ground covers and

other vegetation, for the purpose of minimizing surface erosion, minimizing spread of invasive and noxious weeds and restoring habitat for wildlife.

- (b) The following locations shall receive Enhanced Site Restoration treatment designed and implemented in accordance with this Article, Schedule 6 [Environmental Obligations] and the accepted landscape Design:
 - (i) Surplus Disposal Site in the vicinity of Dart Creek;
 - (ii) approaches to areas identified for Large Animal Passages;
 - (iii) all ground areas disturbed during construction of Surplus Disposal Site in the vicinity of Dart Creek; and
 - (iv) all ground areas outside of Wildlife Exclusion Fencing System within 50 m of Large Animal Passages and disturbed during Construction.
- (c) For Enhanced Site Restoration, seedlings shall be planted in accordance with Section 9.3.5(j) of this Part.
- (d) For Enhanced Site Restoration, groupings of trees shall be inter-plantings of the species noted in Table 9.3.7 [Enhanced Site Restoration - Planting Criteria] of this Part:

Table 9.3.7 Enhanced Site Restoration - Planting Criteria

Plant Material	Size	Plant Quantities
Interior Douglas Fir (<i>Pseudotsuga menziesii</i>)	2 m	5% of total
Rocky Mountain Juniper (<i>Juniperus scopulorum</i>)	1.75 m	10% of total
Lodgepole Pine (<i>Pinus contorta latifolia</i>)	25 cm	10% of total
Saskatoon Berry (<i>Amelanchier alnifolia</i>)	27 cm pot	10% of total
Trembling Aspen (<i>Populus tremuloides</i>)	2.5 m	10% of total
Chokecherry (<i>Prunus virg. demissa</i>)	27 cm pot	10% of total
Buffalo Berry (<i>Shepherdia canadensis</i>)	27 cm pot	5% of total
Snow Berry (<i>Symphoricarpos albus</i>)	27 cm pot	10% of total
Wolf Willow (<i>Elaeagnus commutata</i>)	27 cm pot	10% of total
Drummond Willow (<i>Salix drummondiana</i>)	27 cm pot	10% of total
Sitka Alder (<i>Alnus crispa</i>)	27 cm pot	10% of total

9.3.8 Salvage of Unmerchantable Wood

- (a) Unmerchantable wood is wood which is accessible and otherwise available for harvesting but assumed to be unmerchantable because of stand characteristics (such as small piece size, incidence of decay, species composition, and low stocking).
- (b) As directed by the Province’s Representative and when it is safe to do so, the Identified Indigenous Groups shall be allowed access to salvage unmerchantable wood and wood debris for firewood and cultural purposes.

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- (c) Subject to Section 9.3.8(b) of this Part, the Design-Builder shall salvage unmerchantable wood and wood debris and other organic materials derived from clearing and grubbing operations and either recycle such material on-site by processing it into a compost blanket grade of compost or use for wildlife features in site restoration.
- (d) Salvaging of unmerchantable wood shall be done using a thermophilic composting process, in accordance with AASHTO R 52-6.
- (e) The composting process for the purpose of generating erosion control materials is governed by the *Organic Matter Recycling Regulation* (British Columbia), which stipulates requirements for on-site composting facilities, notifications, inspections and services of an AQP.
- (f) The finished product shall be utilized in Enhanced Site Restoration as an erosion control blanket and topdressing material to assist in re-vegetation. Compost may also be utilized for ‘grouting’ and creation of planting pockets on slopes comprised of coarse rock.
- (g) Compost material shall be spread over areas designated by the Design-Builder’s AQP, in consultation with the Province’s Representative.

9.3.9 Landscape Design Submissions

- (a) The Design-Builder shall submit the landscape Design drawings to the Province’s Representative as part of the Interim Design and Final Design submissions.
- (b) The landscape Design drawings shall show where the described landscape treatments are proposed to be carried out. The drawings shall also have sufficient detail to convey an understanding of the various landscaping requirements.
- (c) The Construction Records shall include post Construction drawings including, as a minimum, the number, species, and locations of planted trees, shrubs, and plants.

9.3.10 No Visual Obstructions

Landscaping shall be designed to prevent visual obstructions along the highway shoulder.

ARTICLE 10 SNOW AVALANCHE DESIGN CRITERIA

10.1 General

There is a high concentration of snow Avalanche Paths along the Project corridor. The Design-Builder shall be responsible for all investigations required to achieve the Design criteria specified in this Article.

10.2 Avalanche Mitigation Measures

- (a) All Avalanche mitigation measures shall be achieved at highway level.
- (b) Remote Avalanche control systems (including gas or explosives-based avalanche triggering systems installed in Avalanche starting zones that can be activated remotely), and snowpack

supporting structures in Avalanche starting zones (such as flexible snow nets, or rigid snow fences) are not approved for this project.

- (c) All analysis and Design relating to Avalanches and Avalanche mitigation shall be completed under the seal of a Professional Engineer with expertise in snow Avalanche risk mitigation.

10.2.2 Existing Ministry Avalanche Paths

- (a) General Avalanche Path locations are shown on the Avalanche Strip Map provided in the Data Room. A higher resolution location map named “Avalanche Catchment Ditch Locations”, and associated digital CAD files, are provided in the Data Room.
- (b) At all locations where an Avalanche Path intersects Highway 1 in the new Project Work, a catchment ditch shall be provided. Catchment ditch storage capacity shall be achieved by meeting the geometric requirements specified in Table 10.2 and Figure 10.2a except for Avalanche Path 6.9. Catchment ditch geometry for Avalanche Path 6.9 shall be based on the requirements of Figure 10.2b. Catchment volume shall be obtained by excavation and/or by incorporating a vertical faced wall positioned at the edge of the highway. For any locations where multiple paths intersect, the more conservative ditch volume and width shall be used.

Table 10.2: Minimum Catchment Ditch Volume per Unit Length of Affected Road and Width Criteria

Avalanche Path		Minimum Catchment Volume per Unit Length (m ³ /m)	Minimum Ditch Width (m) *
4.6		15.5	6.4
4.7	West	28.5	10.2
	East	10.6	5.4
4.8		62.0	16.2
4.9		12.8	6.1
5.3	West	30.8	6.5
	East	29.9	10.5
7.0		49.5	14.2
7.2		46.4	13.9
7.3		23.9	9.2
7.4		54.4	15.1
7.6		20.9	8.4
7.62		18.8	8.0
7.7		32.6	11.1

* The minimum ditch widths listed in Table 10.2 are for snow avalanche catchment. The ditch widths used in Design shall also meet the requirements for rock fall containment in accordance with Article 5 [Geotechnical] of this Part.

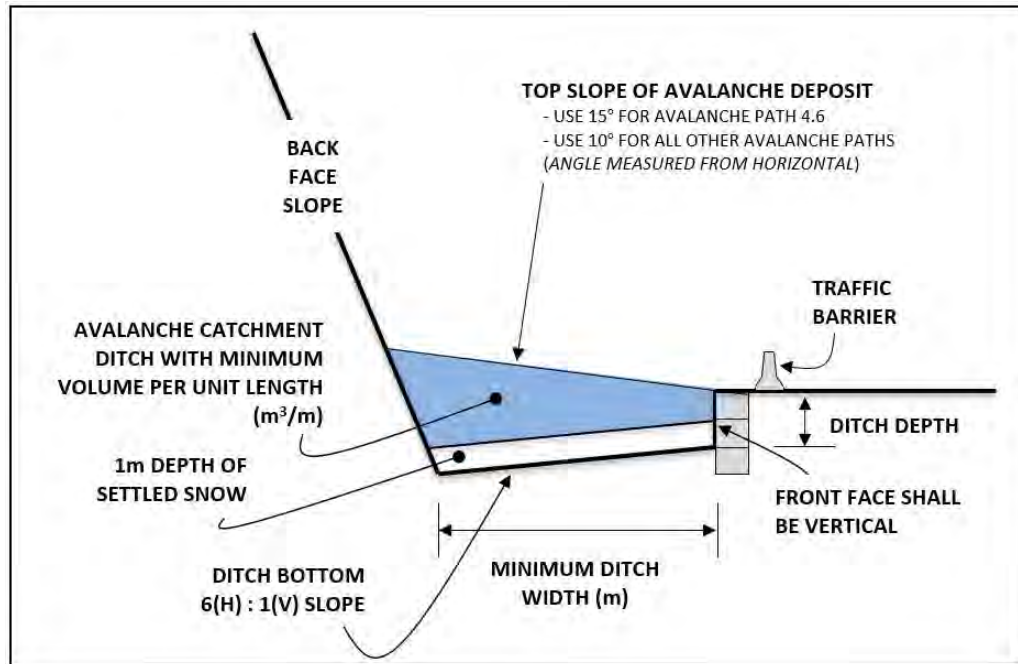


Figure 10.2a Required Catchment Ditch Geometry (Schematic)

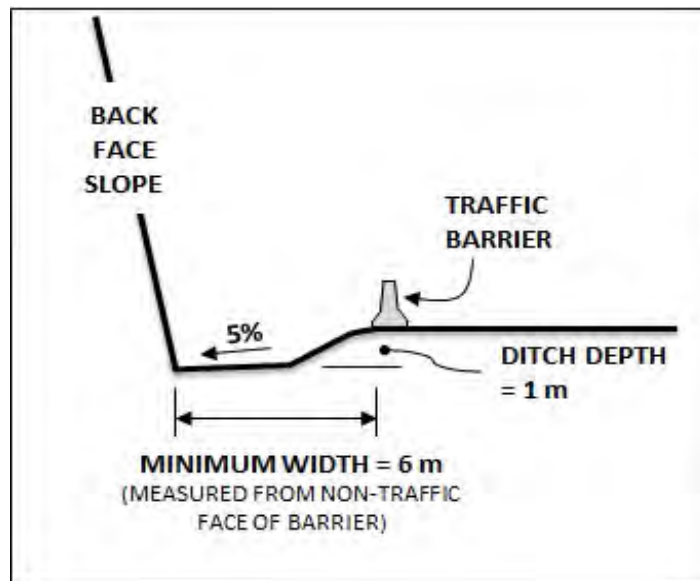


Figure 10.2b Required Catchment Ditch Geometry at Avalanche Path 6.9 (Schematic)

10.2.3 New Avalanche Paths

Any Avalanche Paths encountered or created as a result of the Project Work that are not included in Table 10.2 [Minimum Catchment Ditch per Unit Length of Affected Road and Width Criteria] of this Part shall be designed according to the criteria as follows:

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- (a) New Avalanche Paths from 10 m to 100 m in Length: Avalanche design criteria for all slopes that are between 10 m and 100 m in slope length, and have average slope inclines between 25° and 70°, minimum catchment volume per unit length of affected road shall be calculated according to the following formula:

$\begin{aligned} &\text{Minimum Catchment Volume (m}^3\text{/m)} = \\ &0.32 \times [\text{Horizontal Slope Distance (m)}] \times \cos [\text{Slope Incline}] \end{aligned}$

The cross-sectional profile and ditch width shall be provided as illustrated in Figure 10.2 [Required Avalanche Ditch Geometry] of this Part. The minimum ditch width shall be 5 m, and must meet or exceed the greater of widths required by drainage, avalanche and rock fall catchment criteria.

- (b) New Avalanche Paths more than 100 m in Length: Avalanche design criteria for slopes that are more than 100 m in slope length shall include reduction of the avalanche hazard to a 10-year return period. The 10-year design standard for avalanches shall be based on:
- (i) the volume of snow produced by an avalanche with a 10-year return period avalanche;
 - (ii) modelled avalanche flow parameters (speed, impact, flow depth) of an avalanche with a 10-year return period avalanche;
 - (iii) the avalanche deposits from an avalanche with a 10-year return period not extending onto the travel lanes (not past the fog line); and
 - (iv) the ditch containing 1 m of settled snow.

10.3 Analysis and Design for Avalanches Forces and Clearances for Structures

- (a) Design criteria for Avalanches impacting the design of Structures shall be in accordance with this Article and Article 3 [Structural Design Criteria] of this Part.
- (b) Analyses shall be conducted where the new Project Work is potentially impacted by Avalanches. The analyses shall include an estimation of Avalanche design forces acting on Avalanche Mitigation Structures or Substructures, and minimum clearance to avoid Avalanches directly impacting proposed Superstructures. Methods used shall be based on those described in the Avalanche Design Reference and shall incorporate a probabilistic analysis (such as Monte Carlo) with a 1 in 300-year return period used for Design.

10.4 CP Avalanche Requirements

The Design-Builder shall identify Avalanche hazards that may pose new or increased risk to CP Lands and operations as a result of the Project Work and will incorporate measures to ensure there is no increase for each Avalanche Path in any such risks in accordance with Article 3 [CP Interface] of Part 1 of this Schedule.

10.5 Avalanche Safety Measures

The Design-Builder is responsible for developing, implementing and maintaining an avalanche safety program that will protect its workers within the Project Site, and for operating under and in conjunction with the Ministry's avalanche safety program and WorkSafeBC regulation and other applicable Health and Safety Laws. Snow avalanche safety measure requirements are detailed in Appendix E [Snow Avalanche Safety Measures] to this Schedule.

ARTICLE 11 DEMOLITION, REMOVALS AND DISPOSAL

11.1 Order of Precedence

The Design-Builder shall conduct demolition, removals and disposal in accordance with the criteria set out in this Article and the following codes and standards, and if there is any conflict with the criteria contained in this Article and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) Ministry Technical Circulars and Technical Bulletins including Technical Circular T-04/13;
- (c) DBSS;
- (d) Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia;
- (e) Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials; and
- (f) Water and Air Baseline Monitoring Guidance Document.

11.2 Demolition

- (a) The demolition, disassembly and removal of Project Infrastructure, improvements and amenities from the Project Site shall satisfy all Environmental Laws and requirements of Governmental Authorities and Utility Suppliers.
- (b) The Design-Builder shall prepare and submit demolition plans to the Province's Representative in accordance with the Consent Procedure for any demolition, disassembly or removal of Project Infrastructure, improvements or amenities from the Project Site, a minimum of 90 days prior to the commencement of the implementation of such plan.
- (c) Following the acceptance of any such demolition plan by the Province in accordance with the Consent Procedure, the Design-Builder shall submit all subsequent changes to such demolition plan to the Province's Representative pursuant to the Review Procedure.
- (d) The Design-Builder shall complete all demolition in accordance with this Article before the Design-Builder submits a request for a Certificate of Total Completion pursuant to Part 3 of this Schedule.
- (e) Demolition shall include backfilling abutment excavations, grading and landscaping of demolition sites upon completion of the demolition work.

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- (f) The Design-Builder shall demolish existing Structures in accordance with Article 3 [Structural Design Criteria] of this Part. Portions of roadway that are not retained as part of the New Project Infrastructure shall be removed and the site shall be properly restored in accordance with this Section and Article 9 [Landscape and Site Restoration Design Criteria] of this Part, and in accordance with Article 3 [Structural Design Criteria] and Article 10 [Snow Avalanche Design Criteria] of this Part.
- (g) The Design-Builder shall decommission existing and any new geotechnical instrumentation (piezometers, slope inclinometer casings) deemed not required following construction, pursuant to Section 5.9 [Geotechnical Instrumentation] of this Part.

11.3 Waste Removal and Disposal

- (a) All waste/debris arising from the Works and all material brought to site but not incorporated into the Works shall be removed from the Project Site by the Design-Builder prior to Substantial Completion.
- (b) The Design-Builder shall dispose of all contaminated, hazardous or dangerous material, including oil tanks and propane tanks, in accordance with the regulations of relevant Governmental Authorities.

11.4 Surplus Disposal Site

- (a) The area of the Project Site in the vicinity of Dart Creek near LKI 6.2 upslope of Highway 1 (the “**Surplus Disposal Site**”) available for disposal of surplus excavated earthwork material, or excavated earthwork material deemed not suitable for embankment construction is shown on the Environmental Constraint Drawings.
- (b) Except as noted in this Section, the Surplus Disposal Site shall not be used for disposal of waste material including culverts, bin walls, construction demolition waste such as building wood and metal waste, glass, insulation, metal, flooring materials, or materials that are potentially hazardous waste. These materials shall be removed and disposed of off-site at facilities licensed to take such waste. Removal and disposal of oil tanks, propane tanks, underground lines to tanks or other potentially contaminated or hazardous materials shall meet all requirements of Governmental Authorities.
- (c) Material deposited in the Surplus Disposal Site shall meet the requirements of Section 5.8 [Slope Stability – Soil Slopes and Embankments] and shall be placed in accordance with the requirements for embankments in DBSS 201 except that the layer thickness in DBSS 201.37 may be increased from 200 mm to 300 mm. Side slopes shall be no steeper than 1.5H:1V and shall have horizontal benches of 3 m minimum width at 10 m maximum vertical intervals.
- (d) The Surplus Disposal Site shall be designed in accordance with Article 5 [Geotechnical] of this Part and as shown on the Environmental Constraint Drawings.
- (e) The Design-Builder shall prepare and submit to the Province’s Representative in accordance with the Consent Procedure a decommissioning and disposal plan signed by a Geotechnical Engineer for each Surplus Disposal Site prior to the use of such Surplus Disposal Site by the

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Design-Builder, taking into consideration all geotechnical, environmental and other requirements, including those identified on the Environmental Constraint Drawings.

- (f) Disposal and handling of material that could result in acid rock drainage and/or metal leaching shall be carried out by the Design-Builder in accordance with Article 2 [Design Submissions, Review and Reports] of Part 3 of this Schedule, Section 2.7 [ARD/ML Material Management Plan] of Schedule 6 and the Environmental Constraint Drawings.
- (g) Further to DBSS 145.27, disposal of asphalt and concrete products such as old roadside barrier or acceptable demolition material, may be placed only in a Surplus Disposal Site in accordance with the following:
 - (i) a minimum cover of 2 m of soil or blast rock shall ultimately be placed over asphalt or concrete materials;
 - (ii) concrete or asphalt shall be broken in pieces not exceeding 500 mm by 500 mm;
 - (iii) concrete barriers shall be placed horizontally side by side with the intervening space filled with inorganic soil or blast rock and aligned to permit downslope drainage of groundwater and without voids under or between the pieces;
 - (iv) if barriers or broken asphalt or concrete debris is placed in more than one layer, a layer of compacted competent inorganic soil or blast rock of minimum 600 mm thickness shall be placed between layers; and
 - (v) barriers, broken asphalt and concrete debris shall not be placed more than 3 layers high.
- (h) During the General Project Work Defect Warranty Period, the Design-Builder shall provide Surplus Disposal Site Annual Monitoring and Maintenance Reports in accordance with the requirements of Section 2.5 [Environmental Plans and Reports] of Schedule 6.
- (i) If, during the General Project Work Defect Warranty Period, groundwater, soil or surface water monitoring data demonstrate that exceedance of the applicable standards noted in Section 11.1 [Order of Precedence] of this Part is occurring on or offsite due to the handling and management of ARD/ML material for the Project, the Design-Builder shall take immediate action to investigate the extent and impacts of the contamination and rectify or remediate the cause of the exceedances. If monitoring indicates that contamination is migrating from the disposal facility, the Design-Builder shall employ a Contaminated Sites Approved Professional as the AQP to guide a contaminated sites investigation and remediation, which may include, but not be limited to:
 - (i) installing additional groundwater monitoring wells for lateral and vertical delineation;
 - (ii) additional sampling of surface, groundwater and/or soil.
 - (iii) modifying the disposal stockpile design and implementing changes (that may include constructing new infrastructure) to the disposal stockpile to rectify the cause of the exceedances.

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- (iv) carrying out a Human Health and/or Ecological Risk Assessment or Numerical or Risk-Based Remediation as per the *Environmental Management Act* (British Columbia); and
- (v) obtaining a MOE Certificate of Compliance for Numerical or Risk-Based Remediation.

11.5 Removal of Existing Electrical Equipment

The Design-Builder shall remove from the Project Site and dispose of all existing electrical equipment, including underground boxes, Foundations and wiring, not incorporated into the New Project Infrastructure in accordance with Section 11.3 [Waste Removal and Disposal] of this Part, provided that notwithstanding the above, the Design-Builder may abandon temporary BC Hydro and TELUS utility lines buried under the ground provided the following requirements are met:

- (a) The Design-Builder shall survey the location of the temporary utility lines during initial installation. The Design-Builder shall submit to the Province's Representative the as-constructed record drawings indicating the line location in the completed works.
- (b) Proposed location of abandoned lines shall be selected to avoid risks to future maintenance activities undertaken by the Ministry.
- (c) Where located in the New Project Infrastructure, the abandoned utility lines shall be installed:
 - (i) at 1.5 m minimum below travelled lanes and shoulders; or
 - (ii) at 0.75 m minimum below ditch finished grade; or
 - (iii) at 0.5 m minimum below highway appurtenances (including culverts, catch basins and leads).
- (d) Where located in the existing highway, that is not incorporated into the New Project Infrastructure, the abandoned utility lines shall be installed:
 - (i) at 0.75 m minimum below finished grade; or
 - (ii) at 0.5 m minimum below highway appurtenances.
- (e) The Design-Builder shall install warning tape above the utility.

11.6 Removal of Existing Utilities

- (a) The Design-Builder shall remove from the Project Site or decommission any abandoned pipes exceeding 600 mm in diameter situated beneath permanent Travelled Lanes. Decommissioning shall be achieved by completely filling the void in the pipe with a controlled density fill and sealing both ends. Controlled density fill shall be designed to have a minimum unconfined compressive strength of 1 MPa at 28 days and be designed to minimize shrinkage. All mix designs shall be signed and sealed by the responsible engineer, who shall be a duly experienced Professional Engineer of an appropriate discipline.

- (b) The Design-Builder shall remove and dispose of all abandoned exposed Utilities in accordance with Section 11.3 [Waste Removal and Disposal] of this Part.

ARTICLE 12 CLIMATE CHANGE ADAPTATION

12.1 Order of Precedence

The Design-Builder shall conduct climate change adaptation in accordance with the criteria set out in this Article and the following codes and standards, and if there is any conflict with the criteria contained in this Section and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) Technical Circular T-04/19; and
- (c) Section 1000 [Hydraulics] of the BC Supplement to TAC.

12.2 General Requirements

- (a) The Design-Builder shall determine the appropriate climate data to be used in the Design to account for anticipated climate change. The climate data used shall:
 - (i) be data from the southern interior British Columbia area or derived for the southern interior British Columbia area;
 - (ii) consider at a minimum, temperature, rain, snow, ice, fog, hail, frost, humidity, ice accretion, wind, floods, extreme temperatures and precipitation, and storms of various intensities; and
 - (iii) rely on climatological modelling analysis that is consistent with current climate science and relevant to the southern interior British Columbia area.
- (b) The Design-Builder shall produce a climate change risk assessment report which assesses climate change vulnerability. The vulnerability risk assessment shall:
 - (i) comply with minimum levels of effort as per Section 3.0 of EGBC Climate Change-Resilient Designs;
 - (ii) consider at minimum, climate/design parameters related to extreme weather events involving such things as temperature, rain, snow, ice, fog, hail, frost, humidity, ice accretion, wind, floods, extreme temperatures and precipitation, storms of various intensities, and combinations of these factors;
 - (iii) produce a climate change risk assessment matrix including key infrastructure, as well as any at-risk infrastructure;
 - (iv) assess potential impacts to Project Infrastructure components from climate change, identify a proposed action where an impact is determined to be present and provide a new associated risk rating; and

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- (v) assess how these vulnerability risks are anticipated to change over the design life of each component of the Project Infrastructure.

12.3 Climate Change Adaptation Report

The Design-Builder shall prepare and submit to the Province's Representative together with the Design-Builder's Final Design submission, and in accordance with the Review Procedure, a climate change adaptation report and Design Criteria Sheets for Climate Change Resilience, demonstrating the assessment completed and how the requirements of BC Supplement to TAC, Technical Circular T-04/19 and this Article will be met in the Final Design.

ARTICLE 13 ROAD SAFETY AUDIT

13.1 Order of Precedence

The Design-Builder shall conduct Road Safety Audits in accordance with the criteria set out in this Article and the following codes and standards, and if there is any conflict with the criteria contained in this Article and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) Technical Circular T-02/04;
- (c) Road Safety Audit Guidelines; and
- (d) TAC Road Safety Audit Guide.

13.2 Design-Builder's Responsibility

- (a) The Design-Builder shall be responsible for:
 - (i) scheduling, initiating, and managing the Road Safety Audit process at the appropriate times during the Term;
 - (ii) providing all necessary design drawings and supporting documentation for the Road Safety Audit Team to conduct the audits;
 - (iii) ensuring that the Road Safety Audit is conducted to a high quality standard;
 - (iv) receiving and reviewing the audit report;
 - (v) responding to the audit report and documenting the response;
 - (vi) conducting any re-design as a result of the Road Safety Audit suggestions;
 - (vii) highlighting any significant changes to the required Design drawings resulting from the Road Safety Audit; and
 - (viii) providing all documentation related to the Road Safety Audit to the Province.

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- (b) All costs associated with the Road Safety Audit, including any re-design costs or increased Construction costs that result from the Road Safety Audit, are the responsibility of the Design-Builder.
- (c) After each Road Safety Audit, except as otherwise expressly agreed in writing by the Province, the Design-Builder shall address all recommendations made by the Road Safety Audit Team.

13.3 Road Safety Audit Team

The Road Safety Audit Team shall consist of a minimum of two auditors. Each team member shall meet the following minimum criteria:

- (a) five years relevant experience in road safety, traffic engineering and geometric design;
- (b) participated in at least five road safety audits; and
- (c) completed at least one road safety audit per year in the last two years.

13.4 Road Safety Audit Process

13.4.1 General Requirements

- (a) The Road Safety Audit process shall be carried out in accordance with the TAC Road Safety Audit Guide, the Road Safety Audit Guidelines and in accordance with Part 3 [Design and Certification Procedure] of this Schedule.
- (b) The Road Safety Audit Team shall prepare an audit report to document the audit findings. Road Safety Audit reports shall be submitted to the Design-Builder's Design Team for the stages identified below.
- (c) The Road Safety Audit reports shall clearly identify safety hazards that need to be addressed by the Design-Builder along with recommendations for remediation. The Design-Builder shall respond to the identified hazards and recommendations with remediation countermeasures.
- (d) Road Safety Audits reports shall be provided to the Province for review, in accordance with the Review Procedure, at three stages, as identified below.

13.4.2 Stage 1: Interim Design Road Safety Audit

A Stage 1 Road Safety Audit shall be conducted immediately before submission of the Interim Design in accordance with Part 3 [Design and Certification Procedure] of this Schedule. This Road Safety Audit shall undertake a detailed review of the Interim Design drawings to identify any potential safety-related enhancements that might have an impact on the New Project Infrastructure. Issues considered shall include:

- (a) Design consistency;
- (b) horizontal and vertical alignment;

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- (c) cross section Design;
- (d) intersection/access configuration;
- (e) access locations;
- (f) stopping sight distance and turning sight distance;
- (g) operation of public transport;
- (h) maintenance safety;
- (i) clearances to roadside objects;
- (j) safety barriers; and
- (k) provision for vulnerable road users.

13.4.3 Stage 2: Final Design Road Safety Audit

A Stage 2 Road Safety Audit shall be conducted at Final Design in accordance with Part 3 [Design and Certification Procedure] of this Schedule. The audit shall undertake a detailed review of the Final Design drawings to identify any potential safety-related enhancements that might have an impact on the operational safety of the New Project Infrastructure. Issues considered shall include:

- (a) signing and Pavement Markings;
- (b) intersection details;
- (c) drainage;
- (d) fencing;
- (e) clearances to roadside objects;
- (f) safety barriers;
- (g) surface standards;
- (h) landscaping;
- (i) provision for vulnerable road users;
- (j) accommodation of design vehicles; and
- (k) any Stage 1 items affected by the Final Design.

13.4.4 Stage 3: Post Construction Road Safety Audit

- (a) Prior to opening for traffic operation, a Stage 3 Road Safety Audit shall be carried out to identify potential safety enhancements that may reduce the frequency of collisions.
- (b) Stage 3 Road Safety Audits shall take place prior to and as a condition of the issuance of the Certificate of Substantial Completion.
- (c) In the event any Construction activities are taking place with “live” traffic, a series of staged Road Safety Audits shall be carried out as each stage of the relevant Construction activities is completed and before a Construction Certificate is issued in accordance with Part 3 [Design and Certification Procedure] and Part 4 [Traffic Management] of this Schedule.
- (d) For the purposes of completing a Stage 3 Road Safety Audit required pursuant to paragraphs (a) and (b) above, the Road Safety Audit Team shall fully examine the New Project Infrastructure, including:
 - (i) meeting with the Project team to review any Construction activity related issues, in particular Design changes that may affect the safety of the New Project Infrastructure;
 - (ii) checking to ensure that safety issues identified in the Design audits are addressed and the resulting Design changes do not create a further safety problem;
 - (iii) reviewing any Design changes that occurred during the relevant Construction activity to ensure they do not create a safety problem; and
 - (iv) conducting a field review of the New Project Infrastructure, under both daytime and nighttime conditions, to observe the operation of the New Project Infrastructure from the perspective of the road user.

13.5 Temporary Traffic Control (Design) Road Safety Audit

- (a) For each phase of Construction activity, Road Safety Audits shall be conducted during Design for temporary traffic control set-ups that meet any of the following criteria:
 - (i) the duration of a temporary traffic control set-up or lane shift that is two weeks or longer. The set-up does not necessarily have to be in place for the entire time but can be one of a number of repeating set-ups that are active at different times; and
 - (ii) a temporary traffic control set up whose complexity exceeds that of the standard templates used in the Traffic Management Manual.
- (b) Each such Road Safety Audit shall be completed prior to the implementation of the temporary traffic control set-up unless otherwise agreed to by the Province’s Representative.

13.6 Temporary Traffic Control (On-site) Road Safety Audit

- (a) For each phase of Construction activity, Road Safety Audits shall be conducted on the Project Site, following implementation, for temporary traffic control set-ups that meet any of the following criteria:
 - (i) two or more individual temporary traffic control set-ups in close proximity to each other such that one would influence the traffic operation of the other. The spacing between the termination area of one work zone and the advance warning area of the next work zone for which one temporary traffic control set-up influences the traffic operations of the next temporary traffic control set-up is 2 km or less;
 - (ii) the duration of a temporary traffic control set-up or lane shift that is two weeks or longer. The set-up does not necessarily have to be in place for the entire time but can be one of a number of repeating set-ups that are active at different times; or
 - (iii) a temporary traffic control set-up whose complexity exceeds that of the standard templates used in the Traffic Management Manual.
- (b) Each such Road Safety Audit shall be completed within two days after implementation unless otherwise agreed to by the Province.
- (c) The Road Safety Audit Team shall follow a check list based on the Road Safety Audit Guidelines and in accordance with Section 4.8 [Traffic Management Auditing] of Schedule 7. The Road Safety Audit shall include a review of both daytime and nighttime temporary traffic control set-up and where applicable the accommodation of vulnerable road users.

13.7 Certificates

After each of the three stages of the Road Safety Audit process, and where required for temporary traffic control in accordance with Section 13.5 [Temporary Traffic Control (Design) Road Safety Audit] and Section 13.6 [Temporary Traffic Control (On-site) Road Safety Audit] of this Part, the Design-Builder shall submit to the Province's Representative a Road Safety Audit Certificate.

**PART 3
DESIGN AND CERTIFICATION PROCEDURE**

ARTICLE 1 DESIGN MANAGEMENT PLAN AND TECHNICAL APPRAISAL FORMS

1.1 Submission of Design Management Plan

Within 30 days following the Effective Date, the Design-Builder shall submit a Design Management Plan to the Province's Representative in accordance with the Consent Procedure. The Design Management Plan shall include:

- (a) an organization chart showing the interface and reporting structure for all Design activities including those with other engineering groups, environmental management, and Construction disciplines;
- (b) the procedures to be used for designing and checking each of the designs and the form of review to be undertaken by the Design-Builder;
- (c) the identification of the Design Team and Checking Team for Structures;
- (d) the contents and format of Interim Design and Final Design submissions;
- (e) processes and schedule for design checking, internal reviews and audits;
- (f) a design submission and review schedule, indicating dates that the Design-Builder plans to:
 - (i) submit Interim Designs;
 - (ii) undertake review meetings in accordance with Section 1.3 [Review Meetings] of this Part; and
 - (iii) submit Final Designs;
- (g) the process and schedule for Road Safety Audits;
- (h) the process and organizational structure for reporting of Designer reviews during construction;
- (i) the process and schedule of submitting construction staging plans and courses of action;
- (j) the process for liaising with CP and schedule of submissions required in accordance with Article 3 [CP Interface] of Part 1 of this Schedule;
- (k) the process for liaising with BC Hydro and Telus and incorporation of the utility relocation Designs;
- (l) the process for Design and Construction Certification;
- (m) the process for Designer and Province review during Construction, including inspections, testing, monitoring, Hold Points and Witness Points required by the Inspection and Testing Plan, relevant Quality Documentation and other Project Requirements;

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- (n) a description of the approach and proposed geotechnical activities that will be required to assess and confirm site safety in terms of protecting the workers, public and adjacent facilities from natural hazards and slope failures during Construction;
- (o) the work plan for subsequent geotechnical site assessment, analysis and design as required in accordance with Section 5.13(a) of Part 2 [Design and Construction Requirements] of this Schedule;
- (p) an overview of document management and controls;
- (q) the drawings standards used by the Design-Builder;
- (r) a drawing tree indicating the organization and hierarchy of the Design-Builder's drawings;
- (s) appropriate metrics to measure the progress of the Design for each discipline; and
- (t) a description of the issues, risks and assumptions to be clarified and addressed.

Any subsequent amendments or updates to the Design Management Plan shall be submitted by the Design-Builder to the Province's Representative in accordance with the Review Procedure.

1.2 Compliance with Design Management Plan

The Design-Builder shall implement and comply with the Design Management Plan which has been accepted by the Province's Representative in accordance with the Consent Procedure, and any subsequent amendments or updates to the Design Management Plan to which there is no objection by the Province in accordance with the Review Procedure, in connection with all Design Data prepared or adopted in connection with the Design and the Construction.

1.3 Review Meetings

- (a) The Design-Builder shall organize review meetings with the Province for the purpose of reviewing the Design information in accordance with the Design Management Plan.
- (b) Discussion between the Province and Design-Builder at the review meetings shall be informal and shall not be considered for the purposes of this Agreement as either Province Changes or Design-Builder Proposals.

1.4 TAF Submission Requirements

- (a) Each Final Design and Construction activity submission package submitted by the Design-Builder in accordance with this Part shall be accompanied by a completed TAF.
- (b) In any case where submitted Design Data involves any mechanical or electrical and/or intelligent transportation system functions, or similar specialization, the Design-Builder shall submit to the Province's Representative in accordance with the Review Procedure a TAF in respect of such data and functions.
- (c) In any case where the Project Work involves the complete or partial demolition of an existing Structure, the Design-Builder shall submit to the Province's Representative in

accordance with the Review Procedure a TAF in respect of such complete or partial demolition.

1.5 TAF Form and Content

Each TAF submitted by the Design-Builder pursuant to Section 1.4 [TAF Submission Requirements] of this Part shall be in the format shown in Appendix D [Sample Contents for a Structural TAF] to this Schedule and shall:

- (a) for Interim Design submissions, include the general design methodology, overall design concept, relevant design criteria, environmental and ground considerations, and interface requirements, together with the relevant interim design drawings and reports;
- (b) for Final Design submissions, include the relevant design criteria, environmental and ground considerations, and interface requirements, together with a listing of the design documentation included in the design package accompanying the Design Certificate;
- (c) for Construction submissions, provide the relevant Construction Certificate for such Construction; and
- (d) be signed by:
 - (i) the Design-Builder's Representative; and
 - (ii) the Designer(s), or its principal(s), as necessary.

1.6 TAF Variation

Any variation to a TAF, which has been subject to the Review Procedure during Design, assessment or Construction, shall be submitted in accordance with the Review Procedure as an addendum to the TAF.

ARTICLE 2 DESIGN SUBMISSIONS, REVIEW AND REPORTS

2.1 Design and Certification Procedure

- (a) The Design-Builder shall implement and enforce the procedure set out in this Part (the “**Design and Certification Procedure**”), together with the accepted Design Management Plan, throughout the Term.
- (b) The Design and Certification Procedure shall apply to all Design Data prepared or adopted in connection with the Construction, including any further design development or changes to a design once a TAF has been subjected to the Review Procedure.
- (c) The Design-Builder shall ensure that all certification procedures referred to in the Design Management Plan and the Design and Certification Procedure are complied with by the Appropriately Qualified Professionals referred to therein, including the Design Team, the Designer and any independent team or checking engineer within the Designer, as the case may be, and that all Appropriately Qualified Professionals are at all relevant times duly authorized and qualified to carry out such procedures and to sign the relevant certificates. Any failure by any Appropriately Qualified Professional to fulfil the obligations required of

them under the Design Management Plan or the Design and Certification Procedure shall be a breach of the Design-Builder's obligations under this Agreement.

2.2 Design and Certification Procedure in Emergency

In the case of an emergency, the Design-Builder may proceed with such measures as are immediately necessary for the protection of persons and/or property prior to complying with the applicable provisions of this Design and Certification Procedure, provided that the Design-Builder shall comply with the provisions of this Design and Certification Procedure otherwise applicable to those measures as soon as reasonably possible under the circumstances.

2.3 No Limitation

A requirement for certification or for any check or review pursuant to, and for purposes of, this Part is in addition to, and does not in any way limit, qualify, replace or relieve the Design-Builder from, the obligation to comply with any other certification, check or review requirement provided elsewhere in this Agreement or any of the Project Requirements, or pursuant to any applicable professional standards or practices.

2.4 Format of Design Submissions

- (a) The Design-Builder shall provide two hard copies (one set 11x17 and one set full size), one PDF file and one AutoCAD data file for each Interim Design and Final Design submission.
- (b) Drawings shall be in a format in accordance with the requirements of the Ministry Standards. The Design-Builder shall confirm drawing conventions and standards, including AutoCAD standards, title block and stationing convention, with the Province's Representative prior to commencing design drawing production.

2.5 Preparation of Design Data

All Design Data shall be prepared under the supervision of the Designer. Prior to the submission of any Design Data to the Province's Representative, the Designer and the Checking Team where applicable, shall satisfy themselves that the Design Data meets all Project Requirements and otherwise complies with the requirements of this Agreement.

2.6 Interim Design Review

- (a) The Design-Builder shall submit to the Province's Representative Interim Designs, including interim TAFs and supporting information, for, at a minimum, the Project Infrastructure and geotechnical Design.
- (b) Interim Design submissions shall be informal and shall not be reviewed according to the Review Procedure. Rather, such informal Interim Design submissions shall be used to inform the Province on the development of the Design and provide an opportunity for a dialog on compliance with the Project Requirements before the Design is complete.
- (c) The content of such Interim Design submissions shall be appropriate to the subject and discipline and include any specific requirements for such submissions set out in this Agreement. The information provided shall be adequate to show that the Design is

proceeding in compliance with the Project Requirements and is taking into consideration the relevant Project Work.

- (d) In accordance with this Design and Certification Procedure, the Design-Builder and the Province shall agree on the design information to be submitted for review in the Interim Design submissions, the schedule of such Interim Design submissions, and the scope of each review.

2.7 Final Design Review

- (a) Final Designs from all design disciplines shall be submitted to the Province’s Representative in accordance with the Review Procedure, including the relevant TAF(s) together with all Final Design drawings, Design Certificates, supporting Design Data and calculations required in accordance with this Schedule.
- (b) Each Structure shall have a separate Final Design submission. For Structures that require Design and Construction in stages, Final Design for each Structure component shall be submitted to the Province’s Representative in accordance with the Review Procedure. A Final Design submission of a Structure component shall only be received after an Interim Design has been submitted for all components of the same Structure. The Final Design submission for each component shall include documentation of design assumptions and constraints relating to all related Structure components. A Final Design submission of a Structure or its components shall be received only when Final Design submission of the Avalanche Hazard Assessment and Design report relating to that specific Structure, and Final Design submission of the highway alignment for the corridor are both reviewed and endorsed as either “received” or “received with comments” by the Province’s Representative in accordance with Part 2 [Review Procedure and Consent Procedure] of Schedule 2.

2.8 Final Design Submissions

2.8.1 General

- (a) Design folders shall be prepared for the Final Design submissions and shall have indexes and sectional dividers. The design folders shall contain pertinent correspondence, shall be arranged by subject matter in chronological order, and shall include design calculations and backup information. Design folders shall include, without limitation, copies of all approvals, design reports, correspondence, internal design reviews, quality control records and calculations.
- (b) The Final Design submissions shall address any comments by the Province from the Interim Design Review.
- (c) Final Design drawings and reports shall be signed and sealed by the responsible engineer or qualified professional, who shall be a duly experienced Professional Engineer or qualified professional of an appropriate discipline.

2.8.2 Roadway and Drainage Design

- (a) The Final Design submission shall, without limitation:

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- (i) contain all design drawings, including complete plan, laning and geometrics, profiles, typical sections and template cross-sections, right of way acquisitions and drainage;
 - (ii) include the drainage design report with supporting calculations; and
 - (iii) include revisions to address stakeholder issues, plans for Utility relocations, critical constructability and traffic handling considerations, environmental issues and mitigation plans.
- (b) For each Final Design submission pertaining to pavement, structures, earthworks, disposal sites and any element having a drainage design requirement, a drainage design report shall be submitted to the Province's Representative in accordance with the Review Procedure prior to the Interim Design submission, which shall:
- (i) contain details to describe the assessments completed to develop the drainage design; and
 - (ii) meet the criteria outlined in Section 1000 of the BC Supplement to TAC.
- (c) All drainage drawings and reports shall be sealed by a qualified Professional Engineer.

2.8.3 Structure Design

The Final Design submission shall contain, without limitation, the following:

- (a) all design drawings, including for general arrangements, Foundations, Substructures, Superstructures, auxiliary components, Utilities on the Bridges, drainage, inspection and maintenance accesses, barriers and all related information;
- (b) a geotechnical design report for each of the Structures, including global stability reporting, if applicable;
- (c) descriptions of maintenance considerations for all Structures;
- (d) independent review and Structure checking documentation including documented resolution of all major issues;
- (e) a spreadsheet (hard copy and electronic) containing Structure parameters data as specified by the Province's Representative;
- (f) a neat, bound, indexed set of design calculations for each Structure initialled by the responsible engineer, who shall be a duly experienced Professional Engineer of the appropriate discipline; and
- (g) settlement estimates and monitoring plan for all Structures.

2.8.4 Pavement Design

- (a) For the Final Design submission, the Design-Builder shall prepare a comprehensive pavement design report for the Project. The pavement design report shall be submitted to the Province's Representative at the Interim Design review and be updated and resubmitted with the Final Design. The pavement design report shall contain, without limitation, the following:
 - (i) summary of subsurface conditions including pavement structure subgrade rock and soil type, stratigraphy and groundwater conditions in proposed excavations and embankments;
 - (ii) key pavement design issues, risks and assumptions that have been considered for the Design and Construction;
 - (iii) description of analyses conducted for pavement design, including:
 - (A) value of parameters required in AASHTO Guide for Design of Pavement Structures and the basis for deriving the parameters;
 - (B) methodology for computing pavement structure requirements; and
 - (C) supporting documentation with computations and results of analyses that confirm the pavement structure design criteria have been satisfied;
 - (iv) recommendations for asphalt concrete, granular base and select granular sub-base layer thicknesses, asphalt concrete mix and other elements required for construction of the pavement structure;
 - (v) plans and sections of proposed pavement structures for all roads; and
 - (vi) analysis indicating the chronology and description of projected rehabilitation requirements at October 27, 2030 and for a design life of 20 years following Substantial Completion.
- (b) Details of pavements shall be shown in IFC Drawings prepared prior to commencement of Construction.
- (c) All reports and drawings shall be sealed by a qualified Professional Engineer.

2.8.5 Geotechnical Design

- (a) For the Final Design Submission, the Design-Builder shall prepare comprehensive geotechnical design reports for the Project's Structures, earthworks, rock slopes, debris flow/flood hazard mitigation works, disposal sites and any element having a geotechnical design requirement. The geotechnical design reports shall contain sufficient detail to describe the assessments completed to develop the geotechnical design. Geotechnical design reports for Structures shall be in accordance with the requirements of CAN/CSA-S6-14.

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- (b) As a minimum each geotechnical design report shall contain, without limitation, the following information that pertains to each location and Project component (including proprietary structures):
- (i) summary of subsurface conditions including soil and rock types, stratigraphy and groundwater conditions;
 - (ii) key geotechnical issues, risks and assumptions that have been considered in the selection of Design and Construction recommendations;
 - (iii) description of analyses, including those for settlement, deformation and stability, including:
 - (A) value of parameters used and the basis for deriving the parameters;
 - (B) methodology used to assess hazard, risk, and consequence including computation of magnitude-frequency distributions and return periods for natural hazards (rock fall, debris flows/floods), including consideration of climate change;
 - (C) methodology for developing recommended mitigation against debris flows/floods;
 - (D) methodology for computing geotechnical demands and capacities for rock slope support, rock fall attenuation and rock fall stopping structures, including the basis for selection of rock fall design block size;
 - (E) methodology for computing geotechnical demands and capacities, and related dimensions for Foundation elements; and
 - (F) supporting documentation with computations and results of analyses that confirm the geotechnical criteria have been satisfied;
 - (iv) supporting background geotechnical information, performance testing, design criteria, design parameters and methodology (including manufacturer's requirements and recommendations for design and construction) for any proprietary product to be incorporated in the Project Work;
 - (v) recommendations for structural, earthwork and other related designs and recommendations for construction, to ensure design criteria are satisfied;
 - (vi) recommended methodology for field inspections, testing, monitoring and other assessments during construction to validate design including assumptions and recommendations and also at Substantial Completion to confirm that the geotechnical engineering aspects of the Project Work satisfy acceptance criteria;
 - (vii) recommended geotechnical requirements for related constructability and site safety for workers, the public and adjacent facilities during construction;

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- (viii) assessment of environmental impacts and associated mitigation required due to the geotechnical recommendations;
 - (ix) the signature and seal of a qualified Professional Engineer; and
 - (x) evidence that another Geotechnical Engineer has independently reviewed and approved the contents of the geotechnical design report.
- (c) Details of all Foundations, retaining walls, excavations, embankments, debris flow/flood mitigation works and any other project element requiring geotechnical design shall be shown in IFC Drawings prepared prior to commencement of construction.
- (d) For all rock fall attenuator and stopping fence systems the Design-Builder shall provide:
- (i) design/installation IFC Drawings and specifications for the proposed systems with sufficient detail to show proposed layout of posts, bases, anchors, cables, net/mesh types and connection details;
 - (ii) details of design-life, corrosion protection, anchorage design including installation testing, Witness Points and Hold Points, and acceptance criteria;
 - (iii) written documentation of either:
 - (A) a full-scale field-testing program of the proposed rock fall mitigation system involving at least one dozen impacts of at least 50% of the SEL, and detailing any and all damages sustained during the testing, and resultant modifications made to the proposed system; or
 - (B) the performance of at least three comparable systems installed within the last decade, which documentation shall detail rock fall energy parameters and expected rock fall frequency used for the design of each system, duration of service, and any damage sustained and necessary repairs made to each system since its installation; and
 - (iv) documentation of the engineering basis for the design and dimensioning of the systems to be provided for the Project.
- (e) All rock fall attenuator and stopping fence design drawings and reports shall be sealed by a qualified Professional Engineer.

2.8.6 *Signing and Pavement Markings Design*

- (a) The Final Design submissions shall include signing and Pavement Marking plans sealed by a qualified Professional Engineer.
- (b) All cantilever and sign bridge Structures submissions, if required, shall be undertaken in accordance with Section 300 of the Electrical and Signing Materials Standards.

2.8.7 Avalanche Assessment and Design

- (a) The Design-Builder shall submit an Avalanche hazard assessment and design report that includes assessment of all Avalanche terrain that affects the proposed highway alignment within the Project Site, including currently existing as well as any new Avalanche terrain encountered or created by the New Project Infrastructure and Construction.
- (b) The Avalanche hazard assessment and design report shall contain sufficient detail to describe the assessments completed to develop the Avalanche design, and shall include but not be limited to;
 - (i) summary of snow climate;
 - (ii) summary of Avalanche winter regime;
 - (iii) description of the analyses including:
 - (A) supporting background;
 - (B) assumptions
 - (C) methodology; and
 - (D) estimations of magnitudes and frequencies of all Avalanche terrain that potentially affects the highway alignment;
 - (iv) Avalanche Path mapping for all Avalanche Paths that affect the highway alignment;
 - (v) mitigation recommendations;
 - (vi) all Avalanche Design parameters, and the supporting calculations and assumptions, required for the Design of Avalanche Mitigation Structures and Avalanche mitigation measures; and
 - (vii) documentation of independent review as required in Article 3 [Structural Design Criteria] of Part 2 of this Schedule.
- (c) Details of all Avalanche Mitigation Structures, catchment excavation works, or any other Project Work element requiring Avalanche design shall be shown on the IFC Drawings.
- (d) The Avalanche hazard assessment and design report shall be sealed by a Professional Engineer with expertise in Avalanche risk assessment and mitigation.
- (e) For all proprietary Avalanche stopping fence systems, the Design-Builder shall provide IFC Drawings with relevant design and installation information including layout and component details, corrosion protection and design life specification, and anchorage design including installation testing, Witness Points and Hold Points, and acceptance criteria. The Design-Builder shall also supply the following:

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- (i) written documentation of a full-scale field-testing program of the proposed Avalanche mitigation system involving at least 12 impacts of at least 50% of the design energy, which documentation shall detail all damage sustained during the testing, and resultant modifications made to the proposed system;
 - (ii) written documentation of the performance of at least three comparable systems installed within the last decade, which documentation shall detail Avalanche impact parameters and expected Avalanche frequency used for the design of each system, duration of service, and any damage sustained and necessary repairs made to each system since its installation; and
 - (iii) documentation of the engineering basis for the design and dimensioning of the systems to be provided for this project.
- (f) All proprietary Avalanche stopping fence drawings and reports shall be sealed by a qualified Professional Engineer.

2.8.8 Landscaping and Site Restoration

- (a) The Final Design submission shall contain a detailed landscape plan and drawings that reflect any highway design changes and incorporate comments made on the Interim Design submissions. The Design-Builder shall document changes and describe the design work that has been completed since the Interim Design submission. Design shall be compliant with DBSS 751, 754 and 757. Drawings shall be of a suitable scale for legibility, and shall provide enlarged detailing where needed.
- (b) Landscape Design drawings for the areas identified for Enhanced Site Restoration (Dart Creek Disposal Area and Large Animal Passage approaches) shall be prepared by the Design-Builder's AQP in accordance with Section 2.8 [Wildlife Exclusion Fencing System] of Schedule 6 and detailing the following requirements:
 - (i) locations where stripping material will be temporarily stockpiled for use in reclamation upon completion of the disposal operation;
 - (ii) topsoil and landscaping grading in accordance with DBSS 751, except that inorganic and organic debris as identified on the landscape design drawing;
 - (iii) requirements specified in Section 9.3 [Landscape Requirements] of Part 2 of this Schedule.
 - (iv) plantings shall receive supplementary topsoil;
 - (v) calculations for the approximate area that is plantable;
 - (vi) final grading of the site ensuring the top layer of soil is rough and loose and incorporates small mounds and swales to encourage wildlife habitat and microclimates suitable for planting;
 - (vii) plantings generally in mixed cluster groupings and distributed under the direction of the Design-Builder's AQP in consultation with the Province's Representative;

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- (viii) Enhanced Site Restoration grass seed mix as described in Section 9.3.5 [General Planting Requirements] of Part 2 of this Schedule 4;
- (ix) wildlife features comprised of organic and inorganic debris, each a maximum 9 m² and placed at intervals of 1 per 100 m²;
- (x) plant maintenance schedule for the General Project Work Defect Warranty Period to achieve 80% survival or native plant cover of 50% of the area seeded / planted at the end of the General Project Work Defect Warranty Period.
- (xi) areas receiving Enhanced Site Restoration shall be planted with native shrubs only as per in Section 9.3.7 [Enhanced Site Restoration] of Part 2 of this Schedule to encourage animal congregation at this location;
- (xii) further to DBSS 754.71, annual reporting detailing planting survival and corrective measures required for that year shall be submitted to the Province's Representative in December of each year during the General Project Work Defect Warranty Period; and
- (xiii) immediately following planting and during the General Project Work Defect Warranty Period, temporary protection measures for trees and shrubs from wildlife browsing shall be installed and maintained, and temporary fencing shall be removed at the end of the General Project Work Defect Warranty Period.

2.8.9 Environmental Design

The Final Design submission shall contain, without limitation:

- (a) applicable construction drawings that shall include:
 - (i) all critical and sensitive wildlife habitats and ecosystems (including nest trees, red and blue listed plant communities and wetlands);
 - (ii) “environmentally sensitive areas” and “restricted zones – archaeology sites” as shown on the Environmental Constraint Drawings;
 - (iii) Wildlife Exclusion Fencing System Design, prepared in accordance with Schedule 6 [Environmental Obligations]
 - (iv) Surplus Disposal Site Design, prepared in accordance with Section 11.4 [Surplus Disposal Site] of Part 2 of this Schedule; and
 - (v) all archaeological features;
- (b) riparian restoration and terrestrial reclamation/revegetation drawings that, as a minimum, describe timing requirements, seed mixes and applications rates of hydroseeding and site-specific restoration plans, including species type, size and spacing for riparian areas, areas of higher sensitivity, and areas prone to erosion or shallow slope movement;

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- (c) environmental design drawings that show environmental mitigation and compensation features and any environmental features to be constructed;
- (d) environmental design documentation including:
 - (i) all licenses, notifications, permits, authorizations and approvals specific to the work designed;
 - (ii) a ARD/ML Prediction Assessment Report as described in Technical Circular T-04/13 and in accordance with the Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials; and
 - (iii) all assessments, studies, surveys and monitoring reports specific to the work designed; and
- (e) an environmental design criteria checklist for each environmental design package as specified in paragraphs (a), (b), (c) and (d) of this Section that demonstrates consideration of and compliance with the environmental requirements and commitments applicable to the particular design package.

2.9 Road Safety Audit Design Data

All Design Data shall be subject to Road Safety Audits in accordance with Article 13 [Road Safety Audit] of Part 2 of this Schedule as and where required pursuant to the provisions of the Design Management Plan, the Project Requirements and any other provision of this Agreement.

2.10 Objection to Design Data

If the Province objects to any Design Data in accordance with the Review Procedure, the Province's Representative shall so notify the Design-Builder and the Design-Builder shall, unless the Design-Builder disputes the objection by the Province to such Design Data in accordance with the Dispute Resolution Procedure, either:

- (a) cause to be made such alterations and additions as may be necessary such that the Design Data accords with the Project Requirements and all other requirements of this Agreement, all in accordance with the Review Procedure; or
- (b) subject to the other provisions of this Agreement, submit a Design-Builder Proposal.

2.11 Adherence to Design Data

Design Data which has been the subject of a Certificate that has been submitted to the Province's Representative in accordance with the Design Management Plan, the Design and Certification Procedure or this Agreement shall not be departed from otherwise than in accordance with Schedule 11 [Changes] of this Agreement.

2.12 IFC Drawings

The Design-Builder shall submit copies of all IFC Drawings, together with manuals, instructions to the Design-Builder and other relevant information as requested by the Province, to the Province's Representative and to the Owner's Engineer.

2.13 No Construction

The Design-Builder shall not commence or permit the commencement of the Construction (including any Temporary Works) unless and until all Design Data and relevant Certificates required in respect of the relevant part of the Design and Construction have been submitted by the Design-Builder to the Province's Representative for review in accordance with the Design Management Plan and the Design and Certification Procedure.

2.14 Designer Review during Construction

During Construction, the Design-Builder shall ensure that the Designer, in accordance with the procedures set out in the Design Management Plan and the relevant Quality Documentation and other Project Requirements, examines the same and satisfies itself that such Project Work and every part thereof have been designed, constructed, completed, commissioned, tested and maintained in all respects so as to accord with:

- (a) Design Data in respect of which Design Certificates have been issued and to which there has been no objection in accordance with the Review Procedure; and
- (b) all applicable Project Requirements, and otherwise to comply in all respects with the requirements of this Agreement.

2.15 Temporary Works

- (a) As a minimum, design submissions for Temporary Works shall include those items intended for public use and/or potentially affecting public, CP or third party stakeholder safety. Final Designs, including TAFs and Design Certificates, for these Temporary Works shall be submitted to the Province's Representative in accordance with the Review Procedure.
- (b) Design Data relating to any Temporary Works shall be checked by a Checking Team independent of the designer.
- (c) In performing the check referred to in paragraph (b) above, the Checking Team shall satisfy itself that:
 - (i) the Design Data meets the Project Requirements and otherwise complies with the requirements of this Agreement;
 - (ii) the Temporary Works (as a whole and the constituent parts) are satisfactory for the safe and proper discharge of the Design-Builder's relevant obligations; and
 - (iii) the Design Data reflects the requirements of the relevant Governmental Authorities for all affected highways or other roads or areas used by or accessible to the public other than the New Infrastructure.

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- (d) Where any Temporary Works may impact third party stakeholders or utilities or endanger public safety on any highway or other road or area used by or accessible to the public other than the New Infrastructure, the Design-Builder shall consult the relevant highway Governmental Authority and the Design Data shall reflect the requirements of such Governmental Authority.
- (e) Where any Temporary Works may impact the CP Lands or CP operations, the Design-Builder shall consult with CP and obtain CP's acceptance in accordance with Article 3 [CP Interface] of Part 1 of this Schedule, and the Design Data shall meet the requirements of Article 3 [CP Interface] of Part 1 of this Schedule.

2.16 Documentation for Ministry Jurisdictional Atlas

The Design-Builder shall prepare drawings for the Ministry Jurisdictional Atlas. The Design-Builder shall consult with the Province prior to preparing the drawings. The drawings shall be submitted to the Province's Representative in accordance with the Review Procedure no later than 60 days prior to the Substantial Completion Date.

ARTICLE 3 CHECKING OF STRUCTURES

3.1 Independent Review

All Structures shall have an independent review in accordance with Bylaw 14(b) [Quality Management] of the EGBC Bylaws and the EGBC Documented Independent Review of Structural Designs. The independent review shall be completed prior to the Final Design submissions. Complete documentation, including resolution of all issues raised by the independent review, shall be included in the Final Design submission.

3.2 Categories of Structures

The "Category" of a Structure shall determine the degree of independence of checking of Design Data required for that Structure. Every Structure shall be placed in one of four Categories:

- (a) Category 0. Minor individual Structures provided they conform to one of the following:
 - (i) a Structure with a single span of less than 3 m and which is statically determinate; or
 - (ii) an Avalanche Mitigation Structure less than 2 m in height; or
 - (iii) a buried Structure less than 3 m clear span/diameter, or multicell buried Structure where the cumulative span is less than 5 m and having more than 1 m cover; or
 - (iv) a conventional retaining wall without tie-back anchors and less than 2 m retained height; or
 - (v) mechanically stabilized earth with concrete facing panel systems less than 2 m in height.
- (b) Category I. Simple individual Structures provided they conform to one of the following:

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- (i) a conventional retaining wall without tie-back anchors and with 2 m or more but less than 7 m retained height; or
 - (ii) an Avalanche Mitigation Structure 2 m or more than 2 m in height; or
 - (iii) a buried concrete box or corrugated steel buried Structure with less than 8 m span; or
 - (iv) a Structure with a simply supported single span of less than 20 m and having less than 25 deg. skew; or
 - (v) mechanically stabilized earth with concrete facing panel system with 2 m or more, but less than 7 m, in height; or
 - (vi) noise walls 2 m or more than 2 m in height.
- (c) Category II. All those Structures not within the parameters of Categories 0, I or III.
- (d) Category III. Structures which:
- (i) require sophisticated analysis; or
 - (ii) contain low structural redundancy; or
 - (iii) contain unconventional design aspects; or
 - (iv) have any span exceeding 50 m; or
 - (v) have a skew exceeding 45 degrees; or
 - (vi) have unusual or complex Foundation configurations; or
 - (vii) are Bridges with Avalanche snow expected to pass under or be deposited on the Superstructure; or
 - (viii) are Bridges with suspension systems, cable stayed Bridges, steel Bridges with orthotropic Bridge Decks, floating structures, hinged arch structures and all tunnels, movable Bridges and Bridge access gantries; or
 - (ix) are retaining walls with tie-back anchoring systems.

3.3 Category Proposal

As soon as sufficient Design Data for a Structure has been prepared to allow the determination of a category, the Design-Builder shall submit its proposed category (together with such Design Data as necessary to support that proposal) to the Province's Representative in accordance with the Review Procedure.

3.4 Structure Checking Procedure

Design Data relating to each Structure (including without limitation calculations, assessments, drawings and bar schedules) shall be checked as follows:

- (a) Category 0 and Category I Structures require an independent check by a Professional Engineer, other than the engineer who designed the Structure. The checking Professional Engineer may be from the original Design Team.
- (b) Category II Structures require a check by a Checking Team which may be from the Designer but shall be independent of the Design Team.
- (c) Category III Structures require a check to be carried out by a Checking Team appointed to perform an independent detailed check by experts in Bridge structural, avalanche, and geotechnical analysis and design, by an organization not related to the Designer. The Checking Team shall report directly to the Design-Builder.

In addition to the checking procedures required above, the Design-Builder shall conduct all checking procedures required by EGBC.

3.5 Checking Team

At the time it submits the initial Design Management Plan, the Design-Builder shall submit to the Province's Representative under the Consent Procedure a proposal, which shall be supported by a resume for each member of the proposed Checking Team, as to the organization to serve as the Checking Team and the proposed terms and conditions of its employment. The following responsibilities and expertise shall be required of and incorporated in the Checking Team for Category III Structures:

- (a) The Checking Team shall be responsible for:
 - (i) conducting design checks to ensure that the design of such Category III Structures meets performance expectations outlined in this Agreement and that such design is carried out according to accepted industry standards;
 - (ii) conducting design checks on avalanche characteristics and loading on Structures;
 - (iii) undertaking supplementary analyses to independently verify and confirm the design methodologies and assumptions used;
 - (iv) identifying deficiencies in the design and analyses, and notifying the Design-Builder and the Province of unresolved deficiencies;
 - (v) checking the Designers' materials and construction specifications for deep Foundation design and tie-back anchoring systems; and
 - (vi) checking the Designers' acceptance criteria for deep Foundations and tie-back anchoring systems and verifying acceptance of deep Foundation and tie-back anchoring elements construction.

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- (b) The Checking Team shall be comprised of recognized experts in all major disciplines relating to the structural, geotechnical and avalanche design being checked. The Checking Team shall be individuals who are registered or qualified to be registered as Professional Engineers.

3.6 Structure Design Checking Responsibility

The Design Team, Designer and the Checking Team shall each satisfy itself as to the applicability and accuracy of all computer programs used and shall ensure the validity of the program for each application. The Design Team, Designer and the Checking Team shall each also be responsible for its own interpretation of the relevant ground and avalanche information.

3.7 Independence

Independence of the Design Team and Checking Team, and the independence of the Designer and the Design-Builder, shall be maintained at all times. The method of analysis that they employ need not be the same. They may consult each other to ensure that the results they are obtaining are directly comparable.

ARTICLE 4 DESIGN CERTIFICATION

4.1 Design Certificates

The Design-Builder shall issue a Design Certificate for each Final Design package that is submitted. All Design Certificates shall be:

- (a) on the appropriate form(s) attached as Appendix C [Form of Certificates] to this Schedule; and
- (b) be signed and sealed by the responsible engineer, who shall be a Professional Engineer and a principal of the Designer, and by the Design-Builder's Representative (or, in the case only of Design Certificates for environmental works incorporated in the Project Work, the AQP).

All parties that sign Design Certificates shall clearly print their name and position held in their organization.

4.2 Submission of Design Certificates

All Design Certificates together with the supporting documentation shall be submitted to the Province's Representative in accordance with the Review Procedure with original signatures, seals and registration numbers and in such form as to allow the Province to perform its function in respect of such Design Certificate without delay.

4.3 Road Safety Audit Certificates

- (a) The Design-Builder shall submit to the Province's Representative a certificate (a "**Road Safety Audit Certificate**") in the form attached as Appendix C [Form of Certificates] to this Schedule in respect of the Stage 1, Stage 2 and Stage 3 Road Safety Audits respectively. Each Road Safety Audit Certificate shall be signed by the Designer, the Road Safety Audit Team, the Design-Builder and the Design-Builder's Representative.

- (b) The Stage 3 Road Safety Audit Certificate shall be provided to the Owner's Engineer and the Province's Representative, and the Certificate of Substantial Completion shall not be issued unless a Stage 3 Road Safety Audit Certificate in respect thereof has been submitted and signed by the Designer, the Road Safety Audit Team, the Design-Builder and the Design-Builder's Representative.

ARTICLE 5 TESTING

5.1 Conduct of Testing

To the extent and in the manner provided by the Design Management Plan, Quality Documentation and other Project Requirements including Hold Points and Witness Points required by the Inspection and Testing Plan, all testing shall be carried out by a duly accredited and certified testing facility and organization in accordance with Schedule 7 [Quality Management]. The Province's Representative shall be given timely advance notice (being not less than 2 Business Days) of the date of such tests, unless the Province's Representative gives written notice that it does not require such notice for any categories of tests. The Province shall be entitled to attend at any test. Any materials or Plant which fail such tests shall be rejected.

5.2 Test Recording and Reporting

- (a) In addition to the requirements of Schedule 7 [Quality Management], the Design-Builder shall develop and employ a test recording system which shall permit ready retrieval of all test readings and shall provide live internet-based access to the test recording system and its data to the Province's Representative.
- (b) With respect to continuous testing operations (such as concrete quality, structural concrete strengths, aggregate quality, compaction tests and bituminous material quality) the Design-Builder shall provide to the Province's Representative at regular intervals (not to exceed weekly unless otherwise agreed by the Province's Representative) test summary sheets and statistical analyses indicating strength and quality trends and shall do so in accordance with the requirements of Schedule 17 [Records and Reports], including Section 1.6 [Province Access to Records] of Schedule 17.

ARTICLE 6 CONSTRUCTION CERTIFICATION

6.1 Construction Certificates

The Design-Builder shall, in accordance with the procedures set out in the Design Management Plan and the relevant Quality Documentation or other Project Requirements, submit Construction Certificates to the Province's Representative in accordance with the Review Procedure. Construction Certificates shall be submitted to the Province's Representative prior to opening any New Infrastructure for use by the public. All Construction Certificates shall be signed by the Design-Builder's Representative and the Designer. The Design-Builder shall provide a copy of all Construction Certificates to the Owner's Engineer.

6.2 Deliverables for Substantial Completion

Without limiting the Design-Builder's obligations under this Agreement, the Design-Builder shall deliver the deliverables set out in Part I [Deliverables for Substantial Completion] of Appendix A to this Schedule prior to Substantial Completion.

6.3 Deliverables for Total Completion

Without limiting the Design-Builder's obligations under this Agreement, the Design-Builder shall deliver the deliverables set out in Part II [Deliverables for Total Completion] of Appendix A to this Schedule prior to Total Completion.

6.4 Requirements for Substantial Completion

Substantial Completion shall only be achieved after:

- (a) any and all Construction Certificates have been issued in respect of the New Project Infrastructure, other than in respect of final top lift paving;
- (b) a Stage 3 Road Safety Audit Certificate has been issued in accordance with Section 13.4.4 [Stage 3: Post Construction Road Safety Audit] of Part 2 of this Schedule; and
- (c) all relevant Nonconformities have been resolved, quality inspections and audits have been satisfactorily completed in accordance with the Design Management Plan, the Quality Documentation and other relevant provisions of this Agreement and provided to the Province demonstrating that the New Project Infrastructure has been Substantially Completed in accordance with all applicable Project Requirements and other requirements of this Agreement.

6.5 Notice of Substantial Completion

- (a) The Design-Builder shall issue to the Owner's Engineer and the Province's Representative a notice informing them at least 15 Business Days but no more than 30 Business Days prior to the date upon which the Design-Builder expects Substantial Completion. If the Design-Builder has at any time reason to believe that the said date expected for Substantial Completion shall be delayed or achieved earlier by more than five Business Days, it shall issue a fresh notice informing the Owner's Engineer and the Province's Representative of the new date expected for Substantial Completion.
- (b) At the same time that the Design-Builder delivers a notice under Section 6.5(a) of this Part, the Design-Builder shall submit to the Province's Representative for review, acting reasonably, in accordance with the Review Procedure, and to the Owner's Engineer an updated list of any defects or deficiencies in the Project Work (the "**Final Deficiency List**"), which list shall:
 - (i) identify all outstanding defects or deficiencies in the Project Work that the Design-Builder expects to remain outstanding as of Substantial Completion and required to be corrected by the Design-Builder in order to achieve Total Completion, which defects or deficiencies shall include any failure by the Design-Builder to deliver a deliverable required by Part I [Substantial

Completion Deliverables] of Appendix A to this Schedule prior to Substantial Completion;

- (ii) include the Design-Builder’s estimate of the cost to remedy each defect or deficiency (the amount of such costs being, if not objected to by the Province’s Representative after review, acting reasonably, in accordance with the Review Procedure, or, if objected to, as agreed or determined in accordance with the Review Procedure or the Dispute Resolution Procedure, as the case may be, the “**Agreed Remedy Cost**”); and
- (iii) the Design-Builder’s proposed Corrective Action and date for the remedy of each defect or deficiency, which date shall be no later than the Total Completion Target Date.

6.6 Inspection for Substantial Completion

Upon the Design-Builder issuing a notice contemplated in Section 6.5 [Notice of Substantial Completion] of this Part, and subject to the delivery to the Owner’s Engineer and the Province’s Representative of Construction Certificates in respect of the Substantial Completion of all of the New Project Infrastructure and all other relevant Certificates and supporting documentation in accordance with the Design and Certification Procedure, the Province and the Design-Builder shall cause the Owner’s Engineer to commence, within 10 Business Days of receipt of such notice, an inspection of the New Project Infrastructure to determine whether Substantial Completion has been achieved and whether the Final Deficiency List is correct.

6.7 Issuance of Certificate of Substantial Completion and Signing of Final Deficiency List

- (a) The Province and the Design-Builder shall cause the Owner’s Engineer, within 25 Business Days of the commencement of the inspection under Section 6.6 [Inspection for Substantial Completion] of this Part, to either:
 - (i) issue the Certificate of Substantial Completion, stating the Substantial Completion Date, to the Province and the Design-Builder; or
 - (ii) notify the Design-Builder and the Province’s Representative of its decision not to issue the applicable Certificate of Substantial Completion and state the reasons in detail for such decision, including what further work may be required to achieve Substantial Completion.
- (b) The Province and the Design-Builder shall cause the Owner’s Engineer, within 15 Business Days after the commencement of the inspection under Section 6.6 [Inspection for Substantial Completion] of this Part, to either:
 - (i) sign the Final Deficiency List to reflect the Owner’s Engineer’s determination that the Final Deficiency List is correct; or
 - (ii) notify the Design-Builder and the Province’s Representative of its decision not to sign the Final Deficiency List and state the reasons in detail for such decision, including what further defects or deficiencies in the Project Work should be added to the Final Deficiency List.

6.8 Refusal to Issue Certificate of Substantial Completion or Sign Final Deficiency List

- (a) The Owner's Engineer shall refuse to issue the Certificate of Substantial Completion, only if the New Project Infrastructure is not Substantially Complete, or any other conditions or requirements under the Agreement to the achievement of Substantial Completion have not been satisfied or complied with.
- (b) The Owner's Engineer shall refuse to sign the Final Deficiency List only if the Owner's Engineer does not agree that such list correctly sets out the defects or deficiencies in the Project Work as of Substantial Completion and that are required to be remedied in order to achieve Total Completion.

6.9 Completion of Further Work for Substantial Completion

- (a) In the event of service of a notice by the Owner's Engineer under Section 6.7(a)(ii) of this Part, the Design-Builder shall issue to the Owner's Engineer a notice not less than five Business Days but no more than 10 Business Days prior to the date upon which the Design-Builder expects to complete such further work or other measures necessary or appropriate to remedy or remove the cause of the Owner's Engineer's refusal to issue the Certificate of Substantial Completion.
- (b) In the event of service of a notice by the Owner's Engineer under Section 6.7(b)(ii) of this Part, the Design-Builder shall amend the Final Deficiency List to include:
 - (i) the further defects or deficiencies in the Project Work to be added to the Final Deficiency List;
 - (ii) the Design-Builder's estimate of the cost to remedy each such further defect or deficiency (the amount of such costs being, if not objected to by the Province's Representative after review, acting reasonably, in accordance with the Review Procedure, or, if objected to, as agreed or determined in accordance with the Review Procedure or the Dispute Resolution Procedure, as the case may be, the Agreed Remedy Cost in respect of such defects or deficiencies); and
 - (iii) the Design-Builder's proposed Corrective Action and date for the remedy of each further defect or deficiency, which date shall be no later than the Total Completion Target Date.
- (c) Upon the Design-Builder notifying the Owner's Engineer and the Province's Representative that such further work or measures necessary or appropriate have been completed or, as the case may be, the Final Deficiency List has been amended in accordance with Section 6.9(b) of this Part, the Province and the Design-Builder shall cause the Owner's Engineer to commence within 10 Business Days of the notice of completion an inspection of such further work or measures and/or to review the amended Final Deficiency List and the provisions of Section 6.5 [Notice of Substantial Completion] of this Part through to this Section, inclusive, shall apply *mutatis mutandis*.

6.10 Outstanding Work for Total Completion

- (a) The Province shall be entitled to hold back from the Substantial Completion Payment the amount permitted by Section 3.1 [Deficiency Holdback] of Schedule 5 on account of any defects or deficiencies in the Project Work as identified on the Final Deficiency List signed by the Owner's Engineer pursuant to Section 6.7(b)(i) of this Part.
- (b) Notwithstanding the issue of a Certificate of Substantial Completion, the Design-Builder shall promptly complete all outstanding Project Work required to achieve Total Completion as soon as practicable

6.11 Requirements for Total Completion

Total Completion shall only be achieved after:

- (a) all Construction Certificates have been issued in respect of final top lift paving;
- (b) the completion of the remedy of all Final Deficiency List Deficiencies;
- (c) the Design-Builder has provided to the Province's Representative all required deliverables in accordance with Section 6.3 [Deliverables for Total Completion] of this Part; and
- (d) all demolition, removal and disposal of Infrastructure shall have been completed in accordance with Article 11 [Demolitions, Removals and Disposal] of Part 2 of this Schedule.

6.12 Notice of Total Completion

The Design-Builder shall issue to the Owner's Engineer and the Province's Representative a notice informing them at least 15 Business Days but no more than 30 Business Days prior to the date upon which the Design-Builder expects Total Completion. If the Design-Builder has at any time reason to believe that such expected date for Total Completion shall be delayed or achieved earlier by more than five Business Days, it shall issue a fresh notice informing the Owner's Engineer and the Province's Representative of the new date expected for Total Completion.

6.13 Inspection for Total Completion

Upon the Design-Builder issuing a notice contemplated in Section 6.12 [Notice of Total Completion] of this Part and subject to the delivery to the Owner's Engineer and the Province's Representative of Construction Certificates for the Total Completion of all of the New Project Infrastructure and all other relevant Certificates and supporting documentation in accordance with the Design and Certification Procedure, the Design-Builder shall cause the Owner's Engineer to commence, within 10 Business Days of receipt of such notice, an inspection of the New Project Infrastructure to determine whether Total Completion has been achieved.

6.14 Issuance of Certificate of Total Completion

The Province and the Design-Builder shall cause the Owner's Engineer, within 20 Business Days of the commencement of the inspection pursuant to Section 6.13 [Inspection for Total Completion] of this Part, to either:

- (a) issue the Certificate of Total Completion, stating the Total Completion Date, to the Province and the Design-Builder; or
- (b) notify the Design-Builder and the Province's Representative of its decision not to issue the Certificate of Total Completion and state the reasons in detail for such decision.

6.15 Refusal to Issue Certificate of Total Completion

The Owner's Engineer shall refuse to issue the Certificate of Total Completion only if the New Project Infrastructure is not Totally Complete, or any other conditions or requirements under the Agreement to the achievement of Total Completion have not been satisfied or complied with.

6.16 Completion of Further Work for Total Completion

In the event of service of a notice by the Owner's Engineer under Section 6.14(b) of this Part, the Design-Builder shall issue to the Owner's Engineer a notice not less than five Business Days but no more than 10 Business Days prior to the date upon which the Design-Builder expects to complete such further work or other measures necessary or appropriate to remedy or remove the cause of the Owner's Engineer's refusal to issue the Certificate of Total Completion. Upon the Design-Builder notifying the Owner's Engineer and the Province's Representative that such further work or measures necessary or appropriate have been completed, the Province and the Design-Builder shall cause the Owner's Engineer to commence within 10 Business Days of the notice of completion an inspection of such further work or measures and the provisions of Sections 6.12 [Notice of Total Completion] of this Part through to this Section, inclusive, shall apply *mutatis mutandis*.

6.17 Submissions by Province

The Province may, at any time, following receipt of notice given by the Design-Builder pursuant to any of Section 6.5 [Notice of Substantial Completion] or Section 6.12 [Notice of Total Completion] of this Part, as applicable, and prior to the Owner's Engineer issuing or notifying the Design-Builder and the Province's Representative of its decision not to issue a Certificate of Substantial Completion or Certificate of Total Completion, as the case may be, provide the Owner's Engineer and the Design-Builder with the Province's submissions as to whether the conditions for issuance of such Certificate of Substantial Completion or Certificate of Total Completion, as the case may be, have been satisfied and, if applicable, any reasons as to why the Province considers that such Certificate of Substantial Completion or Certificate of Total Completion, as the case may be, should not be issued. The Owner's Engineer shall consider such submissions in determining whether to issue such Certificate of Substantial Completion or Certificate of Total Completion, as the case may be.

6.18 No Limitation

The issuance of any Certificate of Substantial Completion or any Certificate of Total Completion shall be without prejudice to and shall not in any way limit the rights and obligations of the parties under and in accordance with this Agreement.

6.19 Disputed Certificate

If there is any dispute between the parties as to the decision of the Owner's Engineer to issue or not to issue any Certificate of Substantial Completion or any Certificate of Total Completion in accordance with

this Part, then either the Province or the Design-Builder may refer such dispute for resolution under the Dispute Resolution Procedure.

6.20 Certificate Effective Pending Dispute

Notwithstanding any other provision in this Agreement or Schedule 16 [Dispute Resolution Procedure], if the Owner's Engineer has issued any Certificate of Substantial Completion or any Certificate of Total Completion and the Province or the Design-Builder has referred a dispute in respect thereof for resolution under the Dispute Resolution Procedure pursuant to Section 6.19 [Disputed Certificate] of this Part, then for all purposes of this Agreement such Certificate of Substantial Completion or such Certificate of Total Completion, as the case may be, shall be deemed to have been issued unless and until it is determined in accordance with the Dispute Resolution Procedure that it was improperly issued by the Owner's Engineer in accordance with the terms of this Part.

**PART 4
TRAFFIC MANAGEMENT**

ARTICLE 1 GENERAL TRAFFIC MANAGEMENT REQUIREMENTS

1.1 Order of Precedence

The Design-Builder's Traffic Management Plan and traffic control operations for all Construction shall be in accordance with the criteria contained in this Part and the following codes and standards and if there is any conflict between the criteria and any of the Reference Documents, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Part;
- (b) the applicable Ministry Technical Circulars and Ministry Technical Bulletins;
- (c) Traffic Management Manual;
- (d) DBSS;
- (e) Electrical and Traffic Engineering Manual;
- (f) Manual of Standard Traffic Signs and Pavement Markings;
- (g) Electrical and Signing Materials Standards;
- (h) Specifications for Standard Highway Sign Materials, Fabrication and Supply;
- (i) BC Supplement to TAC; and
- (j) TAC Geometric Design Guide.

1.2 Recognized Products List

All traffic control devices used in the Project are to be selected from the Recognized Products List. The use of traffic control devices not on the Recognized Products List requires written acceptance from the Province in accordance with the Consent Procedure.

1.3 General Requirements

- (a) The restrictions outlined in this Part shall be the basis for the development of the Traffic Management Plan and Traffic Control Plans, to be provided in accordance with Article 4 [Traffic Management Plan] of this Part. Variations to the restrictions at specific locations may be permitted for such specific locations, but only if substantiated through a plan by the Design-Builder that addresses, at a minimum, traffic requirements, analysis and stakeholder consultation, where applicable, and such plan is accepted by the Province in accordance with the Consent Procedure.
- (b) Available traffic data is posted in the Data Room. The Design-Builder shall be responsible for obtaining any traffic data necessary for traffic analysis.

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- (c) Except where permitted in accordance with this Part, implementation and removal of any Stoppages, Lane Closures, Twenty-Minute Closures, Full Closures, Extended Closures, Detour Routes, Lane Shifts or other changes in traffic patterns shall be completed outside of Restricted Periods.
- (d) The Design-Builder shall not engage in any activity that could result in the occurrence of a Traffic Disruption Event, or that could otherwise impede or disrupt the flow of traffic, during a Restricted Period.
- (e) If the Design-Builder's Traffic Control Supervisor determines that any traffic delays, queues or disruptions are not in compliance with the Project Requirements, the Design-Builder shall cease any relevant Project Work and safely make all the necessary travel lanes available to traffic as quickly as possible to bring the traffic delays, queues and disruptions to compliance.
- (f) Any proposed Stoppages, Lane Closures, Twenty-Minute Closures, Full Closures, Extended Closures, Detour Routes and Lane Shifts not included in the Design-Builder's accepted Traffic Control Plan shall be subject to prior acceptance by the Province in accordance with the Consent Procedure.
- (g) The Design-Builder shall not use private roads without making prior written arrangements with all affected or Interested Parties and the Province. The Design-Builder shall be responsible for all costs arising from or in connection with the use of the private roads.
- (h) Access to CP Lands shall be in accordance with the requirements set out in Article 3 [CP Interface] of Part 1 of this Schedule.
- (i) Access to private property off Dart Creek Forest Service Road shall be maintained.
- (j) Full access for emergency and first responders shall be maintained at all times.
- (k) All times and hours noted in this Part are in the Mountain Time Zone.

1.4 Location and Storage of Materials and Equipment

The Design-Builder shall not store equipment on the travel portion or Shoulder of any road outside of permitted Full Closure and Extended Closure periods. Equipment stored within the Clear Zone of any road shall be protected by barriers. Concrete barriers shall be provided where Clear Zone requirements cannot be met.

1.5 Accommodation of Railway and CP Vehicular Traffic

The Design-Builder shall accommodate railway traffic and CP vehicular traffic in accordance with Article 3 [CP Interface] of Part 1 of this Schedule.

1.6 Incident Management

- (a) The Design-Builder shall organize and implement an Incident Management Plan in accordance with the requirements specified in the Traffic Management Manual and Section 4.2.2 [Incident Management Plan] of this Part.

- (b) The Design-Builder shall contact Provincial and local emergency services through the Design-Builder’s Operations/Traffic Manager. In anticipation of the requirement for emergency vehicles to pass through the Project Site, the Design-Builder shall have adequate equipment and labour available to clear a passage should a Stoppage or scheduled Closure be in effect. The Design-Builder shall act immediately upon notification by emergency services personnel of an emergency, to provide safe passage for the emergency services within 15 minutes of notification.
- (c) The Design-Builder shall maintain a reliable communication system between the Traffic Control Supervisor and the Province’s Representative, including a back up communication system, at all times. The same communication system shall be accessible to the emergency services to provide three-way communications.
- (d) The Design-Builder shall coordinate the details of the Incident Management Plan with the Traffic Control Plans.

1.7 Statutory Holidays and Special Events

The Design-Builder shall comply with the following requirements:

- (a) The Design-Builder shall not implement any Closures during the Restricted Periods for all Statutory Holidays and Special Events as set out in Table 1.7a [Statutory Holidays and Special Event Restricted Periods] as follows:

Table 1.7a Restricted Periods for Statutory Holidays and Special Events

Day on which Statutory Holiday or Special Event falls	Restricted Periods
Weekday (Monday to Friday)	From 12:00 of the weekday before the Statutory Holiday or Special Event to 12:00 of the weekday following the Statutory Holiday or Special Event.
Weekend (Saturday, Sunday)	From 12:00 of the Friday before the Statutory Holiday or Special Event to 12:00 of the Tuesday following the Statutory Holiday or Special Event that are observed on a Monday. From 12:00 of the Thursday before the Statutory Holiday or Special Event to 12:00 of the Monday following the Statutory Holiday or Special Event that are observed on a Friday.

- (b) Statutory Holidays (each, a ‘**Statutory Holiday**’) are identified in Table 1.7b [Statutory Holidays] as follows:

Table 1.7b Statutory Holidays

Name of Statutory Holiday	Year				
	2020	2021	2022	2023	2024
New Year’s Day	January 1	January 1	January 2	January 2	January 1
BC Family Day / AB Family Day	February 17	February 15	February 21	February 20	February 19
Good Friday	April 10	April 2	April 15	April 7	March 29

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 4: DESIGN AND CONSTRUCTION
Part 4: Traffic Management**

**Commercial in Confidence
Execution**

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Name of Statutory Holiday	Year				
	2020	2021	2022	2023	2024
Easter Monday	April 13	April 5	April 18	April 10	April 1
Victoria Day	May 18	May 24	May 23	May 22	May 20
Canada Day	July 1	July 1	July 1	July 3	July 1
BC Day / AB Heritage Day	August 3	August 2	August 1	August 7	August 5
Labour Day	September 7	September 6	September 7	September 4	September 2
Thanksgiving Day	October 12	October 11	October 12	October 9	October 14
Christmas Day	December 25	December 25	December 25	December 25	December 25
Boxing Day	December 26	December 26	December 26	December 26	December 26

(c) Special Events (each, a “**Special Event**”) are identified below:

- (i) the Golden Triangle cycling event will be held annually in the Victoria Day long weekend; specific dates will be provided to the Design-Builder 90 days in advance of the event;
- (ii) the Golden Ultra Marathon Race scheduled annual event dates as set out below:

Year 2019	September 20-22
Year 2020	September 18-20
Year 2021	September 17-19
Year 2022	September 16-18
Year 2023	September 22-24
Year 2024	September 14-15

- (iii) the Columbia Valley Classics Annual Show & Shine in Radium occurs on the Friday/Saturday of the third weekend in September on the dates set out below:

Year 2019	September 20-21
Year 2020	September 18-19
Year 2021	September 17-18
Year 2022	September 16-17
Year 2023	September 15-16
Year 2024	September 21-22

- (d) The Design-Builder shall assess all Statutory Holidays and Special Events and include them in the Traffic Management Plan.

1.8 Detour Route and Lane Shift Requirements within Project Site

1.8.1 General

- (a) All Detour Routes and Lane Shifts within the Project Site shall be paved with appropriate Pavement Markings and signs placed in accordance with the Traffic Management Manual.
- (b) The Design-Builder shall ensure the condition of the pavement used for all Detour Routes and Lane Shifts is adequate for its intended purpose and does not adversely impact on the safety and intended function of such Detour Routes and Lane Shifts.
- (c) Temporary Detour Routes and Lane Shifts within the Project Site implemented during periods of Available Extended Closures as per Table 2.2-2 [Available Extended Closure Dates] of this Part, may be gravel surfaced under the following conditions and subject to acceptance by the Province's Representative:
 - (i) the Geometric Design Criteria for each lane of each such Detour Route or Lane Shift is in accordance with Table 1.3.6 [Dart Creek Forest Service Road Geometric Design Criteria] of Part 2 of this Schedule;
 - (ii) the total length of each such Detour Route or Lane Shift, including connections to Highway 1, is less than 300m or as acceptable to the Province's Representative;
 - (iii) during periods of Statutory Holidays or Special Events as per Section 1.7 [Statutory Holidays and Special Events] of this Part, all Detour Routes and Lane Shifts within the Project Site must be paved in accordance with Sections 1.8.1(a) and 1.8.1(b) of this Part;
 - (iv) the Design-Builder shall ensure the condition of the gravelled surface including delineation used for all short duration Detour Routes and Lane Shifts is adequate for its intended purpose and does not adversely impact on the safety and intended function of such Detour Routes and Lane Shifts; and
 - (v) all other provisions of this Part shall apply in respect of such Detour Routes and Lane Shifts.
- (d) Milled surfaces open to traffic shall be clean and allow adequate drainage.
- (e) The Design-Builder shall prepare an engineered design for each Detour Route and Lane Shift that shall conform to the minimum Design requirements of the Traffic Management Manual and this Schedule. Detour Route and Lane Shift designs shall be submitted to the Province's Representative under the Review Procedure.
- (f) The Design-Builder shall provide Detour Routes and Lane Shifts in accordance with Section 2.8 [Detour Route and Lane Shift Design Criteria] of this Part.
- (g) Variations to the Detour Route and Lane Shift Design shall not be permitted unless accepted by the Province in accordance with the Consent Procedure.

1.8.2 Traffic Control Devices

- (a) Construction and Advisory Signs
 - (i) The Design-Builder shall be responsible for the design, supply, installation, relocation, maintenance, and removal of all requisite signage and Pavement Markings, including temporary regulatory, warning, guide, advisory, directional, and dynamic message signs. The location and type of each sign shall be indicated on the Traffic Control Plan in accordance with the Electrical and Signing Materials Standards, the Traffic Management Manual and the Manual of Standard Traffic Signs and Pavement Markings.
 - (ii) In accordance with Section 194 [Traffic Management for Work Zones] of the DBSS, all standard signs, new and replacement, shall meet the Specifications for Standard Highway Sign Materials, Fabrication and Supply.
- (b) Portable Dynamic Message Signs
 - (i) The Design-Builder shall provide portable Dynamic Message Signs (“**Portable Dynamic Message Signs**” or “**PDMS**”) and shall use PDMSs to provide advance notification of planned traffic pattern changes in accordance with Section 4.1.8 of Schedule 9 [Communications and Engagement]. Sign locations and messages shall be as shown on the Traffic Control Plan. In addition, the Design-Builder is to use PDMSs to provide notification of Incidents or unplanned traffic pattern changes, as deemed necessary by the Incident Management Plan.
 - (ii) The Design-Builder shall provide PDMSs to provide advance notice of each scheduled Extended Closure, Full Closure, Twenty-Minute Closure, Lane Closure, Stoppage or Detour Route and to provide advance notice of all traffic pattern changes and disruptions. PDMSs (including flashers and other warning devices) shall be placed at strategic locations as per the Traffic Management Plan.
 - (iii) In addition to locations of PDMSs defined in the Traffic Management Plan, the Design-Builder shall have, at a minimum, four PDMSs, two at the east approaches and two at the west approaches of the Project Site, in accordance with the Traffic Management Plan.
 - (iv) The Design-Builder shall submit to the Province’s Representative for acceptance under the Review Procedure the location and messaging of all PDMSs.
 - (v) The deployment of the PDMSs with regards to application and placement shall be in accordance with Section 4.3.2 of the Traffic Management Manual.
 - (vi) The Province shall be responsible for the input and programing of the messaging for PDMSs.
- (c) Speed Reader Boards

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- (i) The Design-Builder shall provide a minimum of two Speed Reader Boards (“SRB”) for use, one on each approach to the Project Site.
- (ii) The deployment of the SRBs with regards to application and placement shall be in accordance with Section 4.11.3 of the Traffic Management Manual.

1.8.3 Concrete Roadside Barrier Requirements

- (a) The Design-Builder shall supply and install temporary concrete roadside barriers in the following situations:
 - (i) between traffic and wall construction;
 - (ii) between traffic and excavations/embankment construction;
 - (iii) between traffic and any Underpass/Overpass construction;
 - (iv) to meet drop-off delineation requirements; and
 - (v) where required by the Traffic Control Plan.
- (b) Traffic barriers within the Project Site shall be continuous or adequately protected by terminals, flares, or impact attenuators in accordance with the Traffic Management Manual. Temporary barriers shall have reflectors installed in accordance with the Manual of Standard Traffic Signs and Pavement Markings.
- (c) Where equipment is actively working adjacent to Highway 1, in order to avoid driver distraction, headlight glare and to inhibit debris from blowing onto the travel surfaces, privacy screens shall be installed on or adjacent to barriers. The Design-Builder shall submit the product proposed for privacy screens to the Province’s Representative for acceptance in accordance with the Consent Procedure.
- (d) Where traffic barriers are used, the Design-Builder shall make provision for drainage and removal of snow, ice and debris to prevent impacts to the proposed Detour Route or Lane Shift.

1.8.4 Drop-Offs

The Design-Builder shall perform all Construction to minimize drop-offs (abrupt changes in roadway elevation) left exposed to traffic. The treatment of drop-offs and travel lane excavations shall be in accordance with Section 6.5 of the Traffic Management Manual. In addition to Section 6.5 of the Traffic Management Manual, drop-offs left exposed to traffic during non-working hours shall be delineated as follows:

- (a) no drop-offs shall be allowed between adjacent lanes of traffic;
- (b) drop-offs greater than 300mm:
 - (i) cannot remain for more than three consecutive days; and

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- (ii) cannot be present at any time during any Restricted Period described in Section 1.7 [Statutory Holidays and Special Events] of this Part; and
- (c) all areas of excavation and their proposed safety measures shall be shown in the Traffic Control Plan.

1.8.5 Temporary Pavement Markings

- (a) Further to Section 4.4 of the Traffic Management Manual, the Design-Builder shall be responsible for the application, maintenance and removal of all temporary Pavement Markings and reflective devices. Only permanent Pavement Markings shall be applied to the final pavement surface.
- (b) When traffic lanes are to be redefined for long-duration work (more than one daytime shift), the Design-Builder shall eradicate all redundant temporary or permanent Pavement Markings that are not required for the intended traffic patterns (without leaving excessive grooves on the pavement surface) and install revised markings.
- (c) The Design-Builder shall supply all temporary Pavement Markings in accordance with Section 4.4.2 of the Traffic Management Manual. The material used for any temporary Pavement Markings shall be paint with glass bead, temporary Pavement Marking tape or thermoplastic marking supplemented with temporary overlay markers.
- (d) The Design-Builder shall apply all Pavement Markings in accordance with the signing and Pavement Markings drawings and the Detour Route and Lane Shift Design drawings.
- (e) The Design-Builder shall always maintain positive delineation and shall re-apply temporary Pavement Markings, delineators and barrier reflectors that are faded, damaged or missing.

1.8.6 Speed Limits and Safe Passage through Project Site

Further to Section 2.4 of the Traffic Management Manual, the Province reserves the right to determine speed limits within the Project Site. Unless specified in this Part or agreed to in writing by the Province's Representative, a construction speed limit of 50 km/hour shall be maintained.

1.9 Pedestrians and Cyclists

The Design-Builder shall implement a strict monitoring program for ensuring the safe passage of pedestrians and cyclists through the work zone at all times, except during scheduled Twenty-Minute Closures, Full Closures and Extended Closures. This program must be clearly detailed in the Traffic Management Plan.

1.10 Accommodation of School Bus and Local Traffic

PDC1.10a The Design-Builder shall accommodate the daily safe passage through the Project Site of school bus and local traffic between Golden and Field. The treatment of drop-offs and travel lane excavations for the passage of the school bus and local traffic through the Project Site shall be in accordance with Section 1.8 [Detour Route and Lane Shift Requirements within Project Site] of this Part. Residents of Golden, Field and other nearby communities that commute on a daily basis between Golden and Field along Highway 1 shall be deemed to be

local traffic. The Province will be responsible for the designation and administration of local traffic that will be allowed to pass through the Project Site. Commercial traffic shall not be permitted through the Project Site, unless agreed to in writing by the Province’s Representative. During the periods of Extended Closures, the Design-Builder shall use pilot cars to guide school bus and local traffic through the Project Site daily for the times specified in Table 1.10 [Local and School Bus Traffic Opening Times]. The use of single lane alternating traffic (SLAT) operation to allow for the passage of the school bus and local traffic is permissible. School buses shall be given priority over general traffic through the Project Site. Pilot cars, if employed, shall be in accordance with Section 4.11.9 of the Traffic Management Manual.

Table 1.10 Local and School Bus Traffic Opening Times

Morning school bus opening	School bus from Golden at 06:45, Return from Field to Golden at 08:15
Morning local traffic opening	07:00 – 07:30 (to be confirmed with Stakeholders but will remain at 30 minutes)
Afternoon school bus opening	School bus from Golden at 15:15, Return from Field to Golden at 17:00
Afternoon local traffic opening	16:30 -17:00 (to be confirmed with Stakeholders but will remain at 30 minutes)

1.11 Public Washroom Facilities

The Design-Builder shall provide portable washroom facilities for public use at each approach to a Full Closure or Extended Closure location, and shall be responsible for the maintenance and upkeep of such portable washroom facilities.

1.12 Consequences of Occurrence of Non-Permitted Traffic Disruption Events

Traffic Management Payments shall be payable by the Design-Builder to the Province pursuant to and in accordance with Schedule 10 [Payment and Performance Mechanism], in respect of each Non-Permitted Traffic Disruption Event.

ARTICLE 2 HIGHWAY 1

2.1 General Requirements

- (a) The types of Stoppages and Closures are defined in Table 2.1 [Stoppages and Closures] below:

Table 2.1 Stoppages and Closures

Stoppage	An occasional, temporary interruption of traffic flow on Highway 1 in one or both directions, for not more than two minutes, caused or directed by the Design-Builder for the purpose of facilitating Construction.
Lane Closure	A Closure whereby one direction of traffic is held while the other is permitted to proceed, and then vice versa, with a single lane open to serve traffic in each direction in alternating cycles, subject to delay (defined as the time between when a vehicle is stopped to when that vehicle begins moving) not exceeding 30 minutes.

Twenty-Minute Closure	A scheduled Closure, in both directions, for a maximum duration of up to 20 minutes that starts on the hour and is followed by 40 minutes full opening of both directions simultaneously.
Full Closure	A scheduled Closure, in both directions, for a maximum duration of up to nine hours.
Extended Closure	A scheduled Closure, in both directions, for continuous consecutive periods of 24 hours, with openings for school buses and local traffic in accordance with Section 1.10 [Accommodation of School Bus and Local Traffic] of this Part.

- (b) The Design-Builder shall provide PDMSs to provide advance notice of each scheduled Lane Closure, Twenty-Minute Closure, Full Closure, Extended Closure or Detour Route and to provide advance notice of all traffic pattern changes and disruptions in accordance with Article 4 [Traffic Management Plan] of this Part and Schedule 9 [Communications and Engagement]. PDMSs (including flashers and other warning devices) shall be placed at strategic upstream locations in order to advance warn motorists and allow them adequate opportunity to divert prior to reaching the Closure or Detour Route location.
- (c) For each scheduled Lane Closure, Twenty-Minute Closure, Full Closure, Extended Closure or Detour Route, the Design-Builder shall provide advance notice to the travelling public and other stakeholders of the scheduled Lane Closure, Twenty-Minute Closure, Full Closure, Extended Closure or Detour Route in accordance with of Schedule 9 [Communications and Engagement].
- (d) The Design-Builder shall also comply with the requirements of Article 3 [Alternative Route] of this Part for the location and messaging requirements for PDMSs off the Project Site.

2.2 Permitted Dates for Stoppages and Closures

- (a) Table 2.2-1 [Permitted Dates for Stoppages and Closures] describes the dates of the year when Stoppages and Closures are permitted, not permitted and limited on Highway 1 in both directions of traffic (eastbound and westbound):

Table 2.2-1 Permitted Dates for Stoppages and Closures

Type of Stoppage or Closure	Date			
	April 1 to May 31	June 1 to September 14	September 15 to November 30	December 1 to March 31
Stoppage	Permitted	Permitted	Permitted	Permitted
Lane Closure	Permitted (outside Hazard Zones)	Permitted	Permitted (outside Hazard Zones)	Permitted (outside Hazard Zones)
Twenty-Minute Closure	Permitted	Permitted	Permitted	Permitted
Full Closure	Permitted	Permitted	Permitted	Permitted

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Type of Stoppage or Closure	Date			
	April 1 to May 31	June 1 to September 14	September 15 to November 30	December 1 to March 31
Extended Closure	Permitted in accordance with Sections 2.2(c), 2.2(d), 2.2(e) and 2.2(f) of this Part	Not Permitted	Permitted in accordance with Sections 2.2(c), 2.2(d), 2.2(e) and 2.2(f) of this Part	Not Permitted

- (b) The permitted timeframes for Stoppages and Closures within these dates are described in Section 2.3 [Permitted Timeframes for Stoppages and Closures] of this Part.
- (c) Subject to acceptance by the Province’s Representative in accordance with the Consent Procedure, the permitted dates and start times for Extended Closures within these dates are further set out in Table 2.2-2 [Available Extended Closure Dates]:

Table 2.2-2 Available Extended Closure Dates

Date	Permitted Dates and Start/End Times			
	2021	2022	2023	2024
April 1 to June 1	12:00 on April 6 to 12:00 on May 14	07:00 on April 1 to 12:00 on April 14	07:00 on April 1 to 12:00 on April 6	12:00 on April 2 to 12:00 on May 17
	05:00 on May 17 to 12:00 on May 21	12:00 on April 19 to 12:00 on May 20	12:00 on April 11 to 12:00 on May 19	12:00 on May 21 to 12:00 on May 24
	12:00 on May 25 to 12:00 on May 28	12:00 on May 24 to 12:00 on May 27	12:00 on May 23 to 12:00 on May 26	05:00 on May 27 to 12:00 on May 31
	05:00 on May 31 to 07:00 on June 1	05:00 on May 30 to 07:00 on June 1	05:00 on May 29 to 07:00 on June 1	
September 15 to December 1	06:00 on September 15 to 12:00 on September 17	06:00 on September 15 to 12:00 on September 16	12:00 on September 18 to 12:00 on September 22	12:00 on September 16 to 12:00 on September 20
	12:00 on September 20 to 12:00 on September 24	12:00 on September 19 to 12:00 on September 23	12:00 on September 25 to 12:00 on October 6	12:00 on September 23 to 12:00 on September 27
	12:00 on September 27 to 12:00 on October 7	12:00 on September 26 to 12:00 on October 7	12:00 on October 10 to 06:00 on December 1	12:00 on September 30 to 12:00 on October 11
	12:00 on October 12 to 06:00 on December 1	12:00 on October 11 to 06:00 on December 1		12:00 on October 15 to 06:00 on December 1

- (d) The Design Builder is limited to a total of 210 cumulative days of Extended Closures over the entire duration of Construction. One day of an Extended Closure is defined as a 24-hour period, or portion thereof, from the start of the Extended Closure to the end of the Extended Closure.
- (e) During Extended Closures, school bus and local traffic openings shall be provided in accordance with Section 1.10 [Accommodation of School Bus and Local Traffic] of this Part.
- (f) No Extended Closures are allowed on weekends between May 16 and May 31 as well as between September 15 and September 30, as per dates and times noted in Table 2.2-2.
- (g) No Extended Closures are allowed in 2020.

2.3 Permitted Timeframes and Durations for Stoppages and Closures

- (a) Subject to acceptance by the Province’s Representative in accordance with the Consent Procedure, the following Tables 2.3-1 to 2.3-4 describe the permitted timeframes and durations for Stoppages, Lane Closures, Twenty-Minute Closures and Full Closures for the permitted dates set out in Section 2.2 [Permitted Dates for Stoppages and Closures], and with “delay” as used therein defined as the time between when a vehicle is stopped to when that vehicle begins moving. The permitted timeframes and durations for Extended Closures are set out in Sections 2.2(c), 2.2(d), 2.2(e) and 2.2(f) of this Part.

Table 2.3-1 Permitted Timeframes and Durations – April 1 to May 31

Type of Stoppage or Closure	Permitted Duration	Permitted Timeframes			
		Monday	Tuesday to Thursday	Friday	Saturday and Sunday
Stoppage	Maximum 2 minutes	No Restrictions			
Lane Closure	Governed by delay, which must not exceed 30 minutes	00:00 to 07:00 09:00 to 15:00 17:00 to 00:00			
Twenty-Minute Closure	Up to 20 minutes starting on the hour	00:00 to 06:20 09:00 to 15:20 17:00 to 23:20			
Full Closure	Up to 2 hours per Full Closure	00:00 to 07:00 09:00 to 15:00 17:00 to 00:00			
Full Closure	Up to 9 hours per Full Closure	22:00 to 00:00 00:00 to 07:00			

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Table 2.3-2 Permitted Timeframes and Durations – June 1 to September 14

Type of Stoppage or Closure	Permitted Duration	Permitted Timeframes				
		Monday	Tuesday to Thursday	Friday	Saturday	Sunday
Stoppage	Maximum 2 minutes	No Restrictions				
Lane Closure	Governed by delay, which must not exceed 30 minutes	00:00 to 07:00 20:00 to 00:00				
Twenty-Minute Closure	Up to 20 minutes starting on the hour	00:00 to 06:20 20:00 to 23:20				
Full Closures	Up to 2 hours per Full Closure	00:00 to 07:00 22:00 to 00:00	00:00 to 07:00 22:00 to 00:00	00:00 to 07:00	05:00 to 07:00	05:00 to 07:00 22:00 to 00:00
Full Closure	Up to 9 hours per Full Closure	00:00 to 07:00 22:00 to 00:00	00:00 to 07:00 22:00 to 00:00	00:00 to 07:00	Not Permitted	22:00 to 00:00

Table 2.3-3 Permitted Timeframes and Durations – September 15 to November 30

Type of Stoppage or Closure	Permitted Durations	Permitted Timeframes			
		Monday	Tuesday to Thursday	Friday	Saturday and Sunday
Stoppage	Maximum 2 minutes	No Restrictions			
Lane Closure	Governed by delay, which must not exceed 30 minutes	00:00 to 07:00 09:00 to 15:00 17:00 to 00:00			
Twenty-Minute Closure	Up to 20 minutes starting on the hour	00:00 to 06:20 09:00 to 15:20 17:00 to 23:20			
Full Closure	Up to 2 hours per Full Closure	00:00 to 07:00 09:00 to 15:00 17:00 to 00:00			
Full Closure	Up to 9 hours per Full Closure	00:00 to 07:00 22:00 to 00:00			

Table 2.3-4 Permitted Timeframes and Durations –December 1 to March 31

Type of Stoppage or Closure	Permitted Duration	Permitted Timeframes			
		Monday	Tuesday to Thursday	Friday	Saturday and Sunday
Stoppage	Maximum 2 minutes	No Restrictions			
Lane Closure	Governed by delay, which must not exceed 30 minutes	00:00 to 07:00 09:00 to 15:00 17:00 to 00:00			
Twenty-Minute Closure	Up to 20 minutes starting on the hour	00:00 to 06:20 09:00 to 15:20 17:00 to 23:20			
Full Closure	Up to 2 hours per Full Closure	00:00 to 07:00 09:00 to 15:00 17:00 to 00:00	00:00 to 07:00 09:00 to 15:00 17:00 to 00:00	00:00 to 07:00 09:00 to 15:00 21:00 to 00:00	00:00 to 07:00 21:00 to 00:00
Full Closure	Up to 9 hours per Full Closure	00:00 to 07:00 22:00 to 00:00			

- (b) The Design-Builder shall not implement Closures during Statutory Holidays or Special Events. When a Statutory Holiday or Special Event occurs, the Restricted Period requirements set out in Section 1.7 [Statutory Holidays and Special Events] of this Part will apply.
- (c) A Stoppage or Closure will end once Highway 1 is opened to traffic in both directions. A Stoppage or Closure will not be permitted if any part of a Stoppage or Closure is outside the of the permitted timeframes, or if the duration of a Stoppage or Closure is longer than the permitted durations as defined in this Section.
- (d) At the end of a Closure, lanes will be opened to clear traffic queues in both directions simultaneously. For daytime Full Closures between 09:00 to 15:00, Highway 1 must remain open for 1.0 hour minimum before another Full Closure may be implemented, if allowed under this Article. At all other times, once a free flow traffic condition exists and queues have been eliminated, another Closure may be implemented if allowed under this Article.
- (e) Twenty-Minute Closures shall start on the hour for a maximum duration of up to 20 minutes. At the end of the Twenty-Minute Closure, all lanes will be opened to clear traffic queues in both directions simultaneously for 40 minutes before any other Closure can be implemented.
- (f) The Design-Builder shall not implement any Lane Closures or Full Closures during the non-permitted windows between 07:00 and 09:00 and between 15:00 and 17:00. The Design-Builder shall accommodate the safe passage of the school bus through the Project Site daily for the times specified in Table 1.10 [Local and School Bus Traffic Opening Times]. The use of single lane alternating traffic (SLAT) operation to allow for the passage of the school bus is permissible. School buses shall be given priority over general traffic through the Project Site.

2.4 Queue Requirements for Stoppages and Closures

- (a) In addition to the permitted timeframes and durations for Stoppages and Closures set out in Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures], the Design Builder shall monitor actual queue lengths during Stoppages and Full Closures and ensure that they do not exceed the applicable maximum Queue Clearing Time set out in Table 2.4 [Maximum Queue Clearing Times per Direction]:

Table 2.4 Maximum Queue Clearing Times per Direction

Stoppage	5 minutes
Full Closure (maximum 2 hours)	30 minutes

- (b) If the Queue Clearing Time for a Stoppage or Full Closure exceeds the maximum allowable time set out in Table 2.4 [Maximum Queue Clearing Times per Direction], the Design-Builder shall immediately clear a lane for safe passage of traffic, even if the permitted Stoppage or Closure duration has not been reached. The Design-Builder shall monitor and record queue lengths and clearance times to better determine Stoppage and Closure durations and provide such records to the Province’s Representative for review.

2.5 Rock Blasting Requirements for Stoppages and Closures

- (a) The Design-Builder must demonstrate to the Province’s Representative that all Project Work causing any Stoppages or Closures can be completed within the applicable permitted durations and timeframes for any such Stoppage or Closure as specified in Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures] of this Part, by progressive build-up of Construction activities in order to satisfy the Province’s Representative that the queue can be cleared within the maximum specified Queue Clearing Times. For example, during blasting activities the Design-Builder shall carry out a gradual build-up of the blast sizes from 50% to 75%, 90%, and 100% of estimated design blasts, while assessing and modifying the blasting design and activities to ensure that all Project Requirements (including those relating to traffic, safety and CP) have been met to the satisfaction of the Province’s Representative before proceeding to the next increase.
- (b) Rock blasting and excavation will be permitted during Stoppages and Closures only after the Design Builder has successfully completed rock blasting testing in accordance with the Rock Excavation Process Progressive Test Procedure Plan which demonstrates that blasting during Stoppages and Closures can be done within the permitted Stoppage and Closure durations that the Design-Builder is proposing. For example, if the Design-Builder is proposing to do blasting within the two hour permitted Closure timeframes, then the Design-Builder must demonstrate that the rock blasting and excavation can be completed and that the lanes can be safely opened to traffic within that duration.
- (c) Once the Design-Builder has successfully demonstrated this process, the Design-Builder may perform rock blasting and excavation within the applicable Stoppage or Closure timeframes unless and until one of the following situations occurs:
- (i) a new rock blasting and excavation location or face is identified;
 - (ii) the geology of the rock to be blasted changes significantly;

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- (iii) the methodology for rock blasting or excavation is changed;
 - (iv) a non-compliant Stoppage or Closure has occurred;
 - (v) changes in natural rock characteristics such as geology, faults, and fractures exist; or
 - (vi) the proximity of the rock excavation to the travelled roadway or height of rock excavation changes,
- (d) Following the occurrence of any one of the situations set out in Section 2.5(e) of this Part, the Design-Builder shall not continue with rock blasting and excavation requiring any Stoppage or Closure until a Rock Excavation Process Progressive Test Procedure Plan for the new situation has been accepted by the Province’s Representative in accordance with Section 4.2.6(c) of this Part.

2.6 Hazard Zone Traffic Management

- (a) The hazard zones within the Project Site (“**Hazard Zones**”), such as snow avalanche zones that are known to the Province are indicated on the Avalanche Strip Map provided in the Data Room. The time of year for the existence of these hazard conditions are noted in Appendix E [Snow Avalanche Safety Measures] to this Schedule.
- (b) The rock fall hazard zones that are known to the Province are indicated on the Geotechnical and Terrain Hazards Plans provided in the Data Room.
- (c) In addition to complying with all applicable WorkSafeBC requirements; the Design-Builder shall ensure that traffic queues that form from any Stoppages or Closures are not located within or extend into areas identified as Hazard Zones on the Avalanche Strip Map during the avalanche season and on the Geotechnical and Terrain Hazards Plans during periods of higher rock fall hazard including but not limited to frequent freeze-thaw cycles in late spring and early fall and after periods of heavy precipitation.
- (d) Queues shall be continually monitored to ensure the public remains in their vehicles at all times, except for use of public washroom facilities.

2.7 Non-Permitted Traffic Disruption Events

Each of the following Traffic Disruption Events is a Non-Permitted Traffic Disruption Event:

- (a) a Stoppage:
 - (i) continuing for longer than two minutes in duration; or
 - (ii) occurring in any other circumstances prohibited or not expressly permitted pursuant to Section 2.2 [Permitted Dates for Stoppages and Closures] or Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures] of this Part;

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- (b) a Lane Closure occurring:
 - (i) during a Restricted Period; or
 - (ii) in any other circumstances prohibited or not expressly permitted pursuant to Section 2.2 [Permitted Dates for Stoppages and Closures] or Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures] of this Part;
- (c) a Twenty-Minute Closure:
 - (i) occurring during a Restricted Period;
 - (ii) starting at any other time than on the hour;
 - (iii) continuing for longer than twenty minutes in duration; or
 - (iv) in any other circumstances prohibited or not expressly permitted pursuant to Section 2.2 [Permitted Dates for Stoppages and Closures] or Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures] of this Part.
- (d) a Full Closure occurring:
 - (i) during a Restricted Period; or
 - (ii) in any other circumstances prohibited or not expressly permitted pursuant to Section 2.2 [Permitted Dates for Stoppages and Closures] or Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures] of this Part; and
- (e) an Extended Closure occurring:
 - (i) during a Restricted Period;
 - (ii) after a total of 210 days of cumulative Extended Closures have occurred, contrary to Section 2.2(c) of this Part; or
 - (iii) in any other circumstances prohibited or not expressly permitted pursuant to Section 2.2 [Permitted Dates for Stoppages and Closures] or Section 2.3 [Permitted Timeframes and Durations for Stoppages and Closures] of this Part.

2.8 Detour Route and Lane Shift Design Criteria within Project Site

- (a) Table 2.8 [Minimum Design Requirement for a Two-Lane Construction Detour Route and Lane Shift – Highway 1] below summarizes the minimum geometric design criteria that shall be incorporated into the design of Detour Routes and Lane Shifts for Highway 1.

Table 2.8 Minimum Design Requirements for a Two-Lane Construction Detour Route and Lane Shift – Highway 1

Design/Posted Speed	50 km/h or as accepted by the Province
Design Vehicle	WB20
Design Grade	Highway 1: 8%
Maximum Superelevation	6%
Minimum Radius	As per BC Supplement to TAC
Vertical Clearance	The lesser of 5.0 m or existing travel lane clearance
Lane Width	Existing or 3.6 m travel lanes (min)
Outside Paved Shoulder Width (Open)	0.5 m (min) paved
Outside Paved Shoulder Width (Closed by Barrier)	0.5 m (min) to face of barrier
Inside Paved Shoulder Width (Closed by Barrier)	0.5 m (min) to face of barrier
Side Slopes (w/o Barrier)	The lesser of 4 : 1 (max) or existing

Notes: Minimum Shoulder Widths shall be permitted except where dictated otherwise by sight distance requirements, in which case widened Shoulder Width in order to meet sight distance requirements shall be provided.

- (b) Temporary drainage appurtenances for Detour Route and Lane Shifts shall be designed to a minimum design return period of 1 in 20 years.
- (c) Pavement drainage for Detour Route and Lane Shift shall be designed in accordance with Section 1050 of the BC Supplement to TAC.
- (d) Continuous concrete roadside barriers, where provided, shall be provided along both sides, and adequately protected by terminals, barrier flares or impact attenuators to current Ministry standards as required. Where traffic barriers are used, the Design-Builder shall make adequate provisions for drainage and removal of snow and ice.
- (e) Except as permitted in this Section, variations to the above Detour Route and Lane Shift criteria shall not be permitted unless accepted by the Province in accordance with the Consent Procedure.

ARTICLE 3 ALTERNATIVE ROUTE

3.1 General Requirements

- (a) The requirements in this Article are applicable to the diversion of traffic from the Project Site to Highway 93 from Castle Junction to Radium and Highway 95 from the Town of Golden to Radium (the “**Alternative Route**”), which has been specified as the designated alternate route during Closures.
- (b) The Design-Builder shall provide PDMSs in accordance with Section 1.8.2(b) of this Part to provide advance notice of each scheduled Extended Closure, Full Closure, Twenty-Minute Closure, Lane Closure, Stoppage or Detour Route and to provide advance notice of all traffic pattern changes and disruptions. PDMSs (including flashers and other warning devices) shall be placed at strategic upstream locations in order to warn motorists in advance and

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allow them adequate opportunity to divert prior to reaching the Closure, Stoppage or Detour Route location, including those required outside the limits of the Project Site such as at Castle Junction, Field, the Highway 95/Highway 93 intersection in Radium and the Highway95/Highway 1 intersection.

- (c) Any PDMSs within Parks Canada jurisdictional boundary shall have messages displayed both in English and French.
- (d) The Design-Builder shall be responsible for the operational improvements and maintenance activities along the Alternative Route on Highway 93 and Highway 95 as set out in the Alternative Route Operational Improvements and Maintenance Requirements attached as Appendix F.

ARTICLE 4 TRAFFIC MANAGEMENT PLAN

4.1 General Requirements

- (a) Within 30 days following the Effective Date, the Design-Builder shall submit an initial Traffic Management Plan to the Province's Representative pursuant to the Consent Procedure. Following the acceptance of the initial Traffic Management Plan by the Province's Representative in accordance with the Consent Procedure, the Design-Builder shall submit all subsequent proposed changes to the Traffic Management Plan, including sub-plans, to the Province's Representative pursuant to the Consent Procedure.
- (b) The Traffic Management Plan and all updates thereto shall be consistent with and comply with all of the requirements set forth in this Part and all other relevant provisions of this Agreement.
- (c) The Design-Builder's Traffic Management Plan shall reference and interface with the Design-Builder's Traffic Quality Management Plan provided in accordance with Schedule 7 [Quality Management] and the Construction Communication Plan provided in accordance with Schedule 9 [Communications and Engagement].
- (d) In addition to the requirements set out in this Section, the Design-Builder shall not conduct any Construction that affects traffic without a current Traffic Management Plan that has also been accepted and sealed by the Design-Builder's Traffic Engineer.
- (e) This work has been assessed to be a Category 3 Project in accordance with the Traffic Management Manual. The Traffic Management Plan shall comply with the definitions and guidelines provided in the Traffic Management Manual.
- (f) The Design-Builder's Traffic Management Plan shall outline how general traffic, as well as the traffic generated by Project Work, is to be managed.
- (g) The Design-Builder's Traffic Management Plan shall include coordination of traffic management strategies with the District Avalanche Technician and Parks Canada in accordance with Section 1.4 of Appendix E [Snow Avalanche Safety Measures] to this Schedule.
- (h) The following sub-plans for the Design-Builder's Traffic Management Plan are required:

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- (i) Traffic Control Plan;
 - (ii) Incident Management Plan;
 - (iii) Implementation Plan;
 - (iv) Traffic Communications Plan;
 - (v) Risk Assessment Plan; and
 - (vi) Rock Excavation Process Progressive Test Procedure Plan.
- (i) Starting on the Effective Date, the Design-Builder shall provide to the Province a schedule of proposed Closures for the upcoming three months and the schedule shall be updated and resubmitted to the Province on a monthly basis.
- (j) The Design-Builder's Traffic Management Plan shall include requirements for the operational improvements and maintenance activities along the Alternative Route on Highway 93 and Highway 95 as set out in the Alternative Route Operational Improvements and Maintenance Requirements per Article 3 [Alternative Route] of this Part.

4.2 Traffic Management Sub-Plans

4.2.1 Traffic Control Plans

- (a) The Design-Builder shall prepare Project specific Traffic Control Plans in accordance with the Traffic Management Manual and other Reference Documents for all activities that affect traffic operations, including but not limited to:
- (i) individual traffic management layouts;
 - (ii) each Construction stage; and
 - (iii) activation of newly constructed roads and Structures.
- (b) The Design-Builder is assigned responsibility for, and shall at all times make provision for, traffic to pass throughout the Project Site in accordance with this Part as well as ensuring the convenience and safety of the public, vehicular, cycling and pedestrian traffic, and the workers on the Project Site, and the protection of the Project Work.
- (c) Any one or more of the advance warning areas, transition areas, buffer spaces, work areas and termination areas of the Traffic Control zone may be outside the Project Site, but this shall in no way diminish the Design-Builder's responsibility to meet the requirements of the Traffic Management Manual.
- (d) Construction signs, specific to an operation, shall be either removed or effectively covered so that their message is obscured whenever such operation is not in progress.
- (e) Further to the Category 3 Traffic Management Plan requirements in the Traffic Management Manual, the Design-Builder shall conduct traffic analysis on the Traffic Control Plan for

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each stage of the Construction where traffic operations are affected. The traffic analysis shall determine the effect of each Traffic Control Plan on the roadway capacity and operation, including the resulting vehicle delays and queue lengths. The analysis shall confirm that the resulting delays and queues are acceptable and are expected to clear before the commencement of a Restricted Period. The traffic analysis shall be conducted for proposed design speed and the representative hour(s) and day(s) that each Traffic Control Plan is in operation. Traffic analysis shall be included in the Traffic Control Plan submission.

- (f) The Design-Builder shall be responsible for including Construction generated traffic data in the Traffic Control Plan and any associated analysis.
- (g) The Design-Builder shall continuously measure the effectiveness of Traffic Control Plans and, if those measurements indicate a Traffic Control Plan is non-compliant, the Design-Builder shall immediately adjust the Traffic Control Plan to bring it into compliance.
- (h) The Traffic Control Plan shall include engineered designs for each Stoppage, Twenty-Minute Closure, Full Closure, Extended Closure, Detour Route, Lane Shift and Lane Closure. The locations and details of all signs, PDMSs, Pavement Markings, barriers, and protective works shall be provided on the drawings. All drawings are to be signed/sealed by the Traffic Engineer.
- (i) The Traffic Control Plans and traffic analysis shall consider regional traffic, planned works by others on Highway 1, the Alternative Route and other Parks Canada projects in the region in accordance with the principles noted in the Trans-Canada Highway Coordination Plan.

4.2.2 Incident Management Plan

- (a) The Design-Builder shall prepare and submit an Incident Management Plan in accordance with the Incident Management Plan requirements of the Traffic Management Manual, this Part and Sections 2.5(b), 2.5(c) and 6.3(b) of Schedule 9 [Communications and Engagement].
- (b) Should any unplanned events or Incidents occur, the Design-Builder shall notify, in addition to the Road Authority as defined in the Traffic Management Manual, the Regional Transportation Management Centre regarding worker and public safety, traffic conditions, and actions taken to normalize traffic flow.
- (c) The Incident Management Plan shall specify how the Design-Builder will provide access for emergency vehicles. The Design-Builder shall provide a dedicated radio channel for uninterrupted communication at all times with each of the emergency providers. The Design-Builder shall supply its own radios, which shall be compatible with the radio system of the emergency services providers in the corridor. The Design-Builder is responsible for coordinating the setup of the radio channels in a timely manner prior to start of Construction, since there can be a long lead time associated with the approvals and the set up.
- (d) The Design-Builder shall consult with emergency responders (including but not limited to Police, fire, ambulance, search and rescue, regional health authorities, area hospitals and municipal and regional emergency service providers) in developing the Incident Management Plan, and liaise closely with them throughout Construction.

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- (e) The Incident Management Plan shall also address access via the Project Site for Incidents or emergencies external to the Project Site but for which emergency vehicles and response personnel require passage over the Project Site.
- (f) The Incident Management Plan shall also address access via the Project Site for Incidents or emergencies along the railway tracks, external to the Project Site, but for which emergency vehicles and response personnel from CP require passage over the Project Site.
- (g) The Incident Management Plan shall include a description of how the Design-Builder proposes to address the following scenarios:
 - (i) an Incident on Highway 1 within the Project Site when Lane Closures are in place;
 - (ii) an Incident on another Highway 1 location when Lane Closures are in place on Highway 1 within the Project Site;
 - (iii) an Incident on Highway 93 when Lane Closures are in place on Highway 1 within the Project Site;
 - (iv) an Incident on Highway 95 when Lane Closures are in place on Highway 1 within the Project Site; and
 - (v) an Incident involving CP operations.

4.2.3 Implementation Plan

The Design-Builder shall prepare and submit an Implementation Plan in accordance with the Traffic Management Manual and Schedule 9 [Communications and Engagement]. This plan shall identify the Traffic Control Supervisor, Traffic Engineer and Operations/Traffic Manager, along with the qualifications and experience of those named individuals. This plan shall also define processes to ensure that the Traffic Control and Incident Management Plans are developed and implemented efficiently and appropriately, and that they are kept up-to-date with necessary modifications during Construction.

4.2.4 Traffic Communication Plan

- (a) The Design-Builder shall prepare and submit a Traffic Communication Plan for the communications required in accordance with Sections 4.1.6, 4.1.7 and 4.1.8 of Schedule 9 [Communications and Engagement] and the Public Information Plan requirements of the Traffic Management Manual.
- (b) As part of the Traffic Communication Plan, the Design-Builder shall prepare and implement an Advisory Signing Plan. The primary objective of the Advisory Signing Plan is to notify the travelling public in advance of the scheduled Construction, Detour Routes, Full Closures, Twenty-Minute Closures, Extended Closures, Stoppages and Lane Closures.

4.2.5 Risk Assessment Plan

In accordance with the Traffic Management Manual, the Design-Builder shall perform an independent assessment to identify any risks or special conditions that must be addressed through the Design-Builder's

Risk Assessment Plan. The Design-Builder shall identify all risks and state the measures to be implemented to manage or eliminate the risks.

4.2.6 Rock Excavation Process Progressive Test Procedure Plan

- (a) As part of the Traffic Communications Plan, the Design-Builder shall prepare and submit a Rock Excavation Process Progressive Test Procedure Plan including a generic, progressive testing procedure for rock blasting that can be modified to suit each specific application, prior to implementing rock blasting and excavation requiring any Stoppage or Closure.
- (b) In developing the Rock Excavation Process Progressive Test Procedure Plan, the Design-Builder shall consider all aspects and implications of rock blasting and excavation including, but not limited to, traffic management, rock blasting procedures, physical relationship between Highway 1, CP, Project Infrastructure and blast location, natural conditions of the rock, and volume of blasted material. The generic, progressive testing procedure for rock blasting will take into account the number of steps required and the number of tests needed at each step.
- (c) Once one of the conditions described in Section 2.5(c) of this Part occurs, prior to continuing with rock blasting and excavation requiring any Stoppage or Closure, the Design-Builder shall prepare and submit to the Province's Representative pursuant to the Consent Procedure a Rock Excavation Process Progressive Test Procedure Plan setting out a specific, progressive testing procedure for the new situation. The Province reserves the right to reject any blasting process set out in such a Rock Excavation Process Progressive Test Procedure Plan if, in the Province's discretion, the process has not been satisfactorily demonstrated in the field.

ARTICLE 5 RESPONSIBILITIES FOR TRAFFIC MANAGEMENT PLAN

5.1 Design-Builder Responsibilities

The Design-Builder shall accept full responsibility for quality control and quality assurance of all activities affecting the Traffic Management Plan. The Traffic Management Plan quality control process shall be included in the Traffic Quality Management Plan. The Design-Builder shall ensure that all personnel identified in the Traffic Management Plan are suitably qualified and licensed compliant with WorkSafeBC regulation.

5.2 Operations/Traffic Manager

The Design-Builder shall designate an Operations/Traffic Manager, who shall be responsible for the following:

- (a) developing, implementing and managing the Traffic Management Plan;
- (b) ensuring the Design-Builder's traffic management personnel are trained and certified;
- (c) ensuring the required traffic control equipment is available for use and maintained per manufacturer's or equipment maintenance specifications;

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- (d) ensuring the Province's Representative is kept informed of all upcoming traffic activities and any revisions to the Traffic Management Plan;
- (e) ensuring that appropriate modifications are made to the Traffic Management Plan if the specified traffic control measures are not achieving the desired effect; and
- (f) coordinating with adjacent work areas, including work being carried out by others;

5.3 Traffic Engineer

The Design-Builder shall designate a Professional Engineer as the Traffic Engineer, who has the Design-Builder's authority to review and seal the Traffic Management Plan and associated sub-plans and take responsibility for ensuring that all traffic engineering issues and requirements are taken into account.

The Traffic Engineer shall sign and seal all traffic engineering checklists and signal timing sheets.

5.4 Traffic Control Supervisors

- (a) The Design-Builder shall designate one or more Traffic Control Supervisors, each of whom shall have the Design-Builder's authority to respond to traffic control requirements and each of whom shall personally perform all the duties of the Traffic Control Supervisor, in accordance with this Part.
- (b) Further to Section 194.04 of the DBSS, a Traffic Control Supervisor shall be on the Project Site full-time when active Construction is underway. The Traffic Control Supervisor shall have direct line authority over all of the Design-Builder's traffic control personnel and procedures on the Project Site. The Design-Builder shall not designate the Site Superintendent as the Traffic Control Supervisor. The Traffic Control Supervisor shall have no other duties.
- (c) The duties of the Traffic Control Supervisor shall include but not be limited to the following:
 - (i) directing all traffic control operations on the Project Site and coordinating with other contractors for any adjacent construction or maintenance operation;
 - (ii) liaising with the Province's Representative, as required;
 - (iii) recording the actual duration of Lane Closures, Stoppages, Twenty-Minute Closures, Full Closures, Extended Closures, Detour Routes and Lane Shifts and unauthorized traffic delays and forwarding this information, on a daily basis, to the Province for information;
 - (iv) monitoring and recording queue lengths in active Construction zones and implementing appropriate measures when such queues become excessive;
 - (v) documenting Traffic Control measures and activities in accordance with this Part; and
 - (vi) overseeing all requirements of the Agreement that contribute to the convenience, safety, and orderly movement of vehicular, cycling and pedestrian traffic.

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- (d) Traffic control supervision shall be provided by the Traffic Control Supervisor on the Project Site on a 24 hour per day basis when active Construction is underway. During non-work periods, the Traffic Control Supervisor or accepted alternate shall be on the Project Site within 45 minutes of being notified. The Traffic Control Supervisor shall have appropriate personnel and equipment available on call, at all times.

5.5 Traffic Control Personnel

All traffic control personnel shall be suitably qualified and licensed compliant with WorkSafeBC regulation and in accordance with Health and Safety Laws.

5.6 Temporary Traffic Control On-site Road Safety Audits

- (a) Temporary Traffic Control [Design and On-site] Road Safety Audits shall be carried out in accordance with Article 13 [Road Safety Audit] of Part 2 of this Schedule.
- (b) In addition, the Design-Builder shall audit each Detour Route, Lane Shift or other Traffic Management in accordance with the requirements of Section 4.8 [Traffic Management Auditing] of Schedule 7.

**APPENDIX A
DELIVERABLES FOR SUBSTANTIAL COMPLETION AND TOTAL COMPLETION**

PART I DELIVERABLES FOR SUBSTANTIAL COMPLETION

1. Records Documentation

- (a) Prior to Substantial Completion, the Design-Builder shall compile a complete set of Construction Records and Quality Records, including record drawings, for the New Project Infrastructure and submit the finalized Construction Records and Quality Records to the Province's Representative for record purposes.
- (b) Record drawings shall be provided in the following formats:
 - (i) one full set of original signed and sealed full size hard copies, in custom sized cardboard boxes with suitable sized folders and appropriate labels;
 - (ii) one full set of signed and sealed 11x17 hard copies, hole punched and placed in three ring binders;
 - (iii) two full sets of 11x17 hard copies, hole punched and placed in three ring binders;
 - (iv) three full sets of PDF drawings on separate USB sticks or similar;
 - (v) three full sets of DWG drawings on separate USB sticks or similar;
 - (v) three full sets of DWFx drawings on separate USB sticks or similar; and
 - (vi) one set of all drawings of New Project Infrastructure, original signed and sealed 11x17 hard copies and one set of PDF and DWG drawings on a USB stick.
- (c) All Construction Records and Quality Records compiled by the Design-Builder shall be available to the Province and the Owner's Engineer upon request.
- (d) The Design-Builder shall ensure that all changes to drawings are properly and completely identified for record purposes. The drawing numbers shall remain the same as the originals. All Construction Records shall be stand-alone documents drafted in the format and to the standards of the original Design drawings.

2. Evidence of Assignments and Transfers of Property and Warranties

The Design-Builder shall deliver the following to the Province, or at the discretion of the Province to BCTFA or other third party designated by the Province:

- (a) written confirmations or acknowledgements of:
 - (i) the assignment of Subcontractor warranties as required by Section 2.5 [Assignment of Warranties to Province] of Schedule 5; and

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Appendix A: Deliverables for Substantial Completion and Total Completion

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- (ii) where not previously provided pursuant to Section 2.12(c), the transfer of any other assets required to be transferred prior to the Substantial Completion Date to the Province or any other person under the terms of this Agreement; and
- (b) copies of all materials comprising the Project Intellectual Property, and transfers, assignments and waivers in respect of same in accordance with the provisions of this Agreement.

3. Operations and Maintenance Manuals

Prior to Substantial Completion, the Design-Builder shall provide the Province any and all operation and maintenance manuals required in accordance with this Schedule 4, such manuals having been reviewed in advance in accordance with the Review Procedure.

4. Training and Orientation

Prior to Substantial Completion, the Design-Builder shall provide to the Province any and all training and orientations required to operate or maintain any special equipment or special Infrastructure implemented as part of the Project Facilities.

5. Spare Parts

Prior to Substantial Completion, the Design-Builder shall provide to the Province a minimum of one set of spare parts required for any special equipment or special Infrastructure implemented as part of the Project Facilities.

6. Cleaning

The Design-Builder shall:

- (a) remove all surplus material, equipment, sanitary facilities and any other Construction Plant, and all waste, material, debris, and rubbish from the Project Site;
- (b) remove all temporary fences and roads from the Project Site; and
- (c) leave the Project Work, the Project Site and the Project Infrastructure to the extent that such infrastructure has been constructed, installed, altered, upgraded, and/or augmented by the carrying out of the Project Work in a safe and orderly condition, including by ensuring that such areas have been returned to their original condition, as applicable, or are 'broom clean' and graded to an even clean surface.
- (d) flush clean all drainage systems on or in respect of any Project Infrastructure; and
- (e) remove all graffiti from the Project Infrastructure.

7. Keys, Codes and Passwords

The Design-Builder shall:

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- (a) in respect of all locks, supply and install permanent cores;
- (b) deliver the following keys to the Province or a third party designated by the Province:
 - (i) the permanent keys to all permanent cores installed under paragraph (a) above;
 - (ii) the keys to all traffic sign housings;
 - (iii) the keys to all groundwater monitoring and geotechnical instrumentation sites;
 - (iv) the lifting keys for all types of chamber covers; and
 - (v) all other keys to all buildings, structures or other facilities forming part of the Project Infrastructure; and
- (c) deliver the codes and passwords to all computers and computerized systems installed as part of the Project Work, control of which is required to be transferred to the Province or a third party designated by the Province.

PART II DELIVERABLES FOR TOTAL COMPLETION

1. Asset Inventory Data

- (a) Prior to Total Completion, and except as otherwise required in accordance with Section 3.4(a) of Part 3 [Design and Certification Procedure] of this Schedule, the Design-Builder shall collect and provide asset inventory data for the Province’s electronic asset inventory records for all New Project Infrastructure. Such asset inventory data shall be provided for the following Province corporate asset inventory systems:

Province System	Inventory
Bridge Management Information System (BMIS)	<ul style="list-style-type: none">• Structures – Bridges, Major Retaining Walls, Major Culverts, Tunnels, and Major Sign Structures.
Roadway Pavement Management Systems (RPMS)	<ul style="list-style-type: none">• Pavements – including but not limited to Travelled Lanes, Shoulders, medians, rest area parking, and other areas specified to be treated to adjacent highway standard. The Shoulder and surface type are also recorded in CHRIS.

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Appendix A: Deliverables for Substantial Completion and Total Completion

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Province System	Inventory
Corporate Highway and Resource Information System (CHRIS)	<ul style="list-style-type: none"> • Basic inventory – highway reference point (RFI landmark), highway profile, maintenance class, surface type, special lane profile (where applicable); • Other Structures – including but not limited to retaining walls less than 2.0 m high, minor culverts; • Other drainage appliances – including but not limited to curb and gutter, catch basins, flumes, and manholes; • Signs – including but not limited to regulatory, warning, guide, informational, advisory, construction and maintenance, and route markers, but excluding electronically controlled messages/displays; • Pavement markings – including but not limited to longitudinal, transverse and intersection markings, thermoplastic markings and HRPM; • Other inventory – including but not limited to walls, fences, gates, guardrails and reflectors, and linear safety features; and • Rock fall and Snow Avalanche attenuator and stopping systems.

- (b) Inventory data collected shall be in the format prescribed in the applicable Province manual for the relevant provincial system.
- (c) The Design-Builder shall provide all additions and amendments to the asset inventory for RPMS and CHRIS electronically to the Province’s Representative to upload into the corporate asset inventory system. The file(s) shall be compatible with the software used by the Province for managing the asset inventory.
- (d) For BMIS, the Design-Builder shall provide inventory data to the Province’s Representative to enter into the BMIS electronic program. The information supplied shall be generated in accordance with the definitions utilized within the BMIS. Clearance data, general arrangement data and Structure location information shall be provided to the Province’s Representative to be input into BMIS 30 days prior to opening the Structure to public vehicle use in accordance with Section 3.4(a) of Part 3 [Design and Certification Procedure] of this Schedule. All remaining inventory data is to be provided to the Province’s Representative for input into BMIS within 12 months and in any event prior to Total Completion of such Structure.
- (e) The Design-Builder shall provide the Province with a complete list of all electrical inventory in electronic and hard copy.
- (f) Unless specified otherwise, electronic files shall be compatible with the most recent version of either Microsoft Office or Adobe Acrobat Reader, and all supplied electronic files shall be on a USB data storage device and be clearly labelled as to the content.
- (g) The actual extent of data fields requiring populating, particularly for asset inventory being entered into CHRIS, will be by agreement between the Design-Builder and the Province’s Representative.

**APPENDIX B
PROVINCE PERMITS**

1. Occupant License to Cut (File numbers L51558 for Dart Creek and L51528 for Highway 1) issued under the *Forest Act* (British Columbia) and expiring March 4, 2025.
2. Inspection Permit 2018-0255 issued under Section 12.2 of the *Heritage Conservation Act* (British Columbia) and expiring May 31, 2021.
3. Inspection Permit 2019-0208, including subsequent amendments, issued under Section 12.2 of the *Heritage Conservation Act* (British Columbia) and expiring December 31, 2022.
4. Alteration Permit 2020-0297, including subsequent amendments, issued under Section 12.4 of the *Heritage Conservation Act* (British Columbia), for areas within the Project Lands (other than the Additional Lands) where the Archaeological Impact Assessment is completed.

**APPENDIX C
FORM OF CERTIFICATES**

1. Design Certificate (General)
2. Design Certificate (Independent Check for Category III Structures)
3. Design Certificate (Environmental)
4. Road Safety Audit Certificate (Stage 1)
5. Road Safety Audit Certificate (Stage 2)
6. Road Safety Audit Certificate (Stage 3)
7. Construction Certificate
8. Certificate of Substantial Completion
9. Certificate of Total Completion
10. Assessment Certificate (Structures)/Avalanche

Certificate Form 1

Certificate Ref No. []

DESIGN CERTIFICATE (GENERAL)

In respect of :..... (Provide details e.g. Highways/Geotechnical/Traffic Operations Modelling/Landscape etc.)

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate to be used by the Designer for certifying the Design in accordance with Part 3 of Schedule 4 to the Agreement.

1. We certify that we have the requisite professional qualifications, skill and experience to prepare the Design Data referred to herein in accordance with the requirements of the Agreement and all relevant Project Requirements.
2. We certify that we have prepared the Design Data for [.....] listed in the Schedule hereto in accordance with all applicable requirements contained in the Design Management Plan and the Design Quality Management Plan and utilizing the standards of care, skill and diligence that, in accordance with the standards of our profession, are required of Appropriately Qualified Professionals undertaking the preparation of such Design Data, and that in our professional opinion such Design Data:
 - (i) complies with all applicable Project Requirements, as amended by the following:
[List, if any, the changes made by the issue of Change Certificates];
 - (ii) complies with all applicable design requirements of the Agreement;
 - (iii) complies with all applicable standards, codes and current Good Industry Practice; and
 - (iv) accurately describes and depicts the work to be undertaken.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 4: DESIGN AND CONSTRUCTION
Appendix C: Form of Certificates**

*Commercial in Confidence
Execution*

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SCHEDULE

[Include here drawing numbers and titles, reports, calculations, etc.]

Signed:
Designer (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

Signed:
Design-Builder's Representative
Name:
Date:

2. This Certificate is:
- i. received*
 - ii. received with comments as follows*
 - iii. returned marked "comments" as follows:*
- * delete as appropriate

Signed:
Province's Representative
Name:
Date:

Certificate Form 2

Certificate Ref. No []

DESIGN CERTIFICATE (INDEPENDENT CHECK FOR CATEGORY III STRUCTURES)

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of certificate to be used by the Checking Team for certifying the design of Category III Structures incorporated in the Project Work, in accordance with Part 3 of Schedule 4 to the Agreement.

1. We certify that we have the requisite professional qualifications, skill and experience to perform an independent check of the Design Data referred to herein in accordance with the requirements of the Agreement.
2. We certify that we have performed an independent check (as required in the Agreement for Category III Structures) of the Design Data for [.....] **[Name of the Structure and list of all elements of the Structure included in the Design Data]** listed in the Schedule hereto **[and annexed in accordance with all applicable requirements contained in the Design Management Plan and the Design Quality Management Plan]** and utilizing the standards of care, skill and diligence that, in accordance with the standards of our profession, are required of Appropriately Qualified Professionals undertaking such an independent check, and that in our professional opinion:
 - i. the said Design Data meets performance expectations outlined in the Agreement, **[including Technical Appraisal Form]** No. [.....] dated [.....], as amended by the following:

[List, if any, the changes made by the issue of Change Certificates, and any Addenda to the foregoing Technical Appraisal Form]; and
 - ii. the design, methodologies and assumptions are consistent with Good Industry Practice.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 4: DESIGN AND CONSTRUCTION
Appendix C: Form of Certificates**

*Commercial in Confidence
Execution*

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SCHEDULE

[Include here drawing numbers and titles and reports, calculations, etc.]

Signed:
Checking Team (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

Signed:
Design-Builder's Representative
Name:
Date:

2. This Certificate is:
- i. received*
 - ii. received with comments as follows*
 - iii. returned marked "comments" as follows:*
- * delete as appropriate

Signed:
Province's Representative
Name:
Date:

Certificate Form 3

Certificate Ref No. []

DESIGN CERTIFICATE (ENVIRONMENTAL)

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of certificate to be used by the Designer for certifying the design of environmental works incorporated in the Project Work, in accordance with Part 3 of Schedule 4 to the Agreement.

1. We certify that we have the requisite professional qualifications, skill and experience to prepare the Design Data referred to herein in accordance with the requirements of the Agreement and all relevant Project Requirements.

2. We certify that we have prepared the Design Data for [.....] [**Site Restoration and Revegetation Planting; ARD/ML Disposal Stockpile Design and Reporting; Wildlife Exclusion Fencing System**] in the Schedule hereto and annexed in accordance with all applicable requirements contained in the Design Management Plan and the Design Quality Management Plan and utilizing the standards of care, skill and diligence that, in accordance with the standards of our profession, are required of Appropriately Qualified Professionals undertaking the preparation of such Design Data, and that in our professional opinion:
 - i. the said Design Data complies with all applicable Project Requirements, including Technical Appraisal Form No. [.....] dated [.....], as amended by the following:

[List, if any, the changes made by the issue of Change Certificates, and any Addenda to the foregoing Technical Appraisal Form];
 - ii. the said Design Data complies with all applicable design requirements of the Agreement; and
 - iii. the said Design Data complies with all applicable standards, codes and current Good Industry Practice.

SCHEDULE

[Include here drawing numbers and titles and reports, calculations, etc.]

Signed:
Designer (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

Signed:
Environmental Manager
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

2. This Certificate is:
- i. received*
 - ii. received with comments as follows*
 - iii. returned marked “comments” as follows:*
- * delete as appropriate

Signed:
Province’s Representative
Name:
Date:

Certificate Form 4

Certificate Ref No. []

ROAD SAFETY AUDIT CERTIFICATE (STAGE 1)

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate to be used by the Designer for certifying that a Stage 1 Road Safety Audit has been carried out in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement.

1. We certify that the preliminary design of [.....] has been the subject of a Stage 1 Road Safety Audit in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement, the Design Management Plan, the Design Quality Management Plan and all other relevant provisions of the Agreement.
2. The Audit Team’s report and statement certifying the audit has been carried out are attached.

Signed:
Audit Team (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

3. We certify that the preliminary design of [.....] has been the subject of a Stage 1 Road Safety Audit in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement, the Design Management Plan, the Design Quality Management Plan and all other relevant provisions of the Agreement and that all observations and recommendations in the Audit Team’s report have been satisfactorily addressed and resolved.

Signed:
Design-Builder (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 4: DESIGN AND CONSTRUCTION
Appendix C: Form of Certificates**

**Commercial in Confidence
Execution**

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Signed:
Designer (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

Signed:
Design-Builder's Representative
Name:
Date:

4. Receipt of this Certificate is acknowledged.

Signed.....
Province's Representative
Name.....
Date.....

Certificate Form 5

Certificate Ref. No. []

ROAD SAFETY AUDIT CERTIFICATE (STAGE 2)

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate to be used by the Designer for certifying that a Stage 2 Road Safety Audit has been carried out in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement.

1. We certify that the Detailed Design of [.....] has been the subject of a Stage 2 Road Safety Audit in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement, the Design Management Plan, the Design Quality Management Plan and all other relevant provisions of the Agreement.
2. The Audit Team’s report and statement certifying the audit has been carried out are attached.

Signed:
Audit Team (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

3. We certify that the Detailed Design of [.....] has been the subject of a Stage 2 Road Safety Audit in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement, the Design Management Plan, the Design Quality Management Plan and all other relevant provisions of the Agreement and that all observations and recommendations in the Audit Team’s report have been satisfactorily addressed and resolved.

Signed:
Design-Builder (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 4: DESIGN AND CONSTRUCTION
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*Commercial in Confidence
Execution*

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Signed:
Designer (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

Signed:
Design-Builder's Representative
Name:
Date:

4. Receipt of this Certificate is acknowledged.

Signed.....
Province's Representative
Name.....
Date.....

Certificate Form 6

Certificate Ref. No. []

ROAD SAFETY AUDIT CERTIFICATE (STAGE 3)

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate to be used by the Designer for certifying that a Stage 3 Road Safety Audit has been carried out in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement.

1. We certify that the [reference relevant works] as constructed, tested and commissioned has been the subject a Stage 3 Road Safety Audit in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement, the Design Management Plan, the Design Quality Management Plan and all other relevant provisions of the Agreement.
2. The Audit Team’s report and statement certifying the audit has been carried out are attached.

Signed:
Audit Team (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

3. We certify that the [reference relevant works] as constructed, tested and commissioned has been the subject of a Stage 3 Road Safety Audit in accordance with Article 13 of Part 2 of Schedule 4 to the Agreement, the Design Management Plan, the Design Quality Management Plan and all other relevant provisions of the Agreement and that all observations and recommendations in the Audit Team’s report have been satisfactorily addressed and resolved.

Signed:
Design-Builder (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 4: DESIGN AND CONSTRUCTION
Appendix C: Form of Certificates**

*Commercial in Confidence
Execution*

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Signed:
Designer (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal

Signed:
Design-Builder's Representative
Name:
Date:

4. Receipt of this Certificate is acknowledged.

Signed.....
Province's Representative
Name.....
Date.....

Certificate Form 7

Certificate Ref. No. []

CONSTRUCTION CERTIFICATE

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate to be used by the Designer and the Design-Builder for certifying the Substantial Completion or Total Completion of Construction of the Project Work in accordance with Part 3 of Schedule 4 to the Agreement.

Design-Builder’s Statement

1. We certify that **[name and element of construction]** has been designed, constructed, [Substantially Completed] [Totally Completed], commissioned and tested in all respects in accordance with:
 - (i) the relevant Design Data and Design Certificates in each case to which there has been no objection under the Review Procedure; and
 - (ii) the provisions of the Agreement including all applicable Project Requirements [as amended by the following Minor Works, Province Changes and Value Engineering Proposals: [.....]].

Signed.....
Design-Builder (Principal)
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal

Signed:
Design-Builder’s Representative
Name:
Date:

Designer’s Statement

2. We certify that we have examined the **[name and element of construction]** in accordance with the requirements for examination of the Project Work contained in the Design Management Plan, the Design Quality Management Plan and the Construction Quality Management Plan and utilizing the standards of care, skill and diligence that, in accordance with the standards of our profession, are required of Appropriately Qualified Professionals undertaking such examinations, and that in our professional opinion the said element of the Project Work or other works has been

designed, constructed, [Substantially Completed] [Totally Completed], commissioned and tested in all respects in accordance with:

- (i) the relevant Design Data and Design Certificates in each case to which there has been no objection under the Review Procedure; and
- (ii) the provisions of the Agreement including all applicable Project Requirements [as amended by the Minor Works, Province Changes and Value Engineering Proposals listed in paragraph 1 above].

Signed.....
Designer (Principal)
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal

3. Receipt of this Certificate is acknowledged.

Signed.....
Owner's Engineer
Name.....
Date.....
Professional Registration Number:
Affix Professional Seal

Certificate Form 8

Certificate Ref No. []

CERTIFICATE OF SUBSTANTIAL COMPLETION

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate of Substantial Completion to be used by the Owner’s Engineer in accordance with Part 3 of Schedule 4 to the Agreement.

1. Confirmation was given on [date] by the Design-Builder that the New Project Infrastructure has been Substantially Completed in accordance with the Agreement and that all conditions to achievement of Substantial Completion as set out in the Agreement have been met.
2. A Road Safety Audit Certificate (Stage 3) was issued on [date].
3. Construction Certificates for the Substantial Completion of the New Project Infrastructure were issued on [dates].
4. This document shall serve as the Certificate of Substantial Completion.
5. The Final Deficiency List signed by the Owner’s Engineer is appended.
6. The Substantial Completion Date shall be [date].

Signed.....
Owner’s Engineer
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal

Certificate Form 9

Certificate Ref. No. []

CERTIFICATE OF TOTAL COMPLETION

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate of Total Completion to be used by the Owner’s Engineer in accordance with Part 3 of Schedule 4 to the Agreement.

1. Confirmation was given on [date] by the Design-Builder that Total Completion has been achieved in accordance with the Agreement.
2. Construction Certificates for the Total Completion of the New Project Infrastructure were issued on [dates].
3. This document shall serve as the Certificate of Total Completion.
4. The Total Completion Date shall be [date].

Signed:
Owner’s Engineer
Name:
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal

Certificate Form 10

Certificate Ref. No. []

ASSESSMENT CERTIFICATE (STRUCTURES)/AVALANCHE

Agreement between Her Majesty the Queen in right of the Province of British Columbia and Kicking Horse Canyon Constructors (GP) dated November 6, 2020 (“the Agreement”) relating to the Project. Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

1. We certify that in assessing [.....] [**Name and Category of the Structure and list of all elements of the Structure and related avalanche risk included in the assessment**] listed in the Schedule hereto and annexed we have complied with all applicable requirements contained in the Design Management Plan, the Design Quality Management Plan and the Construction Quality Management Plan and have utilized the standards of care, skill and diligence that, in accordance with the standards of our profession, are required of Appropriately Qualified Professionals undertaking such assessments, and that in our professional opinion:
 - i the said assessment complies with all applicable Project Requirements, including Technical Appraisal Form No. [.....] dated [.....], as amended by the following:

[List, if any, the changes made by the issue of Change Certificates and addenda to the foregoing Technical Appraisal Form];

and the said assessment complies in all other respects with the Agreement; and
 - ii the assessed capacity of each element of the Structure is as follows:

**KICKING HORSE CANYON PROJECT – PHASE 4
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Appendix C: Form of Certificates**

**Commercial in Confidence
Execution**

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SCHEDULE

[Include here drawing numbers and title used for the assessment.]

Signed.....
Designer (Principal)
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal

Signed:
Design-Builder's Representative
Name:
Date:

2. This Certificate is:
- i. received *
 - ii. received with comments as follows*
 - iii. returned marked "comments" as follows:*
- * delete as appropriate

Signed:
Province's Representative
Name:
Title:
Date:

**APPENDIX D
SAMPLE CONTENTS FOR A STRUCTURAL TAF**

Ref. No.....

- 1. NAME OF PROJECT.....**
 - 1.1 Type of highway
 - 1.2 Permitted traffic speed (for a Bridge give over and/or under).
- 2. NAME OF STRUCTURE.....**
 - 2.1 Obstacles crossed.
- 3. PROPOSED STRUCTURE**
 - 3.1 Description of Structure.
 - 3.2 Design Life.
 - 3.3 Structural type (include reasons).
 - 3.4 Foundation type (include reasons).
 - 3.5 Span arrangements or height of wall structure.
 - 3.6 Articulation arrangements.
 - 3.7 Parapet type.
 - 3.8 Proposed arrangements for inspection and maintenance.
 - 3.9 Materials and finishes.
- 4. DESIGN/ASSESSMENT CRITERIA**
 - 4.1 Live Loading, Headroom.
 - 4.1.1 Design live load.
 - 4.1.2 Any special loading not covered above.
 - 4.1.3 Authorities consulted and any special conditions required.
 - 4.2 Any other special design loading such as avalanche rock fall impact, debris torrent, etc.
 - 4.3 List of relevant design documents.
 - 4.4 Proposed construction sequence/staging.
 - 4.5 Proposed additional/alternative design criteria if any.

5. STRUCTURAL ANALYSIS

- 5.1 Methods of analysis proposed for Superstructure, Substructure and Foundations.
- 5.2 Description and diagram of idealised Structure to be used for analysis.
- 5.3 Assumptions used for calculation of structural element stiffness.
- 5.4 Proposed earth pressure coefficients (k_a , k_o , or k_p) to be used in design of earth retaining elements.

6. GROUND CONDITIONS

- 6.1 Acceptance of interpretative recommendations of the geotechnical report to be used in the design and reasons for any proposed departures.
- 6.2 Describe Foundations fully including the reasons for adoption of Foundation type, allowable and proposed bearing pressures/pile loads/anchor loads, strata in which Foundations are located, provision for skin friction effects on piles, tension on anchors, and for lateral pressures due to compression of underlying strata, etc.
- 6.3 Settlement and deformation estimates as required by Article 5 [Geotechnical] of Part 2 of Schedule 4 to the Design-Build Agreement.
- 6.4 Anticipated ground movements or settlement due to embankment loading, excavations, changes in groundwater pressures, slope attrition, flowing water, and measures proposed to deal with these defects as far as they affect the Structure.
- 6.5 Results of tests of groundwater chemistry (e.g. pH value, chloride or sulphate content), potential issues and any counteracting measures proposed.
- 6.6 Anticipated ground movements or settlement due to seismic loading, measures proposed to deal with these impacts as far as they affect the Structure.

7. CHECKING

- 7.1 Proposed Category of Structure.
- 7.2 Name of proposed Checking Team.
- 7.3 Summary of Structure Checking, key findings and resolution.

8. DRAWINGS AND DOCUMENTS

- 8.1 List of drawings (including numbers) and documents accompanying the submission.

9. THE ABOVE DESIGN AND CONSTRUCTION PROPOSALS ARE SUBMITTED FOR REVIEW.

For permanent works:

Signed:
Designer (Principal)
Name:
Engineering Qualifications:.....
Date:
Professional Registration Number:
Affix Professional Seal

Signed:.....
Design-Builder’s Representative
Name:.....
Date:.....

For Temporary Works:

Signed:
Designer (Principal) or designer (Principal), as applicable
Name:
Engineering Qualifications:.....
Date:
Professional Registration Number:
Affix Professional Seal

Signed:.....
Design-Builder (Principal)
Name:.....
Date:.....

Signed:.....
Design-Builder’s Representative
Name:.....
Date:.....

10. THE ABOVE TAF IS:

- i. received*
 - ii. received with comments as follows:*
 - iii. returned marked “comments” as follows:*
- *delete as appropriate.

Signed:.....
Province’s Representative
Name:
Date:.....

**APPENDIX E
SNOW AVALANCHE SAFETY MEASURES**

1. INTRODUCTION

1.1 General

The TransCanada Highway 1 passes through the steep terrain of the western Rocky Mountain ranges east of Golden. The Province is responsible for managing the Avalanche hazard affecting the highway from the intersection of Highway 1 and Highway 95 in Golden to the Boundary of Yoho National Park, except to the extent of the Design-Builder’s responsibilities in accordance with this Agreement, including this Appendix. This area includes all known Avalanche Paths from Path 4.5, located at the westerly limit of the Project Site, to Path 9.2, located at the easterly limit of the Project Site. There are also a number of active Avalanche Paths beyond the limits of the Project Site, as shown on the Avalanche Strip Map attached as Attachment 1 to this Appendix (the “**Avalanche Strip Map**”). These locations represent hazard areas for traffic stoppages and queues.

This Appendix describes the general Avalanche risk management measures required and defines the Avalanche safety-related responsibilities of the Province and the Design-Builder.

1.2 References

- (a) BC Ministry of Transportation and Infrastructure Avalanche Safety Plan, available by public link: https://www2.gov.bc.ca/assets/gov/driving-and-transportation/transportation-infrastructure/highway-bridge-maintenance/avalanche/avalanche_safety_plan.pdf
- (b) OHS Regulation Part 4.1.1, available by public link: <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-04-general-conditions#SectionNumber:4.1.1>
- (c) The following documents (provided in the Data Room) show Avalanche Paths in the corridor:
 - (i) the Avalanche Atlas, and
 - (ii) the Avalanche Strip Map.

1.3 Roles

For the purposes of this Appendix, the following roles apply:

- (a) District Avalanche Technician – provided by the Province, and means the Province’s Avalanche technician based in Golden and responsible for Avalanche risk management for the road corridor along the Kicking Horse Canyon;
- (b) Avalanche Professional – provided by the Design-Builder, and means a Qualified Person as described in OHS Regulation 4.1.1 with experience in developing and coordinating Avalanche safety programs, with a minimum of 15 years of experience in avalanche safety and control and avalanche structural design, and meeting the requirements of an AQP; and

- 2 -

- (c) Avalanche Supervisor – provided by the Design-Builder, and means a worker who has completed the Canadian Avalanche Association Resource and Transportation Avalanche Management course (or equivalent) as a minimum.

1.4 Background

Avalanches are possible at any time. Generally, this hazard condition exists between the months of December and March, but often extends into shoulder seasons beginning in November, and lasting until late April.

The Province maintains an Avalanche safety program for the Highway 1 corridor from Golden to the Yoho National Park border via Avalanche technicians based in Golden, B.C.

The Province's Avalanche safety program has three objectives:

- (a) ensuring the safety of the travelling public;
- (b) ensuring the safety of Ministry personnel; and
- (c) minimizing traffic flow interruptions.

The District Avalanche Technician coordinates hazard forecasting, daily conditions monitoring (including regular patrols) and active control actions from October through May, with a core season typically from November 15th to April 15th.

The Province may close Highway 1 occasionally as required, either because avalanches are expected, or to allow the Province's Avalanche staff to perform explosive Avalanche control. Historical information regarding road closures due to Avalanches is provided in the Data Room.

In addition to the Province's Avalanche safety program, Parks Canada maintains an Avalanche safety program in Yoho Park, near the Town of Field.

2. AVALANCHE SAFETY RESPONSIBILITY

At all times during the Access Period, the Design-Builder shall be responsible for the following:

- (a) developing, implementing and maintaining an Avalanche safety program that will protect all workers within the Project Site;
- (b) operating under and in conjunction with the Province's Avalanche safety program; and
- (c) carrying out Avalanche hazard forecasting for the Project Site that includes site-specific Avalanche safety measures for workers within the Project Site.

The Design-Builder is responsible for managing Avalanche risk to workers within the Project Site from all Avalanche Paths, regardless of whether they are existing Avalanche Paths as shown in the Avalanche Strip Map, or other Avalanche Paths encountered, or that may develop, during the Project Work.

- 3 -

The Design-Builder is responsible for coordinating with the District Avalanche Technician the Project Work activities, including traffic management, and communicating conditions and relevant planned activities.

During the Project, the Province in conjunction with the Design-Builder, is responsible for communicating with the Concessionaire and Parks Canada regarding Avalanche safety closures.

The Traffic Quality Management Plan shall describe the coordination of traffic management strategies with the District Avalanche Technician, the Concessionaire, and Parks Canada.

3. HAZARD TO THE HIGHWAY

The Province may close the highway through the Kicking Horse Canyon corridor when Avalanches are expected to affect traffic or when Avalanche control is planned. The Province will define the Avalanche closure area and will notify the Design-Builder of planned Avalanche control activities and planned closures. The Design-Builder shall coordinate its activities, including traffic management, to ensure that all personnel are removed from the closure area and in a manner such that the Province is not impeded when conducting Avalanche control measures.

If the Design-Builder's Avalanche Professional determines that the hazard is acceptable within the Project Site limits to allow the Design-Builder to work safely during an Avalanche control closure implemented by the Province external to the Project Site limits, the Design-Builder may continue to work, but must adjust its activities so as not to interfere in any manner with safety or logistical measures implemented by the Province, which may include the parking of public traffic at any location along the Highway 1 corridor that the Province deems safe.

There may be snow and debris material deposited on the Project Site resulting from Avalanche control activities. The Concessionaire will remove the snow and debris to the most convenient locations to allow timely reopening of the highway. The Concessionaire may have to re-handle this material and will do so as soon as practical after traffic flow is restored. The Design-Builder may assist with this process at its own cost.

Any adjustments to work schedule or work locations made by the Design-Builder in order to allow the Province to perform Avalanche control activities, form traffic queues, or manage the location of deposits resulting from Avalanche control measures will be made at the Design-Builder's own cost and the Design-Builder will not be entitled to any additional payment, reduction in any payment to be made by the Design-Builder or extension of time under this Agreement as a result of any such adjustments.

4. HAZARD TO THE WORKSITE

In furtherance of the Design-Builder's responsibility for safety at the Project Site in accordance with Section 4.11 [Site Safety and Security] and Section 4.12 [Design-Builder as Prime Contractor], the Design-Builder shall:

- (a) retain the services of an Avalanche Professional acceptable to the Province; and

- 4 -

- (b) cause the Avalanche Professional to develop an avalanche safety plan (the “**Avalanche Safety Plan**”) outlining a framework to reduce avalanche risk to workers and the travelling public, and as defined in OHS Regulation Part 4.1.1, and implement and maintain all activities described in the Avalanche Safety Plan.

The Avalanche Safety Plan shall be submitted by the Design-Builder to the Province’s Representative no later than October 31, 2020 in accordance with the Consent Procedure. Failure to provide the Avalanche Safety Plan by this date may impact the Project Work. The Province will take steps, including stopping work, if the Avalanche Safety Plan is not submitted.

The Avalanche Safety Plan shall include, but not be limited to:

- (a) identification of Avalanche hazard areas within the Project Site (the District Avalanche Technician may identify additional hazard areas during the course of the Project);
- (b) Avalanche hazard forecasting services specific to the Project Site;
- (c) communication of Avalanche hazard to workers and the Province;
- (d) posting of the site Avalanche hazard rating at locations that are visible to all workers coming on shift, and communicating any changes throughout shifts;
- (e) defining and identifying worker activities or restrictions that are acceptable at the various hazard levels;
- (f) details regarding Avalanche control planning and methods of control;
- (g) traffic management requirements for Avalanche control closures;
- (h) details regarding Avalanche safety training for workers, including follow up training;
- (i) an Avalanche rescue plan in accordance with Section 7 of this Appendix; and
- (j) details regarding provision and maintenance of Avalanche safety equipment, including transceivers, rescue equipment and radios.

All persons on the Project Site shall comply with the requirements of the Avalanche Safety Plan.

The Design-Builder shall ensure that a designated Avalanche Supervisor is at the Project Site at all times while conducting Project Work at the Project Site during the period from November 1st to April 15th in each Contract Year unless a variance is accepted by the District Avalanche Technician.

The Design-Builder shall provide and communicate daily Avalanche hazard forecasts to all workers on the Project Site as well as to the Province’s Representative. The Design-Builder must immediately notify all workers on the Project Site when the Avalanche hazard level changes and ensure work is conducted in accordance with any instructions given by the Avalanche Professional.

Table E1 provides an example of a scale that may be used to communicate Avalanche hazard and work restrictions for the Project Site:

Table E1 – Sample Avalanche hazard scale

AVALANCHE HAZARD RATING	DEFINITION AND WORK RESTRICTIONS
LOW	Avalanches are unlikely to affect the highway road or worksites. Standard avalanche safety measures apply.
MODERATE	Small avalanches possible to affect the highway or worksites. Large avalanches unlikely to affect the access road or worksites. Check the hazard bulletin for specific restrictions in effect.
HIGH	Large avalanches are likely to affect the highway or worksites. Area closures in effect until further notice

Locations for safe storage of equipment and material required for the Project should be specified by the Avalanche Professional.

5. TRAINING

The Design-Builder shall ensure that all workers who are working in Avalanche hazard zones between November 1st and April 15th of each Contract Year are trained in Avalanche safety. An Avalanche Professional or their designate with specific industry sector experience, acceptable to the Province, will provide Avalanche safety training.

Training shall include one mock rescue practice (transceiver, probe and shovel practice) as a minimum. The Avalanche safety training session shall occur prior to November 1st of each Contract Year. New workers coming onto the Project Site between November 1st and April 15th of each Contract Year are required to complete the Avalanche safety training before working in Avalanche hazard zones.

The Design-Builder shall keep Avalanche training records for all workers at the Project Site. These records must be available to the Province upon request.

6. AVALANCHE RESCUE TRANSCEIVERS

All workers must wear 457 kHz avalanche rescue transceivers set on “transmit” (or “send”) while working in Avalanche hazard areas between November 1st and April 15th of each Contract Year, and outside of these dates if the Avalanche Professional deems there to be Avalanche hazard to workers. If the District Avalanche Technician determines that there is no Avalanche hazard, he may provide written authorization to the Design-Builder to allow work without transceivers.

The Design-Builder will supply the transceivers and ensure that all personnel are trained in their use.

- 6 -

7. RESCUE PLAN

As part of the Avalanche Safety Plan, the Design-Builder shall provide a written Avalanche rescue plan describing the tasks to be performed by Design-Builder when a worker is (or may be) buried in an Avalanche. The rescue plan shall follow industry standard, and incorporate an Incident Command System (ICS), as per the current CAA Avalanche Search and Rescue Advanced Skills (AvSAR) course. Training in the use of the rescue plan shall be included in the training course.

Avalanche rescue equipment shall be supplied by the Design-Builder and the Design-Builder shall be solely responsible for the care of such Avalanche rescue equipment. Equipment must meet industry standard, as designated by the Avalanche Professional.

8. RADIOS

The Avalanche Supervisor must maintain radio contact with the District Avalanche Technician whenever work is being done on the Project Site.

The Design-Builder shall supply its own radios, which shall be compatible with the Province radio system and other operators in the corridor.

**APPENDIX F
ALTERNATIVE ROUTE OPERATIONAL IMPROVEMENTS AND MAINTENANCE
REQUIREMENTS**

Responsibility for the operational improvements and maintenance activities along the Alternative Route are as set out in this Appendix.

1. Design-Builder’s Responsibility

The Design-Builder shall:

- (a) procure, install, maintain and, at the end of the Project, remove and dispose of, all directional signage related to the Alternative Route as defined in the drawings showing the Alternative Route requirements provided in the Data Room (the “**Drawings**”);
- (b) procure, install, maintain and, at the end of the Project, remove and dispose of, all information signs, supports and appurtenances related to the Alternative Route as defined in the Drawings;
- (c) procure, install, maintain and, at the end of the Project, remove and dispose of, all regulatory signs and warning signs, supports and appurtenances related to the Alternative Route as defined in the Drawings;
- (d) install, maintain, operate and at the end of the Project remove, all portable changeable message signs as defined in the Drawings in accordance with the following:
 - (i) the Design-Builder shall recommend messaging for portable changeable message signs to the Province;
 - (ii) the Province will provide approved messaging, which may include specific dual-purpose messaging for wildlife and buses, for the portable changeable message signs to the Design-Builder; and
 - (iii) the Design-Builder will implement messaging approved by the Province;
- (e) install, maintain, operate and at the end of the Project remove, all portable speed reader boards as defined in the Drawings;
- (f) install, maintain and remove, at the appropriate times, all temporary detour delineation including cones, barriers, delineators and other related appurtenances as defined in the Drawings;
- (g) cover and uncover, at the appropriate times, existing directional and informational signage as required for various Closure periods as defined in the Drawings;
- (h) recommend messaging for existing overhead changeable message signs for Province approval and implementation; and
- (i) recommend messaging for publication on Drive BC for Province approval and implementation.

SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix F: Alternative Route Operational Improvements and Maintenance Requirements

- 2 -

2. Province's Responsibility

The Province shall:

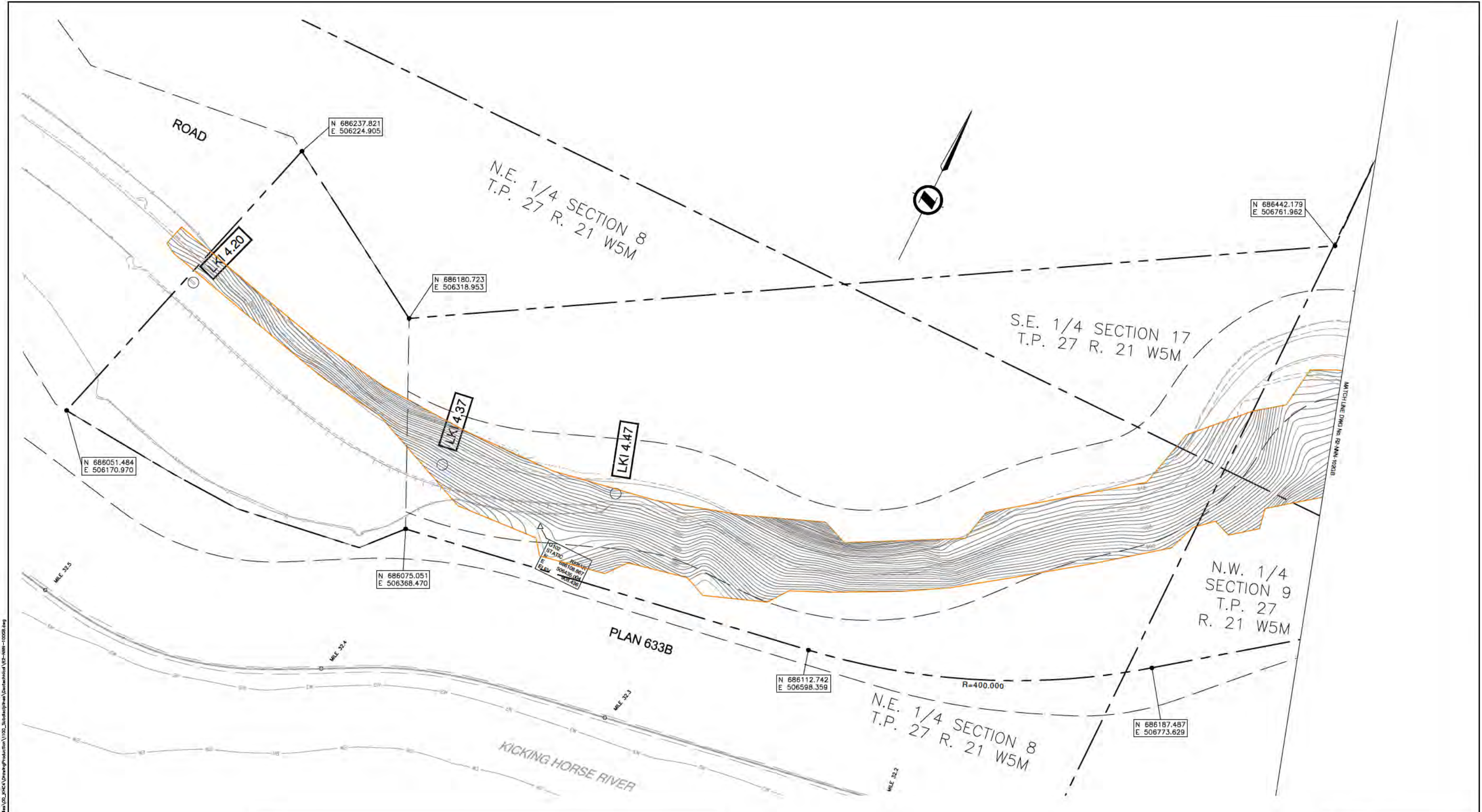
- (a) provide all sign faces as defined in the Drawings in three packages at a storage location in or near the Town of Golden by August 31, 2020 as follows:
 - (i) Package 1: all sign faces as shown in the Drawings for Highway 1 west of the Project and all signage for Highway 95 from Highway 1 to the south boundary of the Town of Golden;
 - (ii) Package 2: all sign faces as shown in the Drawings for Highway 95 south of the Town of Golden and Highway 93 from its intersection with Highway 95 north to Sinclair Canyon; and
 - (iii) Package 3: all sign faces as shown in the Drawings for Highway 93 from Sinclair Canyon to Highway 1 and along Highway 1 east of the Project including Field, the interchange at Icefields Parkway, Lake Louise and the interchange at Highway 93 south;
- (b) review and approve messaging for all portable changeable message signs;
- (c) review, approve and implement messaging for publication on Drive BC;
- (d) review, approve and implement messaging for existing overhead changeable message signs;
- (e) refresh lane lines on the Highways 1, 95 and 93 in the Spring and Fall of each year;
- (f) install and maintain all warning signage, including school bus stop signage, as defined in the Drawings;
- (g) design and construct all realignment and modifications to Park Drive in Golden including the relocation of the pedestrian crossing signal as shown on the Drawings;
- (h) install rectangular rapid flashing beacons on pedestrian crossings at 5th Street North and 11th Street South in Golden as shown on the Drawings;
- (i) install traffic signals at 6th Street North in Golden as shown on the Drawings;
- (j) provide signal timing plans for traffic signals at 6th Street North in Golden as shown in the Drawings; and
- (k) provide liaison with Parks Canada and Alberta Transportation.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 4: DESIGN AND CONSTRUCTION**

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**APPENDIX G
GEOTECHNICAL BASELINE AREA POLYGON DRAWINGS**

See attached.



NOTE

1. CONTOURS REPRESENT THE ASSUMED GEOLOGIC TOP OF BEDROCK SURFACE FOR SPECIFIC APPLICATION TO GEOTECHNICAL BASELINE ASSUMPTIONS AS DESCRIBED IN PART 2 SCHEDULE 4 ARTICLE 5.6 OF THE DBA

LEGEND

GEOTECHNICAL BASELINE

AREA POLYGON

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SCALE 0 10 1-1000 50m

CAD FILENAME: R2-NNN-100GB.DWG DATE: 2020-06-12

REV	DATE	REVISIONS	SIGNATURE

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
SOUTHERN INTERIOR REGION
HIGHWAY ENG NEER NG

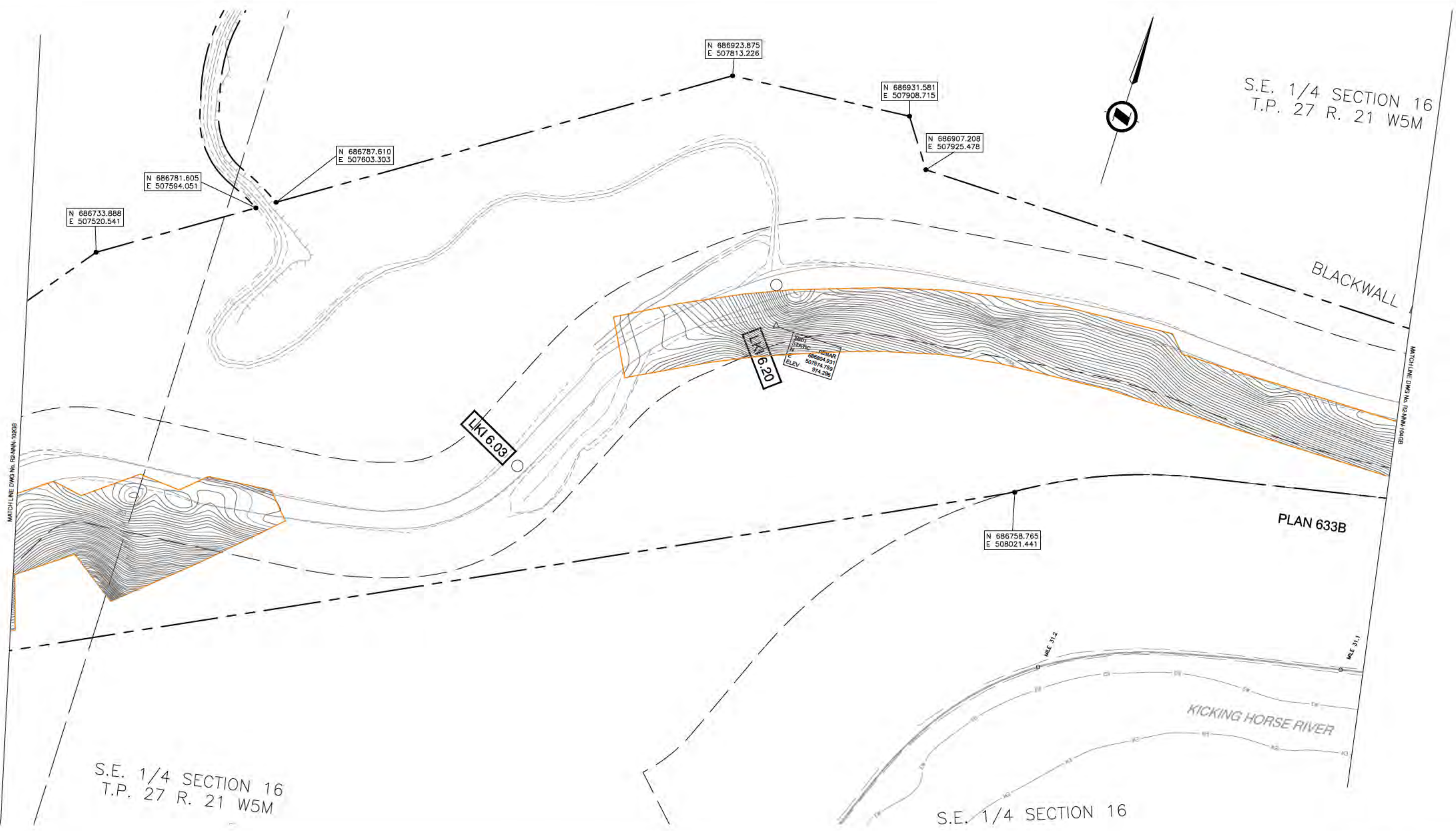
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 QUALITY CONTROL: F.D. DATE: JUNE 2020
 QUALITY ASSURANCE: A.B. DATE: JUNE 2020
 DRAWN: T.K. DATE: JUNE 2020

SENIOR DESIGNER: _____ DATE: _____

GEOTECHNICAL BASELINE CONTOURS
HIGHWAY No. 1
KICKING HORSE CANYON PROJECT - PHASE 4
LKI 4.20 TO LKI 4.92

FILE NUMBER	PROJECT NUMBER	REV	DRAWING NUMBER	REV
	22593	2	R2-NNN-101GB	

S.E. 1/4 SECTION 16
T.P. 27 R. 21 W5M



S.E. 1/4 SECTION 16
T.P. 27 R. 21 W5M

NOTE
1. CONTOURS REPRESENT THE ASSUMED GEOLOGIC TOP OF BEDROCK SURFACE FOR SPECIFIC APPLICATION TO GEOTECHNICAL BASELINE ASSUMPTIONS AS DESCRIBED IN PART 2 SCHEDULE 4 ARTICLE 5.6 OF THE DBA

LEGEND
GEOTECHNICAL BASELINE AREA POLYGON

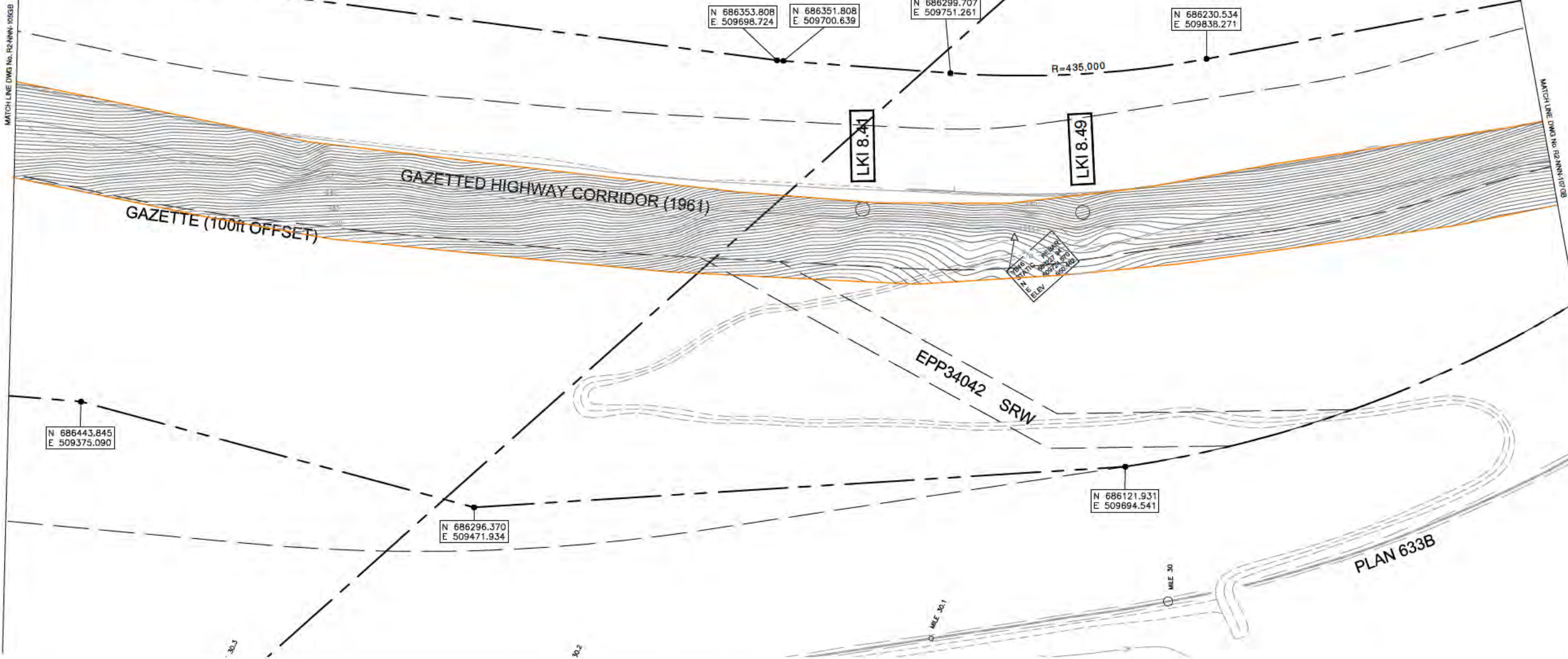
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		<table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>REVISIONS</th> <th>SIGNATURE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		REV	DATE	REVISIONS	SIGNATURE													DESIGNED D.C. (WOOD) DATE JUNE 2020 QUALITY CONTROL F.D. DATE JUNE 2020 QUALITY ASSURANCE A.E. DATE JUNE 2020 DRAWN T.K. DATE JUNE 2020	SENIOR DESIGNER DATE	FILE NUMBER 22593
REV	DATE	REVISIONS	SIGNATURE																			



S.E. 1/4 SECTION 15
T.P. 27 R. 21 W5M

N.E. 1/4 SECTION 10
T.P. 27 R. 21 W5M



NOTE
1. CONTOURS REPRESENT THE ASSUMED GEOLOGIC TOP OF BEDROCK SURFACE FOR SPECIFIC APPLICATION TO GEOTECHNICAL BASELINE ASSUMPTIONS AS DESCRIBED IN PART 2 SCHEDULE 4 ARTICLE 5.6 OF THE DBA

LEGEND
GEOTECHNICAL BASELINE AREA POLYGON

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DATE: 2020-05-12

BRITISH COLUMBIA
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
SOUTHERN INTERIOR REGION
HIGHWAY ENG NEER NG

DESIGNED: D.C. (WOOD) DATE: JUNE 2020
QUALITY CONTROL: F.D. DATE: JUNE 2020
QUALITY ASSURANCE: A.B. DATE: JUNE 2020
DRAWN: T.K. DATE: JUNE 2020

SENIOR DESIGNER: _____
DATE: _____

GEOTECHNICAL BASELINE CONTOURS			
HIGHWAY No. 1			
KICKING HORSE CANYON PROJECT - PHASE 4			
LKI 8.08 TO LKI 8.70			
FILE NUMBER	PROJECT NUMBER	REV	DRAWING NUMBER
	22593	2	R2-NNN-106GB

**APPENDIX H
TABLE OF RAILWAY PROTECTION REQUIREMENTS**

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
29.55	29.88	Interval with 5 to 10 m high rock cut track-west of the 5-Mile TCH 1 bridge and below the existing TCH 1 retaining wall.	Rock fall	Slope debris catchment immediately below Construction installed prior to hazardous construction activities	None required	Installation of a fence near the proposed highway and cleaning/regrading of the existing catchment ditch near CP track can control these rock falls.	None required.	In this zone, some rock falls originating from construction of the proposed road may reach the CP tracks and are expected to be caught by the ditch cleaning/regrading. Potential for rock fall in this zone is considered to be medium.
			Debris flows Earth slides	Divert surface runoff to north side of Highway 1	Divert surface runoff to north side of Highway 1	Surface runoff is proposed to be diverted to the north side of Highway 1 during construction.	Surface runoff is proposed to be diverted to the north side of Highway 1 as part of the permanent design.	Debris flow hazard is considered to be low if surface water is diverted away from the lower slope.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-2 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
		Avalanche Paths CP 146 and CP 147 ³ .	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES (Avalanche Terrain Exposure Scale) maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Path 8.4 mitigated in Phase 1 with concrete wall, no change in avalanche risk.	Existing wall and operational measures should keep risk at or below current levels

SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-3 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
29.87		900 mm Ø CMP culvert		Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Confirm design will not increase debris flow risk to CP Mitigate any increased risk		Culvert is proposed to be upgraded to 4 x 1200 mm steel culverts.	Culvert is proposed to be upgraded to 4 x 1200 mm steel culverts.
29.88	30.05	Interval where the Mile 29.95 access road reaches the track	Potential for debris flow down the road and upslope road ditch	Mitigate any increase in debris flow risk either at highway level or at CP track level	Provide specific methodology explaining how runoff driven debris flows will be mitigated/contained	Surface runoff is proposed to be diverted to the north side of Highway 1 during construction. Surface water is proposed to be diverted away from fresh/disturbed slopes. Temporary slope cuts are proposed to be covered with erosion protections such as polyethene sheeting if considered necessary.	Permanent slopes are proposed to be designed with long term erosion protection such as topsoil with vegetation and tree reforestation above the realigned access. Surface water from the upper slope (i.e. above access road) is proposed to be directed to the side ditch which should lead to an appropriated armoured discharge point. The side ditch is proposed to be erosion protected.	For new slopes (i.e. above the access road), the permanent slopes will be designed to meet DBA in terms of factors of safety. If water from the upper slope is directed to the new side ditch, potential debris flow risks on the CP slope should not be increased.

SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-4 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.05	30.26	Interval with limited track-north ditch	Rock falls Debris flows	Mitigate any increase in debris flow or rock fall risk either at highway level or at CP track level	Provide specific methodology explaining how runoff driven debris flows or rock falls will be mitigated/contained	Construction of a catchment ditch along the mountainside shoulder of the access road. Cleaning/regrading of the existing catchment ditch adjacent to CP prior to construction. The access road at this zone can protect CP track from rock fall hazards, however, this approach would require coordination with CP to notify the construction team at the site before using the access road. Debris Flow: same design as for 29.88 to 30.05 above.	Highway design is not expected to increase rock fall hazard after construction. Debris Flow: same design as for 29.88 to 30.05 above.	In this zone, rock falls originating from construction of the proposed road that can reach the access road and/or CP track are expected to be managed by installing a temporary catchment ditch and/or cleaning the existing CP side ditch. Potential for rock fall at this zone is considered to be medium Debris Flow: same design as for 29.88 to 30.05 above.
		Unvegetated slope adjacent to track (path CP-145).	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Operational control plan coordinated with Ministry; plow CP access road if additional protection needed.	No structural measures are proposed to maintain current avalanche risk levels.	Limited vegetation removal between highway and CP, as well as tree reforestation above the realigned access so avalanche hazard should be unchanged.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-5 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.26	30.41	Interval with wider upslope ditch and lock-block wall on the track north side of the track.	Rock falls Debris flows Earth slides	Mitigate any increase in debris flow, earth slide or rock fall risk either at highway level or at CP track level	Provide specific methodology explaining how runoff driven debris flows, earth slides, or rock falls will be contained/mitigated	No rock fall threat during the construction from road level. Scaling CP track upslope is recommended. Debris Flow: same design as for 29.88 to 30.05 above.	Highway design should not increase rock fall hazard after construction. Debris Flow: same design as for 29.88 to 30.05 above.	No rock fall hazard from the highway level at this zone. Highly vegetated ground can protect CP track during the construction. Debris Flow: same design as for 29.88 to 30.05 above.
		Unvegetated slope adjacent to track (path CP-144).	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Operational control plan coordinated with Ministry; plow CP access road if additional protection needed.	No structural measures are proposed to maintain current avalanche risk levels.	Limited vegetation removal between highway and CP, as well as tree reforestation above the realigned access so avalanche hazard should be unchanged.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-6 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.36	30.62	Avalanche Paths MoTI Path 7.7, Path 7.8 (Kicking Horse 5), and Path 7.62 (Kicking Horse 4)	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Paths 7.62, 7.7 and 7.8 proposed to be mitigated with ditches to increase protection to CP; Paths 7.7 and 7.8 also have debris flow basins for further protection.	Ditch mitigation is proposed to reduce avalanche risk to CP from current levels.

SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-7 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.41	30.63	Interval between the track-west end of the lock-block wall and the drainage at 30.60	Rock falls Documented debris flow	Rock fall catchment at edge of access road construction installed prior to hazardous construction activities	Confirm design will not increase rock fall or debris flow risk to CP Mitigate any increased risk	Due to the highly vegetated slope between the highway and CP track, rock fall hazard during the construction from road level is expected to be very low; however, scaling CP track upslope is proposed. Debris Flow: Away from the LKI 7.8 and 7.4 gullies, surface water is proposed to be diverted away from the CP slope during construction, hence risk of debris flow should not be increased. At both LKI 7.8 and 7.4 where debris flow hazard exists, the existing culverts are proposed to remain in place, allowing the existing highway to catch potential debris flows during construction and maintaining the existing debris flow catchment that the existing highway provides.	Highway design should not increase rock fall hazard after construction. Debris Flow: Away from the LKI 7.8 and 7.4 gullies, the highway is proposed to be designed to divert surface water away from the CP slope, hence risk of debris flow to the CP slope should not be increased. At both LKI 7.8 and 7.4 gullies where debris flow hazard exists, the proposed design includes construction debris containment structures.	No rock fall hazard from the highway level at this zone. Highly vegetated ground can protect CP track during the construction. Debris Flow: Away from the LKI 7.8 and 7.4 gullies, the highway is proposed to be designed to divert surface water away from the CP slope, hence risk of debris flow to the CP slope should not be increased. At both LKI 7.8 and 7.4, the proposed debris flow catchment structures should reduce the risk of debris flow hazard to CP.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-8 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
		Unvegetated slope adjacent to track (path CP-143).	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Limited vegetation removal between highway and CP, as well as tree reforestation above the realigned access.	Limited vegetation removal between highway and CP, as well as tree reforestation above the realigned access so avalanche hazard should not be unchanged.

SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-9 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.48		900 mm Ø CMP culvert	Debris flow	Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Confirm design will not increase debris flow risk to CP Mitigate any increased risk		Proposed to retain existing culvert.	Proposed to retain existing culvert. At the LKI 7.8 gulley, the proposed design includes a debris flow containment structure. Water from LKI 7.8 gulley proposed to be directed to the highway side ditch hence reducing peak flow to the 900 mm diam. CP culvert.
30.63	30.67	Interval where drainage path below Bus Corner on the TCH 1 intersects the track	Debris flow	Mitigate any increase in debris flow risk either at highway level or at CP track level	Confirm design will not increase debris flow risk to CP Mitigate any increased risk	Increased flow to the CP slope and gulley is not expected during construction.	At the LKI 7.4 gulley, the proposed design includes a debris flow containment structure. Water from LKI 7.4 gulley is proposed to be directed to the highway side ditch hence reducing peak flow to the 900 mm diam. CP culvert.	Debris flow risk should be reduced with the proposed containment structure.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-10 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
		Avalanche Paths MoTI Path 7.6 (Kicking Horse 3), CP 142 (also called MoTI Path 7.4, Kicking Horse 2), and MoTI Path 7.3 (Kicking Horse 1)	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES will be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Blackwall Bridge may increase risk if existing highway alignment not cleared and maintained as a buffer; keep clearing snow on existing retained portion of the existing highway to avoid increasing downslope impacts.	Regularly clearing the retained portion of the existing highway to allow it to retain its function as a buffer to CP may be required to mitigate risk.

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DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-11 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.65		Two 900 mm Ø CSC culverts	Debris flow	Mitigate any increase in debris flow risk either at highway level or at CP track level Upgrade culverts prior to construction, if temporary condition increases peak flow	Confirm design will not increase debris flow risk to CP Mitigate any increased risk Upgrade culverts if design increases peak flow		Proposed to retain existing culverts.	Proposed to retain existing culverts. At the LKI 7.4 gully, the proposed design includes a debris flow containment structure. Water from LKI 7.4 gully is proposed to be directed to the highway side ditch hence reducing peak flow to the 900 mm diam. CP culvert.
30.67	30.86	Interval between track west limit of the drainage at 30.65 and the rock slope track-east of the Mile 30.88 Tunnel	Rock fall hazard	None required	None required	N/A	N/A	N/A

**KICKING HORSE CANYON PROJECT – PHASE 4
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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-12 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.74	30.75	Avalanche Path CP 141 (also called MoTI Path 7.2, Shotgun)	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Wedge avalanche structure above highway should decrease avalanche risk to CP.	Structural defenses above highway should decrease risk to CP.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-13 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.76	30.80	Avalanche Path CP 140 (also called MoTI Path 7.0)	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Mitigation with ditch; construction sequence and operational measures to manage risk during construction.	Ditches and plowed highway should reduce risk to CP from above highway.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-14 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.80	31.20	Avalanche Path MoTI 6.9 also known as the Black Wall on the TCH 1	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Mitigation with optimized ditch to reduce CP risk.	Ditches and plowed highway should reduce risk to CP from above highway.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT**

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SCHEDULE 4: DESIGN AND CONSTRUCTION

Appendix H: Table of Railway Protection Requirements

- H-15 -

Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.86	30.88	Rock slope track-east of the east portal of the Mile 30.88 Tunnel	Rock fall	None required	Confirm design will not increase rock fall risk to CP Mitigate any increased risk	Potential for rock fall in this zone proposed to be mitigated by cleaning/regrading the existing catchment ditch near the railway and installing a one to two row high lock-block catchment wall. The reduced cut design avoids the need for blasting in this area, instead using mechanical means for rock face work which should reduce rock fall risk downslope to CP.	No permanent rock fall measure is proposed to protect CP track from rock fall risks associated with the proposed highway after construction.	Rock fall risks are not expected to be increased by the proposed design hence mitigation should not be required.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.84	30.88	Avalanche Path CP 139	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATEs maps coordinated with Ministry program and communications with CP. The ATEs maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATEs can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Little vegetation removal below highway; no fill slopes. Therefore, avalanche protection measures should not be required.	No increased avalanche risk to CP due to temporary or permanent works.
30.88	30.96	Within the Mile 30.88 {30.9} Tunnel	Rock fall	Pre and post construction inspection to be completed in accordance with DBA	None required	Pre and post construction inspections of the tunnel will be carried out as per DBA.	N/A	N/A
30.96	31.19	West of the	Rock fall	Rock catchment	Rock catchment at	It is understood the	Rock fall hazards	This zone is located

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
		west portal of the Mile {30.9} Tunnel to 60 m west of the west limit of the Mile 31.1 rock fall nets		<p>immediately below Construction installed prior to hazardous construction activities</p> <p>Rock catchment at track level installed prior to hazardous construction activities</p> <p>Specific design and construction methodology to ensure no rock fall onto the CP tracks originates from Work Site and no increase in rock fall originating from slopes between Highway 1 and the CP tracks caused by construction</p>	track level if increased risk of rock fall is likely post construction	<p>existing rock fall catchment at the slope crest above the CP tracks only has the capacity to catch a rock of about 1 m diameter initiating from the crest of the rock slope above CP track. In order to supplement the existing catchment, temporary fencing is proposed to be installed downslope of the construction zone.</p> <p>The lower highway slope will be surveyed as part of detailed design site investigation to verify that potentially loose rocks/boulders on the slope could be caught by the existing rock fence. This should mitigate rock fall hazard due to construction vibration (due to blasting, pile driving, etc.) that may</p>	from highway upslope should be mitigated by permanent rock fall mitigation measures (i.e. attenuators with mesh and catchment ditch).	<p>downslope of Blackwall Bluffs area and can pose high rock fall hazards to CP track. Rock fall hazard due to construction activities such as blasting vibration, building new retaining walls and bridge, scaling, etc. that can cause rock falls is proposed to be mitigated by temporary fencing.</p> <p>There are existing loose rocks/boulders on the downslope that can roll when dislodge by construction vibration (i.e. from blasting, etc.). The risk of rock fall originating from the CP slope should not be increased by the proposed design. The risk originating from above the highway is proposed to be mitigated by a new rock fall management</p>

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
						<p>trigger the existing loose rocks/boulder on the slope below the highway to become mobile.</p> <p>The reduced cut design avoids the need for blasting in this area, instead using mechanical means for rock face work which should reduce rock fall risk downslope to CP.</p> <p>Rock catchment is proposed to be installed at track level prior to hazardous construction activities.</p>		system which should reduce the rock fall risks to CP.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
30.96	31.16	Avalanche Path CP 138	Snow avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Little vegetation removal below highway; no fill slopes.	Avoiding new fill slopes and limiting vegetation removal below highway should avoid increasing downslope risk.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.19		900 mm Ø culvert	Debris flow	Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Provide engineering assessment to demonstrate that the debris flow risk will be mitigated at highway level and that protection for a 5-year return event is provided		Proposed to retain existing culvert	Proposed to retain existing culvert.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.18	31.30		Debris flows	Mitigate any increase in debris flow risk either at highway level or at CP track level	Provide engineering assessment to demonstrate that the debris flow risk will be mitigated at highway level and that protection for a 5-year return event is provided	Surface water proposed to be diverted away from the CP slope, hence increased flow to the CP slope and tracks is not expected during construction.	Surface water proposed to be diverted into the highway side ditch and increased flow to the CP slope and tracks is not expected in the long term.	Divert surface water away and hence reduce debris flow risk to CP.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
			Dart Creek Landslide above the TCH1	Provide engineering assessment to demonstrate that a possible deep-seated landslide will not be destabilized by the Project Work. If engineering assessment demonstrates an unacceptable risk of reactivating such a landslide then a monitoring and mitigation plan, including but not limited to drainage improvements, must be provided	Confirm design will not increase landslide risk to CP Mitigate any increased risk	Reactivation of the Dart Creek landslide during the construction phase was evaluated based on the existing geotechnical information. In general, the possibility of its activation is predicted to be low to medium and was taken into consideration. A geotechnical site investigation and monitoring plan will be prepared for this area to be completed during detailed design. Temporary slope stability, including lowering the groundwater levels and/or use of soil nails will be implemented if considered necessary to mitigate risks above the current ambient level.	Similar to the temporary slope assessment, the deep-seated landslide hazard at Dart Creek will be assessed further through detailed design phase site investigation. If considered necessary, slope stabilization measures such as drainage improvements and/or soil nails will be used to mitigate risks above the current ambient level.	Considering that there is very limited information available about the ancient landslide in the Dart Creek valley and considering the results of stability analysis conducted to date, the potential risk of reactivating the old landslide is predicted to be low to moderate and would need to be further assessed during detailed design and construction. Remedial measures (i.e. improved drainage and/or soil nails) would need to be implemented if considered necessary.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.18	31.21	Avalanche Path CP 137	Snow Avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES can also be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Ditch should mitigate risk from avalanche sources above highway.	Risk to CP should be reduced by ditches satisfying DBA width and geometry requirements.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.21	31.30	Interval between the Track-west end of the rock slope track east of 31.21 and track-east of the rock slope track-east of the Mile 31.31 {31.4} Tunnel	Rock fall	None required	None required	N/A	N/A	N/A
31.25		750 mm Ø CSC?? culvert	Debris flow	Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Provide engineering assessment to demonstrate that the debris flow risk will be mitigated at highway level and that protection for a 5-year return event is provided		Proposed to retain existing culvert.	Proposed to retain existing culvert.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.28		Buried 610 mm Ø CMP culvert	Debris flow	Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Provide engineering assessment to demonstrate that the debris flow risk will be mitigated at highway level and that protection for a 5-year return event is provided		Proposed to retain existing culvert.	Proposed to retain existing culvert.
31.30	31.34	Track-east of the east portal of the Mile 31.31 {31.4} Tunnel	Rock fall	None required	None required	N/A	N/A	N/A
31.34	31.41	Within the Mile 31.34 {30.9} Tunnel	Rock fall	Pre and post construction Inspection to be completed in accordance with DBA	None required	Pre and post construction inspections of the tunnel will be carried out as per DBA.	N/A	N/A
31.41	31.43	Track-west of the west portal of the Mile 31.31 {31.4} Tunnel	Rock fall	None required	None required	N/A	N/A	N/A

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.43	31.82	Track-west of the interval exposed to rock fall to the track-east end of the Mile 31.82 {31.8} Bridge	No significant hazard due to KHCP-4 project other than potentially fly-rock from blasting.	None required	None required	N/A	N/A	N/A

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.82	31.89	Mile 31.82 Bridge	The influence of the LKI 5.3 to 5.7 Landslide on the Kicking Horse River and the Mile 31.82 Bridge	Provide engineering assessment to demonstrate that landslide will not be destabilized by the Project Work. If engineering assessment demonstrates an unacceptable risk of reactivating landslide during construction then a monitoring and mitigation plan, including but not limited to drainage improvements, must be provided	Confirm design will not increase landslide risk to CP Mitigate any increased risk	Sequential excavation and stabilization will be implemented to address potential slope failure hazard of the landslide at/above road level. Geotechnical investigation will be completed to assess subsurface geotechnical condition at the area and assess landslide geometry. Piezometers will be installed to monitor ground water level and its seasonal variation. In addition, slope inclinometers will be installed at/above/below the road level to monitor landslide movement during the construction.	The landslide at this area was assessed based on the existing geotechnical information and geotechnical stabilization measures were designed to increase stability of the landslide at the road level. Design-Builder has not explicitly assessed the ambient landslide risk to CP. Following further investigation and assessment, the final design is expected to increase the new highway stability using structural elements such as vertical piles and/or tie-back soils nails to meet Project Requirement factors of safety, hence risk to CP tracks should be reduced compared to baseline condition.	Since geotechnical stabilization at the road level takes upslope load, the factor of safety of the existing landslide below the road should increase or remain unaffected by the road construction (net neutral).

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
31.89	31.90	Track west of the west end of the Mile 31.82 Bridge	Debris flow	Mitigate any increase in debris flow risk either at highway level or at CP track level	Provide engineering assessment to demonstrate that the debris flow risk will be mitigated at highway level and that protection for a 5-year return event is provided	Surface water is proposed to be diverted away from the CP slope, hence increased risk of debris flow is not expected.	Side ditch at the highway level will be designed to retain 5-year return debris flow hazard. Engineering assessment will be provided during the detailed design stage.	Retaining the debris flow at the highway level should not increase the risk of debris flow to CP.
31.90	32.01	Toe of the LKI 5.15 Landslide	Rock fall	None required	None required	N/A	N/A	N/A
			The influence of the LKI 5.15 Landslide on the CP track and Kicking Horse River.	Provide engineering assessment to demonstrate that the slope will not be destabilized by the Project Work. Monitor and mitigate any potential increased risk to CP, including drainage improvements as required	Confirm design will not increase landslide risk to CP Mitigate any increased risk	Sequential excavation and stabilization will be implemented to address potential slope failure hazard of the landslide at/above road level. Geotechnical investigation will be completed to assess subsurface geotechnical condition at the area and assess landslide geometry. Piezometers will be installed to monitor ground water level and its seasonal variation. In addition, slope inclinometers	The landslide at this area was assessed based on the existing geotechnical information and geotechnical stabilization measures were designed to increase stability of the landslide at the road level. Design-Builder has not explicitly assessed the ambient landslide risk to CP. Following further investigation and assessment, the final design is expected to increase the new	Since geotechnical stabilization at the road level takes upslope load, the factor of safety of the existing landslide below the road should increase or remain unaffected by the road construction (net neutral).

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
						will be installed at/above/below the road level to monitor landslide movement during the construction.	highway stability using structural elements such as vertical piles and/or tie-back soil nails to meet Project Requirement factors of safety, hence risk to CP tracks should be reduced compared to the baseline condition.	
32.01	32.06	Interval surrounding drainages at Miles 32.01 and 32.05.	Limited geohazards	None required	None required	N/A	N/A	N/A
32.01		900 mm Ø CMP culvert	Debris flow	Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Confirm design will not increase debris flow risk to CP Mitigate any increased risk		Proposed to retain existing culverts	Proposed to retain existing culverts. At the LKI 5.1 gully, the proposed design includes a debris flow containment structure. Water from LKI 5.1 gully proposed to be directed to the highway side ditch hence would reduce peak flow to the 900 mm diam. CP culvert.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
32.05		900 mm Ø CMP culvert	Debris flow	Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Confirm design will not increase debris flow risk to CP Mitigate any increased risk		Proposed to retain existing culverts.	Proposed to retain existing culverts. At the LKI 5.1 gully, the proposed design includes a debris flow containment structure. Water from LKI 5.1 gully proposed to be directed to the highway side ditch hence should reduce peak flow to the 900 mm diam. CP culvert.
32.06	32.17	Interval track-west of 32.05 culvert and track east of Mile 32.17 rock slope.	Limited geohazards	None required	None required	N/A	N/A	N/A

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
32.10		750 mm Ø CMP culvert	Debris flow	Upgrade culvert prior to construction, if temporary condition increases peak flow Mitigate any increase in debris flow risk either at highway level or at CP track level	Upgrade culvert if design increases peak flow Confirm design will not increase debris flow risk to CP Mitigate any increased risk		Proposed to retain existing culvert.	Proposed to retain existing culvert. At the LKI 5.1 gully, the proposed design includes a debris flow containment structure. Water from LKI 5.1 gully proposed to be directed to the highway side ditch hence should reduce peak flow to the 750 mm diam. CP culvert.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
32.17	32.45	Rock slope above the track in this interval	Rock fall Debris flow	Rock catchment immediately below Construction installed prior to hazardous construction activities Divert surface runoff away from south facing slope and rock fall chutes	Divert surface runoff away from south facing slope and rock fall chutes	Temporary fence is proposed to be installed downslope of the construction zone to mitigate rock fall from new construction activities. Additionally, downslope scaling proposed to be done to clear existing boulders present at the existing steep slope, which will require coordination with CP. Cleaning/regrading of the existing catchment ditch beside the railway should be considered prior to construction. Debris Flow: Surface water proposed to be directed away from the CP slope hence increased flow to the CP slope and tracks is not expected during construction.	Permanent rock fall measures at this area should control rock falls from the upper slope and protect both the proposed highway and CP track from upper rock fall sources. Debris Flow: At the LKI 5.1 gulley, the proposed design includes a debris flow containment structure. Water from LKI 5.1 gulley proposed to be directed to the highway side ditch hence should reduce peak flow to the CP tracks.	Though potential for rock fall at this zone is high, the temporary mitigation measures should protect CP track. Long term rock fall risks to CP is considered to be reduced with the proposed design. Debris Flow: Debris flow risk should be reduced with the proposed containment structure and surface water diversion.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
		Avalanche Paths CP 132, CP 133 and MoTI Path 4.6	Snow avalanche	Confirm construction phase activities will not increase avalanche risk to CP Mitigate any increased risk	Confirm design will not increase avalanche risk to CP Mitigate any increased risk	Design-Builder’s operational risk management plan and ATES maps coordinated with Ministry program and communications with CP. The ATES maps are used in conjunction with the current avalanche forecast to prohibit, restrict or allow workers to enter each avalanche zone based on current avalanche conditions. The ATES will be used to plan construction scheduling to avoid or minimize work in high exposure areas during peak avalanche months.	Ditches and highway cut should reduce CP risk; existing highway bench is proposed to remain; limit disturbance below existing highway.	Ditches and highway cut should reduce risk to CP.

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Approximate Track Mile		Location description	Geohazards	Railway Protection Baseline Criteria (Construction Phase)	Railway Protection Baseline Criteria (Permanent Long Term)	Design Builder Railway Protection Measures (Construction Phase)	Design Builder Railway Protection Measures (Permanent Long Term)	Rationale for Design Builder Railway Protection Measures
From	To							
32.47	32.52	Area where drainage is directed to the track level in a broad gully	Debris flow	Mitigate any increase in debris flow risk either at highway level or at CP track level	Confirm design will not increase debris flow risk to CP Mitigate any increased risk	Surface water is proposed to be directed away from the CP slope hence increased flow to the CP slope and tracks is not expected during construction.	Surface water is proposed to be diverted into the highway side ditch and therefore no increased flow to the CP slope is expected in the long term.	Proposed to divert surface water away hence reducing debris flow risk to CP.
32.45	32.60	Track-west of the track-west end of the	Limited geohazards	None required	None required	N/A	N/A	N/A

**SCHEDULE 5
PROJECT WORK DEFECTS AND WARRANTIES**

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**PART 1
PROJECT WORK DEFECTS**

1.1 Representation, Warranty and Covenant as to Project Work

The Design-Builder represents and warrants to and covenants with the Province that:

- (a) all Design and Construction and Project Work provided, performed or carried out by or on behalf of the Design-Builder pursuant to this Agreement and (to the extent constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work or to the extent, in order to comply with its obligations under this Agreement, any component thereof ought to have been constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work) all Project Infrastructure shall conform to, comply with and satisfy all of the requirements of this Agreement, Good Industry Practice and all professional engineering principles generally accepted as standards of the industry in the Province of British Columbia;
- (b) the Project Work and (to the extent constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work or to the extent, in order to comply with its obligations under this Agreement, any component thereof ought to have been constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work) the Project Infrastructure shall be free of defects; and
- (c) all materials furnished under this Agreement shall be of good quality and fit for the intended purpose.

1.2 Project Work Defects

- (a) Any defect which the Design-Builder is obligated to repair and remediate pursuant to this Agreement and any deficiency, defect or error in the Project Work or (to the extent constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work or to the extent, in order to comply with its obligations under this Agreement, any component thereof ought to have been constructed, installed, altered, upgraded or augmented by the carrying out of the Project Work) the Project Infrastructure or non-compliance with the requirements of this Agreement (including the representations, warranties and covenants in Section 1.1 [Representation, Warranty and Covenant as to Project Work] of this Schedule) shall be referred to as a “**Project Work Defect**”.
- (b) For certainty, Latent Project Work Defects, shall be Project Work Defects.

**PART 2
WARRANTIES**

2.1 Project Work Defect Warranty

Without limiting or derogating from the other warranty obligations of the Design-Builder contained in this Agreement (including this Schedule), the Design-Builder, at its own cost and expense (but without prejudice to the Province’s obligations under Section 3.1(d) of this Schedule), shall correct to the satisfaction of the Province, acting reasonably, as required by and in accordance with Section 2.3

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[Correction of Project Work Defects] of this Schedule, all Project Work Defects arising during the General Project Work Defect Warranty Period.

2.2 Latent Project Work Defect Warranty

- (a) At least three months prior to the end of the General Project Work Defect Warranty Period, the Province and the Design-Builder shall conduct a joint inspection of all of the Project Work to identify all Project Work Defects which are identifiable on visible inspection and in order to compile a list of any such Project Work Defects, which shall be corrected by the Design-Builder in accordance with Section 2.3 [Correction of Project Work Defects] of this Schedule. The Design-Builder shall prepare and submit such list to the Province's Representative, pursuant to the Consent Procedure, within ten Business Days following the completion of such joint inspection.
- (b) In addition to the joint inspection to be conducted in accordance with Section 2.2(a) of this Schedule, the Design-Builder shall conduct specific inspection and monitoring of the Project Work prior to the end of the General Project Work Defect Warranty Period where required in accordance with this Agreement, including pursuant to Section 2.8 [Pavement Acceptance at End of Warranty Period] and Section 5.7 [Settlement and Deformation] of Part 2 of Schedule 4 and Section 2.5(m) of Schedule 6 [Environmental Obligations].
- (c) Without limiting or derogating from the other warranty obligations of the Design-Builder contained in this Agreement, the Design-Builder, at its own cost and expense shall correct to the satisfaction of the Province, acting reasonably, as required by and in accordance with Section 2.3 [Correction of Project Work Defects] of this Schedule, any and all Project Work Defects which were not identified, and could not reasonably have been identified in accordance with Good Industry Practice, during the inspection contemplated by Section 2.2(a) of this Schedule (each a "**Latent Project Work Defect**"), provided that the Province gives the Design-Builder written notice of each Latent Project Work Defect within the period from the expiry of the General Project Work Defect Warranty Period to and including the fifth anniversary of the expiry of the General Project Work Defect Warranty Period or, if earlier, the fifth anniversary of the Termination Date.
- (d) The Province will use all reasonable efforts to provide notice of a Latent Project Work Defect to the Design-Builder within a reasonable period of time following the Province becoming aware of such Latent Project Work Defect, provided that no delay by the Province in providing such notice shall relieve the Design-Builder of its obligation to remedy such Latent Project Work Defect in accordance with Section 2.3 [Correction of Project Work Defects] of this Schedule.

2.3 Correction of Project Work Defects

- (a) As soon as reasonably practicable, and in any event within ten Business Days after the earlier to occur of the Design-Builder becoming aware of a Project Work Defect required to be corrected pursuant to Section 2.1 [Project Work Defect Warranty] or Section 2.2 [Latent Project Work Defect Warranty] of this Schedule and receipt by the Design-Builder of written notice from the Province specifying such a Project Work Defect, the Design-Builder shall propose when and how the Design-Builder shall remedy such Project Work Defect, which proposal shall be to the satisfaction of the Province, acting

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reasonably, provided that, in case of an Emergency requiring immediate corrective action, the provisions of Section 11.4 [Province's Emergency Rights] shall apply.

- (b) If the Design-Builder becomes aware of a Project Work Defect of which it has not been previously notified by the Province, the Design-Builder shall notify the Province thereof in writing within five Business Days.
- (c) If the Design-Builder does not correct a Project Work Defect in accordance with Section 2.3(a) of this Schedule within the agreed time, or should the Design-Builder fail to provide a proposal within the ten Business Day period referred to in Section 2.3(a) of this Schedule or fail to provide a proposal satisfactory to the Province in accordance with Section 2.3(a) of this Schedule, or should the Province disapprove of the actions being taken by the Design-Builder in the case of emergency conditions, notwithstanding anything to the contrary contained in this Agreement and without limiting the rights of the Province pursuant to Part 11 [Province's Access, Monitoring and Step-In Rights], the Province may, upon five Business Days' written notice to the Design-Builder, perform some or all of the remedial Project Work required to correct or eliminate such Project Work Defect, either through its own forces or through the use of contractors designated by the Province, in which case all reasonable direct costs incurred by the Province (including costs of the Province's own personnel, materials and services) in remedying such Project Work Defect shall, on demand, be payable on demand by the Design-Builder to the Province, provided that:
 - (i) if, prior to the expiry of the General Project Work Defect Warranty Period, the Design-Builder fails on demand either to pay any such costs to the Province or satisfy any Claim made by the Province pursuant to Section 9.1 (including Section 9.1(d)(viii)) in respect of a Project Work Defect, the Province shall be entitled to discharge the relevant claim for such costs by applying an amount from the Warranty Holdback (whether, in accordance with this Agreement, retained from the Progress Payments in accordance with Schedule 10 [Payment and Performance Mechanism] or taken into account in the calculation of any termination sum in accordance with Schedule 13 [Compensation on Termination]), up to an amount in aggregate equal to the amount of such costs or the relevant Claim; and
 - (ii) the Design-Builder's obligation to pay such costs or indemnify the Province, as the case may be, shall only be discharged to the extent of the amount so applied and/or demanded by the Province.
- (d) If, at the expiry of the General Project Work Defect Warranty Period, any Project Work Defect that has been identified by the Province has not been corrected by the Design-Builder in accordance with this Section 2.3 (other than any Project Work Defect in respect of which the Province has applied an amount from the Warranty Holdback in accordance with Section 2.3(c)) of this Schedule, then the Province shall be entitled to retain from the Warranty Holdback (whether, in accordance with this Agreement, retained from the Progress Payments in accordance with Schedule 10 [Payment and Performance Mechanism] or taken into account in the calculation of any termination sum in accordance with Schedule 13 [Compensation on Termination]) up to an amount in aggregate equal to 200% of the Province's estimate of the costs for remedying each such

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Project Work Defect, provided that, following the correction of any such Project Work Defect by the Province, the Province shall pay (without interest) to the Design-Builder the excess (if any) of the amount so retained or demanded over the actual costs incurred by the Province in remedying such Project Work Defect.

2.4 Terms of Subcontractor Warranties

Without limiting or derogating from any warranty obligations of the Design-Builder contained in this Agreement, but subject to any express terms or conditions agreed by the Province, in its discretion, the Design-Builder shall:

- (a) ensure that all Material Subcontracts contain provisions which:
 - (i) impose on the relevant Material Subcontractor the same warranties as are contained in this Agreement in relation to all Design and Construction and Project Work provided, performed or carried out and materials supplied by such Material Subcontractor; and
 - (ii) acknowledge that such warranties are for the benefit of the Province and its assignees as well as the Design-Builder or, as the case may be, the Material Subcontractor that is the beneficiary of any warranties contained in the relevant Material Subcontract and are assignable in accordance with the terms of this Agreement;
- (b) obtain or cause to be obtained any industry standard warranties which may be available as at the Financial Submittal Date which exceed the requirements of this Section 2.4 of this Schedule (including in respect of the term of such warranties), including against defects in materials and workmanship from each Subcontractor in respect of Design and Construction and Project Work provided, performed or carried out and materials and Equipment supplied by that Subcontractor under its Subcontract; and
- (c) at the request of the Province, cooperate with and assist the Province in the enforcement of any claims under warranties contained in any Subcontract or otherwise given by a Subcontractor.

2.5 Assignment of Warranties to Province

- (a) The Design-Builder:
 - (i) hereby absolutely assigns, on the terms set out in Section 2.5(b) of this Schedule, to the Province all warranties contained in any Subcontract to which the Design-Builder is a party; and
 - (ii) shall cause, by ensuring that relevant Subcontractors include relevant provisions in all Subcontracts to which the Design-Builder is not a party, all warranties contained in any such Subcontract to be absolutely assigned to the Province, on the terms set out in Section 2.5(b) of this Schedule.
- (b) Notwithstanding the provisions of Sections 2.5(a)(i) and (ii) of this Schedule, the Design-Builder or the Subcontractor that is the beneficiary of any warranties contained in the

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relevant Subcontract shall be permitted to enjoy the benefit of and enforce the warranties referred to in, respectively, Sections 2.5(a)(i) and (ii) of this Schedule as if the assignment made in Section 2.5(a)(i) of this Schedule and any assignments made pursuant to Section 2.5(a)(ii) of this Schedule had not been made until the earlier of (i) the date on which the Province gives the Design-Builder or the relevant Subcontractor a written notice stating that a Design-Builder Default has occurred and that the Province is exercising its rights pursuant to the relevant assignment, (ii) the Termination Date, and (iii) the end of the Term.

- (c) Without limiting the provisions of Section 18.7 [Further Assurance], the Design-Builder shall:
 - (i) cause to be included in any Subcontract to which it is a party a notice from the Design-Builder to the relevant Subcontractor of the assignment made in Section 2.5(a)(i) of this Schedule and an acknowledgment of such notice from the relevant Subcontractor; and
 - (ii) cause to be included in any Subcontract to which it is not a party a notice from the Subcontractor that is the beneficiary of any warranties contained in the relevant Subcontract to the Subcontractor that is the provider of such warranties of the assignment made pursuant to Section 2.5(a)(ii) of this Schedule and an acknowledgment of such notice from the Subcontractor that is the provider of such warranties.

2.6 Survival

Notwithstanding any other provision of this Agreement, the provisions of this Part 2, together with Sections 3.2(b) and (c) of this Schedule, will survive the expiry or any earlier termination of this Agreement.

PART 3 HOLDBACKS

3.1 Deficiency Holdback

- (a) Notwithstanding any other provision of this Agreement, and in addition to any other holdbacks provided for in this Agreement, the Province may retain from the Progress Payments in accordance with Schedule 10 [Payment and Performance Mechanism] an amount equal to 200% of the Agreed Remedy Cost of each Final Deficiency List Deficiency (the “**Deficiency Holdback**”).
- (b) Following the end of each complete calendar month (commencing with the first complete calendar month) after the Substantial Completion Date has occurred, the Design-Builder shall prepare, and deliver to the Province’s Representative, a Payment Application in the applicable form set out in Appendix E [Payment Application Forms] to Schedule 10 and accompanied by the documentation specified therein, requesting payment of any amounts retained by the Province for the Deficiency Holdback pursuant to Section 3.1(a) of this Schedule in respect of any Final Deficiency List Deficiency that have been remedied, to the satisfaction of the Province, acting reasonably, during such month (or, in the case of the first such application, since the date of Substantial Completion).

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- (c) By no later than the tenth Business Day following receipt of any Payment Application pursuant to Section 3.1(b) of this Schedule, the Province shall, subject to Section 3.1(e) of this Schedule, make payment, without interest, to the Design-Builder of the applicable amount(s).
- (d) If the Total Completion Date does not occur on or before the Total Completion Target Date, the Province may, in its discretion, do either of the following for each Final Deficiency List Deficiency that as at the Total Completion Target Date has not been remedied:
 - (i) without prejudice to Section 3.1(b) of this Schedule:
 - (A) the Province shall be entitled irrevocably to retain any amounts not paid to the Design-Builder in accordance with Section 3.1(b) of this Schedule in respect of such Final Deficiency List Deficiency; and
 - (B) in consideration for the making of such retention and/or demand by the Province, the Design-Builder shall be released from its obligation to remedy such Final Deficiency List Deficiency; or
 - (ii) require the Design-Builder to continue to remedy such Final Deficiency List Deficiency.
- (e) If this Agreement is terminated after any amounts have been retained pursuant to Section 3.1(a) of this Schedule but prior to the Total Completion Date, the Province shall be entitled irrevocably to retain any such amounts retained pursuant to Section 3.1(a) of this Schedule and not paid to the Design-Builder in accordance with Section 3.1(b) of this Schedule.

3.2 Warranty Holdback

- (a) Notwithstanding any other provision of this Agreement, and in addition to any other holdbacks provided for in this Agreement, the Province may retain from the Progress Payments in accordance with Schedule 10 [Payment and Performance Mechanism] an amount equal to 1% of the Contract Price (the “**Warranty Holdback**”).
- (b) Following the expiry of the General Project Work Defect Warranty Period, the Design-Builder shall prepare, and deliver to the Province’s Representative, a Payment Application in the applicable form set out in Appendix E [Payment Application Forms] to Schedule 10 requesting payment of the Warranty Holdback (less any amounts applied therefrom by the Province in accordance with any of Sections 2.3(c) and/or 2.3(d) of this Schedule).
- (c) By not later than the tenth Business Day following receipt of the Payment Application pursuant to Section 3.2(b) of this Schedule, the Province shall make payment, without interest, to the Design-Builder of the Warranty Holdback (less any amounts applied therefrom by the Province in accordance with any of Sections 2.3(c) and/or 2.3(d) of this Schedule).

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ENVIRONMENTAL OBLIGATIONS**

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Appendix A Table of Commitments

**PART 1
GENERAL PROVISIONS**

1.1 Order of Precedence

The Design-Builder shall carry out the Design-Builder's Environmental Obligations in accordance with the criteria set out in the Agreement, including this Schedule, and the other documents, codes and standards listed below, and if there is any conflict with the criteria set out in this Schedule and any of such other documents, codes and standards, the following shall apply in descending order of precedence:

- (a) the criteria contained in this Schedule;
- (b) Ministry Technical Circulars and Technical Bulletins;
- (c) the DBSS, including 165 *Protection of the Environment*;
- (d) the Environmental Constraint Drawings; and
- (e) the other environmental Reference Documents set out in Section 1.2 [Environmental Reference Documents] of this Schedule.

1.2 Environmental Reference Documents

The Design-Builder shall ensure that the Project Work at all times complies with all guidelines, policies or practices of an environmental nature applicable to the Project and the Project Work, including but not limited to each of the following Reference Documents:

- (a) Air Emissions – Environment and Climate Change Canada Best Practices for Reduction;
- (b) Amphibian and Reptile Conservation;
- (c) Archaeological Chance Find Procedure;
- (d) Archaeological Handbook;
- (e) Archaeological Impact Assessment Guidelines;
- (f) BC Ambient Air Quality Objectives;
- (g) BC Water Quality Guidelines – Approved;
- (h) BC Water Quality Guidelines - Working;
- (i) Best Practices for Managing Invasive Plants on Roadsides;
- (j) Canada-wide Standards for Particulate Matter and Ozone;
- (k) Canadian Water Quality Guidelines for the Protection of Aquatic Life Protocol;
- (l) Compendium of Wildlife Guidelines for Industrial Development in the North Area;

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- (m) Culvert and Fish Passage Fact Sheet;
- (n) Develop with Care;
- (o) Emergency Response Guidebook;
- (p) Environmental Best Practices for Highway Maintenance Activities;
- (q) Environmental Summary Report;
- (r) Land Development Guidelines for the Protection of Aquatic Habitat;
- (s) Manual of Aesthetic Design Practice;
- (t) Manual of Control of Erosion and Shallow Slope Movement;
- (u) Protocols for Rare Plant Surveys;
- (v) Raptor Conservation;
- (w) Silvicultural Systems Handbook for British Columbia;
- (x) Standards and Best Practices for Instream Works;
- (y) Technical Circular T-04/13;
- (z) Technical Guidance on Contaminated Sites;
- (aa) Ungulate Guard Standard Drawings;
- (bb) Wildlife at Risk - EA Best Practice Guide;
- (cc) Wildlife Exclusion Systems; and
- (dd) Wildlife Jump-Out Drawing.

1.3 Design-Builder's Environmental Obligations

The Design-Builder shall be responsible, at its own cost and risk, for managing all environmental issues associated with the Project, and shall comply with, observe, satisfy and perform (and will cause all of its employees, agents and Subcontractors and employees of any of them to comply with, observe, satisfy and perform) all of the Design-Builder's Environmental Obligations. The Design-Builder shall perform the Project Work in full compliance with the Design-Builder's Environmental Obligations, including compliance with the following:

- (a) all applicable Environmental Laws, Permits and relevant requirements under any other applicable Laws, the Archaeological and Heritage Resource Management Plan, and all applicable Reference Documents that are current at the time of the relevant Project Work;

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- (b) the conditions, commitments, responsibilities and information set forth in this Schedule, including those set out in the Table of Commitments; and
- (c) a requirement for the Environmental Manager to attend routine Design-Builder meetings with the Province, with such frequency as the Province deems necessary.

1.4 Table of Commitments

- (a) Without limiting the generality of Section 1.3 [Design-Builder’s Environmental Obligations] of this Schedule, the Design-Builder shall at all times comply with and shall do or not omit to do anything necessary to ensure satisfaction of, and will be responsible for the activities set forth in the Table of Commitments.
- (b) In the case of any conflict, ambiguity or inconsistency between or among the Table of Commitments and any other provision within this Agreement, including within this Schedule and within any of the other Schedules hereto, such other provision will prevail over the Table of Commitments, as the case may be.

1.5 Environmental Constraint Drawings

The Environmental Constraint Drawings show:

- (a) “designated environmentally sensitive areas” in accordance with DBSS 165.01.04 and as such, such areas are subject to all the requirements set out in DBSS 165;
- (b) “restricted zones – archaeology sites”:
 - (i) within which no entry of Project Work shall occur and the Design Builder shall not physically disturb the ground in any manner; and
 - (ii) which shall be protected by the Design-Builder from ground disturbance in accordance with the Project Requirements and demarcated in accordance with the requirements for designated environmentally sensitive areas set out in DBSS 165, provided that the Province’s Representative may remove such restrictions upon notice to the Design-Builder;
- (c) “archaeological inspection required” which are areas of the Project Lands that require further work to determine if an archeological site is present; and
- (d) the “project limits”, outside of which any work by the Design-Builder shall be at the Design-Builder’s sole cost and risk.

1.6 Changes to Environmental Impacts

The Design-Builder shall:

- (a) use all reasonable efforts to keep environmental impacts from the Project within the magnitude and extent identified in this Schedule;

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- (b) be responsible for addressing the mitigation and compensation of all Project environmental impacts in accordance with this Schedule, except where the Province identifies otherwise in writing or as otherwise expressly provided in this Agreement; and
- (c) identify, assess, report and mitigate all Project environmental impacts at its own cost and risk for Project Work proposed outside of the project limits shown on the Environmental Constraint Drawings, to the satisfaction of the Province's Representative.

1.7 Best Management Practices

The Design-Builder shall perform the Design-Builder's Environmental Obligations in accordance with Best Management Practices and shall comply with, at its own cost, the provisions of the Best Management Practices, and will not do or omit or permit to be done or omitted anything which is inconsistent with such Best Management Practices.

1.8 Environmental Permits

- (a) Except as otherwise specifically provided in this Agreement, including in relation to Province Permits, the Design-Builder is required, at its own cost and risk, to obtain all Permits which relate to, or are required under Environmental Laws in connection with the Project and the Project Work, including all Permits necessary for the Design-Builder to fulfill the Design-Builder's Environmental Obligations.
- (b) Without limiting any of its other obligations under this Agreement, the Design-Builder shall observe and comply with the standards, practices and requirements in connection with Province Permits required under Environmental Laws in connection with the Project and the Project Work.

1.9 Inquiries and Reports to Environmental Authorities

- (a) The Design-Builder shall promptly on request provide the Province's Representative with such written authorizations as the Province may require from time to time in order to make inquiries of any Environmental Authorities regarding the Design-Builder or any of the Subcontractors or the compliance by the Design-Builder or any of the Subcontractors with Environmental Laws.
- (b) The Design-Builder shall promptly forward to the Province's Representative a copy of any report, submission, application or other document relating to environmental matters on or at or affecting the Project Work, the Project Site or the Project Infrastructure that is filed or lodged by the Design-Builder (or any person for whom the Design-Builder is in law responsible) with or otherwise provided to any Environmental Authority and which is not otherwise required to be provided directly by the Design-Builder to the Province pursuant to this Agreement.

1.10 Environmental Records

The Design-Builder shall maintain in accordance with the Records Management Protocol all environmental documents and records (including all Permits) relating to the Project Site and the performance of the Project Work relating to environmental matters, including all records required to be

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maintained pursuant to the Construction Environmental Management Plan but excluding any documents or records retained in the possession of the Province.

1.11 Performance Measures

The Design-Builder shall perform, comply with and satisfy the performance measures set out in this Schedule (indicated by the reference “PE[XXX]” or as otherwise identified in this Schedule) and, without limiting any other provision of this Agreement, the provisions of Part 10 [NCE Points and Default Points] of Schedule 10 shall apply if the Design-Builder fails to perform, comply with or satisfy any such performance measure.

PART 2 ENVIRONMENTAL MANAGEMENT

2.1 Environmental Manager

- (a) The Design-Builder’s Environmental Manager will have defined authority for ensuring the establishment and maintenance of the Construction Environmental Management Plan and auditing and reporting on the performance of the Construction Environmental Management Plan, the Table of Commitments, and any terms and conditions associated with environmental Permits.
- (b) The Environmental Manager shall be a Key Individual subject to the applicable requirements of Section 3.3 [Key Individuals] of Schedule 2.
- (c) The Environmental Manager shall have experience on major projects that are comparable in scope, complexity and nature to the Project in:
 - (i) developing and managing environmental plans, procedures and practices to address Project environmental requirements, including those related to archaeology;
 - (ii) leading a multidisciplinary environmental team;
 - (iii) environmental regulatory management;
 - (iv) working with Indigenous communities and regulatory agencies;
 - (v) maintaining all required environmental Records; and
 - (vi) implementing environmental quality management systems and procedures in collaboration with the Quality Manager responsible for the Environmental Quality Management Plan in accordance with Schedule 7 [Quality Management].
- (d) The Environmental Manager shall have the following attributes:
 - (i) be an Appropriately Qualified Professional;
 - (ii) have an understanding of environmental regulations and legislation; and

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- (iii) have effective communication, conflict resolution and organization skills.
- (e) Without limiting the generality of the foregoing, the job specification and responsibilities of the Environmental Manager shall include the following:
 - (i) directing all aspects of the Design-Builder's environmental program for the Project Work, including overseeing the environmental auditing program;
 - (ii) managing all environmental issues associated with the Project on a day-to-day basis, including overseeing the environmental monitoring program;
 - (iii) effective operation of the Construction Environmental Management Plan and other environmental plans on a day-to-day basis;
 - (iv) ensuring environmental issues and requirements are met in accordance with this Agreement;
 - (v) establishing and maintaining working relationships with relevant Environmental Authorities and Interested Parties,
 - (vi) liaising with the Archaeological Manager, and field staff including Environmental Observers, Cultural Monitors and Archaeological Monitors;
 - (vii) taking a lead role in internal environmental design reviews including development of mitigation and compensation proposals, acceptable to the Province and Environmental Authorities;
 - (viii) liaising with the Province's Representative and acting as the single point representative for the Design-Builder on all matters relating to environmental management;
 - (ix) preparing and submitting to the Province's Representative all reports required under Section 2.5 [Environmental Plans and Reports] of this Schedule, the Table of Commitments and the Construction Environmental Management Plan;
 - (x) carrying out other responsibilities as outlined in the Table of Commitments; and
 - (xi) ensuring environmental issues and requirements are met in accordance with this Agreement.

2.2 Archaeological Manager

- (a) The Design-Builder's Archaeological Manager shall report to the Environmental Manager and have defined authority to ensure compliance with the Archaeological and Heritage Resource Management Plan, the Archaeological Chance Find Procedure, and any terms and conditions associated with environmental Permits.
- (b) The Archaeological Manager shall have experience on major projects that are comparable in scope, complexity and nature to the Project in:

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- (i) developing and managing environmental plans, procedures and practices to address Project environmental requirements, including those related to archaeology;
 - (ii) monitoring compliance with archaeological Permits and requirements;
 - (iii) working with Indigenous communities and regulatory agencies; and
 - (iv) maintaining archaeological Records.
- (c) The Archaeological Manager shall have the following attributes:
- (i) be an Appropriately Qualified Professional;
 - (ii) have an understanding of archaeological conditions, significance and issues in the Project Site; and
 - (iii) have effective communication, conflict resolution and organization skills.
- (d) Without limiting the generality of the foregoing, the job specification and responsibilities of the Archaeological Manager shall include the following:
- (i) liaising with the Province’s Representative and acting as the single point representative for the Design-Builder on all matters relating to archaeological management;
 - (ii) managing all aspects of the Design-Builder’s archaeological program for the Project Work in collaboration with the Project archaeologist appointed by the Province (the “**Project Archaeologist**”) and the Province;
 - (iii) managing all archaeological issues associated with the Project on a day-to-day basis, including coordinating the archaeological monitoring program during Construction;
 - (iv) ensuring that the requirements and procedures outlined in the Archaeological and Heritage Resource Management Plan and the Archaeological Chance Find Procedure are met on a day-to-day basis;
 - (v) ensuring archaeological issues and requirements are met in accordance with this Agreement;
 - (vi) establishing and maintaining working relationships with the Project Archaeologist, relevant Environmental Authorities and Interested Parties,
 - (vii) taking a lead role in internal design reviews including development of mitigation proposals, acceptable to the Province and Environmental Authorities;
 - (viii) liaising with the Environmental Manager, the Project Archaeologist and field staff and, together with the Project Archaeologist, liaising with the Environmental Observers, Cultural Monitors and Archaeological Monitors;

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- (ix) preparing and submitting to the Province's Representative all reports required under Section 2.5 [Environmental Plans and Reports] of this Schedule and the Table of Commitments, and providing to the Project Archaeologist such information and documentation as may be required from the Design-Builder for the Project Archaeologist to prepare and submit all reports required under the Archaeological and Heritage Resource Management Plan and the Archaeological Chance Find Procedure;
- (x) ensuring environmental issues and requirements are met in accordance with this Agreement;
- (xi) liaising with the Province, the Province's archaeologists and archaeological permit holders;
- (xii) coordinating construction planning and staging implementation with the Design-Builder's construction managers to minimize and avoid impacts to potential archaeological resources, allow archaeological work to be undertaken, and minimize schedule impacts and delays;
- (xiii) maintaining productive working relationships with the Identified Indigenous Groups and representatives; and
- (xiv) coordinating with the Design-Builder's Indigenous Contracting and Employment Coordinator and other managers to provide input into the planning, development, and implementation of training programs, cultural awareness programs, work plans and other activities in relation to planning and implementation of construction in areas with potential archaeological resources.

2.3 Environmental Specialists

The Design-Builder shall have available, at all times during the Term, a multi-disciplinary team of Appropriately Qualified Professionals.

2.4 Environmental Management Requirements

The Design-Builder shall:

- (a) comply with all environmental requirements as set out in Section 1.3 [Design-Builder's Environmental Obligations] of this Schedule;
- (b) prepare all environmental submissions as set out in or required by this Agreement, including Section 2.5 [Environmental Plans and Reports] of this Schedule and Part 3 [Design and Certification Procedure] of Schedule 4;
- (c) issue and sign the Design Certificate (Environmental) in accordance with the procedures as set out in Part 3 [Design and Certification Procedure] of Schedule 4;
- (d) manage proactive programs in accordance with Schedule 9 [Communication and Engagement], including organizing and holding field reconnaissance meetings with Interested Parties from time to time with a view to ensuring that Interested Parties'

concerns are clearly communicated to the Design-Builder to gather input and feedback and to respond to questions and concerns;

- (e) restore and revegetate those portions of the Project Infrastructure and Project Site that will be discontinued for road or Construction purposes;
- (f) carry out the Project Work in a manner that protects and maintains surface and groundwater resources, both within and outside the Project Site, including drinking water sources and infrastructure (groundwater wells);
- (g) be responsible for planning, scheduling and performing the Project Work in such a manner that the quality and quantity of water flowing from the Project Site, is, at all times, acceptable to all relevant Environmental Authorities, and take immediate action to correct any deficiency in water quality;
- (h) maintain appropriate riparian setbacks along upland watercourses and ditches within the Project Site, as shown on the Environmental Constraint Drawings;
- (i) identify and demark wildlife features within the Project Site in accordance with the Environmental Constraint Drawings;
- (j) conduct works in a manner that will prevent the discharge or introduction of deleterious substances into the receiving environment; and
- (k) apply current Best Management Practices to the design of all stormwater management systems and be responsible for implementing a stormwater design for the Project Infrastructure that will ensure that existing water quality and quantity conditions improve or, at a minimum, do not deteriorate.

2.5 Environmental Plans and Reports

- (a) The Design-Builder shall develop, implement, maintain, and update the plans, reports and data listed in Table 2.5 [Schedule of Plans, Reports and Data (Response Time Measures)]:

Table 2.5 Schedule of Plans, Reports and Data (Response Time Measures)

Performance Measure	Deliverable Name	Schedule 6 Specification Reference	Due Date	Review Procedure or Consent Procedure
PE 2.6b	Construction Environmental Management Plan (First Submission)	2.6	45 days from the Effective Date	Consent Procedure

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS**

*Commercial in Confidence
Execution*

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Performance Measure	Deliverable Name	Schedule 6 Specification Reference	Due Date	Review Procedure or Consent Procedure
PE 2.6c	Construction Environmental Management Plan (Updates)	2.6	As soon as completed when required, and in any event no later than the annual anniversary of the Effective Date	Review Procedure
PE 2.5e	Environmental Procedures	2.5	30 days prior to commencement of activity for which the Environmental Procedure is required	Review Procedure
PE 2.5f	Monthly Environmental Reports	2.5	Within 14 days of the end of the month for which the report prepared	Review Procedure
PE 2.5g	Annual Environmental Reports	2.5	By the annual anniversary of the Effective Date	Review Procedure
PE 2.5h	Environmental Completion Report	2.5	Within 30 days of Total Completion Date	Review Procedure
PE 2.5i	Weekly Environmental Monitoring Reports	2.5	Within 1 week of the previous one week period of monitoring from the Effective Date until the Substantial Completion Date	Review Procedure
PE 2.5j	Annual Certificate of Compliance with All Environmental Laws	2.5	December 1 st annually	Review Procedure
PE 2.5k	Independent Environmental Site Assessment and/or Environmental Audit	2.5	Within 60 days of audit being requested by the Province's Representative	Review Procedure
PE 2.5l	Wildlife Exclusion Fencing System Record Drawings and AQP Verification Report	2.5	Within 30 days of the Total Completion Date	Review Procedure

Performance Measure	Deliverable Name	Schedule 6 Specification Reference	Due Date	Review Procedure or Consent Procedure
PE 2.5m	Planting Effectiveness Monitoring Reports	2.5	In December of each year during the General Project Work Defect Warranty Period	Review Procedure
PE 2.5n	Surplus Disposal Site Quarterly Field Reports	2.5	Within 14 days of the end of the quarter for which the report was prepared from the Effective Date until the Substantial Completion Date	Review Procedure
PE 2.5o	Surplus Disposal Site Annual Monitoring and Maintenance Reports	2.5	By the annual anniversary of the Substantial Completion Date	Review Procedure
PE 2.5p	Final Surplus Disposal Site Annual Monitoring and Maintenance Report	2.5	Within 30 days of the expiry of the General Project Work Defect Warranty Period	Review Procedure
PE 2.5q	Surplus Disposal Site Operations and Maintenance Manual	2.5	Within 30 days of the expiry of the General Project Work Defect Warranty Period	Review Procedure
PE 2.7a	ARD/ML Material Management Plan	2.7	45 days from the Effective Date	Consent Procedure

- (b) The documents referred to in Table 2.5 [Schedule of Plans, Reports and Data (Response Time Measures)] that are indicated to be subject to the Consent Procedure or the Review Procedure shall be submitted to the Province’s Representative for acceptance or review, as applicable, in accordance with the Consent Procedure or the Review Procedure, as the case may be, pursuant to Schedule 2 [Representatives, Review Procedure and Consent Procedure].
- (c) The Design-Builder shall also develop, implement, maintain and update other plans in accordance with the Table of Commitments and the other terms set out in this Agreement, including the Environmental Quality Management Plan in accordance with Schedule 7 [Quality Management], each of which shall, where applicable and in addition to meeting all applicable requirements set out in this Agreement, be submitted to the Province’s Representative:

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- (i) in the case of an initial plan not previously submitted and accepted by the Province under this Agreement, in accordance with the Consent Procedure prior to submitting such plan to any appropriate Environmental Authority; or
- (ii) in the case of a plan which is an update to a plan previously submitted and accepted by the Province under this Agreement, in accordance with the Review Procedure prior to, or at the same time as, submitting such plan to any appropriate Environmental Authority,

or as otherwise expressly specified in this Agreement.

- (d) The Design-Builder shall, promptly upon their production by or on behalf of the Design-Builder or upon their coming into the possession or control of the Design-Builder, provide the Province's Representative with copies of all environmental site assessments, audits, reports and test results relating to the Project Site, including all assessments, audits, reports and tests at any time whether before or after the Effective Date.

PE 2.5e Each Environmental Procedure shall be outlined in the Environmental Procedures Plan included as a component plan of the Construction Environmental Management Plan, shall be prepared by the Design-Builder and submitted to the Province's Representative as supplementary to the Construction Environmental Management Plan, and will include site-specific and activity-specific mitigation measures to be implemented to address Construction or Project Work;

PE 2.5f The Design-Builder shall prepare and submit to the Province's Representative and Environmental Authorities, during any period during which Construction is undertaken, a monthly environmental report that:

- (i) outlines the Design and Construction undertaken as part of the Project Work during the period, as well as future activities, key environmental issues, monitoring activities, mitigation measures (successes and failures), resolutions to environmental impacts, and how the Design-Builder was able to comply with all applicable Permits;
- (ii) provides an update on the status of the implementation of and compliance with the Table of Commitments; and
- (iii) has appended thereto all notes of meetings with Interested Parties, including action items, environmental sub-consultant reports, environmental incident reports, specific mitigation plans, and sediment and drainage plans for that period.

PE 2.5g Annual environmental reports, which will be inclusive of all Design and Construction periods of the Project, shall be prepared by the Design-Builder and submitted to the Province's Representative to provide a Project wide state of the environment summary.

PE 2.5h An environmental completion report shall be prepared by the Design-Builder and submitted to the Province's Representative prior to the Total Completion Date, which includes:

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- (iv) Project information, including scope, prime contractor and environmental representative names and credentials;
- (v) Construction activities and archaeological and environmental monitoring undertaken, including a summary of each of the following:
 - (A) environmental monitoring site inspections;
 - (B) Construction and environmental monitoring activities;
 - (C) water quality monitoring results;
 - (D) environmental issues encountered, and mitigation measures implemented during the Project by environmental design component (as referenced in Section 2.8.9 [Environmental Design] of Part 3 of Schedule 4);
 - (E) corrective measures to address site deficiencies; and
 - (F) incident reports; and
- (vi) select site photographs that illustrate issues, mitigation, corrective measures and incidents.

PE 2.5i

Weekly environmental monitoring reports shall be prepared during Construction and submitted to the Province's Representative. Weekly environmental monitoring reports shall include, as a minimum, the following information:

- (i) Project area;
- (ii) name(s) of environmental monitor(s);
- (iii) period covered by report;
- (iv) date report submitted; overall weather conditions;
- (v) report recipient(s);
- (vi) contractor(s) undertaking work;
- (vii) description, photos and status of Construction by area, including within environmentally sensitive areas;
- (viii) environmental meetings and key issues discussed;
- (ix) key communications with Environmental Authorities;
- (x) status of current sediment and drainage management plans;
- (xi) an issue tracking matrix that provides the description of outstanding environmental issues and/or non-compliances, date of occurrence, corrective

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actions required, the anticipated timeline for implementing corrective actions and the status of issue resolution at the time of reporting, for each identified environmental issue;

- (xii) physical and/or biophysical sampling data collected during reporting period, including but not limited to water quality monitoring results and photographs; and
- (xiii) other information as may be required by Environmental Authorities, the Province's Representative and the Project Archaeologist.

PE 2.5j The Design-Builder shall, at the request of the Province's Representative from time to time where there are reasonable grounds for making such request and in any event not less frequently than annually, provide the Province's Representative with a certificate signed by the Design-Builder's Environmental Manager certifying that the Design-Builder has complied with all Environmental Laws and with all of its obligations under this Agreement in respect of environmental matters, providing full and complete particulars of such compliance and all documentation in connection therewith (or if any occurrence of non-compliance has taken place, providing full and complete particulars thereof and all documentation in connection therewith).

The certificate is to confirm that (to the best of the knowledge, information and belief of the Environmental Manager, having made reasonable inquiry) no adverse environmental occurrence has taken place on or at or affecting the Project Site or any part thereof (or, if any such occurrence has taken place, providing full and complete particulars thereof and all documentation in connection therewith).

PE 2.5k The Design-Builder shall, at the request of the Province's Representative from time to time where there are reasonable grounds for making such request, obtain and submit to the Province's Representative pursuant to the Review Procedure, from an independent environmental consultant (the identity of which has been accepted by the Province's Representative pursuant to the Consent Procedure), an environmental assessment of the Project Site (or any part or parts thereof) and/or an environmental audit of the Project Work, such compliance with any such request to be at the Design-Builder's own cost, including obtaining any additional investigations recommended by the environmental consultant.

PE 2.5l Record Drawings for the Wildlife Exclusion Fencing System and an AQP Verification Report shall be prepared by the Design-Builder in accordance with DBSS 700 and this Schedule, and be submitted to the Province's Representative prior to the Total Completion Date.

PE 2.5m During the General Project Work Defect Warranty Period, the Design-Builder shall prepare and submit to the Province's Representative in December of each year a Planting Effectiveness Monitoring Report which shall, further to DBSS 754.71, include annual reporting detailing planting survival and corrective measures required for that year. Enhanced Site Restoration planting shall be deemed as complete if planted vegetation achieves greater than 80% survival at the end of the General Project Work Defect Warranty Period.

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PE 2.5n The Design-Builder shall prepare and submit to the Province’s Representative Surplus Disposal Site Quarterly Field Reports during Surplus Disposal Site stockpile construction in accordance with Section 6.2(e) of Part 2 [Design and Construction] of Schedule 4.

PE 2.5o During the General Project Work Defect Warranty Period, the Design-Builder shall prepare and submit to the Province’s Representative Surplus Disposal Site Annual Monitoring and Maintenance Reports for all Surplus Disposal Site stockpiles, which shall:

- (i) be signed by an Appropriately Qualified Professional;
- (ii) demonstrate that the stockpiles are monitored in accordance with the quality targets in the ARD/ML Material Management Plan;
- (iii) describe and confirm that the items outlined in the ARD/ML Material Management Plan are being successfully maintained, monitored and managed to prevent exceedances of soil, surface water and groundwater standards;
- (iv) demonstrate the prevention of erosion of the disposal stockpile and maintenance of soil and vegetative cover in accordance with Article 9 [Landscape and Site Restoration Design Criteria] of Part 2 of Schedule 4;
- (v) demonstrate that water diversion and retention structures are maintained and repaired to accommodate their design capacity and function; and
- (vi) report water sampling data at quarterly sampling intervals for surface (springs, creek and the retention pond), groundwater, fresh cut rock slopes, and soil if applicable.

PE 2.5p At the end of the General Project Work Defect Warranty Period, the Design-Builder shall prepare and submit to the Province’s Representative a final Annual Monitoring and Maintenance Report for all Surplus Disposal Site stockpiles that certifies that the facility is functioning as designed and proves with data that there are no contaminants exceeding the applicable soil, surface, and groundwater standards and guidelines.

PE 2.5q At the end of the General Project Work Defect Warranty Period, the Design-Builder shall prepare and submit to the Province’s Representative a Surplus Disposal Site Operations and Maintenance Manual for all Surplus Disposal Site stockpiles which shall:

- (i) be signed by an Appropriately Qualified Professional; and
- (ii) describe operations and maintenance procedures to:
 - (A) maintain, monitor and manage the disposal stockpiles to prevent exceedances of soil, surface water and groundwater standards in accordance with the ARD/ML Material Management Plan;
 - (B) prevent erosion of the disposal stockpile and maintenance of soil and vegetative cover in accordance with Article 9 [Landscape and Site Restoration Design Criteria] of Part 2 of Schedule 4;

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- (C) ensure that water diversion and retention structures are maintained and repaired to accommodate their design capacity and function; and
- (D) sample water, including frequency and sampling parameters, to meet any regulatory or other required reporting for surface water (springs, creek and the retention pond), groundwater, fresh cut rock slopes, and soil if applicable.

2.6 Construction Environmental Management Plan

PE 2.6a The Design-Builder shall develop, implement, maintain and update the Construction Environmental Management Plan, which Construction Environmental Management Plan, including each of its component plans set out in Section 2.6(d) of this Schedule, will remain in effect until the Total Completion Date and will:

- (i) comply with all of the applicable requirements set out in this Schedule;
- (ii) identify applicable roles and responsibilities of the Design-Builder's environmental team;
- (iii) identify monitoring and reporting requirements;
- (iv) include an overview of Project Work scheduling;
- (v) include each of the component plans listed in Section 2.6(d) of this Schedule; and
- (vi) comply with all of the Design-Builder's Environmental Obligations.

PE 2.6b The Design-Builder shall submit the initial Construction Environmental Management Plan, including each of its component plans required for Construction as set out in Section 2.6(d) of this Schedule, to the Province's Representative in accordance with the Consent Procedure prior to submitting such initial Construction Environmental Management Plan to any appropriate Environmental Authorities.

PE 2.6c The Construction Environmental Management Plan, including each of its component plans set out in Section 2.6(d) of this Schedule, shall be expanded and updated through the Term until the Total Completion Date to reflect the Project Work scheduling, Project Site conditions and weather-dependent contingency measures. The Design-Builder shall submit all such updates to the Province's Representative in accordance with the Review Procedure prior to, or at the same time as, submitting such updates to any appropriate Environmental Authorities.

- (d) The Construction Environmental Management Plan will include the following component plans and any other plans required for Construction:
 - (i) Air Quality and Dust Control Plan, which shall describe the measures to be used to control dust during Construction and the program that will be implemented to monitor fugitive dusts, ambient particulate matter, and ambient air quality, which dust control measures shall consider avoiding topsoil/overburden stripping during excessively dry weather, limiting the height from which material is dropped and

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using rubber skirts, hoods or windbreaks around drop zones, and shall include vehicle emissions and anti-idling measures in accordance with Section 2.9 [Air Emissions] of this Schedule;

- (ii) Construction and Hazardous Waste Management and Disposal Plan, which shall describe procedures and Best Management Practices to manage Construction materials, waste materials, concrete, sediment and soil, or other Hazardous Substances, measures to be implemented to effectively manage material that may attract wildlife, appropriate disposal of materials including the prohibition of disposal of land clearing debris by burning, and the requirement to reuse materials wherever possible;
- (iii) Construction Water Management Plan, which shall identify the surface and groundwater management measures required to ensure safe and timely control of water pressures and flows relative to Project Work on Project Lands, including those along the Dart Creek Forest Service Road and along the proposed highway alignment in the vicinity of Dart Creek, and with such water management measures to include, per Section 1.3.7.3 [Dart Creek Water Collection Access] of Part 2 of Schedule 4, those to address potential for slope destabilization, effects to downslope areas and CP, erosion and sedimentation and protection of the aquifer (including restoration or relocation of a Dart Creek water collection source), planned Environmental Procedures to address site-specific issues, and measures that will need to be specified in any applications under the *Water Sustainability Act* (British Columbia);
- (iv) Contaminated Sites Management Plan, which shall describe the measures to be implemented to manage, appropriately remediate and/or dispose of Hazardous Substances in the event that Contamination is encountered or an accidental release or other accident results in soil or groundwater Contamination;
- (v) Cultural Monitoring Plan, which shall describe the measures to be implemented for Cultural Monitors and Environmental Observers to identify, avoid, protect or mitigate identified cultural values and features potentially affected by Project Work activities; including that Cultural Monitors and Environmental Observers shall be provided the opportunity to monitor all ground altering activities where natural ground surfaces could be disturbed, and include provisions for detailed schedules of ground altering activities to be provided to the Province's Representative (and the Identified Indigenous Groups) at least 10 Business Days before work takes place; and including facilitating the delivery of cultural monitoring as described within agreements the Province has entered into with identified Indigenous groups, to the extent that such information is made available to the Design-Builder by the Province;
- (vi) Decommissioning and Disposal Plan, for the Surplus Disposal Site that takes into consideration all geotechnical, environmental and other requirements, including those identified on the Environmental Constraint Drawings, and is signed by an Appropriately Qualified Professional;
- (vii) Environmental Awareness and Education Plan, which shall describe how, when and the type of environmental training, education and awareness programs that

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will be provided to the personnel of the Design-Builder and its Subcontractors, including senior Design and Construction personnel, the Construction safety manager and Construction workers on the Project Site;

- (viii) Environmental Incident Reporting Plan, which shall describe how, when and the type of environmental monitoring and reporting that will be provided to the Province's Representative, follow-up reporting and corrective action procedures to demonstrate how Construction is complying with this Schedule and the Construction Environmental Management Plan;
- (ix) Environmental Monitoring Plan, which shall describe how, when and the type of environmental monitoring and reporting that will be provided to the Province's Representative and how Project construction is complying with this Schedule and the Construction Environmental Management Plan;
- (x) Environmental Procedures Plan, that outlines the anticipated Environmental Procedures for the Project and which describes the plan objective; how, when, where and the type of Environmental Procedures that will be in place to protect the intended environmental feature/species and follow-up actions and corrective procedures to ensure continued and effective protection of the intended environmental feature/species;
- (xi) Erosion and Sediment Control Plan, which shall identify areas within the Project Site and Construction activities that have the potential to create erosion or sedimentation, describe general and site specific measures that will be applied to mitigate soil and erosion and shallow slope movement, control sediment-laden flows, and prevent sediment-laden water from entering watercourses, and describe the monitoring program, including water quality monitoring, that will be implemented and will comply with DBSS Section 165 performance objectives for water quality parameters, including pH and TSS;
- (xii) Spill Management and Emergency Response Plan, which shall list the spill abatement materials/equipment to be used on the Project Site, identify responsible Project personnel and external contacts, and describe the communications, containment, clean-up, follow-up and reporting requirements;
- (xiii) Vegetation Management and Site Restoration Plan, which shall describe the approach to be used for protection and removal of trees and other vegetation along the Project alignment; describe measures to be used to minimize the disturbance of riparian vegetation, protect upland vegetation, manage and protect rare or listed plants and plant communities, manage removal of merchantable timber, restore and/or replant reclaimed abandoned roadways and temporarily disturbed areas with native species, prevent propagation and spread of invasive species as well as measures for handling, storing, re-using and/or disposing of non-merchantable vegetation, and site restoration and reclamation in accordance with Article 9 [Landscaping and Site Restoration] of Part 2 of Schedule 4 and permit requirements; and
- (xiv) Wildlife and Habitat Management Plan, which shall identify and describe wildlife species at risk and Species of Concern (being wildlife species that are

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identified by federal or provincial conservation status rankings as of heightened concern for Indigenous groups, stakeholders (including regulators and scientists) or the public) that may be present, provide for reasonable protection of such species prior to and during construction, identify and describe sensitive wildlife habitat on Construction drawings and demark on the Project Site, identify measures to be implemented to minimize impacts to wildlife and describe wildlife enhancement measures, including restoration planning measures to benefit wildlife, address noise and vibration management including Project Site specific schedule, procedures and Best Management Practices to control Construction noise emissions and vibration, in accordance with this Schedule and Schedule 4 [Design and Construction], including target noise emission levels of equipment and blasting, equipment maintenance and management, and noise and vibration monitoring requirements, including measures to manage adverse effects to wildlife species at risk and Species of Concern.

2.7 ARD/ML Material Management Plan

PE 2.7a

The Design-Builder shall develop, implement, maintain and update until the Total Completion Date the ARD/ML Material Management Plan describing the schedule, design, generic and site-specific procedures and best practices for the handling, storage utilization and/or disposal of excavated unsuitable construction materials, and including:

- (i) a summary of regulatory requirements (a list of groundwater, surface water and/or soil standards that are applicable to the disposal site);
- (ii) plans on how to avoid or minimize the effects of the Surplus Disposal Site stockpile(s) to archaeological sites and areas of high archaeological potential in accordance with requirements of this Schedule;
- (iii) site geotechnical investigation to inform Surplus Disposal Site facility design;
- (iv) evidence to demonstrate the long-term geochemical stability of the Surplus Disposal Site stockpile(s);
- (v) evidence to demonstrate that the design of the Surplus Disposal Site stockpile(s) will be geotechnically stable;
- (vi) design parameters, including, but not limited to, the following:
 - (A) geotechnical stability – factors of safety considering both static and pseudo-static conditions;
 - (B) stockpile volume capacity;
 - (C) volumes of Type A and D material and mixing ratios;
 - (D) if mixing ARD/ML rock and non-ARD/ML rock, then a step-wise calculation must be included and actions for quality control of material for confirming and/or adjusting the mixing ratio;

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- (E) natural or geosynthetic liner(s) and/or encapsulation material parameters;
 - (F) material placement schedule;
 - (G) predictions of water ingress and seepage rates;
 - (H) growing medium and vegetation cap;
 - (I) erosion control measures; and
 - (J) design assumptions including climate change considerations in the design for long term performance;
- (vii) water management measures for runoff control, water diversion structure(s), retention basin(s), water infiltration, and seepage management/prevention;
 - (viii) measures to avoid interactions with groundwater and surface water and/or measures to prevent contamination of surface water, groundwater and soil, including measures to avoid ARD/ML material mixing with other materials to be used during the Project Work;
 - (ix) measures to prevent precipitation and/or water interacting with ARD/ML material between blasting and placement in the Surplus Disposal Site stockpile(s);
 - (x) groundwater monitoring wells installed less than 50 m upgradient and downgradient of the Surplus Disposal Site stockpile(s) and maintained to accommodate their design function or replaced with equivalent wells if compromised;
 - (xi) pursuant to paragraph (x) above, measures to sample, test and report on groundwater from the groundwater monitoring wells;
 - (xii) measures for site restoration and closure;
 - (xiii) management and design considerations for wildlife occupying the site post-construction; and
 - (xiv) Design and Record Drawings; and pre-construction (baseline), operational (short-term) and post-General Project Work Defect Warranty Period (long-term) water and soil quality monitoring recommendations to confirm the efficacy of the Surplus Disposal Site stockpile(s) design and objectives.

2.8 Wildlife Exclusion Fencing System

PE 2.8a

The Design-Builder shall design and construct a wildlife exclusion fencing system (including ungulate guards, wildlife jump-outs, one-way gates, human access gates, and wildlife exclusion fencing) in accordance with this Section and DBSS 700 for the purpose of excluding large mammals from the roadway (the “**Wildlife Exclusion Fencing System**”).

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- (b) The Wildlife Exclusion Fencing System shall:
- (i) be supplied and installed on both sides of Highway 1 from the west project limit to the east project limit;
 - (ii) form an effective and contiguous exclusion system for bighorn sheep, elk, deer and other large animals typically found within the Kicking Horse Valley and be tied into existing wildlife exclusion fencing at the east and west project limits;
 - (iii) be identified on the construction drawings and showing the proposed location of the wildlife exclusion fencing, ungulate guards, wildlife jump-outs, one-way gates, human access gates and double swing gate for vehicles; and
 - (iv) be included in the environmental Design package which shall be submitted at the 50% and 100% design submissions in accordance with Section 2.8.9 [Environmental Design] of Part 3 of Schedule 4.
- (c) Field Inspections
- (i) The Design-Builder's Appropriately Qualified Professionals for wildlife fencing, avalanche and geotechnical shall organize field inspections with the Province's Representative of the proposed wildlife fencing system placement pre-construction, and of the completed fencing system. The location of one-way gates, wildlife jump-outs, vehicle and human access gates, and fencing line shall be demarcated in the field prior to the field inspection for proposed placement of the system. Non-conformities identified during inspections shall be rectified in accordance with Schedule 7 [Quality Management].
 - (ii) The Design-Builder's Appropriately Qualified Professionals shall approve and sign-off on the location, design and final work of the Wildlife Exclusion Fencing System, subject to review and acceptance by the Province's Representative.
- (d) Location
- The location of the Wildlife Exclusion Fencing System shall be designed with consideration of avalanche and debris flow mitigation to minimize potential entanglement of wildlife in mitigation structures and minimize potential maintenance due to avalanches and debris flows. The design shall be reviewed and accepted by the Design-Builder's avalanche and geotechnical engineers. If the Design-Builder chooses not to install roadside barrier, the fence must be located outside the clear zone.
- (e) Ungulate Guards
- (i) The Design-Builder shall, under the direction of the Design-Builder's Appropriately Qualified Professional, design and build a minimum of three ungulate guards of suitable width at Highway access points, in accordance with the Ungulate Guard Standard Drawings.
 - (ii) Positions of running strips shall be confirmed with the Province's Representative prior to fabrication so that running strips match wheel tracking locations on the

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approach roadways. Structure identification numbers as assigned by the Province shall be incorporated into each ungulate guard in accordance with the Bridge Standards and Procedures Manual;

- (iii) The Design-Builder shall use numeral forms made available by the Province's Representative for the imprinting of an identification number into concrete portions of the structure, and shall return any numeral forms provided by the Province to the Province's Representative in good clean condition upon completion of the finished improvements.

(f) **One Way Wildlife Jump Outs**

- (i) The Design-Builder shall design and build a minimum of four one-way wildlife jump outs using 0.75 m x 1.5 m x 0.75 m concrete blocks and 0.75 m x 0.75 m x 0.75 m concrete blocks with conforming shear keys, according to the design and specifications shown on the Wildlife Jump-out Drawing.
- (ii) The Design-Builder's Appropriately Qualified Professional shall vary the location of the wildlife jump outs to suit field conditions and shall provide guidance for the location and distribution of the jump-outs to suit field conditions.
- (iii) Foundation excavation shall be performed in accordance with DBSS 407. Suitable excavated material may be utilized for construction of the level grade approaches.
- (iv) The foundation pad (levelling pad) shall be constructed from 25 mm WGB to a minimum thickness of 300 mm compacted to at least 98% standard proctor maximum dry density. Concrete blocks shall be backfilled with SGSB in accordance with DBSS 202.25, overlaid with organic strippings and seeded in accordance with Article 9 [Landscape and Site Restoration Design Criteria] of Part 2 of Schedule 4.

(g) **One Way Gates**

- (i) Should the provision of one-way wildlife jump outs be infeasible at one or more locations, the Design-Builder shall design and build one-way gates in accordance with DBSS 700 Standard Drawings SP700-12.1 to 12.7.
- (ii) The fence shall tie-in to the one-way gates that shall be located to maximize wildlife use.
- (iii) One-way gates shall be located at approximate 300 m intervals within the Project Site. The final fence alignment and gate locations shall be determined by the Design-Builder's Appropriately Qualified Professional.

(h) **Lockable Human Gates**

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- (i) The Design-Builder shall design and build the required number of lockable human access gates in accordance with DBSS 700 Standard Drawings SP700-14.1.
 - (ii) Unless otherwise accepted by the Province, access shall be provided to allow inspection and equipment access from the highway to all points of all bridges, maintenance access roads, both ends of culverts greater than 2 m in diameter, and walls over 2 m in height, all in accordance with DBSS 700.29.
- (i) Connections with Wildlife Exclusion at Project Limits
- (i) The Design-Builder shall design and build tie-ins to existing wildlife exclusion systems.
 - (ii) For the western project limit, the Design-Builder shall replace existing fencing as needed to ensure an effective exclusion barrier to large animal access to the travelled surface of the Project.
 - (iii) For the eastern project limit, the exclusion system shall tie in and around the western Yoho Bridge abutment.
- (j) Animal Passage
- (i) Culverts shall be a minimum of 600 mm in diameter to be accessible for small and medium animals at both culvert inlets and culvert outlets and shall be designed without barriers to movement, unless otherwise acceptable to the Province. Animal passage culverts shall meet the relevant culvert requirements of Article 7 [Drainage Design Criteria] of Part 2 of Schedule 4.
 - (ii) Three clearance envelopes under Structures that are each a minimum of 4.5 m in height and 12 m in width and accessible by large mammals (such as elk) at both inlets and outlets without barriers to movement and allowing unimpeded passage under the highway (each, a “**Large Animal Passage**”) shall be provided in the following locations:
 - (A) between LKI 4.62 and LKI 5.22;
 - (B) between LKI 5.62 and LKI 5.82; and
 - (C) between LKI 6.72 and LKI 7.52.
- (k) Bridge Design shall be reviewed and approved by the Design-Builder’s Appropriately Qualified Professional with regard to wildlife access and exclusion prior to submission to the Design to the Province’s Representative in accordance with Part 3 [Design and Certification Procedure] of Schedule 4.
- (l) The Design-Builder’s Appropriately Qualified Professional shall prepare and submit a TAF documenting the environmental basis of Design of the Wildlife Exclusion Fencing System to the Province’s Representative in accordance with Part 3 [Design and Certification Procedure] of Schedule 4.

2.9 Air Emissions

Air quality in Golden, British Columbia is historically poor, therefore strict adherence to DBSS 165.16 requirements for air emissions and air quality mitigation is required.

PART 3 CONTAMINATION AND HAZARDOUS SUBSTANCES

3.1 Waiver of Site Profile

The Design-Builder waives the requirement, if any, for the Province to provide a site profile to the Design-Builder for the Project Site under the *Environmental Management Act* (British Columbia) and acknowledges that it may obtain from the Environmental Authorities site profiles for any site listed in the Site Registry at <http://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/contaminated-sites/information-about-sites>.

3.2 No Use of Hazardous Substances

- (a) The Design-Builder shall not use or permit to be used on the Project Site or any part thereof for the sale, storage, manufacture, disposal, handling, treatment, generation, use, transport, refinement, processing, production, remediation or Release of, or any other dealing with, any Hazardous Substance without the prior approval of the Province unless the Province normally conducts or permits such activities in the case of other “controlled access highways” as defined in the *Transportation Act* (British Columbia).
- (b) Approval may be granted or withheld in the Province’s discretion, and then only in compliance with all Environmental Laws.

3.3 Dealing with Hazardous Substances

The Design-Builder shall:

- (a) deal with all Hazardous Substances on the Project Site in accordance with all Environmental Laws; and
- (b) at all times comply with and cause all persons for whom the Design-Builder is responsible to comply with all Environmental Laws in respect of the Project Site and the performance of the Project Work.

3.4 Notification to Province

PE 3.4a The Design-Builder shall promptly, and in any event within 24 hours, notify the Province’s Representative of:

- (i) any Release of a Hazardous Substance or any other occurrence or condition involving Hazardous Substances at or affecting the Project Site that could cause Contamination of the Project Infrastructure, the Project Site or any other lands in their vicinity or subject the Design-Builder, the Province or BCTFA to any fines, penalties, orders, investigations or other proceedings under any Environmental Laws, together with full particulars of such Release, occurrence or condition

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including the location, time, agencies involved, damages suffered or caused and remedial action taken;

- (ii) all charges, orders, investigations or notices of violation or non-compliance issued against the Design-Builder or relating to the performance of the Project Work or the Project Site under any Environmental Laws; and
- (iii) any notice, claim, action or other proceeding by any person against the Design-Builder or relating to the performance of the Project Work or the Project Site concerning the Release or alleged Release of any Hazardous Substance.

3.5 Notification to Environmental Authorities

PE 3.5a The Design-Builder shall, as required pursuant to and in accordance with Environmental Laws, notify the relevant Environmental Authorities of any Release of any Hazardous Substance at or from the Project Site.

Failure to provide such notice means the Province may, but will not be obliged to, notify the relevant Environmental Authorities of any Release of any Hazardous Substance.

3.6 Removal and Remediation

- (a) The Design-Builder shall:
 - (i) promptly at any time, if requested by the Province or by any other Environmental Authority pursuant to Environmental Laws; and
 - (ii) in any event upon the expiry or earlier termination of this Agreement, remove from the Project Site or remediate or manage any and all Hazardous Substances to the numerical or risk-based standards required or permitted by Environmental Laws.
- (b) The Design-Builder shall remediate by removal any Contamination of any lands in the vicinity of the Project Site resulting from Hazardous Substances brought onto, used at or Released at or from the Project Site or by the Design-Builder or any person for whom the Design-Builder is responsible.
- (c) Upon encountering any Contamination on the Project Site, the Design-Builder shall prepare and submit to the Province's Representative pursuant to the Consent Procedure a plan for the remediation, removal or management of such Contamination, if such remediation, removal or management is required in accordance with this Agreement and, following the acceptance of such plan by the Province, or sooner if required by Environmental Laws, the Design-Builder shall commence and complete any required remedial, removal or management work in accordance with such plan and all Environmental Laws to the extent applicable, provide the Province's Representative with full information with respect to any such remedial, removal or management work, and comply with the reasonable requirements of the Province with respect to any such remedial, removal or management work.

3.7 Hazardous Substances Brought onto Project Site

Notwithstanding any Laws or any other provision in this Agreement to the contrary, all Hazardous Substances and materials, goods or other items containing Hazardous Substances brought onto and used at or Released at or from the Project Site by the Design-Builder or any person for whom the Design-Builder is in law responsible shall be and remain the sole and exclusive property of the Design-Builder and shall not become the property of the Province or BCTFA, notwithstanding their incorporation into or affixation to the Project Site or the Project Work and notwithstanding any termination or expiration of the Term.

**APPENDIX A
TABLE OF COMMITMENTS**

1. All commitments identified in this Table of Commitments shall be interpreted to mean that the Design-Builder shall be obliged to perform and carry out the works and activities and comply with the matters described in the relevant condition in their entirety.
2. The designation of “Minor”, “Moderate”, “Major”, or “Severe” in the column entitled “Performance Mechanism Index” in this Appendix A indicates, in respect of the condition corresponding to such designation in this Appendix A, the basis on which NCE Points and Default Points will be assigned in accordance with Part 5 [NCE Points and Default Points] of Schedule 10 to this Agreement.
3. All defined terms used in the Table of Commitments shall have the meanings given in Schedule 1 [Definitions and Interpretation] to this Agreement.

Ref	Commitment	Performance Mechanism Index
1.0	RESPONSIBLE ENVIRONMENTAL MANAGEMENT	
1.1	<p>Develop, implement and maintain a Construction Environmental Management Plan (CEMP) for the Project to demonstrate how the design and construction of the Project will:</p> <ul style="list-style-type: none"> • Be carried out to avoid or mitigate negative impacts; • Be carried out in an environmentally responsible manner, in accordance with DBSS 165 [Protection of the Environment]¹; • Employ Best Management Practices (BMPs²); and • Comply with federal and provincial legislation, permits, approvals and authorizations and Project requirements. <p>As directed by the Province, the draft CEMP shall be provided to Indigenous groups for review and their comments considered in the next revision of the CEMP.</p>	Severe
1.2	<p>Pursuant to DBSS 165.2, the Design-Builder’s Environmental Manager shall be an Appropriately Qualified Professional³ (AQP) with at least 10 years of experience on Projects of similar scale and complexity. In addition to the requirements of Part 2, Article 2.1 of the DBA (Vol 2), the Design-Builder’s Environmental Manager shall be responsible for:</p> <ol style="list-style-type: none"> 1. Developing, maintaining and providing compliance oversight of the Construction Environmental Monitoring Plan, Environmental Procedures, and the Design-Builder’s Environmental Obligations of the Project requirements, in accordance with DBSS 165; 	Severe

¹ Should there be a conflict between the DBSS 165 and these commitments, the more stringent environmental protection measure shall apply.

² Those that are technically and economically feasible and as defined specifically in other sections of this Table of Commitments.

³ As defined in DBSS 165.

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	<ol style="list-style-type: none"> 2. Managing all environmental issues associated with the Project on a day-to-day basis, including overseeing the environmental monitoring program; 3. Being available at all times during the Term of the contract to respond to environmental issues; 4. Providing direction to the design and implementation of any mitigation that may be required as a condition of the environmental permits received or with plans and Environmental Procedures; 5. Facilitating and recording environmental management meetings to provide regular updates for Ministry staff; 6. Establishing and maintaining positive working relationships with environmental regulatory agencies and interested parties, as directed by the Province’s Representative; 7. Managing the restoration and revegetation of those portions of the existing highway that have been disturbed as a result of the Project that will be discontinued for road purposes; 8. Developing and implementing the Surplus Disposal Site in collaboration with the Design-Builder’s geotechnical and hydrogeology AQPs and assuring compliance with the environmental design criteria for disposal of potentially acid-generating (PAG) and non-PAG material in accordance with Project Requirements. 9. Managing the restoration and revegetation of disposal sites to provide wildlife habitat for ungulates and other wildlife species in consultation with First Nations and interested parties; 10. Implementing a wood-waste management system to recycle non-merchantable vegetation materials for use as: <ol style="list-style-type: none"> a. a compost medium for revegetation planting; and b. Indigenous ceremonial or other purposes. 11. Submitting weekly environmental monitoring reports for distribution to the Ministry; in a format that is acceptable to the Province’s Representative and that reports weekly on all aspects of Project Work where an Environmental Procedure is required; report submittal to the Province’s Representative shall be no more than 7 days beyond the period for which monitoring occurred. 12. Monitoring and reporting environmental and non-compliance issues during construction and preparing Environmental Incident Reports for the Province’s Representative review; 13. Monitoring and mitigating potential wildlife impacts during construction in accordance with Sections 11, 12, and 13 of this Table of Commitments; 14. Monitoring and mitigating potential invasive species impacts during construction; and 15. Participating in stakeholder and community meetings at the request of the Ministry as per the Agreement. 	

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1.3	<p>Prepare and implement a CEMP and Environmental Procedures Plan (EPP), for the Project prior to the start of site preparation or ground-disturbing Project Work. These shall be the primary documents for protection of the environment during the Work. Submission, approval and acceptance of the CEMP and EPP shall be in accordance with the Project Review and Consent Procedures. The Design-Builder shall comply with the CEMP that has been accepted by the Ministry for the Work. The CEMP shall be prepared in accordance with Project Requirements. The EPP shall outline the Environmental Procedures that are anticipated for the Project, in accordance with DBSS 165. The CEMP shall comply with DBSS 165 except as noted in the Agreement and shall include a construction schedule that considers Environmental Timing Windows and includes the following sub-component plans:</p> <ul style="list-style-type: none"> • Air Quality and Dust Control Plan; • Archaeology and Heritage Resource Management Plan (including blast management); • Contaminated Sites Management Plan; • Construction and Hazardous Waste Management and Disposal Plan; • Cultural Monitoring Plan (see Commitment 2.6) • Decommissioning and Disposal Plan (including ARD / ML material management); • Environmental Awareness and Education Plan (including environmental training); • Environmental Monitoring Plan; • Erosion and Sediment Control Plan (including clearing and grubbing and surface water quality management); • Environmental Incident Reporting Plan; • Spill Management and Emergency Response Plan; • Vegetation Management and Site Restoration Plan (including management of invasive species); • Wildlife and Habitat Management Plan (including blast and vibration management). 	Severe
1.4	<p>Roles and responsibilities for environmental management shall be as described in DBSS 165, unless otherwise stated herein. To effectively manage Project Work in accordance with DBSS 165.01.02 and the CEMP, the Design-Builder shall retain AQPs for specialized Project Work.</p>	Severe
1.5	<p>Obtain required statutory permits, approvals, authorizations, and consents from the authority having jurisdiction for the performance of Project Work, before proceeding with activities or construction that requires such permits. Comply with applicable bylaws of the Town of Golden for Project Work within the Town of Golden.</p>	Major
1.6	<p>Adhere to the terms and conditions of the CEMP; the DBSS including DBSS 165 [Protection of the Environment]; and any other applicable permits, licenses and approvals.</p>	Severe

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1.7	Manage contamination encountered during Project Work, regardless of the current assessment of potential contamination, in accordance with applicable regulatory requirements.	Severe
1.8	Manage environmental issues associated with Project Work and comply with and take into account the commitments, responsibilities and information set forth in the Agreement, the environmental reference documents, necessary permits and approvals, and all requirements relating to the environmental matters set out in this document.	Severe
1.9	Comply with all applicable Environmental Laws, permits, and relevant requirements under the Agreement.	Major
1.10	Perform the Design-Builder’s Environmental Obligations in accordance with best practices and comply with, at its own cost, the provisions of best practices and shall not do or omit or permit to be done or omit anything which is inconsistent with such best practices.	Moderate
1.11	Provide the Ministry with an updated Environmental Summary Report (ESR) and discipline-specific memos if, in the Ministry’s opinion, the Project’s design and consequent environmental impacts differ substantially from those described in the original ESR, which is based on the preliminary design. The Province’s Representative will determine if environmental effects associated with design changes are acceptable. If determined to be unacceptable, the Design-Builder shall, at its own risk and no additional cost to the Province, modify the design until environmental effects associated with the change are deemed to be acceptable by the Province’s Representative.	Severe
1.12	During Project Work, greenhouse gas emissions shall be minimized by sourcing materials locally, where possible; tarping aggregates to minimize energy required for kiln drying; limiting stoppages from traffic management and using anti-idling signage during traffic control to reduce traffic emissions, in accordance with the Agreement.	Moderate
1.13	Safeguard sensitive environmental features during blast planning and implementation in the vicinity of Restricted Zones – Archaeology Sites as shown on the Environmental Constraint Drawings, and in the Environmentally Sensitive Area around the watercourse and water license outflow at Dart Creek. Blasting methods shall be managed to prevent flyrock from entering Restricted Zones – Archaeology Sites and Environmentally Sensitive Areas” (e.g., using smaller charges, staggered blasts).	Moderate
1.14	Conduct Project Work in accordance with the constraints identified for Environmentally Sensitive Areas, as defined in DBSS 165.01.02 and as shown in the Environmental Constraint Drawings.	Moderate
1.15	Conduct Project Work in accordance to the constraints identified for Restricted Zones – Archaeology Sites, as shown on the Environmental Constraint Drawings and the Project Agreement.	Severe
1.16	Fence Restricted Zones – Archaeology Sites and Environmentally Sensitive Areas in work zones of the Project Site in advance of Project Work (e.g., with snow fencing) and maintain such fencing during Project Work. Disturbances beyond the fenced limits are prohibited in Restricted Zones – Archaeology Sites. The Design-Builder shall ensure that personnel and machinery do not enter Restricted Zones – Archaeology Sites and Environmentally Sensitive Areas are shown on the Environmental Constraint Drawings.	Minor

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1.17	Follow the design criteria outlined in the Manual of Aesthetic Design Practice and the Landscape Policy and Design Standards that form the landscape and site restoration design criteria for the Project.	Minor
2.0	MONITORING	
2.1	Ensure that environmental monitoring and reporting for the Project is conducted, in accordance with the Project Agreement, DBSS 165 and other regulatory permits, approvals and authorizations as applicable.	Severe
2.2	Incorporate performance objectives and a monitoring component into all applicable sub-plans of the CEMP developed for the construction phase of the Project.	Moderate
2.3	Outline in each of the sub-plans of the CEMP: <ul style="list-style-type: none"> • Rationale for monitoring; • Measurable performance objectives; • Parameters to be monitored; • Monitoring program details; and • Adaptive management measures including required follow-up actions. 	Moderate
2.4	Undertake environmental monitoring activities in accordance with the CEMP and the Agreement, including: <ul style="list-style-type: none"> • Monitoring, evaluating, and reporting in accordance with the Review and Consent procedures on Project Work and the effectiveness of environmental management and mitigation measures; • Taking on-site action, including Stop Work Orders if necessary, to avoid/respond to potential environmental effects. 	Severe
2.5	Implement an environmental quality management program through monitoring, auditing and reporting activities for the Project in accordance with the Project Agreement and the terms and conditions of the regulatory permits, approvals and authorizations.	Major
2.6	Implement a Cultural Monitoring Plan with the Identified Indigenous Groups. Cultural monitoring will be required for all Project disturbance of areas: <ul style="list-style-type: none"> • that have not been previously disturbed (i.e., natural ground surfaces); • identified in the Cultural/ Monitoring Plan; and • Environmentally Sensitive Areas shown on the Environmental Constraint Drawings. 	Major
3.0	INCIDENT MANAGEMENT	
3.1	Respond to environmental incidents, including spill incidents in accordance with the Spill Management and Emergency Response Plan to minimize effects and risks to the general public, on-site workers and the environment.	Severe

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3.2	Include protocols, consistent with the BC Spill Reporting Regulation, for reporting spills to appropriate emergency response authorities, including: <ul style="list-style-type: none"> • The Provincial Emergency Program, in the case of any spills of reportable deleterious substances into waters frequented by fish, regardless of the amount of the spill; and • To adjacent property owners and occupiers, including local government, where utilities cross the highway and there is a potential for an incident to extend beyond the Project boundaries. 	Major
3.3	Train all field Project personnel regarding implementation of the CEMP, including the Construction and Hazardous Waste Management and Spill Management and Emergency Response Plans.	Minor
3.4	Incorporate relevant municipal and local Ministry contacts into the emergency contacts for the Construction and Hazardous Waste Management and Spill Management and Emergency Response Plans.	Minor
3.5	Follow applicable DBSS 165 and Canadian Council of Ministers of Environment codes and procedures if temporary fuel storage/fueling facilities are required during construction. Where there is a difference in standards, the most stringent measure for environmental protection will take precedence.	Moderate
4.0	COMMUNITY ENGAGEMENT	
4.1	Support the Ministry in consultation and engagement with local government, stakeholders, Identified Indigenous Groups and the public during all stages of Project development including as follows: <ul style="list-style-type: none"> • Conduct community open houses and information sessions to obtain input on design refinements • Public information updates on the progress of construction, the schedule, and upcoming milestones • Consultation with the Town of Golden • Consultation and engagement with the Identified Indigenous Groups • Discussion of potential Project economic opportunities with Identified Indigenous Groups. • Using input from Identified Indigenous Groups to identify appropriate measures to mitigate potential Project-related impacts on their previously identified interests in relation to cultural, archaeological and all environmental matters, including habitat. 	Major
4.2	Provide updated media information materials, as part of the Project commitment to making project information available to the public.	Severe
4.3	Track Project enquiries and responses and provide to the Province.	Moderate

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5.0	DRAINAGE AND STORMWATER MANAGEMENT	
5.1	Ensure that the design, construction and maintenance of stormwater management infrastructure for the Project takes an integrated approach to stormwater management and contributes to maintaining, or improving, drainage, flow rates and water quality conditions downstream of the Project corridor.	Moderate
5.2	Design and construct stormwater management infrastructure to meet the performance objectives outlined in the Project Agreement.	Moderate
5.3	Provide final designs for stormwater management infrastructure to the Province’s Representative and regulatory agencies in accordance with Environmental Laws.	Severe
5.4	Culverts on the Highway 1 alignment shall be a minimum of 600 mm in diameter to be accessible for small and medium animals at both culvert inlets and culvert outlets and shall be designed without barriers to movement, unless otherwise acceptable to the Ministry.	Moderate
6.0	AIR QUALITY	
6.1	<p>The Ministry is taking initiatives to reduce greenhouse gas (GHG) emissions from the Project and has identified reduced idling of construction vehicles and equipment as a GHG reduction strategy. In accordance with DBSS 165.16.02, the Design-Builder’s CEMP Air Quality and Dust Control Plan shall outline procedures that will be used by the Design-Builder for idle reduction.</p> <p>The Design-Builder is encouraged to:</p> <ul style="list-style-type: none"> • Develop innovative and practical methods to influence workers to participate in this program; • Utilize idle reduction technologies where appropriate and applicable. Some examples are available at: http://www.epa.gov/diesel/. 	Minor

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6.2	<p>Develop and implement an Air Quality and Dust Control Plan that complies with the Project Agreement and DBSS 165.16.03 for Project Work and that:</p> <ul style="list-style-type: none"> • Describes the application and handling of dust palliatives, and other dust control techniques that may be required during Project Work, including but not limited to gravel operations, drilling, and blasting; • Includes an air quality monitoring program with thresholds, which if exceeded, will trigger the implementation of additional mitigation and corrective measures; • Commits to the best available, known and effective, measures for mitigating construction related air emissions, including diesel particulate matter (PM), as identified by relevant regulatory agencies. This would include, where practical, the use of diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs) on all on-road project equipment in combination with use of a B20 biodiesel blend; • Commit to fugitive dust minimization strategies (e.g. wheel wash and sweeping), and dust suppression techniques (e.g., watering) on roads; and • Identify site specific considerations, where applicable, such as proximity to sensitive environmental or human receptors. 	Severe
6.3	Burning as a means for disposing of land clearing debris will not be allowed.	Major
7.0	TRAFFIC MANAGEMENT	
7.1	Prepare and implement a Traffic Management Plan to address construction-related traffic conditions for Project Work in accordance with the Agreement and that considers access requirements for emergency response, recreational businesses, and community needs.	Major
7.2	<p>Manage potential access to emergency response services by:</p> <ul style="list-style-type: none"> • Ensuring emergency response plans (including a Spill Response Management and Emergency Response Plan) are in place during the construction phase of the Project, and updated annually, at a minimum; • Consulting first responders and local fire departments in Traffic Management Plan development to ensure adequate access. 	Major
8.0	NOISE AND VIBRATION	
8.1	Ensure that potential noise impacts associated with Project Work are addressed with avoidance and mitigation measures.	Major
8.2	<p>Prepare and implement noise and vibration management plan for Project Work, as described in the CEMP:</p> <ul style="list-style-type: none"> • Include specific mitigation measures, including those to address potential effects to Species of Concern • Include a noise complaint protocol to respond in a timely manner to concerns and complaints raised by residents and take reasonable actions to reduce the Project-related construction noise in question. 	Severe

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8.3	Comply with all of the applicable bylaws of the Town of Golden, for work within the Town of Golden, including those related to noise disturbance.	Moderate
8.4	Further to DBSS 204.03.04, blast vibration monitoring shall be conducted if working in proximity to Species of Concern.	Severe
9.0	CONTAMINATED SITES	
9.1	Ensure that potential site contamination is investigated and managed in compliance with the Contaminated Sites Regulation (BC <i>Environmental Management Act</i>), during all stages of project development including property acquisition, design and construction.	Moderate
9.2	Assess all Tier 1 and Tier 2 properties required for the ROW for potential contamination prior to construction and take steps, as required, to investigate and address site contamination that may exist.	Moderate
9.3	Manage any contamination encountered and undertake risk assessment and remediation activities, as required, in accordance with Environmental Laws and the Agreement.	Major
9.4	Should contaminated groundwater be identified within the Project Site, include measures to control/mitigate the potential for impacts to surface water in future stormwater design. Notify the Province’s Representative and the MOE of potential migration of contaminants.	Major
9.5	As part of the CEMP’s Contaminated Sites Management Plan, develop and implement a protocol for identifying and managing contaminated and potentially contaminated materials during Project Work.	Major
10.0	WATER QUALITY	
10.1	Ensure that Project Work is conducted in compliance with the Design-Builder’s Environmental Obligations for protecting water quality.	Major
10.2	The Design Builder shall meet the performance objectives for the Erosion and Sediment Control Plan as outlined in the CEMP. Performance objectives include but are not limited to minimizing soil loss and erosion across landscapes and into watercourses, and protecting water quality (e.g., due to siltation and deleterious substances) in accordance with federal and provincial guidelines and objectives for water quality.	Major
10.3	Comply with the <i>Water Sustainability Act</i> (British Columbia) for protection of licensed water and provide equal or better access (compared to baseline) to the licensed water source at Dart Creek following construction..	Major
10.4	The drainage system shall be designed in accordance with Project requirements for stormwater treatment before discharging to the receiving aquatic environment.	Minor

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10.5	Sample water from potentially impacted licensed water sources to assess potential adverse effects to water quality prior and annually during Project Work or as specified by the Province’s Representative. Provide sampling water quality data to the Province’s Representative within 1 month of sampling events.						Moderate										
10.6	<p>The Design Builder’s Erosion and Sediment Control Plan shall, at a minimum:</p> <ul style="list-style-type: none"> • Identify requirements for additional water quality monitoring prior to and during construction to ensure preventative and mitigation measures can be taken as appropriate, to adhere to performance objectives for water quality; • Identify potential water quality contaminants of concern generated by construction activities and associated preventative and mitigative measures; • Manage disposal areas to avoid adverse impacts to surface or ground water quality due to disposal of surplus materials in the Dart Creek valley. 						Moderate										
10.7	Environmental monitoring reports shall include water sampling data where water from Project Work, including private quarries, may enter a fish bearing stream, licensed water source or other watercourse.						Moderate										
11.0	WILDLIFE																
11.1	Project Work shall avoid impacts to wildlife, particularly Species of Concern, to the extent that is reasonably and technically feasible as determined by the Province’s Representative. Species of Concern are defined as wildlife species that are of heightened concern for regulators, stakeholders, or the public, as identified by federal or provincial conservation status rankings.						Moderate										
11.2	Prepare and implement a Wildlife and Habitat Management Plan and associated Environmental Procedures to avoid and, where necessary and mitigate potential impacts to wildlife and wildlife habitat and that identifies protocols for the survey and salvage of Species of Concern as appropriate and required. Environmental Timing Windows for the management of Species of Concern are as follows:						Severe										
	<table border="1"> <thead> <tr> <th>Wildlife Species of Concern</th> <th>Constraint for Blasting*</th> <th>Constraint for Clearing/Rock Scaling*</th> <th>Constraint for Project Helicopter Overflights</th> <th>Environmental Timing Window (Least Risk)</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>Bank Swallow</td> <td>At the western project limit, the following threshold shall not be exceeded outside the Environmental Timing Window: sound concussion 140 dB, shock wave 1.5 p.s.i. and peak particle velocity (ppv) 20 mm/s.</td> <td>n/a</td> <td>N/A</td> <td>Aug 5 – May 14</td> <td>Nesting in cliffs upslope ~250m west of western project limit</td> </tr> </tbody> </table>	Wildlife Species of Concern	Constraint for Blasting*	Constraint for Clearing/Rock Scaling*	Constraint for Project Helicopter Overflights	Environmental Timing Window (Least Risk)		Location	Bank Swallow	At the western project limit, the following threshold shall not be exceeded outside the Environmental Timing Window: sound concussion 140 dB, shock wave 1.5 p.s.i. and peak particle velocity (ppv) 20 mm/s.	n/a	N/A	Aug 5 – May 14	Nesting in cliffs upslope ~250m west of western project limit			
Wildlife Species of Concern	Constraint for Blasting*	Constraint for Clearing/Rock Scaling*	Constraint for Project Helicopter Overflights	Environmental Timing Window (Least Risk)	Location												
Bank Swallow	At the western project limit, the following threshold shall not be exceeded outside the Environmental Timing Window: sound concussion 140 dB, shock wave 1.5 p.s.i. and peak particle velocity (ppv) 20 mm/s.	n/a	N/A	Aug 5 – May 14	Nesting in cliffs upslope ~250m west of western project limit												

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	Bighorn sheep (lambing)	At the boundary of lambing constraint polygons closest to blasting (see Environmental Constraint Drawings), the following thresholds shall not be exceeded outside the Environmental Timing Window: sound concussion 100 dB.	Outside the Environmental Timing Window, maintain a 500 m buffer zone for ground activities associated with clearing/rock scaling when sheep are present in the lambing constraint polygon.	Outside the Environmental Timing Window, avoid helicopter overflights lower than 400m above ground elevation when sheep are present in the lambing constraint polygon	Jul 16 – Apr 30	Within Project Site downslope of LKI 5.12 to LKI 6.22	
	Mountain goats (kidding)	At the northern project limit closest to goat constraint polygons, the following thresholds shall not be exceeded outside the Environmental Timing Window: sound concussion 100 dB	Outside the Environmental Timing Window, maintain a 500 m buffer zone for ground activities associated with clearing/rock scaling when goats are present in the kidding constraint polygon.	Outside the Environmental Timing Window, avoid helicopter overflights lower than 400m above ground elevation when goats are present in the kidding constraint polygon	Jul 16 – Apr 30	Outside Project Site upslope of LKI 6.82 to LKI 8.12	

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	Migratory Birds (breeding)	See Commitment 11.3	Clearing outside of the Environmental Timing Window only after pre-clearing breeding bird surveys and appropriate buffers established around active nests.	N/A	Aug 24 – Apr 11	Within the Project Site	
	Raptors (breeding)	See Commitment 11.3	Clearing outside of the Environmental Timing Window only after pre-clearing raptor nest surveys and appropriate buffers established around protected nests.	N/A	Aug 2 – Feb 28	Within project limits and setback buffers recommended by AQP	

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	Little Brown Bats and Northern Myotis (summer roosting) (winter roosting)	From the boundary of the bat roost polygon, the following thresholds shall not be exceeded outside of the Environmental Timing Window: sound concussion 150 dB, shock wave 1.5 p.s.i. and ppv 15 mm/s.	Outside of the Environmental Timing Window: - avoid removal of rock within high suitability roosting habitat (see Environmental Constraint Drawings) and - maintain 300 m buffer for ground activities. As per conditions of Permits.	N/A	Sept 1 – Oct 14 Apr 16 – May 14	Cliffs in and upslope of Project Site 5.12 to LKI 5.62	
*AQP to establish buffer zone outside of which disturbance behaviours unlikely to occur.							
11.3	In accordance with the federal <i>Migratory Birds Convention Act</i> and the provincial <i>Wildlife Act</i> , to minimize potential impacts to nesting birds, the Design-Builder shall not clear vegetation or remove original rock faces outside the Environmental Timing Window (see Commitment 11.2). If clearing or rock face removal is required outside the Environmental Timing Window, it shall only proceed following implementation of a nest survey and protection protocol and if a nest survey confirms that nesting birds will not be harmed. Nest surveys shall be conducted according to a protocol detailed in the CEMP or an Environmental Procedure and shall include consideration of crepuscular species such as nighthawks and swifts. Environmental Procedures shall be prepared for activities that do not meet the constraints and ETWs in Commitment 11.2.						Severe
11.4	In accordance with the federal <i>Species at Risk Act (SARA)</i> , to minimize potential impacts to nesting bank swallows or little brown myotis, blasting or other Project activities that could affect active nests/roosting, unless the Design-Builder's AQP has developed Environmental Procedures to avoid such impacts or otherwise confirms in writing that impacts to these species will be avoided.						Severe

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11.5	<p>Should Project include clearing of vegetation outside of the Environmental Timing Windows for bats or birds, minimum requirements for CEMP protocols or Environmental Procedures for pre-construction bird nest surveys shall include but not necessarily be limited to the following:</p> <ul style="list-style-type: none"> • Sign-off by the AQP • Conduct of pre-construction nest surveys for raptors, or any listed species nest and roost tree surveys, consistent with applicable BMPs, to determine presence of active/inactive raptor nests in the corridor; • Identified and buffer measures and applicable timing restrictions for active nests; • Procedure for determining whether a nest has become inactive. 	Moderate
11.6	<p>The Design-Builder’s AQP shall review blasting plans for Project Work outside of Environmental Timing Windows and verify that the proposed blast plan meets Design Builder’s Environmental Obligations for avoidance of significant adverse effects to Species of Concern and their habitat.</p>	Minor
11.7	<p>Further to DBSS 204.01, rock cut Project Work shall be managed to avoid effects to Species of Concern outside of Environmental Timing Windows as documented through protocols in the CEMP or Environmental Procedures.</p>	Moderate
11.8	<p>Culverts shall be designed to meet requirements in Commitment 5.4.</p>	Moderate
11.9	<p>Large Animal Passage is defined as a clearance envelope under Structures that is a minimum of 4.5 m in height, 12 m in width and is accessible by large mammals (e.g., elk) under the Structure. Three Large Animal Passages allowing unimpeded passage under the highway shall be provided in the following locations:</p> <ul style="list-style-type: none"> • Between LKI 4.62 and LKI 5.22Sta104+700 and Sta105+000; • Between LKI 5.62 and LKI 5.82Sta105+500 and Sta105+750; and • Between LKI 6.72 and LKI 7.52Sta106+600 and Sta107+300. 	Major
11.10	<p>Bridge design shall be reviewed and approved by the Design-Builder’s AQP with regard to wildlife passage prior to submission to the Ministry.</p>	Moderate

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11.11	<p>Design and construct the Wildlife Exclusion Fencing System (including ungulate guards, wildlife jump-outs, one-way gates, human access gates, and wildlife exclusion fencing) in accordance with the Project Agreement and DBSS 700.</p> <ul style="list-style-type: none"> • The Wildlife Exclusion Fencing System shall be supplied and installed on both sides of the TransCanada Highway. <p>The Wildlife Exclusion Fencing System shall form an effective and contiguous exclusion system for bighorn sheep, elk, deer and other large mammals typically found in the Project area and shall be tied into existing wildlife exclusion fencing at the west project limit and Yoho Bridge in the east.</p> <ul style="list-style-type: none"> • Relevant construction drawings shall include all required detail for wildlife exclusion fencing, ungulate guards, wildlife jump-outs, one-way gates, human access gates and double swing gate for vehicles. • Design and build a minimum of three (3) ungulate guards of suitable width at Highway access points. • Further to DBSS 700, the Design-Builder shall design and build a minimum of four (4) one-way wildlife jump outs in accordance with the Agreement. • The Design-Builder's AQPs for wildlife fencing, avalanche and geotechnical shall verify design and construction compliance for the Wildlife Exclusion Fencing System. 	Major
11.12	<p>Use data collected by Golden and District Rod and Gun Club and through the Ministry- administered Wildlife Accident Reporting System and the Concessionaire's wildlife-vehicle collision records to monitor direct effects on wildlife and manage potential effects during Project Work.</p>	Minor
11.13	<p>Identify the location of sensitive wildlife habitats and other Environmentally Sensitive Areas, including but not limited to habitat for Species of Concern, on detailed design and construction drawings and ensure compliance during Project Work, to avoid or minimize potential effects to these areas.</p>	Moderate
12.0	VEGETATION	
12.1	<p>Ensure that Project Work avoids where practical and technically feasible, impacts to vegetation. This includes adherence to provincial guidance for retention of wildlife trees https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/conservation-habitat-management/wildlife-conservation/wildlife-tree-committee/wt-guidance-05-2006.pdf.</p>	Moderate
12.2	<p>Further to Commitment 11.13, identify red and blue listed plant communities identified as Environmentally Sensitive Areas on Environmental Constraint Drawings and during Project Work.</p>	Moderate
12.3	<p>Prepare and implement a Vegetation Management and Site Restoration Plan in accordance with the Agreement for slopes above and below the new Highway 1 corridor. This Plan shall include site restoration drawings and specifications for:</p> <ul style="list-style-type: none"> • Temporary accesses and work sites disturbed by Project Work and no longer required for operation of Project. • Disposal areas used by the Project in the Dart Creek watershed. 	Major

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12.4	Conserve existing vegetation by preserving native trees and understory plants in areas outside the actual roadwork footprint that do not present safety concerns or affect infrastructure integrity.	Moderate
12.5	Remnants of old road surfaces or other structures that are not retained as part of the Finished Improvements shall be removed, and suitably prepared and improved in accordance with the Agreement. Such areas shall be scarified, finish graded, dressed with 100 mm of soil and soil amendments and planted as per the Agreement.	Moderate
12.6	Project retaining and abutment walls and hardscape surfacing in areas of high visibility and aesthetics are opportunities for public art. As required by the Agreement, the Design-Builder shall incorporate design treatments that are visually appealing and offer surface texturing, patterning, and/or relief suitable for the situation.	Moderate
12.7	<p>The Vegetation Management and Site Restoration Plan shall describe basic site restoration treatments as required by the Agreement and that:</p> <ul style="list-style-type: none"> • provides self-sustaining and attractive vegetative ground cover restoration of disturbed land, • revegetates existing soils in these areas with grass, ground covers and other vegetation, • minimizes surface erosion, the spread of invasive and noxious weeds, and maintenance requirements, and • consists primarily of grading, seeding and planting of existing soils in all disturbed areas outside of the Wildlife Exclusion Fencing System, that are greater than 5 m² in size, slopes less than 1V:1.25H (80% slope); and all decommissioned laydown areas. 	Moderate
12.8	Landscape design drawings shall be prepared by the Design Builder’s AQP and included as part of the Vegetation Management and Site Restoration Plan in accordance with the Agreement.	Moderate
12.9	<p>Limber Pine shall be protected and retained within the Project Site as shown on the Environmental Constraint Drawings. Where Limber Pines must be removed, the Vegetation Management and Site Restoration Plan shall specify one of the two following options:</p> <ul style="list-style-type: none"> • Limber Pine cones shall be collected for, reseeding/propagated for replanting in accordance with the Agreement; • Limber Pine seedlings shall be sourced as per direction from the Province’s Representative. 	Moderate
12.10	<p>Site restoration that meets objectives for wildlife habitat shall be designed, implemented and monitored, in accordance with DBSS 754 and the Agreement for:</p> <ol style="list-style-type: none"> 1. Dart Creek Disposal Area 2. Approaches to areas identified for Large Animal Passage 	Moderate
12.11	Disposal sites shall be covered with organic stripping material and a minimum depth of 100 mm of topsoil and seeded in accordance with the Agreement.	Moderate

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12.12	<p>As directed by the Ministry, unmerchantable wood¹, wood debris and other organic materials derived from clearing and grubbing operations should be managed as follows:</p> <ul style="list-style-type: none"> • Where it is safe to do so, make these materials available to First Nations to use for firewood and cultural purposes; • Remaining wood shall be recycled on-site by processing it into a compost blanket grade of compost in accordance with the Agreement. 	Major
12.13	<p>Develop and implement invasive species management as part of the Vegetation Management and Site Restoration Plan in accordance with the Agreement to minimize the spread of invasive species due to Project Work.</p>	Moderate
12.14	<p>Post-construction effectiveness monitoring of the planted vegetation will be required annually during the Warranty Period and is to be reported on to the Ministry Representative in December of each year during the Warranty Period. Effectiveness monitoring shall include:</p> <ol style="list-style-type: none"> 1. Estimated percent survival for planted vegetation using standard vegetation assessment methods; 2. Estimation of native and invasive species cover using Provincial standard vegetation mapping methods 	Moderate
12.15	<p>Planted vegetation survival must be greater than 80% for all plantings at the end of the Warranty Period. If this survival target is not reached the Design Builder shall implement additional measures to meet this target, as approved by the Province’s Representative.</p>	Major
13.0	<p>SPECIES OF CONCERN</p>	
13.1	<p>Ensure that Project Work is completed in accordance with Environmental Laws and that all reasonable measures are taken to avoid or minimize effects of the Project on SARA-listed species and other Species of Concern. Mitigation and monitoring for Species of Concern shall be undertaken consistent with applicable SARA recovery strategies and action plans and the Agreement.</p>	Moderate
14.0	<p>ARCHAEOLOGY</p>	
14.1	<p>Ensure compliance with the Archaeological and Heritage Resource Management Plan in accordance with the Agreement, provided that the Project Archaeologist shall be responsible for carrying out all archaeological work on the Project Lands (but not including, for greater certainty, any archaeological work on any Additional Lands) set out in the Province’s workplan under section 7.1 of the Archaeological and Heritage Resource Management Plan in 2020 and 2021 (the “Province Archaeological Work”) (and the Province shall be responsible for all costs of such Province Archaeological Work), and the Design-Builder shall be responsible for any other archaeological work thereunder.</p>	Moderate
14.2	<p>Support the Ministry and the Project Archaeologist with participating First Nations who have identified related interests regarding investigation of unsurveyed areas within the Project area, protection of any archaeological sites that may be identified and compliance with mitigation measures consistent with the BC Archaeological Impact Assessment Guidelines.</p>	Major

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14.3	Ensure compliance with the Archaeological Chance Find Procedure (CFP) in accordance with the Agreement and ensure that the Province’s Representative has current contact information for identified personnel.	Moderate
14.4	Support the Project Archaeologist in assisting with the participation of First Nations in specified archaeological work that is to occur in the Project Site within their respective asserted traditional territories.	Major
15.0	RAIL	
15.1	Avoid or minimize potential impacts from Project Work and activities to rail corridors.	Severe
15.2	Notify Transport Canada of Project Work as required under the <i>Notice of Railway Works Regulations</i> . Notify the public and affected stakeholders in accordance with the <i>Railway Safety Act</i> .	Major
16.0	DISPOSAL AREAS	
16.1	Surplus Material Disposal Sites are to be used for disposal of surplus excavated earthwork material, or excavated earthwork material deemed not suitable for embankment construction and areas available for disposal are shown on the Environmental Constraint Drawings.	Moderate
16.2	Material deposited in the Surplus Disposal Site shall meet requirements of the Agreement, including requirements for slope stability and measures to address the potential for metal leaching and potential for acid rock drainage.	Major
16.3	Prepare a Decommissioning and Disposal Plan for the Surplus Disposal Site, taking into consideration all geotechnical, environmental and other requirements of the Agreement, including those identified on the Environmental Constraint Drawings. Decommissioning and Disposal Plans shall be signed by the Design Builder’s geotechnical AQP.	Major
16.4	Further to DBSS 145.27, disposal of asphalt and concrete products such as old roadside barrier or acceptable demolition material, may be placed only in the Surplus Disposal Site in accordance with the following: <ol style="list-style-type: none"> 1. A minimum cover of 2 m of soil or blast rock shall ultimately be placed over asphalt or concrete materials; 2. Concrete or asphalt shall be broken in pieces not exceeding 500 mm X 500 mm; 3. Concrete barriers shall be placed horizontally side by side with the intervening space filled with inorganic soil or blast rock and aligned to permit downslope drainage of groundwater and without voids under or between the pieces; 4. If barriers or broken asphalt or concrete debris is placed in more than one layer, a layer of compacted competent inorganic soil or blast rock of minimum 600 mm thickness shall be placed between layers; and 5. Barriers, broken asphalt and concrete debris shall not be placed more than 3 layers high. 	Major
16.5	Area to be used for disposal shall be prepared in accordance with the Agreement. No additional clearing shall be undertaken in the Surplus Disposal Site without written permission from the Province’s Representative.	Major

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16.6	The Decommissioning and Disposal Plan shall prioritize re-use, recycling, and reclamation as principles for material handling.	Minor

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Appendix A	Quality Manual
Appendix B	Design Quality Management Plan
Appendix C	Construction Quality Management Plan
Appendix D	Traffic Quality Management Plan
Appendix E	Environmental Quality Management Plan
Appendix F	Health and Safety Program Quality Management Plan
Appendix G	Traffic Management Site Condition Rating Checklist – Sample

**PART 1
QUALITY MANAGEMENT SYSTEM**

1.1 Quality Management System

The Design-Builder shall develop and implement a Quality Management System in accordance with the requirements of the DBSS and this Schedule. The Design-Builder acknowledges and agrees that the Design-Builder is solely responsible for the quality of the Project Work and that the effective implementation of a comprehensive Quality Management System is a critical component of the proper and timely completion of the Project Work.

1.2 Design-Builder Responsibilities

The Design-Builder is responsible for all quality assurance and quality control activities required to manage its own processes as well as those of its Subcontractors. The Design-Builder shall ensure that all aspects of the Project are the subject of a Quality Management System that complies with the provisions of this Schedule, and shall comply with and cause each of its Subcontractors and the employees of each of them to comply with the requirements of such Quality Management System. For greater certainty, and without limiting the Design-Builder's ability to contractually assign matching responsibilities and obligations to the Subcontractors in accordance with this Agreement, the Design-Builder shall not be relieved of any of the Design-Builder's responsibilities or obligations set out in this Schedule by the assignment of such responsibilities or obligations to its Subcontractors.

1.3 Quality Management System Requirements

The Quality Management System shall address all aspects of the Project Work for all phases of the Project, including Design and Construction. The Quality Management System shall be integrated into all Project Work, including environmental management, traffic management, safety management and communications activities. The Quality Management System shall include all quality control and quality assurance activities for all aspects of the Project Work for all phases of the Project.

The Quality Management System shall, at a minimum, include the Quality Documentation described in Part 5 [Quality Documentation] of this Schedule and shall comply with:

- (a) the requirements and principles of the ISO 9001:2015 Standard and any other applicable standards specified in this Schedule;
- (b) the Project Requirements;
- (c) Good Industry Practice; and
- (d) all other requirements set out in this Schedule and this Agreement.

1.4 Compliance

1.4.1 Performance Measures

The Quality Management System must be compliant with the ISO 9001:2015 Standard in accordance with Section 1.3(a) of this Schedule.

1.4.2 Specific Requirements

The Design-Builder shall update its Quality Management System and all Quality Documentation as required to ensure that the Quality Management System and all Quality Documentation is and at all times remains in full compliance with the ISO 9001:2015 Standard and the requirements of this Schedule.

1.5 Documentation Deliverables

1.5.1 Performance Measures

Without limiting the generality of Section 1.3 [Quality Management System Requirements] of this Schedule, the Design-Builder shall prepare and submit to the Province’s Representative, by the due dates shown in Table 1.5.1, each of the following:

Table 1.5.1 Schedule of Plans and Reports (Response Time Measures)

Performance Measure	Deliverable Name	Due Date	Specification Reference	Review Procedure or Consent Procedure
PQ1.5.1a	Quality Manual	Submitted 30 days from the Effective Date	Appendix A	Consent Procedure
PQ1.5.1b	Design Quality Management Plan	Submitted 30 days from the Effective Date	Appendix B	Consent Procedure
PQ1.5.1c	Construction Quality Management Plan	Submitted 45 days from the Effective Date	Appendix C	Consent Procedure
PQ1.5.1d	Traffic Quality Management Plan	Submitted 45 days from the Effective Date	Appendix D	Consent Procedure
PQ1.5.1e	Environmental Quality Management Plan	Submitted 30 days from the Effective Date	Appendix E	Consent Procedure
PQ1.5.1f	Health and Safety Program Quality Management Plan	Submitted 30 days from the Effective Date	Appendix F	Consent Procedure
PQ1.5.2a	Other Quality Management Plans (see below)	Submitted 45 days from the Effective Date	1.5.2	Consent Procedure
PQ4.1.1a	Quality Audit Plans	Submitted 90 days from the Effective Date	4.1.1	Consent Procedure
PQ4.1.1b	Quality Audit Plans Updates	At twelve monthly intervals	4.1.1	Consent Procedure
PQ5.9.1a	Monthly Quality Management System reports	By 15th of each following month	5.9.1	N/A
PQ4.2.2b	Quality Audit Reports	Within 14 days of audit completion	4.2.2	N/A

The documents above that are indicated to be subjected to the Consent Procedure shall be submitted to the Province's Representative in accordance with the Consent Procedure pursuant to Schedule 2 [Representatives, Review Procedure and Consent Procedure]. All other documents shall be submitted to the Province's Representative.

1.5.2 Specific Requirements

The Design-Builder shall prepare and submit a Quality Management Plan for any other person contracting with the Design-Builder or any Subcontractor for the purposes of undertaking any material and substantial aspect of the Project Work (but excluding legal advisors) in each case for undertaking the activities covered by that party's contract with the Design-Builder or such Subcontractor (as the case may be) and meeting the requirements of the Quality Manual.

1.6 Timing of Implementation

1.6.1 Performance Measures

PQ1.6.1a The Quality Manual and all Quality Management Plans must be fully implemented within 120 days from the Effective Date.

1.6.2 Specific Requirements

The Design-Builder shall not commence or permit the commencement of any aspect of the Project Work before those parts of the Quality Documentation that concern such aspect of the Project Work have been submitted to the Province's Representative in accordance with this Schedule under the Consent Procedure or the Review Procedure, as the case may be.

1.7 Compliance with Quality Management System

The Design-Builder shall ensure that:

- (a) it complies with the Quality Management System detailed in the Quality Manual and any other Quality Documentation, including the Design Quality Management Plan, the Construction Quality Management Plan, the Traffic Quality Management Plan, the Environmental Quality Management Plan and the Health and Safety Program Quality Management Plan in connection with the Project Work and all other activities under this Agreement;
- (b) the Designer complies with the Design Quality Management Plan and any other Quality Documentation in connection with its Design and Construction-related activities;
- (c) any other person contracting with it or any Subcontractor complies with the relevant Quality Management Plan prepared and implemented pursuant to Section 1.5.2 [Specific Requirements] of this Schedule in connection with the activities covered by that party's contract with it or such Subcontractor (as the case may be); and
- (d) any other person who performs any portion of the Project Work complies with the Quality Management System as it relates to that portion of the Project Work.

The means by which the above requirements are communicated, understood and verified shall be documented in the Quality Records.

1.8 Continual Improvement

- (a) The Design-Builder shall implement a program and shall have mechanisms in place, such as management reviews and Quality Audit programs, to allow all identified Opportunities for Improvement to be recorded, tracked and implemented, and closed out.
- (b) The program shall be used to continually improve the effectiveness and efficiency of the Design-Builder's Quality Management System.
- (c) The Design-Builder shall ensure that all of the Design-Builder's employees and Subcontractors (including the Designer) are aware of the importance of continual improvement and are actively engaged in its implementation in connection with the performance of the Project Work.

PART 2 QUALITY PERSONNEL

2.1 Quality Director

- (a) At all times until the Total Completion Date, the Design-Builder shall employ a Quality Director who shall, irrespective of such person's other responsibilities, have defined authority for ensuring the establishment and maintenance of the Quality Management System and auditing and reporting on the performance of the Quality Management System.
- (b) The Quality Director shall be an Appropriately Qualified Professional with experience in a similar quality management representative role for a successful project of similar scope and complexity and shall have successfully completed an ISO 9001 Lead Auditor Course.
- (c) The identity of the Quality Director (and any replacement) and the Quality Director's job specification and responsibilities shall be subject to acceptance by the Province (such acceptance not to be unreasonably withheld or delayed), and the Quality Director shall be a Key Individual subject to the applicable requirements of Section 3.3 [Key Individuals] of Schedule 2.
- (d) Without limiting the generality of the foregoing, the job specification and responsibilities of the Quality Director shall include the following:
 - (i) developing, implementing and maintaining, and ensuring the effective operation of, the Quality Management System;
 - (ii) verifying that Quality Documentation conform to applicable Project Requirements prior to submission to the Province;
 - (iii) ensuring integration of the Quality Management System with and between all Project disciplines;

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- (iv) initiating management reviews of the Quality Management System, not less frequently than annually, and taking other actions necessary to ensure the effective operation and continual improvement of the Quality Management System;
- (v) approving and signing off on all Quality Management System documents, including all revisions;
- (vi) scheduling and coordinating Independent Quality Audits with the Independent Quality Auditor;
- (vii) preparing Quality Audit Plans and managing (including scheduling and coordinating) Internal Quality Audits and External Quality Audits of all key processes with the Design-Builder's personnel and with the Subcontractors (including the Designer);
- (viii) ensuring that all Quality Audits required under Section 4.2 [Design-Builder's Quality Audits] of this Schedule and under the Quality Documentation are conducted, and reporting the findings of such audits to the Province's Representative;
- (ix) having the authority to immediately stop any work or activity which is not being performed or carried out in accordance with the Quality Documentation applicable thereto;
- (x) liaising with the Province's Representative and acting as the primary representative for the Design-Builder on all matters relating to quality management;
- (xi) preparing and submitting to the Province's Representative monthly Quality Management System reports;
- (xii) ensuring that relevant Records are maintained and retained in accordance with this Agreement, the Quality Management System and the Records Management Protocol;
- (xiii) developing and implementing a program for Correction, and where applicable, Corrective Action in respect of Nonconformities;
- (xiv) developing and implementing a program for Opportunities for Improvement in respect of potential Nonconformities or continual improvement initiatives;
- (xv) reviewing, approving and endorsing the action taken in close out of Nonconformity Reports in accordance with Section 6.1 [Nonconformity Reporting Process] of this Schedule; and
- (xvi) carrying out any other matters which, in accordance with this Agreement, are the responsibility of the Quality Director.

2.2 Quality Managers

- (a) The Quality Director will appoint Quality Managers as will be required by the Design-Builder.
- (b) Quality Managers shall be Appropriately Qualified Professionals and report directly to the Quality Director.

PART 3 TESTING

3.1 Testing Requirements

Where the Design-Builder is required by this Agreement, any of the Project Requirements, the Design and Certification Procedure or any Quality Documentation to carry out any calibration, sample, test or trial, such calibration, sample, test or trial shall be carried out in accordance with the following provisions of this Part 3 and the provisions of the relevant Quality Documentation.

3.2 Accreditation Standards

- (a) All on and off Project Site calibrations, samples, tests and trials shall be carried out by laboratories that are duly accredited for the carrying out of such calibrations, samples, tests and trials.
- (b) Laboratory accreditation shall be in accordance with ISO/IEC 17025, as amended, updated or replaced from time to time, provided that, for specific activities, the Province may, in accordance with the Consent Procedure, accept other industry-recognized accreditation in lieu of ISO/IEC 17025, including:
 - (i) concrete and concrete materials: CAN/CSA A283, “Qualification Code for Concrete Testing Laboratories”, to the appropriate category for the tests being done;
 - (ii) structural steel and welding: CAN/CSA W178.1, “Certification of Welding Inspection Organizations”, to the level appropriate for the inspection being carried out;
 - (iii) aggregates, bituminous paving mixtures: “Canadian Council of Independent Laboratories”, as appropriate to the work being carried out; and
 - (iv) protective coatings: “National Association of Corrosion Engineers”, as appropriate to the work being carried out.
- (c) The Design-Builder may request acceptance by the Province to use other industry-recognized accreditations, which approval shall not be unreasonably withheld or delayed if such other accreditation is applicable to the Project Work for which it is proposed and meets the intent of ISO/IEC 17025.

3.3 Material Verification Testing

For all materials incorporated into the Project Work, the Design-Builder shall have a laboratory, registered as a corporation in Canada and accredited in accordance with this Agreement, carry out verification of the materials to ensure they meet the Project Requirements as follows:

- (a) test and verify that the material meets the requirements of the Design;
- (b) perform verification testing on, but not limited to, materials such as structural steel, miscellaneous steelwork, cement, aggregates, supplementary cementing materials, additives, reinforcing steel, fasteners, bolts, anchor rods, and welding consumables;
- (c) verify that the mill certificates for the material and any other material certifications are valid;
- (d) perform verification testing of steel for boron content; and
- (e) stamp the mill certificates and any other material certifications with the name of the laboratory, the laboratory's authorized officer, and the names and signatures of the inspectors and testers.

3.4 Structural Component Inspection and Testing

- (a) For manufacturing and fabrication of components incorporated into a Structure, including but not limited to, structural steel, fabricated steel elements, steel piles, steel strands, stay cables and pre-cast concrete (the “**Structural Components**”), the Design-Builder shall, as a minimum, employ independent testing and inspection companies registered as corporations in Canada and certified by organizations accredited by the Standards Council of Canada to provide the following:
 - (i) full time quality inspection and testing at the mills and fabrication facilities, under the on-site direction of a Professional Engineer, while the manufacture and fabrication works are in process;
 - (ii) quality reports and assurances produced under the direction of the Professional Engineer identified in Section 3.4(a)(i) of this Schedule:
 - (A) at the following milestones:
 - (1) upon supply of raw materials to the fabricator; and
 - (2) at 25%, 50%, 75% and 100% fabrication completion stages; and
 - (B) including a record of the fabrication activities and testing and inspections to date including Nonconformities, Corrections and Corrective Actions;
 - (iii) monthly status reports, signed and sealed by the Professional Engineer identified in Section 3.4(a)(i) of this Schedule, which include a status of the stages of the manufacture and fabrication process carried out to the date of the report and a

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record of the quality reports and assurances identified in Section 3.4(a)(ii) of this Schedule carried out to the date of the report; and

- (iv) a full and final report, signed and sealed by the Professional Engineer identified in Section 3.4(a)(i) of this Schedule, following the completion of any manufacture and fabrication process including a summary of all stages of the manufacture and fabrication process and a record of the quality reports and assurances identified in Section 3.4(a)(ii) of this Schedule

and provide each of the reports identified in this Section 3.4 to the Province's Representative at the times and the milestones identified in this Section.

- (b) The Design-Builder shall cause the responsible Professional Engineer identified in Section 3.4(a)(i) of this Schedule to provide a signed and sealed declaration that “by utilizing the standards of care, skill and diligence in accordance with the standards of the profession, the [insert name/description of the relevant Structural Components] have been manufactured and/or fabricated to meet the requirements of the specifications as attached [insert list of all relevant specifications]”.
- (c) The Design-Builder shall notify the Province's Representative, no later than 60 days prior to shipping, of its intent to ship Structural Components to the Project Site.
- (d) The Design-Builder shall cause the Designer (Principal) and the responsible Professional Engineer as required by Part 3 [Design and Certification Procedure] of Schedule 4 to provide a signed and sealed declaration that “the [insert name/description of the relevant Structural Components] have been manufactured and/or fabricated to meet the requirements of the relevant Design Data and the provisions of the Agreement”, and submit this declaration to the Province's Representative in accordance with the Review Procedure prior to any Structural Components leaving the place of manufacture or fabrication.

3.5 Re-Inspection and Re-Testing of Steel Structural Components

- (a) For steel Structural Components manufactured or fabricated outside of Canada or the United States (the “**Applicable Steel Structural Components**”), the Design-Builder shall, prior to incorporation into the Project Infrastructure, re-inspect and re-test, at a location in Canada, 10% of each such Applicable Steel Structural Component by a company certified by the Canadian Welding Bureau in accordance with CAN/CSA W47.1 to Division 1 and by the Canadian Institute of Steel Construction in the category of steel bridges.
- (b) For each Applicable Steel Structural Component, the Design-Builder shall ensure:
 - (i) that such Applicable Steel Structural Component shall be in a configuration and location that facilitates all re-inspection and re-testing requirements;
 - (ii) the re-inspection and re-testing of such Applicable Steel Structural Component shall be completed in accordance with the testing and inspection requirements of DBSS 421 Structural Steelwork and to ensure that such Applicable Steel

Structural Component was not damaged during transportation and that the shop assembly is in accordance with DBSS 421 Structural Steelwork; and

- (iii) that the re-inspection of the welding of such Applicable Steel Structural Component is carried out by a CAN/CSA W178.2 Level III certified welding inspector accredited with CAN/CSA W47.1/W59 to inspect Applicable Steel Structural Components.
- (c) The Design-Builder shall provide to the Province's Representative the results of all re-inspection and re-testing of Applicable Steel Structural Components in accordance with this Section 3.5.

3.6 Remedial Work

The Design-Builder shall be responsible at its own expense for any remedial work required as a result of any failure to pass any calibration, sample, test or trial required in accordance with this Agreement, any of the Project Requirements, the Design and Certification Procedure or any Quality Documentation or as a result of any laboratory not being duly accredited as required by this Agreement.

PART 4 QUALITY AUDITS AND MONITORING

4.1 Quality Audit Plans

4.1.1 Performance Measures

PQ4.1.1a The Design-Builder shall provide the Quality Audit Plans to the Province's Representative within 90 days after the Effective Date.

PQ4.1.1b The Design-Builder shall provide updated Quality Audit Plans at twelve month intervals thereafter.

4.1.2 Specific Requirements

Quality Audit Plans shall detail the Internal Quality Audits and the External Quality Audits that shall be conducted by the Design-Builder on its own processes and those of its Subcontractors, and the planned dates of such Quality Audits.

4.2 Design-Builder's Quality Audits

4.2.1 General

The Design-Builder shall conduct Internal Quality Audits and External Quality Audits of its own processes and those of its Subcontractors (including the Designer) and in accordance with the requirements of this Schedule, the Quality Documentation and the Quality Audit Plans referred to therein. The purpose of the Design-Builder's quality auditing process is to confirm that all activities comprising the Project Work are in compliance with the Quality Management System (including the Quality Manual and Quality Management Plans), to identify all Nonconformities,

necessary Corrective Actions and Opportunities for Improvement, and to facilitate continual improvement.

4.2.2 Performance Measures

PQ4.2.2a The Quality Director shall schedule Internal Quality Audits and External Quality Audits to ensure that all key processes are reviewed regularly (at least annually).

PQ4.2.2b Within 14 days of completion of any Quality Audit, the Design-Builder shall document, or cause to be documented, the results of such Quality Audit in an audit report and make such report available to the Province's Representative.

4.2.3 Specific Requirements

- (a) Internal Quality Audits and External Quality Audits shall be scheduled taking into account the status and importance of the processes being audited as well as the results of previous audits.
- (b) Internal Quality Audits and External Quality Audits shall be conducted by personnel independent of the area(s) being audited.
- (c) Where necessary, follow-up audits shall be scheduled to ensure that identified Corrections, Corrective Actions and Opportunities for Improvement are carried out in a timely fashion.

4.3 Province's Quality Audits

4.3.1 General

The Province will, pursuant to the submission of the Quality Documentation in accordance with this Schedule, review the Quality Documentation to identify the critical activities and processes identified in the Quality Manual and Quality Management Plans on which the Province's auditing efforts and resources should be directed. The Province will determine the frequency of auditing through regular and ongoing review of the Design-Builder's performance and management systems. Work procedures and activities that show good audit performance may have the frequency of auditing decreased, while those that show poor performance or increased risk may have the frequency of auditing increased. The Design-Builder shall provide and shall ensure its Subcontractors (including the Designer) provide the Province's auditors with all documentation, records, access, facilities and assistance for the safety and convenience of the Province.

4.3.2 Types of Quality Audits

The following two types of Quality Audits may be conducted by, or on behalf of, the Province in its discretion:

- (a) Surveillance Quality Audits – Scheduled or unscheduled field audits conducted on a random basis or on specific areas of interest. The objective of these surveillance audits is to monitor the Design-Builder's activities involving the Project Work, including but not limited to work practices, workmanship, performance measures and general quality of materials and completed components. Any noted deficiencies shall be resolved to the

satisfaction of the Province's Representative through evidence of the Design-Builder's deficiency evaluation findings or Nonconformity resolution process. If the deficiency is not resolved to the satisfaction of the Province's Representative, then the Province will issue a Nonconformity Report to the Design-Builder; and

- (b) Quality Management System Audits – Scheduled audits conducted at specific times to assess the performance of and compliance with the Quality Management System.

4.3.3 Audit Observations and Findings

The Province may, at any time and in its discretion, provide its observations and findings, including deficiencies, procedural or performance nonconformities, to the Design-Builder in an audit report.

Where the Province initiates a Nonconformity Report, the Design-Builder shall investigate, address and track the Nonconformity in accordance with Part 6 [Nonconformities] of this Schedule.

All other observations and findings identified by the Province and provided to the Design-Builder in an audit report, shall be reviewed and evaluated by the Design-Builder for Opportunities for Improvement.

4.3.4 Performance Measures

PQ4.3.4a The Design-Builder shall prepare a Corrective Action plan and submit it to the Province's Representative within 10 Business Days of receiving the report of the Province's Quality Audit.

The Province reserves the right to conduct follow up reviews to determine if the Design-Builder's Corrective Action plan has been implemented and completed.

4.4 Province Monitoring

In addition to carrying out any scheduled and unscheduled Quality Audits as provided in Section 4.3 [Province's Quality Audits] of this Schedule, the Province may, at its discretion, monitor and verify the operation of the Quality Management System by, inter alia, carrying out spot checks and making independent inspections and tests of any plant or material including any plant or material which fails any test or is suspected by the Province of not complying with the requirements of this Agreement.

4.5 Deficient Quality Audits

If either:

- (a) the Province reasonably believes that the Design-Builder is failing to conduct Quality Audits of its Quality Management System as required by this Agreement in any material respect or if such Quality Audits are not conducted in accordance with the ISO 9001:2015 Standard or the ISO 19011:2018 Standard by personnel competent to conduct such Quality Audits; or

- (b) any auditing, monitoring or spot checks of the Quality Management Systems reveal material deficiencies in the Quality Management System or the implementation thereof,

the Province may carry out increased levels of External Quality Audits (whether in number, duration or detail) of all or any aspect of the Quality Management System until such time as the Province is reasonably satisfied that none of the circumstances described in this Section 4.5 continue to exist.

4.6 Costs of Audits

If the Province carries out any audit pursuant to Section 4.3 [Province’s Quality Audits], Section 4.4 [Province Monitoring] or Section 4.5 [Deficient Quality Audits] of this Schedule, and the results of such audit shows any material Nonconformity in respect of the Project Work, then without limiting any other rights and remedies of the Province, the Design-Builder shall compensate the Province for all costs incurred in carrying out such audit (including the relevant administrative expenses of the Province, including an appropriate sum in respect of general staff costs and overheads). All other audits carried out by the Province pursuant to Section 4.3 [Province’s Quality Audits], Section 4.4 [Province Monitoring] or Section 4.5 [Deficient Quality Audits] of this Schedule shall be at the Province’s cost.

4.7 Independent Quality Audits

- (a) In addition to Internal Quality Audits and External Quality Audits, the Design-Builder shall cause independent quality audits (each, an “**Independent Quality Audit**”) to be undertaken during the Project Work. A full Independent Quality Audit on the QMS, including all Quality Management Plans, shall be completed within one year after the Effective Date and thereafter at least once per year until the Total Completion Date.
- (b) Each Independent Quality Audits shall be conducted by an independent quality auditor (an “**Independent Quality Auditor**”) acceptable to the Province and the Design-Builder and certified by an accredited auditors’ registration body, such as the International Register for Certified Auditors or Registrar Accreditation Board, who is qualified to audit the full scope of the QMS.
- (c) Each Independent Quality Audit shall, at a minimum, ensure that all input requirements as required by the Design-Build Agreement are included in the QMS and adhered to in the performance of the Project Work.
- (d) The Design-Builder shall cause the Independent Quality Auditor to prepare a report (the “**Independent Quality Audit Report**”) that addresses all quality audit findings identified from the Independent Quality Audit, and to submit the Independent Quality Audit Report to the Province’s Representative at the same time as the Independent Quality Audit Report is submitted to the Design-Builder.
- (e) All corrective measures addressed in an Independent Quality Audit Report shall be implemented and submitted to the Province’s Representative.

4.8 Traffic Management Auditing

- (a) If any Design-Builder or Province Traffic Management audit identifies any traffic management or safety Nonconformity, or if a Nonconformity is reported to or brought to the attention of the Design-Builder via any source, then the Design-Builder shall rectify such Nonconformity immediately.
- (b) For complex temporary traffic control set-ups as detailed in Sections 13.5 [Temporary Traffic Control (Design) Road Safety Audit] and 13.6 [Temporary Traffic Control (On-Site) Road Safety Audit] of Part 2 of Schedule 4, the Road Safety Audit process shall be implemented in accordance with Article 13 [Road Safety Audit] of Part 2 of Schedule 4.
- (c) For the purpose of facilitating the conduct of Internal Quality Audits and External Quality Audits relating to the performance of traffic management (“**Traffic Management Auditing**”) in an active or inactive work zone with a traffic control set-up, the Design-Builder shall develop and implement a Site Condition Rating checklist acceptable to the Province, for use by each of the Design-Builder and the Province.
- (d) As a component of the Traffic Quality Management Plan, the Site Condition Rating checklist shall be submitted to the Province’s Representative in accordance with the Consent Procedure. Submissions of subsequent updates to the checklist shall be in accordance with Section 5.6 [Changes to Quality Documentation] of this Schedule.
- (e) The checklist shall provide the framework for auditing the safety and overall management of traffic within the Project Site against the requirements contained in the Traffic Management Plan, the requirements of Part 4 [Traffic Management] of Schedule 4 and the Traffic Management Manual (collectively, the “**Traffic Management Criteria**”).
- (f) The checklist shall be specific to the Project Site and at a minimum, shall include the following information:
 - (i) Traffic Management Plan – in relation to the approved site specific plan;
 - (ii) General Traffic Requirements – in relation to Article 1 [General Traffic Management Requirements] of Part 4 of Schedule 4, including:
 - Storage of materials
 - Traffic control devices
 - Roadside barriers
 - Drop-offs
 - Clear zones
 - Temporary Pavement Markings
 - Provisions for passage of school bus, local and emergency traffic during periods of Extended Closures; and
 - (iii) Traffic Management Manual – in relation to all relevant requirements.

A sample Site Condition Rating checklist of Nonconformities is set out in Appendix G [Traffic Management Site Condition Rating Checklist - Sample] to this Schedule. For clarity, the sample checklist is not an exhaustive checklist and shall be considered a

minimum, and the Design-Builder shall submit a checklist as set out in this Schedule based on specific work zone hazards and risks.

- (g) Each Nonconformity in the checklist shall be assigned a number of Site Condition Rating points (“**SCR Points**”) that reflects its relative importance in relation to the other listed Nonconformities. SCR Points shall be assigned to the Design-Builder for each occurrence of a Nonconformity with Traffic Management Criteria that is identified at the time of the relevant audit, at the site within the Project Site that is the subject of such audit. The aggregate of such assigned SCR Points shall indicate the applicable site condition rating (the “**Site Condition Rating**”) for the subject site as at the time of the relevant audit.
- (h) The following table sets out the Site Condition Rating categories, the number of SCR Points, the assignment of which will result in assignment of a particular Site Condition Rating, the required action on the subject site, and the response time.

Site Condition Rating category	SCR Points	Required Action on Site	Response Time
Category 1	1 – 25	Undertake remedial action to bring the subject site to compliance	24 hours
Category 2	26 - 50	Undertake remedial action to bring the subject site to compliance	4 hours
Category 3	51+	Immediately cease all work on subject site and undertake remedial action to bring the subject site to compliance	Immediate

- (i) At a minimum, Traffic Management Auditing shall be carried out before the initial opening of a new traffic management implementation and weekly for temporary traffic control implementations in operation. Traffic Management Auditing shall be planned considering the status, importance and level of risk of each traffic control implementation, and generally rotate through the traffic control implementations in use for the Project at that time.
- (j) The designation of Site Condition Rating categories “Category 1”, “Category 2”, and “Category 3”, as identified in Section 4.8(h) of this Schedule and as shown in the sample checklist set out in Appendix G [Traffic Management Site Condition Rating Checklist - Sample] to this Schedule, indicates the basis on which NCE Points will be assigned in accordance with Part 5 [NCE Points and Default Points] of Schedule 10 to this Agreement.
- (k) Copies of Traffic Management Auditing reports shall be submitted to the Province’s Representative within two Business Days following the audit.
- (l) The requirements of this Section 4.8 are in addition to, and do not limit, the Design-Builder’s other obligations under this Schedule, including the Design-Builder’s obligations in Part 6 [Nonconformities] of this Schedule.

**PART 5
QUALITY DOCUMENTATION**

5.1 Principles

The minimum requirements and principles which apply to the Quality Documentation are set out in Appendices A to F inclusive to this Schedule. The Design-Builder's Quality Management System shall also comply with the requirements and principles of the ISO 9001:2015 Standard, this Schedule, and the principles of the ISO 9004:2015 Standard, including:

- (a) customer focus;
- (b) leadership;
- (c) engagement of people;
- (d) process approach;
- (e) improvement;
- (f) evidence-based decision making; and
- (g) relationship management.

5.2 ISO Reference Documents

Without limiting the requirement of the Quality Management System to comply with the ISO 9001:2015 Standard, the Design-Builder's Quality Management System shall also incorporate the requirements of the following:

- (a) ISO 9004:2009 Standard;
- (b) ISO 9000:2015 Standard;
- (c) ISO 19011:2018 Standard; and
- (d) ISO 14001:2015 Standard.

5.3 Quality Documentation Requirements

The minimum documentation requirements for the Quality Management System are:

- (a) the Quality Manual as required pursuant to Section 1.5 [Documentation Deliverables] of this Schedule;
- (b) Quality Management Plans for all aspects of the Project Work as required pursuant to Section 1.5 [Documentation Deliverables] of this Schedule;
- (c) that the following are included in each Quality Management Plan:

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- (i) quality system procedures and process flow charts documenting who does the work, what they do, and what evidence shall be generated that they have done the work correctly;
- (ii) the Quality Audit Plans required pursuant to Section 4.1 [Quality Audit Plans] of this Schedule;
- (d) Work Method Statements, as applicable;
- (e) Inspection and Testing Plans, as applicable;
- (f) geotechnical and environmental monitoring plans, as applicable; and
- (g) the Records required pursuant to Section 5.8 [Quality Records] of this Schedule.

5.4 Submission of Quality Documentation

- (a) The Design-Builder shall prepare and submit all required Quality Documentation to the Province's Representative for review in accordance with the Consent Procedure or the Review Procedure, as the case may be, in accordance with Section 1.5 [Documentation Deliverables] of this Schedule.
- (b) If any Quality Documentation relies on or incorporates any quality manual, plan, procedure or like document then such quality manual, plan, procedure or other document or the relevant parts thereof shall (unless the Province otherwise agrees) be submitted to the Province's Representative at the time that the relevant Quality Documentation or part thereof or change, addition or revision to the Quality Documentation is submitted in accordance with the Consent Procedure or the Review Procedure, as the case may be, and the contents of such quality manual, plan, procedure or other document shall be taken into account in the consideration of the relevant Quality Documentation or part thereof or change, addition or revision to the Quality Documentation in accordance with the Consent Procedure or the Review Procedure, as the case may be. The Province may require the amendment of any such quality manual, plan, procedure or other document to the extent necessary to enable the relevant Quality Documentation to satisfy the requirements of this Schedule.

5.5 Design-Builder Obligation to Update

The Design-Builder shall be responsible for proactively updating its Quality Management System and all Quality Documentation from time to time, in accordance with the procedures set forth in this Agreement, to ensure that the Quality Management System and all Quality Documentation are, and at all times remain, relevant and in full compliance with the ISO 9001:2015 Standard and the requirements of this Agreement.

5.6 Changes to Quality Documentation

- (a) The Design-Builder may submit to the Province's Representative in accordance with the Consent Procedure any proposed changes or additions to or revisions of any of the Quality Documentation.

- (b) Without limiting the generality of Section 5.6(a) of this Schedule, the Design-Builder shall from time to time submit to the Province’s Representative in accordance with the Consent Procedure any changes to any of the Quality Documentation required for such Quality Documentation to continue to reflect and comply with the requirements set out in this Schedule.
- (c) If the Design-Builder does not propose any change required pursuant to Section 5.6(b) of this Schedule, then the Province may propose such change and it shall be dealt with in accordance with the Review Procedure or the Consent Procedure, as the case may be, as though it had been proposed by the Design-Builder and shall not therefore be treated as a Province Change. Any dispute between the parties in respect of any such change shall be resolved in accordance with the Dispute Resolution Procedure.

5.7 Amendment of Quality Documentation

If there is no unresolved objection by the Province under the Consent Procedure or the Review Procedure, as the case may be, to a part of the Quality Documentation pursuant to Section 5.4 [Submission of Quality Documentation] of this Schedule or to a change, addition or revision proposed pursuant to Section 5.6 [Changes to Quality Documentation] of this Schedule, then the Quality Documentation shall be amended to incorporate such part, change, addition or revision.

5.8 Quality Records

- (a) The Design-Builder shall establish and maintain complete and accurate quality management records (the “**Quality Records**”), which shall form part of the Records.
- (b) The Quality Records shall provide objective evidence of conformance with all requirements of this Agreement, compliance with the ISO 9001:2015 Standard and the effective operation of the Quality Management System.

5.9 Quality Management System Reports

5.9.1 Performance Measures

PQ5.9.1a For each month, the Design-Builder shall prepare, and submit to the Province’s Representative within 15 Business Days of the start of the following month, a comprehensive Quality Management System report.

5.9.2 Specific Requirements

- (a) The monthly Quality Management System report shall address all quality management activities under the Quality Manual and each of the Quality Management Plans for that month and any outstanding quality issues from prior months.
- (b) The monthly Quality Management System reports shall, as a minimum, include the following information separately identified for the Quality Manual and for each Quality Management Plan:
 - (i) a Nonconformity Report log summarizing the Nonconformity Tracking System and providing the following in respect of each Nonconformity Report: “date

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open”, “date closed”, “status” (open, pending, closed) and “description of Correction” (Repair, Rework, Reject, Use As Is);

- (ii) a Corrective Action log providing details of the Corrective Actions performed to date and their close-out status;
- (iii) an Opportunities for Improvement log summarizing the Opportunities for Improvement raised to date, including the following information: reference numbers, “date open”, “status” (open, pending, closed), “date closed”, and description of how it was closed;
- (iv) a summary of any inspection and testing activities conducted during the month and a four-month look-ahead schedule for planned inspection and testing activities;
- (v) environmental, geotechnical, traffic, safety and other applicable monitoring reports;
- (vi) status report of applicable environmental Permits;
- (vii) Internal Quality Audits and External Quality Audits, including any Independent Quality Audits performed during the month and a four month look-ahead schedule for planned future Quality Audits;
- (viii) any other information required to be included in the monthly Quality Management System reports pursuant to any of the Appendices to this Schedule or the terms of the relevant Quality Management Plan; and
- (ix) any changes made to the Quality Management System or the Quality Documentation in compliance with the provisions of this Agreement.

5.10 Additional Information

- (a) The Corrective Action log and Opportunities for Improvement log as described in Sections 5.9.2(ii) and (iii) of this Schedule shall be:
 - (i) maintained and updated throughout the Term; and
 - (ii) made easily accessible to the Province.
- (b) Notwithstanding any other provision of this Schedule, the Design-Builder shall provide the Province’s Representative with such information as the Province may request from time to time to demonstrate compliance with this Agreement, including this Schedule.

**PART 6
NONCONFORMITIES**

6.1 Nonconformity Reporting Process

The Nonconformity reporting process, from initial creation through to closeout, shall follow the process outlined below:

- (a) If the Design-Builder or the Province discovers a Nonconformity, it shall initiate a Nonconformity Report in accordance with the ISO 9001:2015 Standard, and as follows:
 - (i) the Design-Builder initiated Nonconformity Reports - Upon discovery of a Nonconformity, the Design-Builder shall, within two Business Days of discovering the Nonconformity, issue a Nonconformity Report identifying the problem and provide a copy of the Nonconformity Report to the Province’s Representative; or
 - (ii) Province initiated Nonconformity Reports - If at any time the Province is notified, or otherwise becomes aware, that there is any Nonconformity relating to the Project Work, the Province may issue a Nonconformity Report, without prejudice to any other right or remedy available to the Province and BCTFA, including the assignment of NCE Points and/or Default Points pursuant to Schedule 10 [Payment and Performance Mechanism].
- (b) The Nonconformity Report is issued to the Quality Director, thereby activating the Nonconformity Report. The date of issue shall be recorded denoting the commencement of the time period for which the Nonconformity Report has an ‘open’ status.
- (c) The Design-Builder shall investigate and respond to all Nonconformity Reports in accordance with this Part and shall ensure the Corrections and Corrective Actions are acceptable to the Designer.
- (d) The Quality Director shall in response to the Nonconformity Report describe a Correction of the Nonconformity and, if applicable, a Corrective Action in accordance with the ISO 9001:2015 Standard. A response time for the implementation of the Correction shall be included in the response.
- (e) Acceptable responses for Corrective Actions associated with Nonconformity Reports are set out in Table 6.1.

Table 6.1 Acceptable Responses to Nonconformity Reports

Status of Nonconformity	Correction	Corrective Action (if applicable)
Correction has been undertaken	Describe nature of the Correction (Rework, Repair, Reject, Use As Is). Provide confirmation that the Correction has remedied (if applicable) the Nonconformity and accepted by the Designer	Describe any improvements to process to prevent reoccurrence. Provide a plan committing to scope and timing of the Corrective Action.

Status of Nonconformity	Correction	Corrective Action (if applicable)
Correction is proposed	Describe nature of the Correction (Rework, Repair, Reject, Use As Is). Provide a plan committing to scope and timing of Correction.	Describe any improvements to process to prevent reoccurrence. Provide a plan committing to scope and timing of the Corrective Action.
Objection to NCR and no Correction is proposed	Refer to Sections 6.1(i) and 6.1(j) of this Schedule.	

- (f) The Quality Director shall change the status of the Nonconformity Report to ‘pending’ once a Correction, a response time and, if applicable, a Corrective Action has been documented for the Nonconformity in accordance with Section 6.1(d).
- (g) The Design-Builder shall rectify each Nonconformity in accordance with the Correction and, if applicable, the Corrective Action described in the Nonconformity Report.
- (h) Once the Nonconformity has been corrected, it shall be subject to verification by the Quality Director to demonstrate conformity to the requirements. The Quality Director shall then change the Nonconformity Report status to “closed” and shall submit the Nonconformity Report to the Province’s Representative within two Business Days thereafter.
- (i) The Design-Builder may object to the issuance of any Nonconformity Report by the Province. If such objection has not been resolved by mutual agreement between the Province and the Design-Builder within five Business Days of delivery by the Design-Builder to the Province’s Representative of notice of the objection, then either the Design-Builder or the Province may refer the matter to the Dispute Resolution Procedure for determination.
- (j) If the Design-Builder fails to object to the issue by the Province of a Nonconformity Report within five Business Days, the Design-Builder is deemed to have accepted that Nonconformity Report.

6.2 Nonconformity Report Tracking System

The Design-Builder will implement and maintain a live, electronic, internet-based Nonconformity Tracking System to monitor the status of all Nonconformity Reports initiated by the Province and the Design-Builder.

PQ6.2.1 The Nonconformity Tracking System shall be fully operational, with the following minimum requirements, within 90 days from the Effective Date:

- (a) comprising a single repository containing both the Design-Builder and Province initiated Nonconformity Reports;
- (b) having the ability to attach supporting material such as photos and documents;

- (c) providing live access to the current Nonconformity Report status to both the Design-Builder and the Province;
- (d) automatically applying NCE Points to each Non-Compliance Event in accordance with Schedule 10 [Payment and Performance Mechanism];
- (e) allowing for the application of additional NCE Points to individual Nonconformity Reports in accordance with Schedule 10 [Payment and Performance Mechanism]; and
- (f) submitting monthly summary Reports to the Province’s Representative of all Nonconformity Reports including the status of outstanding Nonconformity Reports, NCE Points and Default Points accrued within each performance threshold category in any given month, and the total NCE Points and Default Points accrued across all performance threshold categories in any given month.

6.3 Unremedied Nonconformity

The Province may issue further Nonconformity Reports if a Nonconformity identified in a Nonconformity Report continues unremedied, and may assign Default Points in respect of such unremedied Nonconformity pursuant to Section 5.4 [Assignment of Default Points] of Schedule 10.

6.4 Nonconformity Records

In addition to the maintenance of the Nonconformity Tracking System under Section 6.2 [Nonconformity Report Tracking System] of this Schedule, the Design-Builder shall maintain records of:

- (a) each Nonconformity;
- (b) the reference numbers of all Nonconformity Reports;
- (c) a description of all Nonconformity Reports;
- (d) the proposed actions by the Design-Builder to rectify each Nonconformity;
- (e) the date and time at which Nonconformities were identified;
- (f) the date and time at which the status of Nonconformity Report is changed to “pending” in accordance with Section 6.1(f) of this Schedule; and
- (g) the date and time at which a Nonconformity specified in a Nonconformity Report was rectified.

**APPENDIX A
QUALITY MANUAL**

1.0 QUALITY MANUAL

- 1.1 The Design-Builder shall provide a comprehensive Quality Manual that describes the Quality Management System for all aspects of the Project Work including the Design and Construction phases of the Project, in accordance with the ISO 9001:2015 Standard. The Quality Manual shall establish the Quality Policy and Quality Objectives for all aspects of the Project Work and shall describe the processes that shall be established, implemented, controlled, and continually improved to achieve the established Quality Objectives.
- 1.2 The Quality Objectives shall be measurable, consistent with the Quality Policy and linked to meeting the needs and performance expectations of the Province with respect to all aspects of the Project Work, including the Design and Construction phases of the Project. The Quality Management System described in the Quality Manual shall include all the activities required to achieve these Quality Objectives, including project controls such as scope, cost, schedule, actions to address risks and opportunities, document control, and general management activities. All of these activities shall be subject to Internal Quality Audits, External Quality Audits or Independent Quality Audits.
- 1.3 The Quality Manual shall describe the nature of the Design-Builder's organization involved in performing the Project Work and how key management activities (such as project controls; Design; Construction; Traffic Management; communications, and environmental management) shall interface with each other. The Quality Manual shall also provide the organization chart, authority and responsibilities of all key personnel. The Quality Manual shall also show how the various levels of Quality Management System documentation, including other relevant documentation such as any plan, procedure or like document detailed elsewhere in this Agreement, are linked together.
- 1.4 The Quality Manual shall clearly define the reporting function and authority of the Design-Builder's Quality Director who shall liaise with the Province's Representative and act as the single point representative of the Design-Builder for all matters relating to quality management.

**APPENDIX B
DESIGN QUALITY MANAGEMENT PLAN**

1.0 DESIGN QUALITY MANAGEMENT PLAN

- 1.1 The Design-Builder shall provide a comprehensive Design Quality Management Plan that describes how it intends to manage the design processes for the Project in accordance with the ISO 9001:2015 Standard, the Quality Management System requirements stated in its Quality Manual and the provisions of this Agreement.
- 1.2 The Design Quality Management Plan shall contain an organizational chart identifying key design management personnel and the relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications, and authority of the above personnel and the organizational interfaces with other engineering groups, environmental management, and construction disciplines.
- 1.3 The Design Quality Management Plan shall, at a minimum, include or reference detailed quality system procedures and process flow charts for the following processes:
- (a) design input and output review;
 - (b) design verification to ensure that design input requirements have been met;
 - (c) design validation to ensure that the final product is capable of meeting its intended use;
 - (d) design changes;
 - (e) design subcontractor quality assessment and procurement;
 - (f) Designer review during Construction;
 - (g) Design and Construction Certification;
 - (h) interface with Construction, including the development and review of inspection and testing plans by the Designer prior to and during Construction, and ongoing Designer review of records during Construction;
 - (i) External Quality Audits of the Designer and design subcontractor(s);
 - (j) Internal Quality Audits;
 - (k) control of nonconforming activities and/or product;
 - (l) Corrective Actions;
 - (m) Opportunities for Improvement;
 - (n) document management; and
 - (o) control of Records.

KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 7: QUALITY MANAGEMENT
Appendix B: Design Quality Management Plan

Commercial in Confidence
Execution

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The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

- 1.4 When any of the above processes are addressed as part of other Quality Documentation, such as the Quality Manual or another Quality Management Plan, these processes shall still be provided with their own section heading in the Design Quality Management Plan, but the details of such processes in the applicable section of the Design Quality Management Plan may be limited to a reference to the section or paragraph of the other applicable Quality Documentation where the relevant details are provided, provided that such referenced section or paragraph of such other Quality Documentation includes specific requirements to the applicable process as it relates to design quality management. Notwithstanding the foregoing, processes that fall within the specific requirements for Design must include detailed quality system procedures and process flow charts under the Design Quality Management Plan.

**APPENDIX C
CONSTRUCTION QUALITY MANAGEMENT PLAN**

1.0 CONSTRUCTION QUALITY MANAGEMENT PLAN

- 1.1 The Design-Builder shall provide a comprehensive Construction Quality Management Plan that describes how it intends to manage the Construction processes in connection with the Project in accordance with the ISO 9001:2015 Standard, the Quality Management System requirements stated in its Quality Manual and the provisions of this Agreement.
- 1.2 The Construction Quality Management Plan shall contain an organizational chart identifying key Construction management personnel and the relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications, and authority of the above personnel and the organizational interfaces with design and other disciplines such as communications, environmental management and Traffic Management.
- 1.3 The Construction Quality Management Plan shall, at a minimum, include or reference detailed quality system procedures and process flow charts for the following processes:
- (a) Health and Safety Program performance audits;
 - (b) inspection, testing and monitoring;
 - (c) materials identification and traceability;
 - (d) chain of custody for sampling and testing;
 - (e) receiving inspections for procured equipment and supplies;
 - (f) Subcontractors' quality assessment and procurement;
 - (g) interface with design and other disciplines for work activities including the development and review of inspection and testing plans prior to and during Construction, and coordination of field reviews by the Designer during Construction;
 - (h) External Quality Audits and Independent Quality Audits of Subcontractors;
 - (i) Internal Quality Audits and Independent Quality Audits;
 - (j) control of nonconforming activities and/or product;
 - (k) Corrective Actions;
 - (l) Opportunities for Improvement;
 - (m) document management; and
 - (n) control of Records.

SCHEDULE 7: QUALITY MANAGEMENT

Appendix C: Construction Quality Management Plan

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The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

- 1.4 When any of the above processes are addressed as part of other Quality Documentation, such as the Quality Manual or another Quality Management Plan, these processes shall still be provided with their own section heading in the Construction Quality Management Plan, but the details of such processes in the applicable section of the Construction Quality Management Plan may be limited to a reference to the section or paragraph of the other applicable Quality Documentation where the relevant details are provided, provided that such referenced section or paragraph of such other Quality Documentation includes specific requirements to the applicable process as it relates to construction quality management. Notwithstanding the foregoing, processes that fall within the specific requirements for Construction must include detailed quality system procedures and process flow charts under the Construction Quality Management Plan.
- 1.5 The Construction Quality Management Plan shall include or reference an Inspection and Testing Plan detailing all on and off Project Site inspection and testing activities for work performed by the Design-Builder and that of its Subcontractors and suppliers of any tier. The Inspection and Testing Plan shall, at a minimum, include:
 - (a) description of the inspection, test and monitoring activity;
 - (b) frequency of inspections, tests and monitoring;
 - (c) reference to standards, codes, specifications, and acceptance criteria;
 - (d) reports, documents, certificates and checklists required;
 - (e) personnel and organization responsible for inspection, testing, acceptance and monitoring of the Project Work;
 - (f) quality assurance review, witness and hold points; and
 - (g) description and frequency of geotechnical instrumentation monitoring and adherence to acceptance criteria.
- 1.6 The Construction Quality Management Plan shall also identify all major Project Work activities requiring detailed Work Method Statements to describe the processes and methodologies required to deliver the Project Work. The Design-Builder shall submit Work Method Statements to the Province's Representative under the Review Procedure prior to commencement of the relevant work activity.

**APPENDIX D
TRAFFIC QUALITY MANAGEMENT PLAN**

1.0 TRAFFIC QUALITY MANAGEMENT PLAN

- 1.1 The Design-Builder shall provide a comprehensive Traffic Quality Management Plan that describes how it intends to administer the Traffic Management processes in connection with the Project in accordance with the ISO 9001:2015 Standard, the Quality Management System requirements stated in its Quality Manual and the provisions of this Agreement. The Traffic Quality Management Plan shall address all phases of the Project Work including Design and Construction. The Traffic Quality Management Plan shall also detail coordination of traffic management strategies with the Ministry District Avalanche Technician, Parks Canada and the Concessionaire.
- 1.2 The Traffic Quality Management Plan shall contain an organizational chart identifying key Traffic Management personnel and the relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications, and authority of the above personnel and the organizational interfaces between Traffic Management and other disciplines such as Design, Construction, communications and environmental management.
- 1.3 The Traffic Quality Management Plan shall at a minimum, include or reference detailed quality system procedures and process flow charts for the following processes:
- (a) Traffic Quality Management Plan design input and output review;
 - (b) Traffic Quality Management Plan design verification to ensure that design input requirements have been met;
 - (c) Traffic Quality Management Plan design validation to ensure that the final product is capable of meeting its intended use;
 - (d) Traffic Quality Management Plan design changes;
 - (e) Subcontractors' quality assessment and procurement;
 - (f) External Quality Audits of Subcontractors;
 - (g) Internal Quality Audits;
 - (h) control of nonconforming activities;
 - (i) Corrective Actions;
 - (j) Opportunities for Improvement;
 - (k) document management; and
 - (l) control of Records.

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The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

- 1.4 When any of the above processes are addressed as part of other Quality Documentation, such as the Quality Manual or another Quality Management Plan, these processes shall still be provided with their own section heading in the Traffic Quality Management Plan, but the details of such processes in the applicable section of the Traffic Quality Management Plan may be limited to a reference to the section or paragraph of the other applicable Quality Documentation where the relevant details are provided, provided that such referenced section or paragraph of such other Quality Documentation includes specific requirements to the applicable process as it relates to traffic quality management. Notwithstanding the foregoing, processes that fall within the specific requirements of the Traffic Management Plan must include detailed quality system procedures and process flow charts under the Traffic Quality Management Plan.
- 1.5 The Traffic Management Auditing process and Site Condition Rating checklist as described in Section 4.8 [Traffic Management Auditing] of this Schedule shall be incorporated into the Traffic Quality Management Plan.
- 1.6 The Traffic Quality Management Plan shall describe the coordination of traffic management strategies with the District Avalanche Technician, the Concessionaire, and Parks Canada in accordance with Appendix E [Snow Avalanche Safety Measures] of Schedule 4.

**APPENDIX E
ENVIRONMENTAL QUALITY MANAGEMENT PLAN**

1.0 ENVIRONMENTAL QUALITY MANAGEMENT PLAN

1.1 The Design-Builder shall provide a comprehensive Environmental Quality Management Plan that describes how it intends to manage the environmental components of the Project in accordance with the ISO 14001:2015 Standard, the Quality Management System requirements stated in its Quality Manual and the provisions of this Agreement. The Environmental Quality Management Plan shall address all phases of the Project Work including Design and Construction.

1.2 The Environmental Quality Management Plan shall contain an organizational chart identifying key environmental management personnel and the relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications, and authority of the above personnel and the organizational interfaces between the environmental management and other disciplines such as design and construction.

1.3 The Environmental Quality Management Plan shall at minimum include or reference detailed quality system procedures and process flow charts for the following processes:

- (a) satisfying and ensuring compliance with the Design-Builder's Environmental Obligations, including the preparation and implementation of an Environmental Management Plan and specific plans as detailed elsewhere in this Agreement;
- (b) obtaining and maintaining Permits;
- (c) environmental monitoring and reporting;
- (d) environmental incident reporting and tracking;
- (e) External Quality Audits of Subcontractors;
- (f) Internal Quality Audits;
- (g) control of nonconforming activities and/or products;
- (h) Corrective Actions;
- (i) Opportunities for Improvement;
- (j) document management; and
- (k) control of Records.

The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

1.4 When any of the above processes are addressed as part of other Quality Documentation, such as the Quality Manual or another Quality Management Plan, these processes shall still be provided with their own section heading in the Environmental Quality Management Plan, but the details of

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such processes in the applicable section of the Environmental Quality Management Plan may be limited to a reference to the section or paragraph of the other applicable Quality Documentation where the relevant details are provided, provided that such referenced section or paragraph of such other Quality Documentation includes specific requirements to the applicable process as it relates to environmental quality management. Notwithstanding the foregoing, processes that fall within the specific requirements of environmental management must include detailed quality system procedures and process flow charts under the Environmental Quality Management Plan.

- 1.5 The Environmental Quality Management Plan shall clearly demonstrate how verification of the Design-Builder's compliance with the Design-Builder's Environmental Obligations, including obtaining approvals from relevant Environmental Authorities, will be carried out.

APPENDIX F

HEALTH AND SAFETY PROGRAM QUALITY MANAGEMENT PLAN

1.0 HEALTH AND SAFETY PROGRAM QUALITY MANAGEMENT PLAN

1.1 The Design-Builder shall provide a comprehensive Health and Safety Program Quality Management Plan that describes how it intends to manage the Health and Safety Program components of the Project in accordance with WorkSafeBC regulation, Health and Safety Laws and Quality Management System requirements stated in its Quality Manual and the provisions of this Agreement. The Health and Safety Program Quality Management Plan shall address all phases of the Project Work including Design and Construction.

1.2 The Health and Safety Program Quality Management Plan shall contain an organizational chart identifying key safety management personnel and the relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications, and authority of the above personnel and the organizational interfaces between safety management and other disciplines such as design and construction.

1.3 The Health and Safety Program Quality Management Plan shall at minimum include or reference detailed quality system procedures and process flow charts for the following processes:

- (a) satisfying and ensuring compliance with the Design-Builder's safety management and performance obligations including the preparation and implementation of a Health and Safety Program Management Plan and specific plans as detailed elsewhere in this Agreement;
- (b) safety performance monitoring and reporting;
- (c) safety incident reporting, investigation and tracking;
- (d) External Quality Audits and Independent Quality Audits of Subcontractors;
- (e) Internal Quality Audits and Independent Quality Audits;
- (f) control of nonconforming activities;
- (g) Corrective Actions;
- (h) Opportunities for Improvement;
- (i) document management; and
- (j) control of Records.

The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

1.4 When any of the above processes are addressed as part of other Quality Documentation, such as the Quality Manual or another Quality Management Plan, these processes shall still be provided with their own section heading in the Health and Safety Program Quality Management Plan, but

SCHEDULE 7: QUALITY MANAGEMENT

Appendix F: Health and Safety Program Quality Management Plan

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the details of such processes in the applicable section of the Health and Safety Program Quality Management Plan may be limited to a reference to the section or paragraph of the other applicable Quality Documentation where the relevant details are provided, provided that such referenced section or paragraph of such other Quality Documentation includes specific requirements to the applicable process as it relates to safety quality management. Notwithstanding the foregoing, processes that fall within the specific requirements of safety management must include detailed quality system procedures and process flow charts under the Health and Safety Program Quality Management Plan.

- 1.5 The Health and Safety Program Quality Management Plan shall clearly demonstrate how verification of the Design-Builder's compliance with the Design-Builder's safety obligations including obtaining approvals from Governmental Authorities, will be carried out.

APPENDIX G

TRAFFIC MANAGEMENT SITE CONDITION RATING CHECKLIST– SAMPLE

Contractor		Location	
Auditor		Direction	
Date & Time		TCP #	
Weather		Activity	

A. Advanced Warning Area

- Signage
- Visibility
- Placement
- Condition

B. Transition Area, Buffer Space, Work Area, Termination Area

- Signage
- Visibility
- Placement
- Condition
- Delineation
- Placement
- Condition
- Spaced Correctly

C. Other issues

- Excavations
- Pedestrians from work
- Pedestrians from traffic
- Cyclists from work
- Cyclists from traffic
- Advance Warning area
- Transition area
- Buffer Space
- Work Area
- Warning lights
- Vehicles operating with traffic flow
- Vehicles parked with traffic flow
- Vehicles outside zone
- Entering/leaving with traffic flow
- Workers safety
- Traffic Control Plan available on site
- TCP or TCP Supervisor on site

D. General Observations

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SCHEDULE 7: QUALITY MANAGEMENT

Appendix G: Traffic Management Site Condition Rating Checklist - Sample

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SITE CONDITION RATING

Nonconformity		SCR Points	No. Of Occurrences	Total SCR Points
Signs	Missing (including side road)	5 for each sign		
	Incorrect Spacing	2 for each sign		
	Misaligned/Not visible	3 for each sign		
	Obstructed	3 for each sign		
	Condition marginal - needs repair	1 for each sign		
	Condition unacceptable - needs replacement	4 for each sign		
	Order incorrect	2 for each set of signs out of order		
	Contradictory sign not covered	2 for each sign		
	Unapproved sign	4 for each sign		
	Sign on wrong side	2 for each sign		
	Sign too low	1 for each sign		
	Speed restriction/de-restriction not appropriate/inconsistent	5 for each occasion		
	Speed limit not correctly aligned	2 for each occasion		
	Sign not upright	1 for each sign		
	Non-compliant support	2 for each support		
	Wrong sign	5 for each sign		
	Lateral location incorrect	1 for each sign		
Any other sign Deficiency	1 for each sign			
Delineation Devices	Missing as per TCP	30 where delineation is missing and required		
	Tapers too short	5 for each taper		
	Spacing in tapers	3 for each taper where spacing too great to be effective		
	Spacing in lanes	2 where spacing in lanes/around work area is too great		
	Condition marginal - needs repair	1 for each device where classified in marginal condition		
	Condition unacceptable - needs replacement	3 for each device in unacceptable condition		
	Using non-approved device	4 for each non-approved device		
	Used incorrectly	2 for each device		
	Lane Shift	10 for each missing or installed incorrectly		
	Any other delineation device deficiency	2 for each occurrence		
Pavement Markings	Marking missing	5 for each occurrence		
	Marking incorrect	5 for each occurrence		
	Marking not located as per TCP	5 for each occurrence		
	Marking not visible	5 for each occurrence		
	Contradictory markings/not eradicated	5 for each occurrence		
	Any other pavement marking deficiency	2 for each occurrence		
Miscellaneous	Workers working in Live Lanes	55 for each occasion		
	Traffic Control Personnel not located as per TCP	30 for each occurrence		
	Unauthorized/Unqualified person controlling traffic	30 for each occurrence		
	Flashing Beacon not used / ineffective	1 for each vehicle		
	PPE not worn	5 for each individual		
	PPE in poor condition	5 for each PPE in unacceptable condition		
	No provision for pedestrians	30 where no provision made and required		
	No provision for cyclists	30 where no provision made and required		
Parking/stopping features not relocated	5 where relocation of feature is required			

SCHEDULE 7: QUALITY MANAGEMENT

Appendix G: Traffic Management Site Condition Rating Checklist - Sample

Nonconformity		SCR Points	No. Of Occurrences	Total SCR Points
	Equipment/materials obstruct pedestrians or cyclists	5 for each occurrence		
	Transition Area, or Buffer Space, or Work Area compromised	2 for unacceptable or no safety zone		
	Excavation not protected	10 for excavation not protected by acceptable method		
	DMS/PDMS message incorrect	20 for displaying incorrect information		
	Barrier defects	10 for each incorrect or missing barrier component		
	Any other hazards	10 for each occurrence		
Mobile & Semi Static Operations	Pilot vehicle omitted	20 for missing or incorrect location		
	Buffer/Shadow vehicle omitted	20 for missing or incorrect location		
	Vehicle mounted signs	5 for missing or incorrect signs		
	TMA missing	20 for TMA missing when required		
	TMA non-compliant	5 for TMA in use but not of acceptable standard		
	Arrowboard missing	20 for Arrowboard missing when required		
	Arrowboard display incorrect	20 for no display or incorrect display		
Any other mobile & semi static deficiency	20 for each occurrence			
Other Operational	Twice daily passage of local traffic and school bus during periods of Extended Closure	50 for each occurrence		
SCR POINT TOTAL				

Site Condition Rating	<i>No Nonconformities Identified</i> (0)	<i>Category 1</i> (1 -25)	<i>Category 2</i> (26-50)	<i>Category 3</i> (51+)
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Copies to:

Province's Representative

**SCHEDULE 8
LANDS**

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**PART 1
TERMS AFFECTING ACCESS TO PROJECT SITE**

1.1 Conditions of Access

The access to the Project Site granted to the Design-Builder in Section 2.5 [Access to and Responsibility for Project Site] and the rights of the Design-Builder thereunder are subject to all terms, conditions and limitations set out in this Schedule (collectively, the “**Conditions of Access**”), including the following:

- (a) all rights of public passage or access existing over all or any part of the Project Site and the Project Infrastructure from time to time;
- (b) the rights of the public and users to use all or any part of the Project Facilities and any other private and public roads or highways;
- (c) the rights of access referred to in Section 4.6 [Public Use] and 4.7 [Access to Project Site and Project Infrastructure by Others];
- (d) the rights of the Province and any Governmental Authority with respect to the Project Site or parts thereof provided for elsewhere in this Agreement including Part 11 [Province’s Access, Monitoring and Step-In Rights];
- (e) in the case of any part of the Project Site that is Crown land, all rights over Crown land;
- (f) in the case of any part of the Project Site that is subject to the *Land Title Act* (British Columbia), any applicable exceptions to indefeasible title set out in section 23(2) thereof;
- (g) the terms and conditions of the Project Site Agreements, including the Railway Agreements, and of any Land Rights comprising any part or parts of the Project Site;
- (h) the Project Site Encumbrances and the Utility Agreements; and
- (i) all Indigenous Requirements and Requirements of Interested Parties.

1.2 Land Rights Not Yet Acquired

- (a) The Design-Builder acknowledges that as at the date of this Agreement neither the Province nor BCTFA owns all of the Land Rights that will comprise the Project Lands, and that some of the Land Rights that will comprise the Project Lands are to be acquired by the Province or BCTFA after the date hereof, after which they will be made available to the Design-Builder and will, for the purposes of this Agreement, form part of the Project Lands, all subject to the terms and conditions of this Agreement.
- (b) The Design-Builder shall provide such information and documentation and such administrative assistance as may be requested by the Province and as the Design-Builder may reasonably be able to provide, to assist the Province or BCTFA in completing the acquisition in respect of any Project Lands. The Province shall reimburse the Design-Builder for the reasonable costs incurred by the Design-Builder in providing such information, documentation and assistance to the Province.

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1.3 Commencement of Access to Project Site

The access to the Project Site granted to the Design-Builder in Section 2.5 [Access to and Responsibility for the Project Site] shall commence, and the Province shall make the relevant lands available to the Design-Builder for the purposes of this Agreement and the Project Work as follows:

- (a) in the case of Project Lands (or Land Rights therein) owned by or vested in the Province or BCTFA as of the Effective Date, on the Effective Date; and
- (b) without prejudice to the Province's obligations under Section 2.1 [Handover of Lands] of this Schedule and the Design-Builder's rights in respect of any breach thereof, in the case of any parcel of Project Lands (or Land Rights therein) not owned by or vested in the Province or BCTFA as of the Effective Date, on the date specified by the Province in a notice of entry with respect to such parcel, and if such date is before:
 - (i) the date that title to the parcel is acquired by and registered in the name of the Province or BCTFA, as the case may be; or
 - (ii) in the case of land established as a highway, the date that title to the parcel vests in the Province or BCTFA, as the case may be, as highway,

then until title to such parcel is registered in the name of the Province or BCTFA or vests in the Province or BCTFA, as the case may be, the Design-Builder shall comply with and cause all Subcontractors to comply with any terms governing such entry specified in the notice of entry.

The Province will use all reasonable efforts to provide that each parcel of Project Lands (other than the Additional Lands) will, when made available to the Design-Builder in accordance with this Section 1.3, be a "highway" as defined by the *Transportation Act* (British Columbia).

1.4 Termination of Access to Project Site

The access to the Project Site granted to the Design-Builder in Section 2.5 [Access to and Responsibility for Project Site] shall terminate and expire (except to the extent necessary to enable the Design-Builder to perform any obligations of the Design-Builder under this Agreement required to be performed in consequence of or following the termination of this Agreement) as follows:

- (a) as to any Temporary Land Rights, on the date of expiration or termination thereof as contemplated in Section 1.9 [Temporary Land Rights] of this Schedule;
- (b) as to any Land Rights (other than fee simple interests) in any Project Lands, on the date of termination thereof; and
- (c) as to all other Project Lands, on the Substantial Completion Date,

or, in each case, if earlier, the date on which the Province's rights of access to such part of the Project Site terminate as a result of any act or omission of, or breach in the performance or observance of, the Design-Builder's obligations under this Agreement by the Design-Builder or any person for whom the Design-Builder is in law responsible, and in any event, notwithstanding the foregoing, the access to the Project Site granted to the Design-Builder in Section 2.5 [Access to and Responsibility for Project Site] shall

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terminate and expire (except to the extent necessary to enable the Design-Builder to perform any obligations of the Design-Builder under this Agreement required to be performed in consequence of or following the termination of this Agreement) not later than the effective date of any termination of this Agreement.

1.5 Limitations on Access to Project Site

In addition to and not in limitation of the other requirements in this Agreement, the following terms, conditions and limitations apply to the access to the Project Site granted to the Design-Builder in Section 2.5 [Access to and Responsibility for Project Site]:

- (a) such access will subsist for the purposes of carrying out the Project Work and for no other purposes;
- (b) such access includes the right of the Design-Builder to grant access to the Project Site, on the same terms and conditions and subject to the same terms, conditions and limitations as the access to the Project Site granted to the Design-Builder in Section 2.5 [Access to and Responsibility for Project Site], for the purpose of carrying out the Project Work and for no other purpose;
- (c) no legal demise or other interest in land, and no interest in the Project Site or the Project Infrastructure thereon, or in any other land or improvements, is granted to the Design-Builder, or created in favour of the Design-Builder, by this Agreement;
- (d) such access is non-exclusive, and no right to exclusive possession of all or any part of the Project Site or the Project Infrastructure thereon is granted to the Design-Builder; and
- (e) the Design-Builder's rights are derived from and subject to the rights and interests of the Province and/or BCTFA in and to the Project Site (including under the Project Site Agreements) and are subject to the Conditions of Access.

1.6 Special Use Restrictions

Without limiting the generality of Section 2.7 [Limited Use], or Section 1.5 [Limitations on Access to Project Site] of this Schedule, where any land or Land Rights forming part of the Project Site have been acquired or made available:

- (a) for any specific purpose pursuant to a Project Site Agreement, or a Compulsory Acquisition Order; or
- (b) subject to any restriction relating to the use of such land for any specific purpose;

the Design-Builder shall not use such land or Land Rights other than for activities that are necessary for the achievement of such specific purpose, and the access to the Project Site granted to the Design-Builder in Section 2.5 [Access to and Responsibility for Project Site] in respect of such land will be limited accordingly.

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1.7 Boundaries Descriptions

Subject to Section 1.9 [Updating of Land Boundaries] of this Schedule, the boundaries of the Project Lands are as reflected in the descriptions thereof in the Appendices to this Schedule and the Land Identification Drawings. The Land Identification Drawings, as updated in accordance with Section 1.9 [Updating of Land Boundaries] of this Schedule shall govern as to the delineation of the boundaries of the Project Lands. The Land Identification Sheets are for convenience of reference only and shall not determine or affect the rights and obligations of the parties. The Design-Builder confirms that it is satisfied as to the adequacy and sufficiency of the descriptions of such boundaries for the purposes of the design of the New Project Infrastructure pursuant to the Project Requirements on the date of execution of this Agreement.

1.8 Temporary Land Rights

- (a) Until such time as the Province gives the Design-Builder notice of the expiry of any Temporary Land Rights, and which notice shall not, unless otherwise specified on the Land Identification Drawings, take effect prior to the Substantial Completion Date, the lands associated with such Temporary Land Rights shall form part of the Project Lands for all purposes of this Agreement.
- (b) Upon the expiry of any Temporary Land Rights, the Design-Builder shall return the applicable Project Lands to a like condition as existing as of the Handover Date for such Project Lands.
- (c) In the event the Design-Builder wishes to make use of the Dart Creek Forest Service Road, the Design-Builder shall, before any such use, obtain a Permit for such use from the Ministry of Forests.

1.9 Updating of Land Boundaries

The descriptions of the boundaries of the Project Lands in the Appendices to this Schedule and the Land Identification Drawings, will be revised as appropriate to reflect:

- (a) the actual boundaries of the Project Lands that are acquired by the Province or BCTFA after the Effective Date;
- (b) any additional Land Rights actually acquired in connection with any Province Change or agreed Value Engineering Proposal; and
- (c) any revisions to the boundaries of the Project Lands necessary to reflect the expiry of Temporary Land Rights in accordance with Section 1.8 [Temporary Land Rights] of this Schedule,

and provided that no such revision of the boundaries of the Project Lands shall constitute a Change or a Compensation Event pursuant to subsection (a) of the definition of “Compensation Event” in Section 1.1 [Definitions] of Schedule 1. The Design-Builder shall submit to the Province’s Representative pursuant to the Consent Procedure the Land Identification Drawings, updated in accordance with the foregoing upon the request of the Province.

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1.10 Access to and from Project Site

The Province shall at all reasonable times during the Term make available to the Design-Builder reasonable access to and from the Project Site by means of right of passage across highways outside the Project Site for which the Province or BCTFA is the highway authority, but only to the extent necessary to enable the Design-Builder to perform its obligations under this Agreement, subject to reasonable prior notice in writing being given by the Design-Builder to the Province's Representative, and subject to all Laws including Laws applicable to the use of highways by the public generally. The Design-Builder, in exercising such access, shall use all reasonable efforts to avoid or, if unavoidable, to minimize physical disruption to the operation of such highways and shall not cause any physical damage to such highways. The Province shall not be responsible for obtaining such access across any highway or road under the authority of a municipality or any highway authority other than the Province or BCTFA.

1.11 Design-Builder Not to Acquire Project Lands

Neither the Design-Builder, nor any Subcontractor who contracts directly with the Design-Builder to perform all or part of the Project Work, nor any Affiliate of the Design-Builder or of a Subcontractor who contracts directly with the Design-Builder to perform all or part of the Project Work, shall, except from the Province as expressly provided in this Agreement, acquire any Project Lands or any Land Rights in Project Lands, without the prior written consent of the Province pursuant to the Consent Procedure, which consent may be withheld in the discretion of the Province.

1.12 Acquisition of Additional Project Lands by the Province

The Design-Builder may submit a Value Engineering Proposal in accordance with Section 7.4 [Value Engineering Proposals] and Part 3 [Value Engineering Proposals] of Schedule 11 requesting the Province and/or BCTFA to acquire Land Rights in, over or relating to lands that do not currently form part of the Project Lands, if the Design-Builder considers that it would be beneficial to construct or install Project Infrastructure on such lands.

PART 2 HANDOVER OF LANDS

2.1 Handover of Lands

The Province shall make each parcel of Project Lands available to the Design-Builder on the terms of this Agreement on or before the Specified Handover Date for that parcel of Project Lands.

2.2 Extension of Specified Handover Date by Province

The Province will have the right from time to time to extend the Specified Handover Date with respect to any parcel of Project Lands by way of an Province Change and the provisions of Part 7 [Province Changes and Design-Builder Proposals] will apply accordingly.

2.3 Change of Handover Date by Design-Builder

The Design-Builder may from time to time request a change in any Specified Handover Date with respect to any parcel of Project Lands, provided the Design-Builder makes such request by notice in writing to the Province's Representative prior to the then current Specified Handover Date for such parcel, and the Province, to the extent it is reasonably able to do so, will endeavour to accommodate such

- 6 -

request, provided that the Design-Builder will bear and will reimburse the Province and BCTFA on demand for, and will indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, in respect of, all Direct Losses and/or Claims at any time suffered or incurred by the Province and the Province Indemnified Persons, or any of them, as a result of accommodating or attempting to accommodate such request, and provided further that neither the Province nor BCTFA will have any liability to the Design-Builder for, and the Design-Builder will have no claim for compensation or other relief arising out of, any failure of the Province or BCTFA to accommodate any such request.

**PART 3
OTHER LAND**

3.1 Acquisition of Other Land

- (a) It is the Design-Builder's obligation, at its sole cost and expense, to acquire any access to or use of, or any Land Rights in respect of, any Other Land, desired by the Design-Builder, or required, to enable the Design-Builder to perform its obligations under this Agreement.
- (b) The Design-Builder shall bear and be responsible for all costs, charges and expenses, and all other Losses and Claims, arising from or in connection with the use or occupation of any Other Land or Land Rights in Other Land acquired or used for the purposes of performing the obligations of the Design-Builder under this Agreement.
- (c) The Design-Builder shall indemnify and hold harmless the Province and the Province Indemnified Persons, and each of them, from and against all Claims and Direct Losses arising as a result of or in connection with the acquisition, use or occupation of any Other Land or Land Rights in Other Land acquired or used for the purposes of performing the obligations of the Design-Builder under this Agreement.
- (d) Before acquiring any access to or use of, or any Land Rights in respect of, any Other Land, for the purposes of performing the obligations of the Design-Builder under this Agreement, and before using or allowing the use of any Other Land for such purposes, the Design-Builder shall provide to the Province evidence satisfactory to the Province that such acquisition and use for such purposes will not result in material adverse changes to the environmental or archaeological effects of the Project.
- (e) At the Province's direction the Design-Builder shall ensure that, if this Agreement is terminated prior to the Total Completion Date, any Other Lands or Land Rights in respect of Other Lands acquired by (or on behalf of) the Design-Builder or any person for whom the Design-Builder is in law responsible, and occupied at the time of such termination by the Design-Builder for the purposes of the Project, are made available to the Province for its occupation and use until the completion of the Project by the Province or, if applicable, until such earlier date on which the Design-Builder's rights over such land would have otherwise expired for the purposes of the Project (or, in each case, such earlier date as determined by the Province, in its discretion) upon such terms as the Province may in its discretion require, subject to payment by the Province of a reasonable rental charge, and if the Province exercises its rights under this Section 3.1(e), the Design-Builder shall indemnify the Province and the Province Indemnified Persons, and each of them, from and against any Claims and Direct Losses at any time suffered or

- 7 -

incurred by, or brought or made against, the Province and the Province Indemnified Persons that arise directly or indirectly as a result of or in connection with:

- (i) any failure by any person for whom the Design-Builder is in law responsible failing to comply or fulfill any obligation in any lease or other agreement which permits use and occupation of such Other Lands or Land Rights in respect of Other Lands; or
- (ii) the use and occupation of the relevant Other Lands or Land Rights in respect of Other Lands during the period prior to occupation and use thereof by the Province,

and the provisions of this Section 3.1(e) shall survive the termination of this Agreement.

PART 4 SPECIAL PROVISIONS

4.1 Site Materials

The Design-Builder may only excavate, extract, dispose of, exploit or otherwise deal with Site Materials:

- (a) in accordance with applicable Laws, Permits, and the terms of all relevant Project Site Agreements, Compulsory Acquisition Orders, Project Site Encumbrances and Utility Agreements;
- (b) if and to the extent that, in the case of excavation or extraction of Site Materials, such excavation or extraction is necessary for the purpose of carrying out the Project Work in accordance with the Project Requirements;
- (c) subject to and in accordance with the rights of all third parties, whether being rights in or to the Site Materials, Land Rights, rights under Project Site Agreements, Project Site Encumbrances, Utility Agreements, Indigenous Requirements, Requirements of Interested Parties, or otherwise;
- (d) subject to all limitations, restrictions and conditions, whether pursuant to Laws or otherwise, that would apply to or affect the right of the Province or BCTFA to undertake any such excavation, extraction, disposal, exploitation or other dealing if the Province or BCTFA were undertaking the same; and
- (e) in a manner that does not contravene any of the requirements of Schedule 6 [Environmental Requirements] or the Environmental Constraint Drawings, and in accordance with all applicable Permits including those obtained by the Design-Builder to permit such excavation, extraction, disposal of, exploitation or dealing with the Site Materials.

4.2 Fire Control Powers Under the *Wildfire Act*

For greater certainty, the exercise by the Province of rights, powers or authorities provided for under any enactment to compel the provision of facilities, equipment and/or employees to carry out fire

- 8 -

control under the *Wildfire Act* (British Columbia) will not give rise to any Claim or entitlement on the part of the Design-Builder for any Losses, compensation, extension of time or other relief under this Agreement.

4.3 Cutting of Trees or Logging

- (a) The Design-Builder will not cut down or remove trees or timber grown on or make any use of forested lands comprised in the Project Site except in accordance with all applicable Laws and Permits, Schedule 6 [Environmental Obligations] and, in the case of cutting or removal of trees or timber, where:
 - (i) the Design-Builder, acting reasonably, determines that certain trees must be removed for bona fide construction or safety reasons or in order to comply with any of its other obligations under this Agreement; or
 - (ii) the prior approval of the Province (in the case of trees or timber on Crown land) or BCTFA (in the case of trees or timber on land owned by BCTFA) is obtained.
- (b) The Design-Builder will pay all costs and be responsible for all Claims and Direct Losses arising from or in connection with the cutting or removal of trees or timber, and will obtain at its expense all required Permits in connection therewith.
- (c) The Design-Builder will not sell or otherwise dispose of or deal with any trees or timber cut or removed from the Project Site except subject to and in accordance with directions received from the Province (in the case of trees or timber on Crown land) or BCTFA (in the case of trees or timber on land owned by BCTFA) and, if applicable, in accordance with the *Forest Act* (British Columbia).

PART 5 LAND RIGHTS AND ENCUMBRANCES

5.1 Performance of Agreements

The Design-Builder shall:

- (a) observe and perform in all material respects the obligations of the Province and BCTFA under all Project Site Agreements except:
 - (i) those obligations with respect to which the Design-Builder is relieved from liability under Section 5.3 [Exceptions to the Design-Builder Responsibilities] of this Schedule to the extent so relieved;
 - (ii) those obligations of the Province and BCTFA under the Project Site Agreements that may only be legally observed and performed by the Province or BCTFA as a Governmental Authority; and
 - (iii) those obligations of the Province under the CP Agreement that are not expressly included as obligations of the Design-Builder in this Agreement, including in Article 3 [CP Interface] of Part 1 of Schedule 4 to this Agreement;

- 9 -

- (b) not do or omit to do, and not cause or permit to be done or omitted by any Subcontractor or other person for whom the Design-Builder is in law responsible, anything on or with respect to the Project Site or any part thereof or any improvements thereon that would cause the Province or BCTFA to be in breach under any of the Project Site Agreements, Project Site Encumbrances, Utility Agreements, Indigenous Requirements, Requirements of Interested Parties and Permits, but the Design-Builder shall not pursuant to this Section 5.1(b) be obligated to perform those obligations with respect to which the Design-Builder is relieved from liability under Section 5.3 [Exceptions to the Design-Builder Responsibilities] of this Schedule to the extent so relieved; and
- (c) observe and comply with the terms and conditions of all Land Rights relating to or benefiting the Project Site or any part thereof, except:
 - (i) those obligations with respect to which the Design-Builder is relieved from liability under Section 5.3 [Exceptions to the Design-Builder Responsibilities] of this Schedule to the extent so relieved; and
 - (ii) those terms and conditions of such Land Rights that may only be legally observed and performed by the Province or BCTFA as a Governmental Authority.

5.2 Project Work to Comply

The Design-Builder will perform the Project Work such that:

- (a) the Design-Builder complies with and performs all obligations under all of the Project Site Agreements, Project Site Encumbrances, Utility Agreements, Indigenous Requirements, Requirements of Interested Parties and Permits as if the Design-Builder were a party to or bound by such agreements, orders, requirements and permits in the place of the Province or BCTFA, as applicable, except for those obligations with respect to which the Design-Builder is relieved from liability under Section 5.3 [Exceptions to the Design-Builder Responsibilities] of this Schedule to the extent so relieved;
- (b) all Project Work is performed in a manner that does not breach any of the provisions of the Project Site Agreements, Project Site Encumbrances, Utility Agreements, Indigenous Requirements, Requirements of Interested Parties and Permits; and
- (c) there will be no act or omission to act by the Design-Builder or any of the Subcontractors or other persons for whom the Design-Builder is in law responsible that gives rise to a right for any person to obtain any Land Rights in the Project Site or the Project Infrastructure or any part thereof.

5.3 Exceptions to Design-Builder Responsibilities

The Design-Builder shall not have any obligation to pay any rent, user fees, property taxes (if any) or occupancy costs that are or become payable by the Province or BCTFA under Project Site Agreements or Project Site Encumbrances or to indemnify third parties in respect of the non-payment thereof, except for any rent, user fees, property taxes or occupancy costs that become payable as a direct result of a failure by the Design-Builder to observe or perform:

- 10 -

- (a) any other obligations of the Province or BCTFA under the Project Site Agreements that are the responsibility of the Design-Builder; or
- (b) any obligations of the Design-Builder under this Agreement.

5.4 Additional Agreements

The Province and BCTFA each has the right from time to time, in accordance with Section 5.5 [Additions or Changes by Province Change] of this Schedule, to obtain, enter into, assume or grant, additional or amended Project Site Agreements, Compulsory Acquisition Orders and Project Site Encumbrances, and the obligations of the Design-Builder under this Agreement with respect to Project Site Agreements, Compulsory Acquisitions Orders and Project Site Encumbrances shall apply to such agreements, orders and encumbrances.

5.5 Additions or Changes by Province Change

The Province shall issue an Province Change, and the provisions of Part 7 [Province Changes and Design-Builder Proposals] will apply, in the case of any additional or amended Project Site Agreements, Compulsory Acquisition Orders and Project Site Encumbrances obtained, entered into, assumed or granted by the Province or BCTFA after the Financial Submittal Date, except in the case of:

- (a) additional or amended Project Site Agreements, Compulsory Acquisition Orders and Project Site Encumbrances obtained, entered into, assumed or granted in respect of Project Lands or Land Rights therein as specified in Appendix A [Project Lands] to this Schedule, for the purposes of or in connection with the Province acquiring and making available to the Design-Builder such Project Lands and Land Rights as contemplated by this Agreement;
- (b) any additional or amended Encumbrance contemplated in Appendix B [Certain Project Site Encumbrances] or otherwise entered into, assumed or granted in respect of Project Lands to facilitate the Project Work;
- (c) any permit referred to in subsection (d) of the definition of Project Site Encumbrances in Section 1.1 [Definitions] of Schedule 1;
- (d) the entering into by the Province of the CP Agreement substantially in accordance with the terms of the draft thereof included in the Data Room as of August 18, 2020; or
- (e) additional or amended Project Site Agreements, Compulsory Acquisition Orders or Project Site Encumbrances to the extent affecting only the Additional Lands,

provided that the Province shall give the Design-Builder prompt written notice of any such matters.

5.6 Provision of Assistance by Design-Builder

The Design-Builder at its expense shall provide such information, documentation and administrative assistance as may be requested by the Province or BCTFA and as the Design-Builder may reasonably be able to provide (and, if requested, shall execute such applications as are required to be in its name) to enable the Province or BCTFA:

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- (a) to apply for, obtain and (where applicable) renew or extend any Project Site Agreements, including any railway crossing agreements, and Utility Agreements; and
- (b) to comply with and demonstrate compliance with, requirements and obligations of the Province or BCTFA under any Project Site Agreements, Project Site Encumbrances, Utility Agreements, Indigenous Requirements, Requirements of Interested Parties and Permits.

5.7 No Encumbrances by Design-Builder

Except with the prior written consent of the Province, which consent may be granted or withheld in the discretion of the Province, the Design-Builder shall not:

- (a) grant, create, incur or, to the extent within its control to prevent the same, permit, any Encumbrance upon, affecting or against all or any part of the Project Site or the Project Infrastructure;
- (b) grant, create, incur or permit any Encumbrance upon, affecting or against any Plant title to which has passed to the Province in accordance with Section 2.12 [Transfer of Title]; or
- (c) do or omit to do, or cause, suffer or permit to be done or omitted by any person for whom the Design-Builder is in law responsible, anything that results or could result in any Encumbrance upon, against or affecting all or any part of the Project Site or the Project Infrastructure or any Plant title to which has passed to the Province in accordance with Section 2.12 [Transfer of Title].

If all or any part of the Project Site or the Project Infrastructure, or any Plant title to which has passed to the Province in accordance with Section 2.10 [Title to Infrastructure and Improvements] or Section 2.12 [Transfer of Title], becomes subject to any Encumbrance that has not been consented to or granted by the Province, other than an Encumbrance resulting from any act or omission of the Province or BCTFA, the Design-Builder will immediately take all necessary steps to remove such Encumbrance. Subject to Section 5.9 [Removal of Liens] of this Schedule, if the Design-Builder fails to remove any such Encumbrance within 15 days (or such longer period as may reasonably be required in the circumstances provided the Design-Builder is proceeding with all due diligence to remove the same) of its coming into existence then, without prejudice to any other rights or remedies the Province may have, the Province will be at liberty to take whatever steps it or they deem necessary and appropriate to remove the Encumbrance, including payment of any amount owing or claimed thereunder, and to seek immediate recovery of the amount of any such payment and any associated costs, including legal costs on a solicitor own client basis, from the Design-Builder. The Design-Builder will on demand reimburse all such payments and costs to the Province.

5.8 Notice of Liens

The Design-Builder will notify the Province's Representative of all builders' liens and other liens and claims of lien for labour, services or materials furnished or alleged to have been furnished with respect to the Project Work that are registered against or otherwise affect the Project Site or the Project Infrastructure or any part thereof, promptly after the Design-Builder becomes aware thereof.

5.9 Removal of Adverse Claims

- (a) Without limiting the generality of Section 5.7 [No Encumbrances by Design-Builder] of this Schedule or any of the Design-Builder's other obligations under this Agreement, the Design-Builder will cause all builders' liens and other liens and claims of lien for labour, services or materials furnished or alleged to have been furnished with respect to the Project Work (collectively, "**Adverse Claims**") that are registered against or otherwise affect the Project Site or the Project Infrastructure or any part thereof to be paid, satisfied, released and vacated and, if registered, to be discharged from title, within 30 days (or such longer period as may reasonably be required in the circumstances provided the Design-Builder is proceeding with all due diligence) following the date on which the Design-Builder becomes aware thereof.
- (b) If the Design-Builder fails to discharge any Adverse Claim as required pursuant to Section 5.9(a) of this Schedule, the Province may, but without any obligation to do so, cause the Adverse Claim to be vacated or removed and discharged from title by the payment of money into a Court of competent jurisdiction or the posting of security with the Court, the Design-Builder will, on demand, reimburse the Province all amounts so paid or attributable to or drawn under the security so posted together with all related costs (including legal costs on a solicitor own client basis) and expenses incurred by the Province.
- (c) If the Design-Builder *bona fide* disputes any Adverse Claim, the Design-Builder shall be entitled to defend against the Adverse Claim in any proceedings if the Design-Builder first:
 - (i) pays into Court, or provides to the Court sufficient security for, the amount claimed and costs as the Court may direct, and obtains a Court order for the discharge of such Adverse Claim as registered against or otherwise affecting or pertaining to the Project Site or Project Infrastructure or any part thereof, and registers any such discharge in the Land Title Office to discharge any such Adverse Claim from title to the Project Site or any part thereof; or
 - (ii) provides to the Province such other security or remedies in favour of the Province in respect of such Adverse Claim as the Province may determine in its discretion.

5.10 Compliance with *Builders Lien Act* and Payments to Subcontractors

- (a) The Design-Builder will comply with and cause all of its Subcontractors of any tier to comply with any applicable provisions of the *Builders Lien Act* (British Columbia) with respect to Project Work carried out on and materials supplied to or in respect of the Project Site and the Project Infrastructure and will provide evidence of such compliance to the Province upon request.
- (b) Without limiting any of its other rights or obligations under this Agreement, the other Province Project Documents or any Laws, the Design-Builder shall pay or provide for the payment when due, and shall ensure that all of the Subcontractors pay or provide for the payment when due, of all accounts in connection with the performance of the Project

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Work (including all accounts for the supply of labour, materials and services in connection with any works carried out in the course of the Project Work).

- (c) The Design-Builder shall provide to the Province's Representative a monthly certificate addressed to the Province and certified by the Design-Builder's Representative certifying that all wages, salaries and other amounts due to its employees and Subcontractors have been paid in full up to the last payment, subject to holdbacks (including for amounts disputed in good faith) required or permitted by the Subcontracts and, if applicable, the *Builders Lien Act* (British Columbia). If the Design-Builder is unable to obtain from any Subcontractor a representation, warranty or covenant sufficient to enable the Design-Builder to provide such monthly certificate to the Province's Representative, the Design-Builder shall provide the Province's Representative with full particulars of any matter which precludes the Design-Builder from providing such certificate to the Province's Representative.

5.11 New or Amended Railway Agreements

The Design-Builder shall, at its sole cost, either or both:

- (a) negotiate and finalize with the Railway, for execution by (as directed by the Province) the Province and/or BCTFA, any new or amended Railway Agreements required for the Project Infrastructure that will cross or encroach upon the Railway Lands as a result of the Project Work and the construction, maintenance and use of such Project Infrastructure, and, where applicable, in the form provided for in the applicable Railway Agreement with the Railway, based on the design for the relevant Project Infrastructure; or
- (b) apply to the Canadian Transportation Agency for any new or amended Railway Orders in favour of (as directed by the Province) the Province and/or BCTFA required for the Project Infrastructure that will cross or encroach upon the Railway Lands as a result of the Project Work and the construction, maintenance and use of such Project Infrastructure, provided that the Design-Builder shall submit such application to the Province's Representative pursuant to the Review Procedure and that there shall be no objection thereto by the Province, acting reasonably, before such application is submitted to the Canadian Transportation Agency,

as may be required to the extent that amendments are necessary to the existing Land Rights of the Province and/or BCTFA in respect of any Original Project Infrastructure on Railway Lands in order for the Design-Builder to carry out the Project Work contemplated under this Agreement.

**APPENDIX A
PROJECT LANDS**

1. Each parcel of Project Lands is or will be held by the Province or BCTFA in fee simple or as Crown Land.
2. Each parcel of Project Lands has, as its Specified Handover Date, the Effective Date.

**APPENDIX B
CERTAIN PROJECT SITE ENCUMBRANCES**

1. The tenures listed in Table B below are identified by their numeric reference on the Land Identification Drawings:

Table B Crown Tenures

Land Identification Drawing Reference	Tenure Type	Tenure Number / Location	Tenure Owner
8	Trapping	TR0436T001	
9	Trapping	1205527 / TR0436T002	
10	Trapping	1205524 / TR0436T003	
11	Guide / Outfitter	484276 / 400538	
12	Guide / Outfitter	400826	
13	Environment, Conservation and Recreation Reserve	0324671	
14	Licence of Occupation / Power Line	4403237	
15	Power Line Statutory Right of Way	4403195	
22	Water Licence	C125467	
24	Mineral Claim	2736374 / 1019452 / 1059259	
26	Opening	82N036 57/ A31055 1	
27	Cutblock	82N036 72/ A25723 3	
28	Cutblock	82N036 75 / A25723 1	
29	Cutblock	82N036 76 / A25723 2	
30	Cutblock / Silviculture Obligation	82N036 120 / W1587 1	
31	Cutblock / Silviculture Obligation	82N036 122 / W1587 3	
32	Cutblock / Silviculture Obligation	82N036 146 / W1587 4	
33	Cutblock / Silviculture Obligation	82N036 154	

SCHEDULE 8: LANDS

Appendix B: Certain Project Site Encumbrances

- 2 -

Land Identification Drawing Reference	Tenure Type	Tenure Number / Location	Tenure Owner
34	Cutblock / Silviculture Obligation	82N036 159	
35	Woodlot	W1587 A Schedule B	
36	Recreation Trail	Table Mountain Trail 1998581	
37	Forest Service Road	Dart Creek FSR 8289 01 0	
39	Woodlot	W0452 2 Schedule B	
40	Cutblock	82N036 177/ A17645 097	
41	Forestry Road	R08746 1799 D	
42	Forestry Road	R08746 1795 D	
43	Commercial Recreation Licence Snowmobiling	4403730	
44	Mineral claim	1050287	
45	Mineral claim	1059259	

2. There is a privately-owned property at the northerly limit of Dart Creek Forest Service Road (PID 018-732-186, District Lot 1525, Kootenay District). This property comprises an acreage and a dwelling.

3. Occupant Licenses to Cut referenced in Item 1 of Appendix B [Province Permits] to Schedule 4.

4. Environmental Constraint Drawings

**APPENDIX C
LAND IDENTIFICATION DRAWINGS**

See attached.



Ministry of
Transportation
and Infrastructure

PROJECT NO. 22593

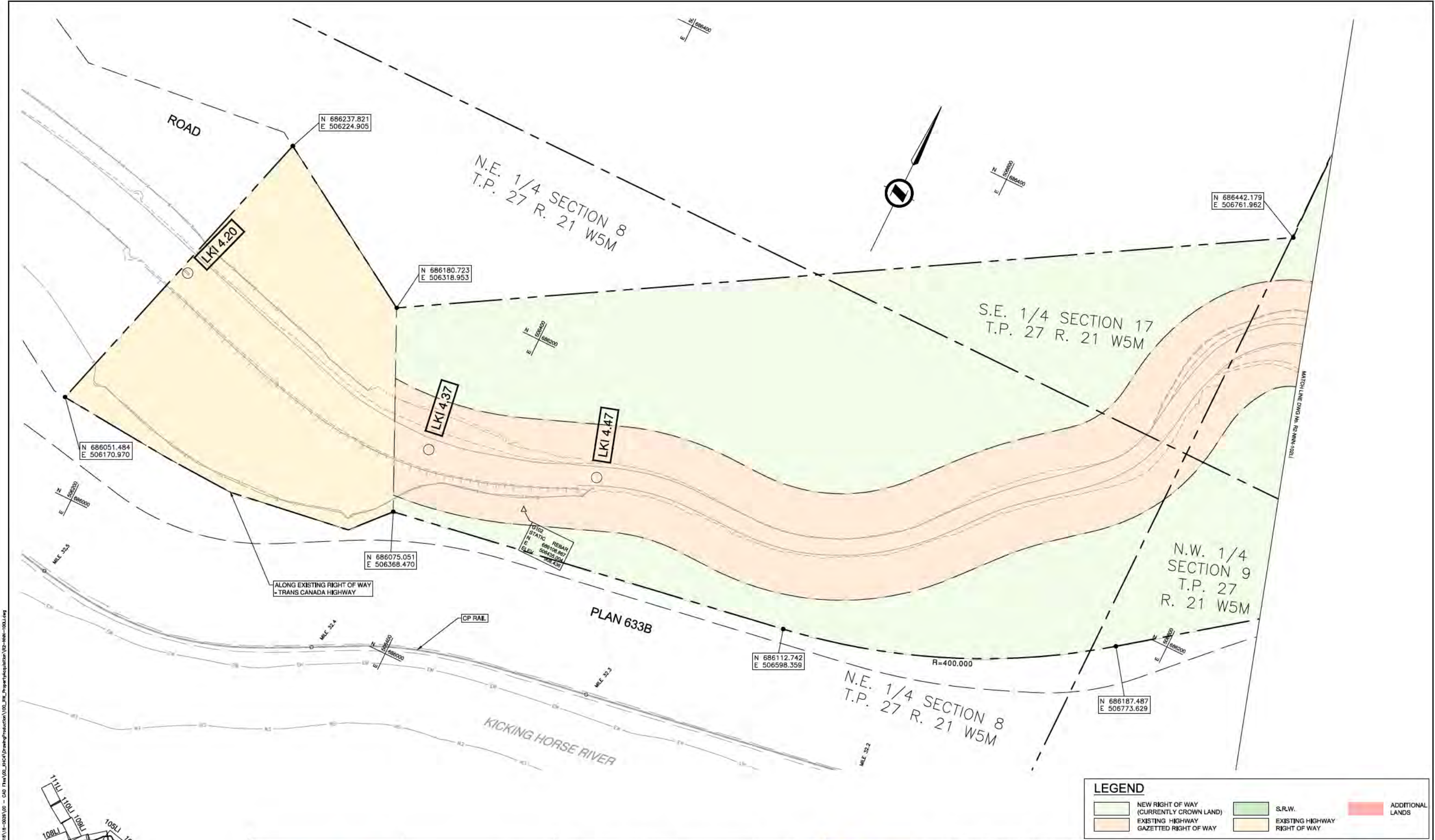
HIGHWAY No. 1

KICKING HORSE CANYON PROJECT - PHASE 4

LAND IDENTIFICATION DRAWINGS

OCTOBER 21, 2020

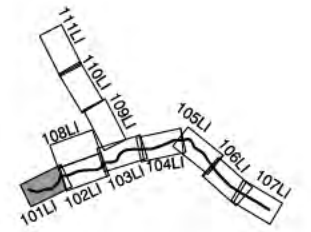
OWNERS ENGINEER DATE 2020/10/21	EXECUTIVE PROJECT DIRECTOR DATE 2020/10/21
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LEGEND

	NEW RIGHT OF WAY (CURRENTLY CROWN LAND)		S.R.W.		ADDITIONAL LANDS
	EXISTING HIGHWAY GAZETTED RIGHT OF WAY		EXISTING HIGHWAY RIGHT OF WAY		

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	22593	2	R2-NNN-101LI																										

S.E. 1/4 SECTION 16
T.P. 27 R. 21 W5M

5.0 m ON EITHER SIDE OF CENTERLINE OF
DART CREEK FOREST SERVICE ROAD

ADDITIONAL AREA 1

N 686923.875
E 507813.226

N 686931.581
E 507908.715

N 686907.208
E 507925.478

N 686787.610
E 507603.303

N 686781.605
E 507594.051

N 686733.888
E 507520.541

GAZETTE BOUNDARY 100' EITHER SIDE OF CENTRE LINE

BLACKWALL

TH
H20-2

TH
LKI 6.20
STATION
REBAR
N 686854.931
E 507874.708
ELEV 974.596

LKI 6.03

PLAN 633B

N 686758.765
E 508021.441

ALONG EXISTING RIGHT OF WAY
- CP RAIL

CP RAIL

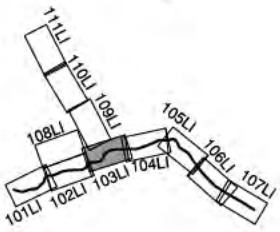
MLE 31.2

KICKING HORSE RIVER

S.E. 1/4 SECTION 16
T.P. 27 R. 21 W5M

LEGEND

- NEW RIGHT OF WAY (CURRENTLY CROWN LAND)
- EXISTING HIGHWAY
- GAZETTED RIGHT OF WAY
- S.R.W.
- EXISTING HIGHWAY RIGHT OF WAY
- ADDITIONAL LANDS



KEY PLAN

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REV	DATE	REVISIONS	SIGNATURE

BRITISH COLUMBIA
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
SOUTHERN INTERIOR REGION
HIGHWAY ENGINEERING

DESIGNED _____ DATE _____
QUALITY CONTROL _____ DATE _____
QUALITY ASSURANCE _____ DATE _____
DRAWN _____ DATE _____

SENIOR DESIGNER _____
DATE _____

LAND IDENTIFICATION DRAWING
HIGHWAY No. 1
KICKING HORSE CANYON PROJECT - PHASE 4
LKI 5.76 TO LKI 6.55

FILE NUMBER	PROJECT NUMBER	REV	DRAWING NUMBER	REV
	22593	2	R2-NNN-103LI	

S.E. 1/4 SECTION 16
T.P. 27 R. 21 W5M

S.W. 1/4 SECTION 15
T.P. 27 R. 21 W5M

S.W. 1/4 SECTION 15
T.P. 27 R. 21 W5M

S.W. 1/4 SECTION 15
T.P. 27 R. 21 W5M

BLUFFS

GAZETTE BOUNDARY 100' EITHER SIDE OF CENTRE LINE

ALONG EXISTING RIGHT OF WAY
- CP RAIL

CP RAIL

1/4 MILE ST

N 686903.205
E 508253.086

N 686936.895
E 508313.869

N 686944.692
E 508352.655

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E 508417.016

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E 508600.771

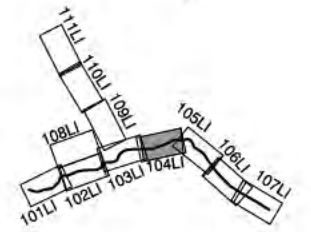
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LEGEND					
	NEW RIGHT OF WAY (CURRENTLY CROWN LAND)		S.R.W.		ADDITIONAL LANDS
	EXISTING HIGHWAY		EXISTING HIGHWAY RIGHT OF WAY		
	GAZETTED RIGHT OF WAY				



KEY PLAN

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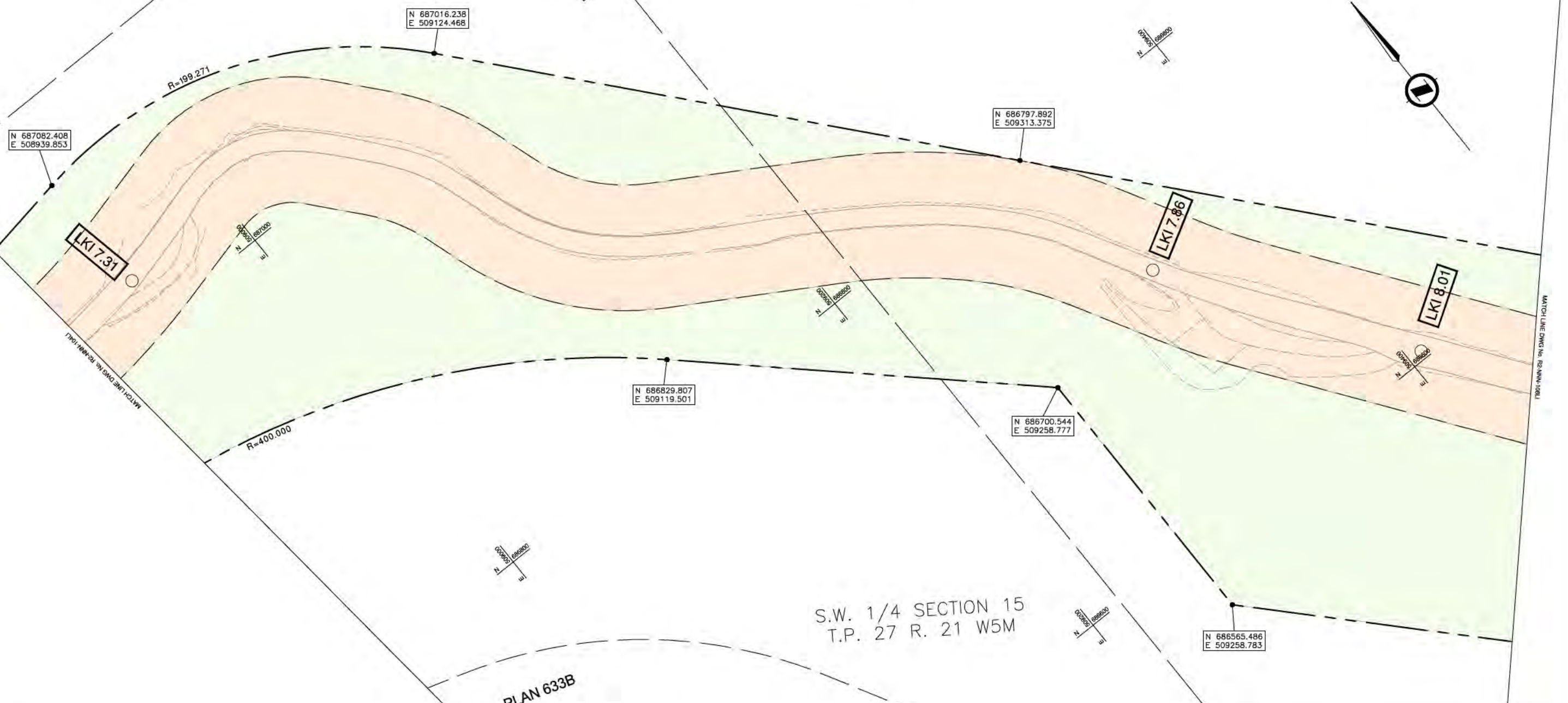
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S.E. 1/4 SECTION 15
T.P. 27 R. 21 W5M

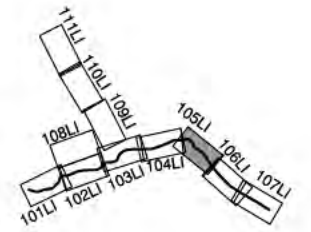
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PLAN 633B



LEGEND

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	EXISTING HIGHWAY GAZETTED RIGHT OF WAY		EXISTING HIGHWAY RIGHT OF WAY		

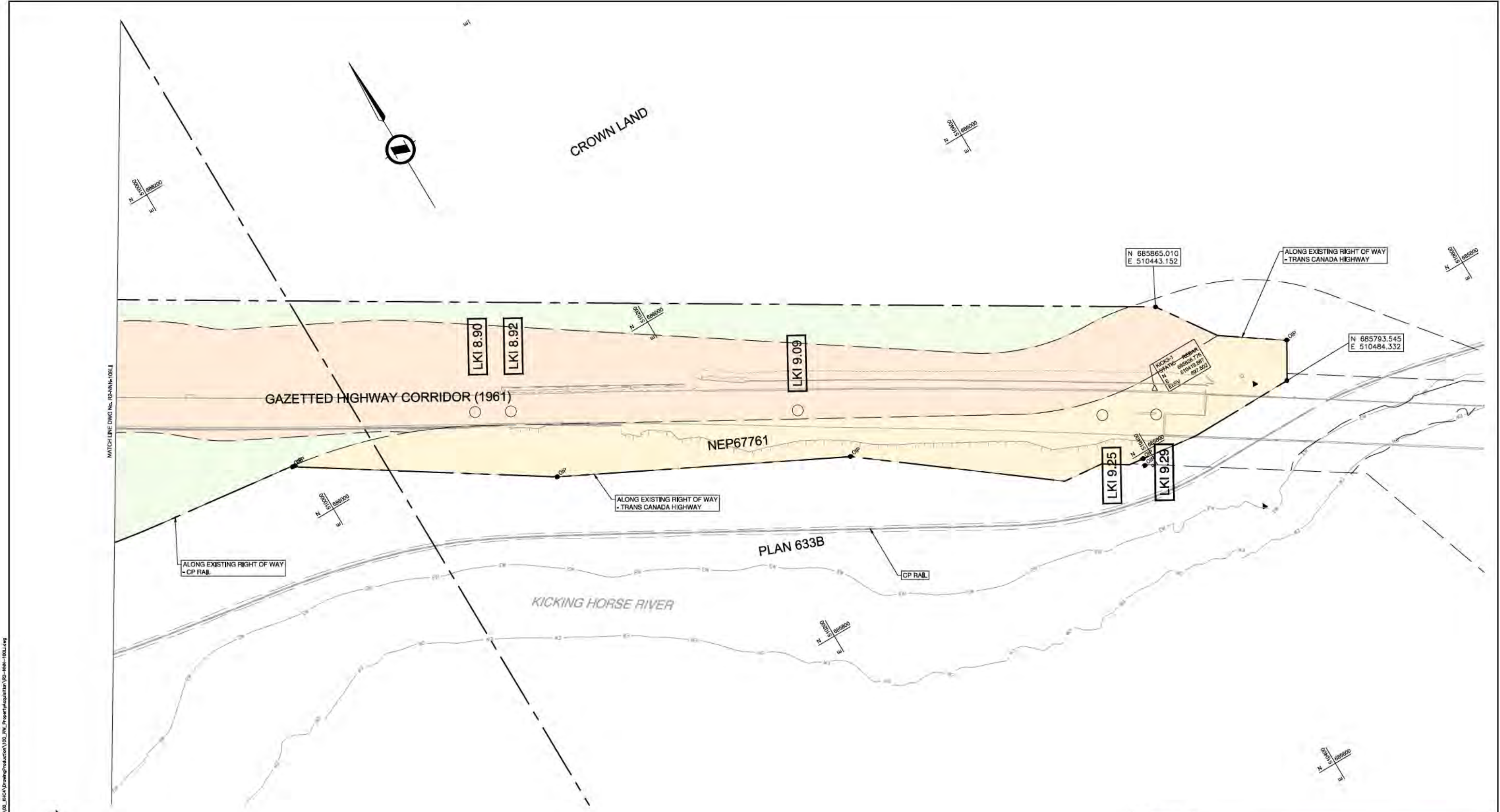


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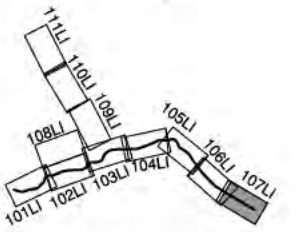
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KEY PLAN

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	NEW RIGHT OF WAY (CURRENTLY CROWN LAND)		S.R.W.		ADDITIONAL LANDS
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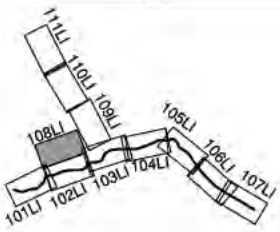
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S.W. 1/4 SECTION 16
T.P. 27 R. 21 W5M

MATCH LINE DWG No. R2-NNN-108LI

LEGEND

- NEW RIGHT OF WAY (CURRENTLY CROWN LAND)
- S.R.W.
- EXISTING HIGHWAY
- EXISTING HIGHWAY RIGHT OF WAY
- GAZETTED RIGHT OF WAY
- ADDITIONAL LANDS



KEY PLAN

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BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE

SOUTHERN INTERIOR REGION

HIGHWAY ENGINEERING

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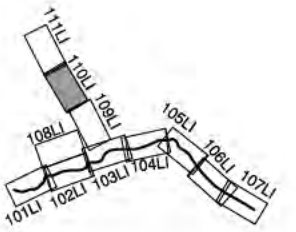
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LEGEND

	NEW RIGHT OF WAY (CURRENTLY CROWN LAND)		S.R.W.		ADDITIONAL LANDS
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BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
SOUTHERN INTERIOR REGION
HIGHWAY ENGINEERING

DESIGNED _____ DATE _____
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LAND IDENTIFICATION DRAWING
HIGHWAY No. 1
KICKING HORSE CANYON PROJECT - PHASE 4
DART CREEK DISPOSAL SITE - SHEET 2 OF 3

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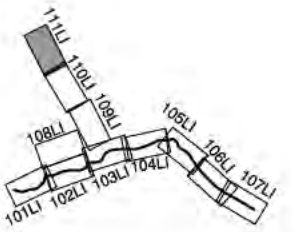
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MATCH LINE DWG NO. R2-NNN-110L



KEY PLAN

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	EXISTING HIGHWAY GAZETTED RIGHT OF WAY		EXISTING HIGHWAY RIGHT OF WAY		

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**SCHEDULE 9
COMMUNICATIONS AND ENGAGEMENT**

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**PART 1
GENERAL PROVISIONS**

1.1 Application of Best Practices

The Design-Builder's Communication and Engagement activities shall reflect the application of best practices to ensure an effective public communications and engagement process.

1.2 Communications and Engagement Scope

Communications and Engagement refers to the following general activities as described in more detail throughout this Schedule:

- (a) Construction notification;
- (b) Community and Stakeholder Engagement;
- (c) Enquiry-Response management;
- (d) supporting the Province with crisis communications and issues management; and
- (e) supporting the Province with media and government relations.

1.3 Communications and Engagement Objectives

The Design-Builder acknowledges that the desired outcome of all the Communications and Engagement activities is to involve and inform the general public and Stakeholders concerning the value, benefits and progress of the Project and to minimize public impacts by considering the needs of the public and appropriately responding to questions and concerns about Construction. The Design-Builder shall commit to working closely, collaboratively and in a timely manner with the Province to communicate and engage regularly and effectively with the public. The Design-Builder shall be responsible for achieving the following Communications and Engagement objectives:

- (a) build and maintain positive relationships with Stakeholders, road users, local residents and businesses, adjacent property owners and the public;
- (b) increase general public understanding of the status of Construction;
- (c) provide regular and timely updates from the Effective Date until the Total Completion Date in order to support the Province's communications about Construction progress;
- (d) develop and implement a Traffic Communication Plan and provide a comprehensive traffic communications program for the duration of the Project Work as required by Section 4.2.4 [Traffic Communication Plan] of Part 4 of Schedule 4;
- (e) support the overall Traffic Management requirements, including minimizing disruption and maximizing predictability, with timely and proactive notification of traffic events, including access, wayfinding, traffic changes, detours or delays, and impacts on local business operations, to minimize traffic related complaints;
- (f) ensure timely communication of business access changes and related issues to the Province's Representative for issues management purposes;

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- (g) meet all requirements of Schedule 6 [Environmental Obligations], including the Table of Commitments;
- (h) consider and respond appropriately to general public, community and Stakeholder enquiries, comments and complaints in relation to the Project, including with respect to noise, dust, vibration, traffic impacts, construction schedule and staging and impacts to local residents and local businesses' operations;
- (i) support the Province's media and government relations and crisis communications efforts with timely information and availability of key personnel; and
- (j) demonstrate accountability in effectively delivering Communications and Engagement activities.

1.4 Planning and Reporting Requirements in Addition

For clarity, any planning and reporting requirements in this Schedule are separate and distinct from and in addition to and do not limit the Design-Builder's obligation to submit plans and reports to the Province under this Agreement, including Schedule 6 [Environmental Obligations] and Schedule 7 [Quality Management].

1.5 Technological Improvements

The Design-Builder shall monitor and keep up-to-date on all technological developments and other improvements that may have a beneficial effect on Communications and Engagement for the Project or improve the Design-Builder's ability to give effect to the provisions of this Schedule ("**Technological Improvements**") provided that, before implementation, the Design-Builder shall submit any such Technological Improvement to the Province's Representative in accordance with the Consent Procedure.

PART 2 COMMUNICATIONS AND ENGAGEMENT MANAGEMENT

2.1 Communications and Engagement Obligations

The Design-Builder shall comply with, observe, satisfy and perform all of the obligations and requirements set out in this Schedule (the "**Communications and Engagement Obligations**"), including the following:

- (a) providing an experienced Communications Director and sufficient supporting communications and community relations staff to meet the requirements set out in this Schedule from the Effective Date to the Total Completion Date;
- (b) being accountable for delivering a comprehensive Traffic Communications program, including developing, implementing, maintaining and updating the Traffic Communication Plan as required by this Schedule and Section 4.2.4 [Traffic Communication Plan] of Part 4 of Schedule 4;
- (c) developing and implementing a comprehensive approach to Construction communications to ensure communities, Stakeholders and the general public are informed and engaged as appropriate, and as required in accordance with this Agreement;

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- (d) participating in and supporting the Province in a comprehensive Communications and Engagement program concerning the value, benefits and progress of the Project;
- (e) being responsible for managing any information shared in whatever form for the purposes of communicating information about changes in traffic conditions due to Construction;
- (f) participating in and supporting the Province in anticipating matters relating to the Project that may be of interest and concern to local communities, Stakeholders, the general public and the media, documenting these concerns, and developing and implementing proactive plans that respond to these interests and concerns;
- (g) supporting and contributing to a positive working relationship with the Province, the community, Stakeholders and the general public;
- (h) not changing the branding of the Project Infrastructure or any other Province initiatives or projects;
- (i) not disseminating public information about the Project except as provided in this Schedule and this Agreement;
- (j) working with the Province to build and foster relationships with local residents, businesses, Stakeholders and the general public in order to notify, understand and proactively and appropriately address concerns about the Project Work, using Communications and Engagement best practices;
- (k) exhibiting a high degree of professionalism and courtesy in carrying out the Communications and Engagement Obligations in accordance with this Schedule, including:
 - (i) planning, organizing, providing information for and attending public and Stakeholder events as required in accordance with Sections 5.2 [Community and Stakeholder Engagement Events] and 5.3 [Community Liaison Committee] of this Schedule (“**Engagement Events**”), including events that engage with interested parties about Design and Construction including traffic management plans and environmental obligations, and provide Project updates and gather feedback;
 - (ii) implementing a training module covering best practices for dealing with the public and the media in the Project orientation for Design-Builder employees and Subcontractors;
 - (iii) conduct of staff and contractors within the construction site (such as limiting noise and litter, cleanliness of vehicles);
 - (iv) location of staff and contractor vehicle parking; and
 - (v) maintaining and replacing existing accesses, driveways, sidewalks, bike paths, fencing, information, signs and other Infrastructure;
- (l) performing the Project Work in accordance with the Communications and Engagement Obligations and this Agreement, including:

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- (i) providing notice of Construction and other Project activities to local communities, Stakeholders and the general public, and maintaining an electronic tracking system for these notifications;
- (ii) proactively responding to enquiries and concerns from local residents, businesses, Stakeholders and the general public, including working with the construction team to identify and minimize impacts arising from Construction, and maintaining an electronic tracking system for enquiries and responses;
- (iii) providing information for the website(s) maintained by the Province (the “**Website**”) as set out in Section 4.1.2 of this Schedule;
- (iv) maintaining a 24/7 Project construction phone line with a live operator as set out in Section 4.1.5 of this Schedule;
- (v) convening and/or participating in the Community Liaison Committee and Engagement Events to seek feedback on Design and Construction and other matters of interest to the general public and Stakeholders;
- (vi) maintaining an Enquiry-Response electronic tracking system and construction notification and engagement electronic tracking system; and
- (vii) supporting issues management and crisis communications and resolution.

2.2 Plan Requirements

Table 2.2 sets out the plans which the Design-Builder is required to develop, implement, maintain and update in accordance with this Schedule and the due dates for production of each plan, and specifies whether the plans are required to be submitted to the Province’s Representative under the Review Procedure or the Consent Procedure. In addition to the plans required, this Schedule sets out in Parts 3, 4, 5, 6 and 7 circumstances under which certain deliverables shall be submitted to the Province’s Representative under the Review Procedure or the Consent Procedure, as the case may be, and certain applicable performance measures.

Table 2.2

Performance Measure	Plan	Section of this Schedule	Due Date	Review Procedure or Consent Procedure
PC 2.4a	Design-Builder Communication Protocol (First Submission)	2.4	Initial plan no later than 45 days following the Effective Date	Consent Procedure
PC 2.4b	Design-Builder Communication Protocol (Updates)	2.4	As soon as completed when required, and in any event, no later than June 1 annually	Consent Procedure
PC 2.5a	Construction Communications and Engagement Plan (First Submission)	2.5	Initial plan no later than 60 days following the Effective Date	Consent Procedure

Performance Measure	Plan	Section of this Schedule	Due Date	Review Procedure or Consent Procedure
PC 2.5b	Construction Communications and Engagement Plan (Updates)	2.5	As soon as completed when required, and in any event, no later than June 1 annually until Total Completion Date	Consent Procedure

2.3 Communications and Engagement Team

- (a) The Design-Builder shall appoint and maintain a team of Communications and Engagement specialists to meet its obligations in relation to this Schedule.
- (b) The Communications Director shall be a Key Individual subject to the applicable requirements of Section 3.3 [Key Individuals] of Schedule 2 and shall have a minimum of seven years of the following experience:
 - (i) managing traffic construction and operations communications for transportation construction projects comparable to the Project;
 - (ii) working with government communications processes and policies;
 - (iii) developing traffic and communications strategies with the input of multiple stakeholders;
 - (iv) working with issues management related to transportation construction projects; and
 - (v) planning and managing community and stakeholder engagement for transportation construction projects.
- (c) The Design-Builder shall at all times from the Effective Date to the Total Completion Date appoint and maintain a Communications and Engagement team to support the Communications Director. The members of the team shall have prior experience in community and stakeholder engagement, communications management, writing and issues management, and event management for transportation construction projects.
- (d) The Design-Builder shall at all times from the Effective Date to the Total Completion Date appoint and maintain a media spokesperson who shall have prior relevant experience with media interviews and shall, when requested by the Province, work with the Communications Director to support the Province’s media relations efforts.

2.4 Design-Builder Communication Protocol

The Design-Builder shall develop, implement, maintain and update in accordance with this Schedule an organization, plan and process for managing the Design-Builder’s execution of the Communications and Engagement Obligations (the “**Design-Builder Communication Protocol**”) which shall include, as a minimum, the following information:

- (a) an executive summary;

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- (b) a description of the Design-Builder's Communications and Engagement team, including the number of personnel proposed, roles, responsibilities, and experience of each team member;
- (c) a description of how the Communications Director will manage each member of the Communications and Engagement team;
- (d) a description of the required qualifications and experience of the Design-Builder's media spokesperson with respect to media interviews if requested by the Province;
- (e) an organizational chart showing the proposed relationship between the Communications Director, the rest of the Design-Builder's Communications and Engagement team, the Design-Builder's Representative, senior Design-Builder managers and the Province;
- (f) an audience map and summary of the proposed Communications and Engagement tools and tactics proposed to meet the obligations of each of the plans required in accordance with this Schedule; and
- (g) a description of how the Design-Builder will coordinate Communications and Engagement activities with the Province, including responding to Communications and Engagement-related requests from the Province.

2.5 Construction Communications and Engagement Plan and Sub-Plans

The Design-Builder shall develop, implement, maintain and update in accordance with this Schedule a plan (the "**Construction Communications and Engagement Plan**") which shall be in effect until the Total Completion Date and shall include, as a minimum, the following sub-plans:

- (a) Construction Notification Plan, which shall include, as a minimum, the following information,
 - (i) a description of the general Project communication activities and Communications and Engagement activities with respect to Construction specifically, and how the Design-Builder will proactively carry out these activities in accordance with the obligations set out in this Schedule including, specifically, how it will:
 - (A) provide notice to local communities, Stakeholders and the general public of Construction, traffic delays, Closures, detours, traffic incidents and emergencies within the timeframes specified using a variety of tools;
 - (B) proactively engage Stakeholders generally and the Community Liaison Committee specifically in accordance with the Community and Stakeholder Engagement Plan regarding traffic-related Construction; and
 - (C) support the Province's communications and media relations activities by supplying accurate information about the Project to the Province within the timeframes specified and incorporating into Project notifications the Province's key messages as requested;

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- (ii) a detailed description of the communications tools outlined in the Design-Builder Communication Protocol that will be used for traffic-related Construction communications to:
 - (A) minimize traffic disruption and maximize traffic predictability;
 - (B) generate clear, consistent and accessible Construction and traffic information for Stakeholders, the general public and the traffic media; and
 - (C) communicate general Construction and traffic information within the timeframes specified;
- (iii) proposed templates for traffic-related notification activities including a public notice, advertisement, email and traffic media notice that the Design-Builder will use for notification of Construction and traffic impacts and templates for providing content to the Province for Website updates and social media posts, for typical Construction activities, including a sample Extended Closure, sample Full Closure, sample Twenty-Minute Closure, typical Lane Closure, sample Lane Shift, and sample Detour;
- (iv) proposed protocol for managing the text, timing and locations for dynamic sign messages concerning unforeseen events or traffic incidents;
- (v) a detailed description of how the Design-Builder will track Construction notifications in a live, online database electronic tracking system to electronically and accurately record, track and report out on the type of notification, date it was issued, method of delivery and to whom the notice was issued (for example a copy of the notification, list of Stakeholders, geographic area for mail-out, geographic area for door-to-door delivery); and
- (vi) reference to and interface with the Traffic Management Plan prepared in accordance with Part 4 [Traffic Management] of Schedule 4, the Table of Commitments in Schedule 6 and all other required interfaces outlined in this Agreement;
- (b) Enquiry Response Plan, which shall outline, as a minimum, how the Design-Builder will:
 - (i) manage and respond to enquiries, suggestions and complaints with respect to the Project;
 - (ii) use a live, online database electronic tracking system to electronically and accurately record, track and report on enquiries and response, with respect to the Project;
 - (iii) keep the electronic tracking system current with updated contact information; and
 - (iv) meet FOIPPA, CASL and Provincial privacy and security requirements;
- (c) Crisis Communications Plan, which shall outline, as a minimum, the following information:

- 8 -

- (i) the type and severity of potential crisis situations that could arise during the Construction;
 - (ii) how the Design-Builder will interface with and integrate with emergency responders and others as appropriate with respect to crisis communications;
 - (iii) the audiences, tactics and tools proposed to be used in responding to a crisis situation;
 - (iv) a list of key contacts and contact numbers, including contact information for the Design-Builder's media spokesperson;
 - (v) a preliminary work plan for initial triage in the event that a crisis occurs; and
 - (vi) how the Crisis Communication Plan interfaces with the Incident Management Plan prepared in accordance with Section 4.2.2 [Incident Management Plan] of Part 4 of Schedule 4; and
- (d) Community and Stakeholder Engagement Plan, which shall clearly describe how the Design-Builder will meet its obligations for Community and Stakeholder Engagement under this Agreement, including, as a minimum, how the Design-Builder will:
- (i) coordinate Communications and Engagement activities with the Province, including responding to Communications and Engagement-related requests from the Province;
 - (ii) manage a proactive program for building relationships with and keeping the Community Liaison Committee informed through on-going two-way communication about the Project to provide regular information about Construction and related impacts, Traffic Management, and other matters that may be required in accordance with this Agreement;
 - (iii) proactively manage regular contact with adjacent businesses and property owners regarding Construction to identify and minimize impacts arising from Construction and proactively manage and respond to day-to-day enquiries and concerns from Stakeholders and local residents on issues and concerns arising out of Construction, including notification and timing of Construction, noise, hours of work and construction updates;
 - (iv) participate in a proactive Community and Stakeholder Engagement program to build relationships, provide local communities, Stakeholders and the general public with regular information about Project designs, plans, benefits, impacts, major project milestones and Construction, including but not limited to public information sessions, open houses, responding to questions and concerns, and organizing and/or attending other meetings that the Province may deem appropriate, community-specific engagement on aspects like noise management and mitigation, habitat protection, landscaping, milestone announcements and celebrations;
 - (v) consider accommodating general public and Stakeholder input in finalizing the Design;

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- (vi) support the Province in undertaking other community relations programs and events that the Province considers necessary or desirable, from time to time;
- (vii) plan and attend Province-directed Engagement Events (including meetings, municipal council and local government presentations) as the Province deems necessary or desirable, and provide all meeting materials that may reasonably be required;
- (viii) track all meetings, Engagement Events, and other events using the construction notification and engagement electronic tracking system;
- (ix) support reasonable Stakeholder initiatives, as approved by the Province;
- (x) provide appropriately experienced personnel to plan, manage, attend and follow up as appropriate on any meetings, events, or initiatives, to maintain a positive working relationship with the Province and with Stakeholders;
- (xi) immediately notify the Province of any issues or potential issues to facilitate timely resolution;
- (xii) in consultation with the Province, develop and implement strategies to track, address, mitigate and minimize any issues or potential issues; and
- (xiii) respond to emerging issues or potential issues identified by the Province within the timeframe specified by the Province.

2.6 Performance Measures

- (a) The Tables in each of Part 3 [Design-Builder Communication Protocol], Part 4 [Construction Communications Performance Measures], Part 5 [Community and Stakeholder Engagement Performance Measures] and Part 6 [Media and Government Relations Performance Measures] of this Schedule set out performance measures to be met by the Design-Builder in relation to Communications and Engagement and the applicable timing for each such performance measure, where applicable, and also specify whether any deliverables included within such performance measures are required to be submitted to the Province Representative under the Review Procedure or the Consent Procedure.
- (b) In respect of any performance measure set out in such Tables with a designation of “Minor”, “Moderate”, “Major”, or “Severe” in a column entitled “Performance Mechanism Index”, such designation indicates, in respect of the performance measure corresponding to such designation, the basis on which NCE Points and Default Points will be assigned in accordance with Part 5 [NCE Points and Default Points] of Schedule 10 to this Agreement.

**PART 3
DESIGN-BUILDER COMMUNICATION PROTOCOL PERFORMANCE MEASURES**

Table 3

	Performance Measure	Timing	Performance Mechanism Index
3.1	Communications Working Group:		
	(a) The Design-Builder shall convene, organize and maintain a group (the “ Communications Working Group ”) that will meet regularly with the Province. The Design-Builder representation on the Communications Working Group shall comprise Communications and Engagement staff from the Design-Builder including the Communications Director, the Design Manager, the Traffic Manager, the Construction Manager and others as appropriate to foster a positive working relationship between the Design-Builder and the Province with respect to Communications and Engagement activities and to build a community and Stakeholder-focused approach to the Project and Construction management and mitigation of impacts due to Construction;		Moderate
	(b) The Design-Builder shall convene an initial meeting of the Communications Working Group;	No later than 30 days following the Effective Date	Moderate
	(c) The Design-Builder shall convene regular meetings of the Communications Working Group;	At a minimum, monthly up to the Total Completion Date	Moderate
	(d) the Design-Builder shall present a 4-month look ahead calendar identifying planned Project activities that warrant action under this Schedule and proposed related Communications and Engagement actions;	At every meeting (at least monthly)	Minor
	(e) the Design-Builder shall report on the status of the Enquiry-Response electronic tracking system, including as a minimum, the number of enquiries, the status of responses to enquiries, and the completeness and timeliness of content updates;	At every meeting (at least monthly)	Moderate
	(f) the Design-Builder shall report on the status of the construction notification and engagement tracking system, including notification of Construction activities and traffic impacts, including notifications that have been sent, the date, the method for distribution, and the distribution area, as well as upcoming notifications including proposed timing, method for distribution and distribution area;	At every meeting (at least monthly)	Moderate
	(g) the Design-Builder shall prepare an agenda for the meetings that will allow for information sharing, discussion of matters of interest to communities, Stakeholders and the general public, and identification of and response to emerging issues; and	For each meeting (at least monthly)	Minor
	(h) the Design-Builder shall prepare and distribute meeting notes following each meeting.	Within 7 days of each meeting	Minor

	Performance Measure	Timing	Performance Mechanism Index
3.2 Evaluation and Reporting			
	The Design-Builder’s Quality Audits of Communications and Engagement shall include audits of the Design-Builder's Communications and Engagement performance, which shall include, among other audit items, the following information:	In accordance with the Design-Builder’s Quality Audit Plans and as indicated below	Moderate
	(a) assessment of performance in relation to the following Communications and Engagement plans and associated activities, including recommendations for how the Design-Builder will incorporate improvements into the annual updates of the respective plans: (i) the Design-Builder Communication Protocol; and (ii) Construction Communications and Engagement Plan.	Annually, no later than March 1	Moderate

**PART 4
CONSTRUCTION COMMUNICATIONS PERFORMANCE MEASURES**

Table 4

	Performance Measure	Timing	Performance Mechanism Index
4.1 General Communication			
4.1.1	Project Identity and Graphic Design: The Design-Builder shall use and apply to all informational materials the visual identity and graphic standards provided for the Project to the Design-Builder by the Province.	For all materials submitted in accordance with all Schedules	Major
4.1.2	Website: At all times, the Design-Builder shall:		
	(a) provide to the Province up-to-date traffic advisories with current traffic information in the approved template that can be applied to the Website;	Weekly	Minor
	(b) provide to the Province Construction updates, in a format that can be applied to the Website;	Weekly	Minor
	(c) provide to the Province Construction Schedule updates including key milestones, in the approved template that can be applied to the Website;	Monthly	Minor
	(d) provide to the Province photos and videos demonstrating Project activities in relation to Section 4.1.9 of this Schedule;	As requested by the Province	Minor
	(e) provide to the Province information for job-seekers and potential Subcontractors including any apprenticeship programs offered by the Design-Builder;	At a minimum monthly	Moderate
	(f) submit such content described in Section 4.1.2(a) through 4.1.2(c) of this Schedule to the Province pursuant to the Consent Procedure; and		

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	Performance Measure	Timing	Performance Mechanism Index
	(g) ensure that material provided considers and appropriately accommodates the needs of users with visual, hearing and motor skill challenges.	For each submission	Minor
4.1.3	Social Media: At all times, the Design-Builder shall:		
	(h) provide text and multimedia content to the Province to support the Province’s social media strategy for the Project, which may include Twitter, Facebook, YouTube, Flickr and that may be expanded to include other tools and techniques; and	As requested by Province	Minor
	(i) submit such content described in Section 4.1.3(a) of this Schedule to the Province pursuant to the Review Procedure.		
4.1.4	Enquiry Response Plan and Electronic Tracking System: The Design-Builder shall:		
	(a) respond to enquiries by telephone, e-mail or other written correspondence (where appropriate) within targeted response times as follows:		
	(i) calls related to traffic safety, traffic incidents or emergencies;	Within 5 minutes	Major
	(ii) urgent calls (at all times) and emails (during business hours) related to Construction impacts, traffic disruption/impacts;	As soon as possible, but in no event later than 1 hour after receipt of the enquiry	Major
	(iii) other enquiries related to Construction; and	98% within 3 days; 100% within 5 days	Moderate
	(iv) general enquiries;	98% within 3 days; 100% within 5 days	Minor
	(b) ensure that responses explain how the subject matter of the enquiry will be addressed;		Minor
	(c) implement a live electronic tracking system using an online database, to track Enquiry Response activities, including all contact by telephone, email, at meetings and Engagement Events, in person and written correspondence (including enquiries, suggestions, concerns and compliments) and responses provided/actions taken (the system shall provide live access to the current status to both the Design-Builder and the Province);	Within 30 days of the Effective Date	Major

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	Performance Measure	Timing	Performance Mechanism Index
	(d) keep updated in the electronic tracking system, all fields required to satisfy all tracking and reporting requirements, which shall include, as a minimum, a description of the enquiry/concern, response time, time to meet on site if required, meeting location and attendees, the time to complete the appropriate action, follow up on responses or actions, tracking of repeat enquiries/issues, and where a concern may not be justified or satisfaction is not possible, a record of the steps taken and advice given must be recorded;	Current to within 1 Business Day	Moderate
	(e) ensure the system stores data only in Canada, provides secure, live access to the current status of Enquiry-Response activities and tracking to both the Design-Builder and the Province; and		Minor
	(f) submit such information described in Section 4.1.4(a), (b) and (c) of this Schedule to the Province pursuant to the Review Procedure.		
4.1.5	Project Construction Phone Line: The Design-Builder shall:		
	(a) establish, manage and maintain a 24/7 traffic information Project phone line with a live operator at all times to:	Launch within 30 days of the Effective Date	Major
	(i) provide, without limitation, 24/7 site contact information and specific provisions for priority access in the event of a Code 3 Response (B.C. Ambulance Service Radio Code 3 emergency vehicle response to a call using lights and siren) or public emergency as warranted by emergency response agencies; and	At all times	Severe
	(ii) receive and respond to general public enquiries about the Project in accordance with the timeframes specified in Section 4.1.4(a) of this Schedule with information that is consistent with that supplied to DriveBC pursuant to Section 4.1.6(a)(i) of this Schedule;		
	(b) develop, implement, and maintain, a proposed training protocol for operators, including process flow charts for action with respect to different types of calls; and	Within 30 days of the Effective Date and as soon as updated	Minor
	(c) submit the proposed training protocol described in Section 4.1.5(b) of this Schedule to the Province pursuant to the Review Procedure.		
4.1.6	Construction and Traffic Notifications: The Design-Builder shall:		
	(a) provide using the Province pre-approved email templates, email notification regarding Construction and Operation and Maintenance activities that have the potential to adversely affect traffic, including but not limited to approved Stoppages, Lane Closures, Twenty-Minute Closures, Full Closures, Extended Closures, Lane Shifts or Detours, to:		

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	Performance Measure	Timing	Performance Mechanism Index
	(i) the Transportation Management Centre of British Columbia/Drive BC traveller information system;	(A) no later than 1 week in advance of the scheduled activity;	Moderate
		(B) immediately upon actual occurrence of the scheduled Stoppage, Lane Closure, Twenty-Minute Closure, Full Closure or Extended Closure and upon its termination; and	Moderate
		(C) within 15 minutes in the event that the activity is postponed or rescheduled	Moderate
	(ii) emergency responders (including but not limited to Police, fire, ambulance, search and rescue, regional health authorities, area hospitals and municipal and regional emergency service providers);	(A) no later than 1 week in advance of the scheduled activity;	Moderate
		(B) immediately upon actual occurrence of the scheduled Stoppage, Lane Closure, Twenty-Minute Closure, Full Closure or Extended Closure and upon its termination; and	Moderate
		(C) within 15 minutes in the event that the activity is postponed or rescheduled	Minor

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	Performance Measure	Timing	Performance Mechanism Index
	(iii) traffic media;	(A) no later than 48 hours prior to the scheduled activity; and	Moderate
		(B) in the event that the activity is postponed or rescheduled, 1 day in advance of the postponement	Moderate
	(b) develop and distribute using the Province pre-approved email or mail templates, notification of approved Construction or Operation and Maintenance activity, including traffic notifications, for email subscribers, local communities, Stakeholders and the general public;	(A) no later than 1 week in advance of the approved scheduled activity for activities such as a Lane Closure, Twenty-Minute Closure, Full Closure of less than 2 hours or daytime construction;	Moderate
		(B) no later than 2 weeks in advance of the approved scheduled activity for activities such as pile driving, significant noise, and Full Closure of more than 2 hours;	Moderate
		(C) no later than 3 months in advance of the approved scheduled activity for activities such as Extended Closures; and	

	Performance Measure	Timing	Performance Mechanism Index
		(D) within 1 Business Day in the event that the activity is postponed or rescheduled;	
	(c) submit all email notifications to the Province for approved activities pursuant to the Review Procedure; and	Submit 2 days prior to scheduled distribution	
	(d) implement and keep updated a live construction notification and engagement electronic tracking system using an online database, to track Construction and traffic notification activities, including mail-out areas, email distribution lists, door-to-door delivery or visits, and to verify the timeliness and accuracy of information posted by DriveBC (the system shall provide live access to the current status to both the Design-Builder and the Province).	Within 30 days of the Effective Date	
4.1.7	Advertising Communications: The Design-Builder shall:		
	(a) provide information and content regarding general Project information, Construction activities and traffic impacts to the Province to support advertising or Project updates that the Province may undertake;	Within 2 weeks of request by the Province	Moderate
	(b) submit all material in Section 4.1.7(a) of this Schedule to the Province’s Representative pursuant to the Consent Procedure; and	Not less than 15 days before intended distribution	Moderate
	(c) submit to the Province for consideration pursuant to the Consent Procedure any other proposed forms of notification that provide equivalent or better reach, including text message notifications, or other techniques.	Before adopting for use	
4.1.8	Information Signs: The Design-Builder shall:		
	(a) during Construction: (i) arrange, produce, install, remove, store and manage static and dynamic signs to provide road users with information about upcoming Construction activities that have the potential to affect traffic;	As required	Major
	(ii) ensure that signs meet Province standards and are of appropriate size, colour, lighting and location to ensure visibility;		Minor
	(iii) include the Project phone line number on all Project signs and all Design-Builder signs in a font size large enough to be visible to drivers;		Moderate
	(iv) keep signs in good condition when installed and repair or replace damaged signs within 48 hours;		Moderate

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	Performance Measure	Timing	Performance Mechanism Index
	(v) remove graffiti on signs within 48 hours, or, if graffiti cannot be removed, replace signs within 72 hours; and		Moderate
	(vi) provide personnel to install, remove, and relocate signs on an expedited basis as required and if requested by the Province;		Minor
	(b) submit to the Province pursuant to the Review Procedure before intended deployment, proposed text, timing and location of all proposed static and dynamic message signs including shop drawings; installation details and a mock-up of the text; and confirmation of permits (if applicable);	Not less than 15 days before deployment	
	(c) ensure that portable dynamic message signs provide advance notification of planned traffic pattern changes;	Minimum of 5 Business Days prior to the date of implementation	Moderate
	(d) for all static signs, use colours and designs, consistent with the visual identity and graphic standard provided that: (i) identifies the Project Infrastructure in such a manner as to ensure that it is clear in the general public's perception that the Project Infrastructure is part of the Provincial Highway System;		Moderate
	(ii) visually differentiates from the Province and other government agencies;		Moderate
	(iii) clearly communicates the Project intent; and		Minor
	(iv) is consistent with other Design-Builder Communications and Engagement material for the Project, as accepted by the Province in accordance with this Schedule;		Minor
	(e) submit to the Province pursuant to the Consent Procedure prior to installation, erection or removal, the location, content and format of all permanent signs and notices to be installed or erected on the Project Site, and any signs proposed to be removed; and	14 days prior to scheduled installation, erection or removal	
	(f) install Provincial funding signs in a location specified by the Province; provide personnel to install, remove and relocate signs on an expedited basis as required.	Within 1 week of Province request	
4.1.9	Photography and Videography: To record and demonstrate progress of the Project from start of Construction to the Substantial Completion Date, the Design-Builder shall provide to the Province:		
	(a) high resolution photos for shared, royalty-free use by the Province, in publications, advertising, presentations and on public websites;	At least monthly	Minor
	(b) professional quality, high resolution photos, graphics and images for shared and royalty-free use by the Province, in publications, advertising, presentations and on public websites;	For all major Project milestones	Minor

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	Performance Measure	Timing	Performance Mechanism Index
	(c) aerial photography to demonstrate progress of construction along the entire Project Site	At least quarterly	Moderate
	(d) professional quality, high resolution video clips for shared and royalty-free use by the Province, in publications, advertising, presentations and on public websites;	At least quarterly and for all major Project milestones	Minor
	(e) access and assistance for the Province and its sub-contractors to collect time-lapse videos of construction of key locations on the Project Site as may be determined by the Province; and	From start of Construction to all major Project milestones and to Substantial Completion Date	Major
	(f) access and assistance for any photographers, videographers or media personnel designated by the Province.	On request of Province	Minor
4.2 Issues Management			
	At all times until the Total Completion Date, the Design-Builder shall:	As identified	Moderate
	(a) immediately notify the Province of any issues or potential issues to facilitate timely resolution;		
	(b) consult with and provide reasonable assistance to the Province with respect to identifying emerging issues;	As identified	Minor
	(c) in consultation with the Province and pursuant to the Review Procedure, develop and implement strategies to:		Minor
	(i) track, address, mitigate and minimize any issues or potential issues;		
	(ii) share information about any issues or potential issues with emergency responders, Stakeholders or other interested parties as may be identified;		Minor
	(iii) work with the Province to develop messages regarding the Design-Builder's response to any issues or potential issues and communicate them to affected Stakeholders; and		Minor
	(iv) report to the Province on progress/success of mitigation measures with respect to any issues or potential issues;		Minor
	(d) respond to emerging issues or potential issues identified by the Province within the timeframe specified by the Province, acting reasonably; and	As determined by the Province	Moderate
	(e) keep current and available to the Province at all times, a list of key contact names and cell phone numbers that the Province can access to support issues management response.	Within 5 Business Days of the Effective Date and thereafter within 1 day of any change	Moderate

	Performance Measure	Timing	Performance Mechanism Index
4.3	Crisis Communication		
	At all times until the Total Completion Date the Design-Builder shall: (a) provide assistance to the Province in the Province’s development of any supplemental communication plans and strategies;		Minor
	(b) during a crisis situation, make available sufficient and appropriate Project personnel to effectively manage and perform the Design-Builder’s responsibilities; and	Within 30 minutes of request by Province	Severe
	(c) draft and submit to the Province pursuant to the Consent Procedure, proactive and responsive content for crisis situations when a crisis arises.	No later than 2 hours after the Design-Builder or the Province becomes aware of a crisis situation	

**PART 5
COMMUNITY AND STAKEHOLDER ENGAGEMENT PERFORMANCE MEASURES**

Table 5

	Performance Measure	Timing	Performance Mechanism Index
5.1	Community and Stakeholder Engagement Activities and Engagement Events		
	The Design-Builder shall. (a) conduct engagement activities and Engagement Events which shall include sharing of designs and any substantive design changes, traffic management plans and measures to mitigate impacts of Construction;	Until the Total Completion Date	Moderate
	(b) support and attend Province-sponsored open house Engagement Events to: (i) inform interested parties about Project designs (minimum of two Engagement Events); and	As required by the Province	Moderate
	(ii) engage communities to seek input on the Design-Builder’s design process using materials developed in accordance with Section 5.1(a) of this Schedule (total number to be determined based on Design-Builder’s Interim Design and Final Design);	Based on Design Schedule	Moderate

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	Performance Measure	Timing	Performance Mechanism Index
	(c) for each open house Engagement Event described in Sections 5.1(a) and 5.1(b) of this Schedule, the Design-Builder shall:	As required by the Province	
	(i) provide content for Engagement Event materials including information and high-quality renderings and graphics about Project designs; and information and high-quality graphics regarding Construction activities and traffic impacts;	No later than 4 weeks prior to each Engagement Event	Minor
	(ii) provide appropriate personnel to support planning and to attend all Engagement Events, including technical staff, subject matter experts and community relations personnel;		Minor
	(iii) provide any other Engagement Event logistics required;		Minor
	(iv) consider all concerns, issues and matters raised by resident groups, business groups and Stakeholders and prepare a report for future meetings which must: (A) demonstrate in detail how the Design-Builder considered the concerns, issues and matters raised by residents, businesses and Stakeholders and how the Design-Builder proposes to address and remedy each of the concerns, issues and matters raised; and	Within 4 weeks of any Engagement Event	Moderate
	(B) if, in the report in the paragraph (i) above, the Design-Builder proposed not to address or remedy in whole or in part any concern, issue or matter raised by resident groups, business groups or Stakeholders, provide reasons why it proposes not to address or remedy in whole or in part any concern, issue or matter raised by these groups;		
	(d) submit all Engagement Event summary reports described in Section 5.1(c) of this Schedule to the Province pursuant to the Consent Procedure; and	Within 30 days following the Engagement Event	
	(e) track all meetings and events using the electronic tracking system.	Within 1 day of scheduling or rescheduling	Minor
5.2	General Community Relations		
	The Design-Builder shall, until the Total Completion Date prepare content for a quarterly Project update which the Province may send by direct mail to affected residents and businesses, and an electronic copy of which may be posted to the Website.	Initially no later than 90 days after start of Construction, then every 90 days	Minor

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	Performance Measure	Timing	Performance Mechanism Index
5.3	Community Liaison Committee		
	The Design-Builder, shall: (a) prior to the commencement of any Construction on the Project Site, begin participation with the Province in the multi-Stakeholder advisory group (the “ Community Liaison Committee ”), which the Province will facilitate and which will be comprised of representative emergency responders, municipal staff, goods movers, and other local and regional Stakeholders as may be appropriate, and which will provide advice and input to road-based Traffic Management plans and Communications and Engagement with road users with respect to traffic-related Construction;	No later than 60 days after the Effective Date	Major
	(b) obtain and keep current the full membership for the Community Liaison Committee in accordance with this Schedule, information from the Province, and any obligations set out in the Table of Commitments, including a current list of names and contact information;		Minor
	(c) adhere to the terms of reference, developed by the Province, for the Community Liaison Committee, which shall address membership of the Community Liaison Committee, meeting frequency and format, and the meeting facilitation and chair;	30 days prior to the first meeting	
	(d) until the Total Completion Date, participate in meetings of the Community Liaison Committee to discuss the Project and Construction that has the potential to affect road-based traffic;	60 days in advance of commencing Construction activities and thereafter at least once per quarter or more frequently as Construction activities warrant	Minor
	(e) submit to the Province draft agenda items for Community Liaison Committee meetings pursuant to the Review Procedure;	At least 14 days before each meeting	
	(f) consult with the Community Liaison Committee members regarding their concerns, issues and other matters relating to the Project;	At each meeting	Minor
	(g) consider all concerns, issues and matters raised by the Community Liaison Committee at each meeting, and prepare a report for such meeting, which must: (i) demonstrate in detail how the Design-Builder considered the concerns, issues and matters raised by the Community Liaison Committee and how the Design-Builder proposes to address and remedy each of the concerns, issues and matters raised; and		Moderate

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	Performance Measure	Timing	Performance Mechanism Index
	(ii) if, in the such report, the Design-Builder proposes not to address or remedy in whole or in part any concern, issue or matter raised by the Community Liaison Committee, provide reasons why it proposes not to address or remedy in whole or in part any concern, issue or matter raised by the Community Liaison Committee;		Moderate
	(h) submit to the Province all such Community Liaison Committee meeting reports described in Section 5.3(g) of this Schedule pursuant to the Consent Procedure;	Within 15 days of each meeting	
	(i) deliver all accepted Community Liaison Committee meeting reports described in Section 5.3(g) of this Schedule to the Province and representatives of the relevant Community Liaison Committee; and	Within 2 Business Days of acceptance pursuant to Consent Procedure	Moderate
	(j) track all meetings and events using the Enquiry-Response electronic tracking system.	Within 1 day of scheduling or rescheduling to be updated within 1 day after the meeting	Minor
5.4 Property Owner Liaison/Local Resident/Business/Interested Parties Liaison:			
	In consultation with the Province, the Design-Builder shall: (a) participate in meetings with local resident groups, businesses and interested parties to provide updated information on projected construction and traffic impacts, and hear concerns, issues and other matters raised on all matters relating to the Project;	As scheduled or rescheduled	Moderate
	(b) consider all concerns, issues and matters raised by local resident groups, businesses and interested parties at each meeting;	Within 1 week of the meeting	Minor
	(c) proactively address enquiries, issues and concerns raised including working with the construction team to identify and minimize impacts arising from Construction; and	In accordance with 4.1.4(a) of this Schedule	Minor
	(d) track all meetings, direct visits, correspondence, calls and any follow up required using the electronic tracking system.	Within 1 day of scheduling or rescheduling, to be updated within 1 day after the meeting	Minor

**PART 6
MEDIA AND GOVERNMENT RELATIONS PERFORMANCE MEASURES**

Table 6

	Performance Measure	Timing	Performance Mechanism Index
6.1	No Media Relations Activities		
	With the exception of email notices to traffic media which the Design-Builder shall undertake in accordance with Section 4.1.6(a)(iv) of this Schedule, the Design-Builder shall not undertake any activities relating to media relations except where requested or explicitly permitted by the Province.		Severe
6.2	Media Relations Support		
	The Design-Builder must, at all times until the Total Completion Date, support the Province for the following activities relating to media relations: (a) direct all media enquiries and interview requests to the Province’s Representative so that the Province can determine the organization that is most suitable to respond to the enquiry;	Within 1 hour of receiving request	Moderate
	(b) support the Province’s communications and media relations activities by supplying accurate information about the Project to the Province within the timeframes specified;	On request by Province	Minor
	(c) provide all information and data regarding the status of the Project, any traffic incidents, emergencies or other occurrences on the New Project Infrastructure and any other information and data the Province may request in order to appropriately respond to media enquiries;	Within the timeframes requested by Province	Minor
	(d) make available an experienced media spokesperson (with back-up trained media personnel) as requested by the Province;	Within the timeframes requested by Province	Moderate
	(e) provide 24/7 availability of media communications staff to monitor, draft messaging, and 24/7 access to subject matter experts to support response to media enquiries as requested by the Province; and	Continually	Moderate
	(f) make technical and subject matter experts available to the Province’s media relations staff as required for the purposes of responding to technical matters related to media requests.	Within the timeframes requested by Province	Moderate
6.3	Media Releases		
	The Province, in its sole discretion, will determine when media releases are required and will distribute them. At all times until the Total Completion Date, the Design-Builder shall: (a) as requested by the Province, prepare material for such notices; and	As requested by Province	Major

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	Performance Measure	Timing	Performance Mechanism Index
	(b) recommend to the Province’s Representative issue-specific communication protocols for incident management, which require immediate issuance of media release.		Minor
6.4 Governmental Authority Liaison Support			
	Without limiting any and all other obligations to proactively liaise with Governmental Authorities in accordance with this Agreement, the Design-Builder shall: (a) proactively support the Province in liaising with affected Governmental Authorities, by providing information about the Project status, upcoming milestones and issues that may affect the Project and reviewing, within the timeframes specified by the Province, any materials produced by the Province for such liaison activities; and	As requested by Province	Minor
	(b) participate in meetings as and when requested by the Province.	As requested by Province	Minor
6.5 No Public Announcements			
	Neither the Design-Builder nor any of its Subcontractors shall issue or disseminate any media release, public announcement or public disclosure relating to the Project without the Province’s prior consent.		Severe

**SCHEDULE 10
PAYMENT AND PERFORMANCE MECHANISM**

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DIVISION I
PROVINCE PAYMENTS TO DESIGN-BUILDER

PART 1
PAYMENT OBLIGATIONS OF PROVINCE

1.1 Obligation to make Progress Payments

- (a) Subject to the provisions of this Schedule, the Province shall make Progress Payments, in arrears, to the Design-Builder on account of the Contract Price in the amounts determined in accordance with Part 2 [Calculation of Progress Payments] of this Schedule and the procedure set out in Part 10 [Payments].
- (b) Subject to the provisions of Part 10 [Payments], each such Progress Payment shall be calculated in accordance with Part 2 [Calculation of Progress Payments] of this Schedule.
- (c) Without prejudice to Section 10.8 [Payment of Disputed Amounts], the Province shall, after withholding:
 - (i) any amount to be retained in respect of the Progress Payment Holdback in accordance with Section 2.1(a)(iv) of this Schedule;
 - (ii) any amount to be retained in respect of the Deficiency Holdback in accordance with Section 2.1(a)(v) of this Schedule; and
 - (iii) any amount to be retained in respect of the Warranty Holdback in accordance with Section 2.1(a)(vi) of this Schedule,

make payment to the Design-Builder of the net amount approved in respect of a Draw Request pursuant to Section 6.1(j) of this Schedule by not later than the fifth Business Day following approval in respect of the Draw Request pursuant to Section 6.1(j) of this Schedule.

- (d) The Province shall have no obligation to pay or be responsible in any way for payments to Subcontractors.

PART 2
CALCULATION OF PROGRESS PAYMENTS

2.1 Calculation of Progress Payments

- (a) Subject to Section 2.1(c) of this Schedule, the Progress Payment for each Payment Period shall be an amount equal to the total of the amounts described in Sections 2.1(a)(i), (ii) and (iii) below:
 - (i) the amount (the “**Progress Amount**”) that is the aggregate of all the Cost Item Progress Amounts (other than a Cost Item Amount payable in respect of a Specified Cost Item identified in Appendix B [Progress Measurement Principles] to this Schedule) each of which is determined in accordance with Section 2.1(b) of this Schedule for Payment Period *p*;

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- (ii) the aggregate of all the Cost Item Amounts in respect of Specified Cost Items, each of which amounts is determined in accordance with Section 2.1(b) of this Schedule to be payable in respect of Payment Period p ; and
- (iii) for the Payment Period in which the Substantial Completion Date occurs, the total amount of the Progress Payment Holdbacks previously retained by the Province in accordance with Section 2.1(a)(iv) below,

less the amounts, if any, described in Sections 2.1(a)(iv), (v) and (vi) below:

- (iv) for each Payment Period prior to the Payment Period in which the Substantial Completion Date occurs, an amount (the “**Progress Payment Holdback**”) equal to 3% of the total of the amounts described in Sections 2.1(a)(i) and (ii) above;
 - (v) for the Payment Period in which the Substantial Completion Date occurs, the Deficiency Holdback; and
 - (vi) for the Payment Period in which the Substantial Completion Date occurs, the Warranty Holdback.
- (b) Each Cost Item Progress Amount for Payment Period p shall be determined in accordance with the following formula:

$$CIPAp = CIA_{ci} \times RC_p\%$$

where:

$CIPAp$ = the amount (the “**Cost Item Progress Amount**”) that is determined for Payment Period p for work completed during Payment Period p in respect of a Cost Item (other than a Specified Cost Item identified in Appendix B [Progress Measurement Principles] to this Schedule) identified in the applicable Statement of Progress submitted by the Design-Builder pursuant to Section 6.1 [Draw Requests for Progress Payments] of this Schedule

CIA_{ci} = the Cost Item Amount allocated to that Cost Item in Appendix B [Progress Measurement Principles] to this Schedule

$RC_p\%$ = the percentage amount (the “**Relevant Completion Percentage**”) applicable to that Cost Item for Payment Period p , determined as the result obtained by subtracting:

- (i) the total progress made by the Design-Builder (expressed as a percentage), during all Payment Periods up to and including the Payment Period that immediately precedes Payment Period p , toward completion of that Cost Item;

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from:

- (ii) the total progress made by the Design-Builder (expressed as a percentage), during all Payment Periods up to and including Payment Period *p*, toward completion of that Cost Item;

For certainty, the Relevant Completion Percentage may, in certain circumstances, be a negative amount (including, for example, if the progress toward completion of the applicable Cost Item, as certified by the Independent Engineer in respect of one or more Payment Periods, is subsequently determined to have been over-stated).

- (c) The maximum aggregate amount payable by the Province in respect of Progress Payments pursuant to this Schedule shall be an amount equal to the Contract Price.

DIVISION II
DESIGN-BUILDER PAYMENTS TO PROVINCE

PART 3
PAYMENT OBLIGATIONS OF DESIGN-BUILDER

3.1 Obligation to make Performance Incentive Payments

- (a) The Design-Builder shall pay to the Province a Performance Incentive Payment in respect of each Payment Period any portion of which occurs during the period commencing on the Effective Date and ending on (and including) the Total Completion Date.
- (b) Subject to the provisions of Part 10 [Payments], each such Performance Incentive Payment shall be determined in accordance with Section 4.1 [Calculation of Performance Incentive Payments] of this Schedule.
- (c) If any report delivered pursuant to Section 6.2 [Reports for Performance Incentive Payments and Delay Liquidated Damages] of this Schedule shows a net amount owing by the Design-Builder to the Province then, without prejudice to Section 10.8 [Payment of Disputed Amounts], the Design-Builder shall pay and remit to the Province such amount not later than:
 - (i) the last day of the Payment Period following the Payment Period (or part thereof, as the case may be) to which the said report relates; and
 - (ii) the tenth Business Day after the Design-Builder has delivered the said report.
- (d) If any report delivered pursuant to Section 6.2 [Reports for Performance Incentive Payments and Delay Liquidated Damages] of this Schedule shows a net amount owing by the Province to the Design-Builder, it shall be accompanied by an invoice from the Design-Builder to the Province in respect of such net amount (which invoice will separately identify any applicable taxes included in the calculation of such amount).

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Without prejudice to Section 10.8 [Payment of Disputed Amounts], the Province shall pay to the Design-Builder the amount of any such invoice issued by the Design-Builder not later than the later of:

- (i) the last day of the Payment Period following the Payment Period (or part thereof, as the case may be) to which the invoice relates; and
- (ii) the tenth Business Day after the Province has received both the said invoice and the said report (together with the work papers referred to in Section 6.2(b) of this Schedule) in respect of such Payment Period (or part thereof, as the case may be).

3.2 Obligation to pay Delay Liquidated Damages

- (a) If the Substantial Completion Date does not occur on or before the Substantial Completion Target Date, subject to Section 9.3(b), and except to the extent such delay is directly attributable to a Province Non-Excusable Event, the Design-Builder shall pay to the Province liquidated damages (“**Delay Liquidated Damages**”) in an amount equal to for each day (or part thereof; for certainty, without pro-rating) from (but excluding) the Substantial Completion Target Date until (and including) the Substantial Completion Date.
- (b) Delay Liquidated Damages shall accrue on a daily basis and be payable by the Design-Builder to the Province in respect of each Payment Period simultaneously with the delivery of the report delivered pursuant to Section 6.2 [Reports for Performance Incentive Payments and Delay Liquidated Damages] for such Payment Period (whether or not the Province has issued an invoice or demand therefor, provided that, if requested by the Design-Builder, the Province shall issue an invoice therefor as soon as reasonably practicable after the receipt of such request).
- (c) The Province and the Design-Builder acknowledge and agree that:
 - (i) there will be substantial delays, costs and difficulties in determining the loss suffered by the Province if the Substantial Completion Date does not occur on or before the Substantial Completion Target Date;
 - (ii) the Delay Liquidated Damages provided for in Section 3.2(a) of this Schedule are not intended, nor shall they be construed, to be punitive but are a genuine pre-estimate and assessment, by mutual agreement, of the actual loss that will be suffered by the Province as a result of the Substantial Completion Date not occurring on or before the Substantial Completion Target Date, and are payable by the Design-Builder as liquidated damages and not as a penalty; and
 - (iii) the method of calculation of Delay Liquidated Damages in accordance with Section 3.2(a) of this Schedule represents a fair and reasonable pre-estimate of the actual losses that will be suffered by the Province as a result of the Substantial Completion Date not occurring on or before the Substantial Completion Target Date.
- (d) The payment of Delay Liquidated Damages in accordance with this Section 3.2 shall be the Province’s sole remedy if the Substantial Completion Date does not occur on or

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before the Substantial Completion Target Date, provided that the payment of such Delay Liquidated Damages shall not, and shall not be construed to:

- (i) limit the rights and remedies of the Province, or the liabilities of the Design-Builder, that arise or may arise as a result of the occurrence of the Design-Builder Default referred to in Section 12.1(o); nor
- (ii) relieve the Design-Builder from:
 - (A) the obligation to achieve Substantial Completion in accordance with this Agreement; or
 - (B) any liability arising from any failure to comply with the obligation referred to in Section 3.2(d)(ii)(A) of this Schedule, other than any liability that would arise as a result of the Substantial Completion Date not occurring on or before the Substantial Completion Target Date (except for the payment of Delay Liquidated Damages).
- (e) Section 10.4 [Province’s Right of Set-Off] shall apply to the Design-Builder’s obligation to pay Delay Liquidated Damages pursuant to this Section 3.2.

**PART 4
CALCULATION OF PERFORMANCE INCENTIVE PAYMENTS**

4.1 Calculation of Performance Incentive Payments

The Performance Incentive Payment in respect of Payment Period p (or part of Payment Period p , as the case may be) in Contract Year n during the period described in Section 3.1(a) of this Schedule shall be determined in accordance with the following formula:

$$PIP_{pn} = TMP_{pn} + NCEP_{pn}$$

where:

PIP_{pn} = the Performance Incentive Payment in respect of Payment Period p (or part of Payment Period p , as the case may be) in Contract Year n during the period described in Section 3.1(a) of this Schedule

TMP_{pn} = the Traffic Management Payment payable in respect of Payment Period p (or part of Payment Period p , as the case may be) in Contract Year n during the period described in Section 3.1(a) of this Schedule, determined in accordance with Section 4.2 [Calculation of Traffic Management Payments] of this Schedule

$NCEP_{pn}$ = the Non-Compliance Event Payment payable in respect of Payment Period p (or part of Payment Period p , as the case may be) in Contract Year n during the period described in Section 3.1(a) of this Schedule, determined in accordance with Section 4.3 [Calculation of Non-Compliance Event Payments] of this Schedule

4.2 Calculation of Traffic Management Payments

- (a) Subject to Sections 4.2(d), (e), (f), (g) and (h) of this Schedule, the amount of the Traffic Management Payment payable in respect of each Payment Period p (or part of Payment Period p , as the case may be) in Contract Year n in respect of which a Performance Incentive Payment is payable in accordance with Section 3.1 [Obligation to make Performance Incentive Payments] of this Schedule shall be determined in accordance with the following formula:

$$TMP_{pn} = \sum_{i=1}^I \text{TrafficManagementAmount}_i$$

where:

- I = the number of Non-Permitted Traffic Disruption Events occurring in Payment Period p (or part of Payment Period p , as the case may be) in Contract Year n during the period described in Section 3.1(a) of this Schedule
- Traffic Management Amount _{i}** = the Traffic Management Amount in respect of Non-Permitted Traffic Disruption Event i , calculated in accordance with Section 4.2(b) of this Schedule

- (b) The Traffic Management Amount in respect of Non-Permitted Traffic Disruption Event i shall be the lesser of:
- (i) the Non-Permitted Traffic Disruption Event i determined in accordance with Section 4.2(c) of this Schedule; and
- (ii) the amount determined in accordance with the following formula:

$$\text{TrafficManagementAmount}_i = LTDE_i \times DTDE_i \times [TDEC_i]$$

where:

- $LTDE_i$ = the aggregate number of lanes closed by Non-Permitted Traffic Disruption Event i
- $DTDE_i$ = the duration (in minutes) of Non-Permitted Traffic Disruption Event i
- $TDEC_i$ = the Traffic Disruption Event Charge in respect of Non-Permitted Traffic Disruption Event i , determined in accordance with Section 4.2(c) of this Schedule

- (c) The Traffic Disruption Event Charge for any Non-Permitted Traffic Disruption Event i shall be calculated with reference to the Traffic Disruption Event Charge Lookup Table below, using the relevant part of the table for the period during which Non-Permitted Traffic Disruption Event i occurs:

Traffic Disruption Event Charge Lookup Table (TDEC_i)		
Traffic Disruption Event Charge (per minute, per lane)		
	Period during which Non-Permitted Traffic Disruption Event <i>i</i> occurs	
Duration of Non-Permitted Traffic Disruption Event <i>i</i>	Up to and including Substantial Completion Date	After Substantial Completion Date
First 15 minutes		
After the first 15 minutes		

- (d) If a Non-Permitted Traffic Disruption Event referenced in Section 4.2(c) of this Schedule affects more than one lane, and the duration of the Non-Permitted Traffic Disruption Event in respect of each such lane is different, the Traffic Management Amount in respect of the Non-Permitted Traffic Disruption Event shall be calculated separately for each such lane pursuant to Section 4.2(b) of this Schedule.
- (e) If the occurrence of a Non-Permitted Traffic Disruption Event is first identified and reported by the Province and the Province, acting reasonably, considers that the Design-Builder ought to have identified and reported the occurrence of the Non-Permitted Traffic Disruption Event before the Province did so, then the Traffic Management Amount in respect of that Non-Permitted Traffic Disruption Event shall be multiplied by a factor of two.
- (f) No Traffic Management Amount is payable in respect of a Non-Permitted Traffic Disruption Event that is the direct result of:
 - (i) an Excluded Event;
 - (ii) a Relief Event; or
 - (iii) a Force Majeure Event.
- (g) A Non-Permitted Traffic Disruption Event the occurrence of which spans portions of:
 - (i) two or more Payment Periods during the Term; or
 - (ii) two or more periods described in the Traffic Disruption Event Charge Lookup Table set out in Section 4.2(c) of this Schedule,

shall be treated as a new Non-Permitted Traffic Disruption Event for each successive Payment Period or period, as the case may be, that commences while the Non-Permitted Traffic Disruption Event is continuing (with the Traffic Disruption Event Charge applicable to each such successive Payment Period or period, as the case may be, determined with reference to the Traffic Disruption Charge Look-up Table set out in Section 4.2(c) of this Schedule, applying accordingly).
- (h) Despite anything else in this Section 4.2, and without limiting the generality of Section 18.6 [Waiver], the Province expressly reserves the right to waive, reduce or defer the obligation to pay, any Traffic Management Amount otherwise payable pursuant to

Section 4.2(a) of this Schedule in respect of a Non-Permitted Traffic Disruption Event, as such Traffic Management Amount is calculated in accordance with Section 4.2(b) of this Schedule, and the Province may do so in its sole and absolute discretion and without prejudice to any of its rights and remedies (whether pursuant to this Schedule or otherwise) in respect of any other Non-Permitted Traffic Disruption Event. Any such waiver, reduction or deferral by the Province of any Traffic Management Amount shall only be effective if in writing signed by the Province, and shall not excuse the Design-Builder from performing, nor otherwise affect the Design-Builder’s obligation to perform, all of its obligations under this Agreement. For certainty, no interest shall be payable by the Design-Builder in respect of any Traffic Management Amount that is deferred by the Province under this Section 4.2(h).

4.3 Calculation of Non-Compliance Event Payments

- (a) At all times during the period described in Section 3.1(a) of this Schedule, the amount of the Non-Compliance Event Payment payable by the Design-Builder in respect of each Payment Period *p* (or portion thereof, as the case may) in Contract Year *n* in respect of which a Performance Incentive Payment is payable in accordance with Section 3.1 [Obligation to make Performance Incentive Payments] of this Schedule shall be determined in accordance with the following formula:

$$NCEP_{pn} = \sum_{d=1}^D NCEPP_d + \sum_{d=1}^D NCEP_d$$

where:

NCEPP_d = the NCE (Points) Payment in respect of day *d* of Payment Period *p* (or part of Payment Period *p*, as the case may be) in Contract Year *n*, calculated as follows:

$$\$1,000 \times [\text{the greater of (i) } (NCE\ Points_d - 15) \text{ and (ii) } 0]$$

where:

NCE Points_d = the NCE Points Balance on day *d*

NCECP_d = the NCE (Cash) Payment in respect of day *d* of Payment Period *p* (or part of Payment Period *p*, as the case may be) in Contract Year *n*

D = the number of days in Payment Period *m* (or part of Payment Period *m*, as the case may be) in Contract Year *n*

- (b) Despite anything else in this Section 4.3, and without limiting the generality of Section 18.6 [Waiver], the Province expressly reserves the right to waive, reduce or defer the obligation to pay, all or any portion of any Non-Compliance Event Payment otherwise payable pursuant to Section 4.3(a) of this Schedule in respect of any Non-Compliance Event(s), as such Non-Compliance Event Payment (or portion thereof, as the case may

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be) is calculated in accordance with Section 4.3(a) of this Schedule, and the Province may do so in its sole and absolute discretion and without prejudice to any of its rights and remedies (whether pursuant to this Schedule or otherwise) in respect of any other Non-Compliance Event. Any such waiver, reduction or deferral by the Province of any Non-Compliance Event Payment (or portion thereof, as the case may be) shall only be effective if in writing signed by the Province, and shall not excuse the Design-Builder from performing, nor otherwise affect the Design-Builder's obligation to perform, all of its obligations under this Agreement. For certainty, no interest shall be payable by the Design-Builder in respect of any Non-Compliance Event Payment that is deferred by the Province under this Section 4.3(b).

4.4 No Set Off re Performance Incentive Payments

No amount that may from time to time be or become owing by the Province to the Design-Builder under this Agreement may be set off against any amount payable by the Design-Builder to the Province in respect of any obligation of the Design-Builder to pay Performance Incentive Payments pursuant to this Schedule.

DIVISION III **GENERAL PROVISIONS**

PART 5 **NCE POINTS AND DEFAULT POINTS**

5.1 Assignment of NCE Points

- (a) Upon any occurrence of a Non-Compliance Event, whether such occurrence is first identified and reported to the other party by the Design-Builder or the Province, NCE Points shall be assigned by the Province on the basis set out in Appendix D [Assignment of NCE Points] to this Schedule and in accordance with this Section 5.1.
- (b) If the occurrence of a Non-Compliance Event is first identified and reported by the Province and the Province, acting reasonably, considers that the Design-Builder ought to have identified and reported the occurrence of the Non-Compliance Event before the Province did so, the Province may assign one additional NCE Point in respect of that Non-Compliance Event.
- (c) If the Province first discovers a Nonconformity (other than a Non-Compliance Event) and issues a Nonconformity Report in respect thereof in accordance with Section 6.1 [Nonconformity Report Process] of Schedule 7, and the Province, acting reasonably, considers that the Design-Builder ought to have discovered and issued a Nonconformity Report in respect of the Nonconformity before the Province did so, then, if pursuant to the provisions of Part 5 [NCE Points and Default Points] of this Schedule (other than this Section 5.1(c)), the Nonconformity:
 - (i) has, or would have but for its rectification, become a Non-Compliance Event, then the Province may assign one additional NCE Point in respect thereof; or

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(ii) has not, or would not have, otherwise become a Non-Compliance Event, then the Province may assign one NCE Point in respect thereof,

and in each such case the failure by the Design-Builder to discover and issue a Nonconformity Report in respect of such Nonconformity will itself be a Non-Compliance Event.

- (d) No NCE Points shall be assigned by the Province in respect of a Non-Compliance Event that is the direct result of a Province Non-Excusable Event.
- (e) No NCE Points shall be assigned by the Province in respect of the occurrence of a Non-Compliance Event that results in a NCE (Cash) Payment.
- (f) If, after the date of occurrence of a Non-Compliance Event (other than a Non-Compliance Event that has been identified as a result of a traffic management audit process conducted pursuant to Section 4.8 [Traffic Management Auditing] of Schedule 7), such Non-Compliance Event subsists for a period of 28 calendar days, then (in addition to any NCE Points assigned upon the initial occurrence of the Non-Compliance Event) the applicable number of NCE Points shall thereupon again be assigned by the Province in respect of that Non-Compliance Event.

For each successive 28 calendar day period that such Non-Compliance Event subsists, the applicable number of NCE Points shall again be assigned by the Province in respect of that Non-Compliance Event, so that the aggregate number of NCE Points outstanding in respect of that Non-Compliance Event at any time shall be determined by application of the following formula:

***NCE Points outstanding
in respect of any subsisting
Non-Compliance Event*** = ***Points × (1 + Compounding Periods)***

where:

Points = the number of NCE Points applicable to the Non-Compliance Event, as assigned by the Province on the basis set out in Appendix D [Assignment of NCE Points] to this Schedule and in accordance with this Section 5.1 (including in accordance with Section 5.1(b) of this Schedule).

Compounding Periods = the total number of successive 28 calendar day periods having elapsed since the date of initial occurrence of the Non-Compliance Event, as at the date of determination of the number of NCE Points outstanding.

- (g) Despite anything else in this Section 5.1, the Province expressly reserves the right to refrain from, or to defer, assigning all or any portion of the NCE Points set out in Appendix D [Assignment of NCE Points] to this Schedule in respect of any Non-Compliance Event, and the Province may do so in its sole and absolute discretion and without prejudice to any of its other available rights and remedies in respect of that Non-Compliance Event, and without prejudice to its right to assign NCE Points, and to exercise any of its other available rights and remedies, in respect of any other Non-Compliance Event. Any such refraining from or deferral of assigning any NCE Points by

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the Province shall only be effective if in writing signed by the Province, and shall not excuse the Design-Builder from performing, nor otherwise affect the Design-Builder's obligation to perform, all of its obligations under this Agreement.

- (h) The Province shall notify the Design-Builder of the assignment by the Province of any NCE Points pursuant to this Section 5.1 promptly after such assignment.
- (i) The Design-Builder shall be entitled to dispute the assignment of any NCE Points only if:
 - (i) the number of such NCE Points assigned by the Province pursuant to Section 5.1(a) of this Schedule in respect of a Non-Compliance Event is greater than the number of NCE Points identified by the Design-Builder in the relevant monthly report delivered under Part 6 [Periodic Reports and Payment Applications] of this Schedule as being assignable in respect of that Non-Compliance Event; or
 - (ii) it is disputing the reasonableness of the Province's determination pursuant to Sections 5.1(b) or 5.1(c) of this Schedule; or
 - (iii) where the Province assigns NCE Points for a Non-Compliance Event in respect of an Unresolved NCE in accordance with Appendix D [Assignment of NCE Points] to this Schedule, and the Design-Builder asserts that the status of the applicable Nonconformity Report was "closed" in accordance with Section 6.1(h) of Schedule 7 [Quality Management] within the response time specified on the Nonconformity Report in accordance with Section 6.1(d) of Schedule 7 [Quality Management], and therefore such Non-Compliance Event did not occur; and
 - (iv) the Design-Builder refers any such dispute referred to in Section 5.1(i)(i), (ii) or (iii) of this Schedule to the Dispute Resolution Procedure within 14 days after its receipt from the Province of notice of such assignment. If the Design-Builder does not refer the dispute to the Dispute Resolution Procedure within such 14-day period, the Design-Builder shall be deemed to have accepted the Province's assignment of the relevant NCE Points.
- (j) The assignment of NCE Points as contemplated by this Section 5.1 is in addition to and not in substitution for or to the exclusion of any other rights and remedies available to the Province under this Agreement or any of the other Project Documents or at law or in equity, and the Province may have recourse to any one or more of all of such rights and remedies, concurrently or successively, as it shall see fit, without prejudice to any of its other available rights and remedies.

5.2 Calculation of NCE Points Balance

- (a) For purposes of Section 4.3 [Calculation of Non-Compliance Event Payments] of this Schedule:
 - (i) NCE Points that have been assigned pursuant to Section 5.1 [Assignment of NCE Points] of this Schedule (other than as a result of a traffic management audit process conducted pursuant to Schedule 4.8 [Traffic Management Auditing] of Schedule 7 or for a Non-Compliance Event in respect of an Unresolved NCE in accordance with Appendix D [Assignment of NCE Points] to this Schedule) shall

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subsist for the duration of the period from the date of occurrence of the Non-Compliance Event in respect of which such NCE Points have been assigned until the date on which the status of the Nonconformity Report in respect of such Non-Compliance Event is changed to “pending” in accordance with Section 6.1 [Nonconformity Reporting Process] of Schedule 7 (which period shall not, in any event, be less than one calendar day), whereupon such NCE Points shall be deducted from the then current NCE Points Balance;

- (ii) NCE Points that have been assigned pursuant to Section 5.1 [Assignment of NCE Points] of this Schedule as a result of a traffic management audit process conducted pursuant to Section 4.8 [Traffic Management Auditing] of Schedule 7 shall subsist until 11:59 pm on the date of occurrence of the Non-Compliance Event in respect of which such NCE Points have been assigned (and shall be included in the calculation of the NCE Points Balance as at any time on that date after their assignment), whereupon such NCE Points shall be deducted from the then current NCE Points Balance;
 - (iii) NCE Points that have been assigned for a Non-Compliance Event in respect of an Unresolved NCE in accordance with Appendix D [Assignment of NCE Points] to this Schedule shall subsist until the date on which the status of the applicable Nonconformity Report is “closed” in accordance with Section 6.1(h) of Schedule 7 [Quality Management], whereupon such NCE Points shall be deducted from the then current NCE Points Balance; and
 - (iv) for certainty, any NCE Points assigned as contemplated in Section 5.2(a)(i) of this Schedule shall be included in the calculation of the NCE Points Balance as at any time on the date of their assignment and in the calculation of the NCE Points Balance as at any time on each day thereafter during the applicable period until (and including) the date of their deduction from the NCE Points Balance in accordance with Section 5.2(a)(i) of this Schedule.
- (b) At all times during period from the Effective Date until the Total Completion Date, each of the Province and the Design-Builder shall respectively maintain a record of:
- (i) the aggregate number of NCE Points assigned pursuant to Section 5.1 [Assignment of NCE Points] of this Schedule at any time during the period from the Effective Date until such time; and
 - (ii) the aggregate number of NCE Points assigned pursuant to Section 5.1 [Assignment of NCE Points] of this Schedule at any time during the period from the Effective Date until such time, which NCE Points are still outstanding as at such time as determined pursuant to Section 5.2(a) of this Schedule (the “**NCE Points Balance**”).

5.3 Calculation of NCE Points (Default) Balance

- (a) For purposes of Section 5.4 [Assignment of Default Points] of this Schedule, NCE Points that have been assigned pursuant to Section 5.1 [Assignment of NCE Points] of this Schedule shall subsist for the duration of the period from the date of occurrence of the

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Non-Compliance Event in respect of which such NCE Points have been assigned until the earlier of:

- (i) the date on which the Province assigns one or more Default Points in respect of such NCE Points pursuant to Section 5.4(a) of this Schedule; and
- (ii) the end of the Contract Year in which such NCE Points were assigned;

whereupon such NCE Points shall be deducted from the then current NCE Points (Default) Balance. NCE Points that have been assigned for a Non-Compliance Event in respect of an Unresolved NCE in accordance with Appendix D [Assignment of NCE Points] to this Schedule will not count towards the NCE Points (Default) Balance.

- (b) At all times during the period from the Effective Date until the Total Completion Date, the Province shall maintain a record of the aggregate number of NCE Points assigned pursuant to Section 5.1 [Assignment of NCE Points] of this Schedule at any time during the period from the commencement of the then current Contract Year until such time, which NCE Points are still outstanding as at such time as determined pursuant to Section 5.3(a) of this Schedule (the “**NCE Points (Default) Balance**”).

5.4 Assignment of Default Points

Default Points shall be assigned to the Design-Builder on the basis set out in this Section 5.4.

- (a) For each 150 NCE Points assigned to the Design-Builder during a Contract Year the Province shall assign to the Design-Builder one Default Point. Upon any such assignment of a Default Point, the then current NCE Points (Default) Balance shall be reduced by 150 NCE Points.
- (b) If the Design-Builder fails to perform or observe any of its material obligations under this Agreement (other than its obligations referred to in Section 5.4(c) of this Schedule, but including Indigenous Requirements) then the Province may, in its discretion, assign to the Design-Builder up to a maximum of 5 Default Points for each such failure.
- (c) If there occurs:
 - (i) a Nonconformity which continues unremedied (as described in Section 6.3 [Unremedied Nonconformity] of Schedule 7);
 - (ii) a Nonconformity in respect of a Quality Audit of the Quality Management System, and such Nonconformity is not remedied within the required time set out in the relevant Nonconformity Report;
 - (iii) a Nonconformity in respect of a Quality Audit of the Quality Management System that relates to a requirement in respect of which a Nonconformity has occurred previously (a “**Repeat Nonconformity**”), whether or not such Repeat Nonconformity is remedied;
 - (iv) a Nonconformity in respect of performance measure PE3.4(a) [Notification to Province] in Schedule 6;

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- (v) a Nonconformity in respect of performance measure PE3.5(a) [Notification to Environmental Authorities] in Schedule 6;
- (vi) three or more Releases of a Hazardous Substance that require notification to Environmental Authorities in accordance with Section 3.5 [Notification to Environmental Authorities] of Schedule 6 occur in any six month period;
- (vii) any failure by the Design-Builder to comply with Section 1.3(j) of Part 4 [Traffic Management] of Schedule 4; or
- (viii) any Nonconformity in respect of performance measure PDC1.10a [Accommodation of School Bus and Local Traffic] of Part 4 of Schedule 4,

then the Province may, in its discretion, assign to the Design-Builder up to a maximum of 3 Default Points for each such Nonconformity, Repeat Nonconformity or failure to comply, as the case may be.

- (d) Once assigned pursuant to this Section 5.4, Default Points shall subsist for the remainder of the period ending on the Total Completion Date (but, for the purposes of Section 5.4(e)(ii) of this Schedule, shall be in effect only for the period of three years from the date of their assignment).
- (e) At all times during the period from the Effective Date until the Total Completion Date, the Province shall maintain a record of
 - (i) the aggregate number of Default Points assigned pursuant to this Section 5.4 at any time during the period from the Effective Date until such time; and
 - (ii) the aggregate number of Default Points assigned pursuant to this Section 5.4 at any time during the period from (but excluding) the date that is three years prior to such time until such time (the “**Default Points Balance**”).
- (f) The Province shall notify the Design-Builder of the assignment of any Default Points pursuant to this Section 5.4 promptly after such assignment.
- (g) The Design-Builder shall be entitled to dispute the assignment of any Default Point only if:
 - (i) the number of such Default Points assigned by the Province in respect of any month is greater than the number of Default Points identified by the Design-Builder in the relevant monthly report delivered under Part 6 [Periodic Reports and Payment Applications] of this Schedule as being assignable in respect of that month; and
 - (ii) the Design-Builder refers such dispute to the Dispute Resolution Procedure within 14 days after its receipt from the Province of notice of such assignment. If the Design-Builder does not refer the dispute to the Dispute Resolution Procedure within such 14-day period, the Design-Builder shall be deemed to have accepted the Province’s assignment of the relevant Default Points.

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- (h) The Province’s right to assign Default Points as contemplated by this Section 5.4 is in addition to and not in substitution for or to the exclusion of any other rights and remedies available to the Province under this Agreement or any of the other Project Documents or at law or in equity, and the Province may have recourse to any one or more or all of such rights and remedies, concurrently or successively, as it shall see fit, without prejudice to any of its other available rights and remedies.

**PART 6
PERIODIC REPORTS AND PAYMENT APPLICATIONS**

6.1 Draw Requests for Progress Payments

- (a) On or before two Business Days before the last day of each Payment Period, the Design-Builder shall prepare and deliver to the Province’s Representative and the Independent Engineer an initial statement of progress in respect of the current Payment Period, substantially in the form set out in Appendix A [Form of Statement of Progress] to this Schedule, duly completed in accordance with Appendix B [Progress Measurement Principles] of this Schedule (a “**Statement of Progress**”) and accompanied by work papers clearly setting forth the derivation of all percentages and dollar amounts required by Appendix A to be included therein. Prior to delivering a Draw Request to the Province’s Representative pursuant to Section 6.1(b) of this Schedule, the Design-Builder shall arrange with the Province’s Representative and the Independent Engineer a reasonable opportunity for the Province’s Representative and the Independent Engineer jointly with the Design-Builder to inspect the Project Work and review the Statement of Progress and to attend at the offices of the Design-Builder to review such documentation as the Province’s Representative or the Independent Engineer may request.
- (b) On or before five Business Days following the last day of each Payment Period, the Design-Builder shall prepare and deliver to the Province’s Representative a draw request substantially in the applicable form set out in Appendix E [Payment Application Forms] to this Schedule, and a Statement of Progress duly certified by the Independent Engineer and accompanied by work papers clearly setting forth the derivation of the percentages and dollar amounts required by Appendix A to be included therein, including any adjustments to finalize the initial Statement of Progress for the applicable Payment Period as provided pursuant to Section 6.1(a) of this Schedule, each for the Progress Payment for the portion of the Project Work progressed during the Payment Period then most recently ended and accompanied by the documentation specified therein (such draw request and certified Statement of Progress, together being a “**Draw Request**”).
- (c) The Draw Request shall set out the Design-Builder’s calculation of each of the following (each stated separately, without duplication):
 - (i) the Cost Item Progress Amount in respect of each relevant Cost Item in respect of such Payment Period (each such amount as set out in the applicable certified Statement of Progress comprising part of such Draw Request);
 - (ii) the cumulative total progress made by the Design-Builder, during all Payment Periods up to and including such Payment Period, toward completion of each relevant Cost Item, expressed as a percentage (each such percentage amount as

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set out in the applicable certified Statement of Progress comprising part of such Draw Request);

- (iii) the cumulative total progress made by the Design-Builder, during all Payment Periods up to but excluding such Payment Period, toward completion of each relevant Cost Item, expressed as a percentage (each such percentage amount as set out in the applicable certified Statement of Progress comprising part of such Draw Request);
- (iv) the Relevant Completion Percentage applicable to each relevant Cost Item in respect of such Payment Period (each such percentage amount as set out in the applicable certified Statement of Progress comprising part of such Draw Request);
- (v) the Progress Amount in respect of such Payment Period;
- (vi) the Cost Item Progress Amount in respect of each Specified Cost Item, which amount is determined in accordance with Section 2.1(b) of this Schedule to be payable in respect of such Payment Period (each such amount as set out in the applicable certified Statement of Progress comprising part of such Draw Request);
- (vii) the aggregate of all Cost Item Progress Amounts in respect of all Specified Cost Items, each of which is determined in accordance with Section 2.1(b) of this Schedule to be payable in respect of such Payment Period;
- (viii) the amount of any amount payable for such Payment Period in respect of previous Progress Payments Holdbacks pursuant to Section 2.1(a)(iii) of this Schedule;
- (ix) the amount of any holdback on account of the Progress Payment Holdback to be made for such Payment Period pursuant to Section 2.1(a)(iv) of this Schedule;
- (x) the amount of any holdback on account of the Warranty Holdback to be made for such Payment Period pursuant to Section 2.1(a)(v) of this Schedule;
- (xi) the amount of any holdback on account of the Deficiency Holdback to be made for such Payment Period pursuant to Section 2.1(a)(vi) of this Schedule;
- (xii) the total Progress Payment payable in respect of such Payment Period, determined pursuant to Section 2.1(a) of this Schedule;
- (xiii) the aggregate of all amounts payable in respect of:
 - (A) any additional or varied Project Work authorized or approved by a Change Certificate issued pursuant to Part 2 [Province Changes] of Schedule 11 and performed by the Design-Builder during such Payment Period; and

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- (B) any Minor Works performed by the Design-Builder pursuant to Section 1.2(a) of Schedule 11 [Changes] during such Payment Period;
 - (xiv) any applicable taxes payable in respect of any of the payments referred to above in this Section 6.1(c);
 - (xv) any adjustments to reflect over-payments and/or underpayments (each such adjustment stated separately) in respect of Progress Payments made by the Province during the period prior to such Payment Period (for which adjustment has not already been made, including by way of determination of a negative Relevant Completion Percentage applicable to any Cost Item);
 - (xvi) any interest payable in respect of any amounts owed; and
 - (xvii) the net amount owing by the Province to the Design-Builder or by the Design-Builder to the Province in respect of the Province's obligation to make Progress Payments pursuant to Section 1.1 [Obligation to make Progress Payments] of this Schedule and to make payment for additional or varied Project Work performed by the Design-Builder pursuant to a Change Certificate issued pursuant to Part 2 [Province Changes] of Schedule 11 or for Minor Works performed by the Design-Builder pursuant to Section 1.2(a) of Schedule 11 Changes.
- (d) The Draw Request shall be accompanied by work papers clearly setting forth the derivation of the percentages and amounts set out therein in accordance with all applicable calculations specified in this Schedule. Such work papers shall include all relevant reports, information and documentation (all in such form and content as is acceptable to the Province's Representative) to support the Design-Builder's application contained in such Draw Request.
- (e) The Draw Request shall be accompanied by a letter from the Workers' Compensation Board which confirms that the Design-Builder is in good standing with the Workers' Compensation Board and that all required remittances and assessments required by the WCA have been made to a date which is no more than three Business Days prior to the date of the Draw Request.
- (f) The Draw Request shall be accompanied by a report on the status of the Project, which report shall include:
- (i) a description of (A) the Design-Builder's progress during the Payment Period to which the Draw Request relates, (B) the Design-Builder's progress to date in relation to the Works Schedule and (C) the major activities performed by the Design-Builder during the Payment Period; and
 - (ii) a look-ahead work plan for the three months following the Payment Period to which the Draw Request relates.
- (g) The Draw Request shall (subject to any exceptions set out in such Draw Request) constitute a representation and warranty by the Design-Builder to the Province (the truth and accuracy of which representation and warranty shall be a condition precedent to the obligation of the Province to make any payment pursuant to the Draw Request, and

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which representation and warranty may, as to the payment of any Subcontractors as described in Section 6.1(g)(iv) below, be made in reliance on one or more statutory declarations of others) that:

- (i) the Project Work has progressed to the point indicated in the Draw Request;
 - (ii) the Cost Item Progress Amounts identified in the Draw Request have been properly incurred;
 - (iii) the Project Work described in the Draw Request as having been done, has been done in accordance with the Design-Builder's obligations under this Agreement;
 - (iv) all of the Subcontractors have been paid in full up to the last Progress Payment received by the Design-Builder, subject to holdbacks (including for amounts disputed in good faith) required or permitted by the Subcontracts and the *Builders Lien Act* (British Columbia), if applicable;
 - (v) except to the extent communicated by the Design-Builder to the Province in writing, no Adverse Claim exists with respect to or as a result of or in relation to the Project Work;
 - (vi) the Design-Builder is entitled to payment in the amount requested;
 - (vii) no the Design-Builder Default has occurred which has not been either waived in writing by the Province or remedied to the satisfaction of the Province;
 - (viii) there has not been any material adverse change in the Design-Builder's ability to perform its obligations under this Agreement; and
 - (ix) to the best of the Design-Builder's knowledge, there has not been any materially adverse change in any Subcontractor's ability to perform its obligations under the applicable Subcontract.
- (h) The Province's Representative shall identify any deficiencies or inaccuracies in the Draw Request and the amount affected thereby within five Business Days of the Draw Request being delivered pursuant to Section 6.1(b) of this Schedule, which amount shall be subject to Section 10.8 [Payment of Disputed Amounts].
 - (i) The Design-Builder shall cooperate with the Province's Representative to reach agreement on a Draw Request on or before the fifth Business Day following delivery of the Draw Request to the Province's Representative pursuant to Section 6.1(b) of this Schedule.
 - (j) The Province's Representative shall approve the Draw Request as to amounts not in dispute within five Business Days of the Draw Request being delivered pursuant to Section 6.1(b) of this Schedule, and pay to the Design-Builder such amounts not in dispute within the applicable time period specified in Section 1.1(c) of this Schedule.
 - (k) The Draw Request, once agreed upon pursuant to Section 6.1(i) of this Schedule, shall not be amended except in writing signed by each of the parties.

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6.2 Reports for Performance Incentive Payments and Delay Liquidated Damages

- (a) Not later than 10 days after the last day of each Payment Period (or part thereof, as the case may be) in each Contract Year during the period described in Section 3.1(a) of this Schedule, the Design-Builder shall deliver to the Province's Representative a written report setting out the Design-Builder's calculation of the payments payable by it in respect of that Payment Period (or part thereof, as the case may be) in accordance with Section 3.1 [Obligation to make Performance Incentive Payments] and Section 3.2 [Obligation to pay Delay Liquidated Damages] of this Schedule. Specifically, the report shall show the Design-Builder's calculation of each of the following (each stated separately):
- (i) any Performance Incentive Payment payable in respect of that Payment Period (or part thereof, as the case may be);
 - (ii) any Traffic Management Payment payable in respect of that Payment Period (or part thereof, as the case may be);
 - (iii) any Non-Compliance Event Payment payable in respect of that Payment Period (or part thereof, as the case may be);
 - (iv) any Delay Liquidated Damages payable in respect of that Payment Period (or part thereof, as the case may be);
 - (v) any NCE Points assignable to the Design-Builder in respect of each Non-Compliance Event occurring during that Payment Period (or part thereof, as the case may be) (which shall be the number of NCE Points set out in Appendix D [Assignment of NCE Points] to this Schedule in respect of such Non-Compliance Event), and the total of all such NCE Points;
 - (vi) the NCE Points Balance as at the end of each day of that Payment Period (or part thereof, as the case may be);
 - (vii) the NCE Points (Default) Balance as at the end of each day of that Payment Period (or part thereof, as the case may be);
 - (viii) the total of all Default Points assignable to the Design-Builder during that Payment Period (or part thereof, as the case may be) (which shall be the aggregate Default Points assignable to the Design-Builder in accordance with Section 5.4 [Assignment of Default Points] of this Schedule);
 - (ix) the Default Points Balance as at the end of each day of that Payment Period (or part thereof, as the case may be);
 - (x) any applicable taxes payable in respect of any of the payments referred to in paragraphs (i) through (iv) above in respect of that Payment Period (or part thereof, as the case may be);
 - (xi) any adjustments to reflect over-payments and/or underpayments (each such adjustment stated separately) in respect of Performance Incentive Payments made

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by the Design-Builder during the period prior to that Payment Period (for which adjustment has not already been made);

- (xii) any interest payable in respect of any amounts owed; and
 - (xiii) the net amount owing by the Design-Builder to the Province or by the Province to the Design-Builder in respect of the Design-Builder's obligation to make Performance Incentive Payments and pay Delay Liquidated Damages pursuant to Sections 3.1 [Obligation to make Performance Incentive Payments] and 3.2 [Obligation to pay Delay Liquidated Damages], respectively, of this Schedule.
- (b) A report delivered pursuant to this Section 6.2 shall be accompanied by work papers clearly setting forth the derivation of the amounts set out therein in accordance with all applicable calculations specified in this Schedule. Such work papers shall include all relevant reports, information and documentation (all in such form and content as is acceptable to the Province's Representative) to support the Design-Builder's calculation of the relevant Performance Incentive Payment and Delay Liquidated Damages, as applicable.
- (c) The Design-Builder's obligation to deliver a written report pursuant to this Section 6.2 shall not affect the Design-Builder's obligation to deliver any other written report pursuant to any other section of this Part 6.

6.3 Province can issue Reports and Invoices

If the Design-Builder fails to deliver any report or invoice within the time period required pursuant to this Schedule, the Province may itself prepare and deliver to the Design-Builder such report or invoice. Any such report or invoice delivered pursuant to this Section 6.3 shall be accompanied by work papers clearly setting forth the derivation of the amounts set out therein in accordance with all applicable calculations specified in this Schedule.

6.4 Quarterly Forecast of Progress Payments

Not later than 10 days after the first day of each Fiscal Quarter (or part thereof, as the case may be) (the "**Current Fiscal Quarter**") during the period from the Effective Date until the Total Completion Date, the Design-Builder shall deliver to the Province's Representative a forecast of:

- (a) the cumulative total of all Progress Payments to be paid in respect of the Current Fiscal Quarter;
- (b) the cumulative total of all Progress Payments to be paid in respect of all Fiscal Quarters (or part thereof, as the case may be), if any, remaining in the then-current Fiscal Year after the Current Fiscal Quarter; and
- (c) the cumulative total of all Progress Payments to be paid in respect of each Fiscal Year (or part thereof) following the then-current Fiscal Year and commencing before the later of (i) the Total Completion Target Date and (ii) the Total Completion Date.

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PART 7

PAYMENTS BY PROVINCE IN EVENT OF NON-PAYMENT UNDER BCIB AGREEMENTS

7.1 Payments by Province in the Event of Non-payment under BCIB-Agreements and Set-off Rights

- (a) If the Province pays any amount that:
 - (i) the Design-Builder has not paid by the applicable date stipulated by the BCIB-Contractor Agreement; or
 - (ii) a Subcontractor has not paid by the applicable date stipulated by the relevant BCIB-Subcontractor Agreement;

then the Province shall promptly thereafter deliver to the Design-Build an invoice for:

- (iii) any amount(s) so paid; plus
- (iv) an administrative fee calculated as the amount that is the greater of:
 - (A) two percent (2%) of the amount(s) so paid; and
 - (B) five thousand (\$5,000) dollars.
- (b) Without prejudice to Section 10.8 [Payment of Disputed Amounts], the Design-Builder shall pay and remit to the Province, by not later than ten (10) Business Days after the Province has delivered such an invoice to the Design-Builder, the amount of the invoice. If the Design-Builder has not paid the invoice within ten (10) Business Days after the Province has delivered the same to the Design-Builder, then the Province may, at any time thereafter, except to the extent that the Design-Builder provides evidence satisfactory to the Province, acting reasonably, that the Design-Builder has paid the amounts which are the subject of the invoice, set off against any future payments due from the Province to the Design-Builder under this Agreement the amount of such invoice.

**APPENDIX A
FORM OF STATEMENT OF PROGRESS**

Each Relevant Completion Percentage shall be calculated to 2 decimal places, and each Cost Item Progress Amount shall be calculated to the nearest dollar.

Table A1 – Cost Item Progress Amounts (excluding in relation to Specified Cost Items)

	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	Total progress (%)	Total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
1. Project Management								
1.1	project management							
1.2	insurance							
1.3	bonding							
2. Mobilization								
2.1	mobilization							
3. Design								
3.1	Design development							
3.1.1	Design management							
3.1.2	Interim Design							
3.1.3	Final Design							
4. Construction								
4.1	roadworks – temporary access							

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	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	Total progress (%)	Total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
4.2	roadworks – grading, clearing, grubbing and stripping							
4.2.1	roadworks – grading							
4.2.2	roadworks – clearing and grubbing							
4.2.3	roadworks - stripping							
4.3	Traffic Management							
4.3.1	offsite Traffic Management							
4.3.2	onsite Traffic Management							
4.4	roadworks – rock excavation and stabilization							
4.4.1	roadworks – rock excavation							
4.4.2	rock slope stabilization							
4.4.3	rock fall and avalanche attenuation systems							
4.4.4	railroad flagging							
4.5	roadworks – utilities							
4.6	roadworks – drainage							
4.7a	roadworks – paving base lift							

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	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	Total progress (%)	Total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
4.7b	roadworks – paving top lift							
4.8	Structures – Bridge Foundations							
4.8.1	Structures – Bridge Foundations							
4.8.2	Structures – Bridge Foundations - piles							
4.8.3	Structures – Bridge Foundations – pile caps							
4.8.4	Structures – Bridge Foundations – piles delivery							
4.9	Structures – Bridge Substructures							
4.9.1	Structures – Bridge Substructures							
4.9.2	Bridge related retaining walls							
4.9.3	Bridge related retaining walls - Foundations - piles	-						
4.9.4	Bridge related retaining walls – Foundations – pile caps	-						
4.9.5	Bridge related retaining walls Foundations - piles delivery	-						

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	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	Total progress (%)	Total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
4.10	Structures – steel Superstructure							
4.10.1	Structures – steel Superstructure							
4.10.2	Structures – supply of steel components							
4.10.3	Structures – precast modular concrete deck panels and cast in place concrete decks							
4.11	Structures – concrete Superstructure							
4.11.1	Structures – concrete Superstructure							
4.11.2	Structures – concrete Superstructure – precast concrete girders							
4.11.3	Structures – concrete Superstructure – precast modular concrete deck panels and cast in place concrete decks							
4.12	Structures – standalone retaining walls							
4.12.1	Structures – standalone retaining walls							
4.12.2	Structures – standalone retaining walls - piles							

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	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	Total progress (%)	Total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
4.12.3	Structures – standalone retaining walls – pile caps							
4.12.4	Structures – standalone retaining walls – piles delivery							
4.13	restoration and revegetation							
5. Railway Protection Measures								
5.1	railway protection measures on CP Lands							
5.1.1	railway protection measures - rock catchment attenuation and protection on CP Lands (temporary and permanent installations)							
5.1.2	railway protection measures - debris flow and earth slide protection on CP Lands of CP infrastructure (temporary and permanent installations)							
5.1.3	railway protection measures - snow avalanche protection on CP Lands of CP infrastructure (temporary and permanent installations)							

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	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	Total progress (%)	Total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
5.1.4	railway protection measures - drainage improvements on CP Lands for CP infrastructure (temporary and permanent installations)							
5.1.5	railway protection measures - landslide protection and mitigation on CP Lands for CP infrastructure (temporary and permanent installations)							
5.2	railway protection measures on Project Site							
5.2.1	railway protection measures - rock catchment attenuation and protection on Project Site (temporary and permanent installations)							
5.2.2	railway protection measures - debris flow and earth slide protection on Project Site of CP infrastructure (temporary and permanent installations)							
5.2.3	railway protection measures - snow avalanche protection on Project Site of CP infrastructure (temporary and permanent installations)							

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	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	Total progress (%)	Total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
5.2.4	railway protection measures - drainage improvements on Project Site for CP infrastructure (temporary and permanent installations)							
5.2.5	railway protection measures - landslide protection and mitigation on Project Site for CP infrastructure (temporary and permanent installations)							
Total		[Contract Price less Cost Item Amounts in respect of Specified Cost Items]		[Sum of Column C]		[Sum of Column E]		[Sum of Column G]

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Table A2 – Specified Cost Items Completion Amounts

	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	total progress (%)	total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
6. Specified Cost Items								
6.1	Construction Management Plan							
6.2	Design Management Plan							
6.3	Construction Environmental Management Plan							
6.4	ARD/ML Material Management Plan							
6.5	Traffic Management Plan							
6.6	Quality Manual							
6.7	Design Quality Management Plan							
6.8	Construction Quality Management Plan							
6.9	Traffic Quality Management Plan							
6.10	Environmental Quality Management Plan							
6.11	Health and Safety Program Quality Management Plan							

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	Cost Item	Cost Item Amount (\$nominal)	cumulative (EXCLUDING this Payment Period)		cumulative (INCLUDING this Payment Period)		this Payment Period	
			total progress (%)	total progress (\$)	total progress (%)	total progress (\$)	Relevant Completion Percentage	Cost Item Progress Amount
			A	B	C = A x B	D	E = A x D	F = D – B
6.12	Construction Communications and Engagement Plan							
6.13	Indigenous Participation Plan							
6.14	Operation and Maintenance Plan							
6.15	Railway Impact Assessment Report							
6.16	All deliverables pursuant to Part 1 [Deliverables for Substantial Completion] of Appendix A to Schedule 4							
6.17	All deliverables pursuant to Part 2 [Deliverables for Total Completion] of Appendix A to Schedule 4							
Total		[Sum of Column A]		[Sum of Column C]		[Sum of Column E]		[Sum of Column G]

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Total Progress Payment

1. Progress Amount _____
2. Aggregate of all Cost Item Amounts in respect of Specified Cost Items (total amount of column G of table 2) _____
3. Total Progress Payments _____

[Design-Builder's Representative's signature]

Certified Correct:

[Independent Engineer's signature]

**APPENDIX B
PROGRESS MEASUREMENT PRINCIPLES**

A. Cost Items

- All Cost Items other than Specified Cost Items are identified in Column B of Table B-1 as set out below.
- All Specified Cost Items are identified in Column B of Table B-2 as set out below.

B. Descriptions

- Column C of each of Tables B-1 and B-2 set out below provides a summary description of the work included within each Cost Item. It is not intended that such description be a comprehensive and exhaustive statement of the Project Work to be carried out by the Design-Builder nor that such description describes the means or methods to be used by the Design-Builder in undertaking the Project Work or any part thereof.
- For certainty, any element of Project Work not referred to expressly in any such description in Column C of each of Tables B-1 and B-2 set out below, shall be deemed to be included in the relevant Cost Item.
- If the parties disagree as to which Cost Item includes a particular element of Project Work not referred to expressly in any such Cost Item description, then the determination of the Independent Engineer shall be final and binding on the parties.

C. Progress Measurement

- Column D of each of Tables B-1 and B-2 set out below sets out the principles that shall be used by the Design-Builder, the Province and the Independent Engineer to calculate total progress (calculated as a percentage) made by the Design-Builder toward completion of a Cost Item for the purpose of determining the Relevant Completion Percentage for that Cost Item for each Payment Period. The Statement of Progress included in the Draw Request in respect of each Payment Period, to be submitted by the Design-Builder in accordance with Section 6.1 [Draw Requests for Progress Payments] of Schedule 10, shall be completed in accordance with these principles.
- Specified Cost Items shall be considered to be 100% complete based on the principles included in Column D of Table B-2. Prior to 100% completion of a Specified Cost Item, the total progress of that Specified Cost Item shall be deemed to be 0%.
- If the Province, acting reasonably, determines that any particular progress measurement rule set out in Table B-1 or Table B-2 below for determining the progress made by the Design-Builder toward completion of a Cost Item results in an inaccurate calculation of the Design-Builder's actual progress in that regard, then the Province may revise such progress measurement rule.
- Any partial Payment Period shall be considered to be a complete Payment Period when calculating the total number of Payment Periods.

D. Cost Item Amount

- Column E of each of Tables B-1 and B-2 set out below sets out the Cost Item Amount allocated to each Cost Item.
- The aggregate of all Cost Item Amounts shall in no event exceed the Contract Price.

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TABLE B-1 COST ITEMS (excluding Specified Cost Items)

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1. Project Management				
1.1	project management	Management, supervision and administration of the Project together with all temporary facilities required to complete the Project Work.	Number of completed Payment Periods divided by the total number of Payment Periods from the Effective Date to the Substantial Completion Target Date. If, by the Substantial Completion Date, the Relevant Percent Complete in respect of this Cost Item has not achieved 100%, the Relevant Percentage Complete for this Cost Item shall be deemed 100% during the Payment Period during which the Substantial Complete Date occurs.	
1.2	insurance	Insurance premium payments.	Paid on submission of invoice to the Province.	
1.3	bonding	Bonding payments to sureties.	Paid on submission of invoice to the Province.	
2. Mobilization				
2.1	mobilization	The activities carried out necessary to commence Design and Construction of the Project, including Proposal development.	Total of item 2 Mobilization, paid as follows: <ul style="list-style-type: none"> - as to 60%, in the first Payment Period; - as to 20%, in the second Payment Period; and - as to 20%, in the third Payment Period. Considered to be <u>100% complete</u> following the third Payment Period.	
3. Design				
3.1	Design development	Work falling within the definition of Design in Section 1.1 [Definitions and Interpretation] of Schedule 1 but excluding Construction Records.		
3.1.1	Design management	Design management costs during design phase	10% of the total of Item 3 Design paid as equal monthly payments over the scheduled Design period.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
3.1.2	Interim Design	Interim Design submission	45% of the total of Item 3 Design, divided into Interim Design sub-packages. Interim Design and submission in accordance with Schedule 4.	
3.1.3	Final Design	Final Design submission	45% of the total of Item 3 Design, divided into Design sub-packages. Final Design and submission in accordance with Schedule 4.	
4. Construction				
4.1	roadworks – temporary access	Temporary access shall consist of the following work: clearing and grubbing; organic stripping; removals and relocations of existing plant; construction of temporary access roads to foundations and to facilitate rock excavation and stabilization; rock and soil excavation and stabilization for temporary access to foundations; temporary supporting wall construction; disposal of surplus material on site and off site; supply and installation of geotextiles; rockfall prevention for roadways, utilities and railways during construction; monitoring and maintenance of the temporary access; care of water for temporary access; provision and execution of all quality management, traffic management and environmental management as required.	Volume of temporary access completed divided by the total volume of temporary access required.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.2	roadworks – grading, clearing, grubbing and stripping			
4.2.1	roadworks – grading	Grading shall consist of the following work: removals and relocations of existing plant; all other Site preparation required to be done prior to roadway and drainage excavation; roadway and drainage excavation and embankment construction; disposal of unsuitable materials to off-site; disposal of surplus material on site and off site; supply and installation of geotextiles; supply, placement and removal of surcharge; supply, placement and compaction of imported rip rap and granular materials; provision and execution of all quality management and environmental management as required for the work.	Volume of grading completed <u>divided by</u> the total volume of grading required.	
4.2.2	roadworks – clearing and grubbing	Clearing and grubbing shall consist of the removal and disposal of all trees, stumps, roots, logs, shrubs, grass, weeds, fallen timber and other surface litter.	Volume of clearing and grubbing paid by the hectare completed <u>divided by</u> the total volume of clearing and grubbing required.	
4.2.3	roadworks - stripping	Stripping shall consist of the removal and disposal of organic material from areas to be disturbed by excavation and includes planned erosion and sediment control practices.	Amount of stripping completed paid by the square meter <u>divided by</u> the total area of stripping required.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.3	Traffic Management			
4.3.1	offsite Traffic Management	All Traffic Management and infrastructure maintenance performed outside the Project Site including all personnel, equipment, materials and other obligations described in Part 4 [Traffic Management] of Schedule 4 [Design and Construction]. This item includes Appendix F [Alternative Route Operational Improvements and Maintenance Requirements] of Schedule 4 [Design and Construction].	Lump sum for Item 4.3.1 for all offsite Traffic Management and infrastructure maintenance performed outside the Project Site pro-rated by the percentage completed.	
4.3.2	onsite Traffic Management	All Traffic Management and infrastructure maintenance performed within the Project Site including all personnel, equipment, materials and other obligations described in Part 4 [Traffic Management] of Schedule 4 [Design and Construction].	Lump sum for Item 4.3.2 for all onsite Traffic Management and infrastructure maintenance performed within the Project Site pro-rated by the percentage completed.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.4	roadworks – rock excavation and stabilization			
4.4.1	roadworks – rock excavation	Rock excavation shall consist of the following work; organic stripping; removals and relocations of existing plant; care of water; provision and execution of all quality management, traffic management and environmental management as required for the work and all other Site preparation required to be done prior to rock excavation and stabilization except temporary access; rock excavation including drilling, blasting and disposal of surplus material; mitigation of potential ARDML sources.	Volume of rock excavation completed <u>divided by</u> the total volume of rock excavation required.	
4.4.2	rock slope stabilization	Rock slope stabilization including rock anchor, dowel installation or shotcrete application to stabilize rock cuts. Not applicable to temporary access roads or other applications that are not components of the permanent work.	Lump sum item for linear meters of rock dowels and anchors installed and square meters of shotcrete application pro-rated by percentage completed	
4.4.3	rock fall and avalanche attenuation systems	Rock fall and avalanche attenuation systems including walls, fences, mesh, berms, and associated anchorages. Not applicable to temporary access roads or other applications that are not components of the permanent work	Lump sum item for square meters of rock fall and avalanche attenuation systems including walls, fences, mesh, berms, and associated anchorages pro-rated by the percentage completed.	
4.4.4	railroad flagging	Flagging costs for work conducted by CP flag people.	Lump sum item for actual costs for the provision of flag people employed by CP.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.5	roadworks – utilities	Utilities shall consist of (but not necessarily be limited to) BC Hydro electrical, Telus communications, Ministry communications conduit, and other third party public/private utility services.	Lump sum item for each utility pro-rated by the percentage completed.	
4.6	roadworks – drainage	Drainage shall consist of open ditches, enclosed/piped facilities, pumps/siphons, etc. required to convey run-off water including execution of all quality management, traffic management and environmental management as required for the work.	Lump sum item for all permanent drainage pro-rated by the percentage completed.	
4.7a	roadworks – paving base lift	Final grading of all surfaces to be paved; supply and application of penetrating primer; and tack coat; supply and placement of asphalt pavement leveling course and asphalt pavement base lift; supply and installation of all pavement drainage facilities; supply and installation of pavement markings and delineation; roadside and median barrier supply and placement; installation of signs; provision and execution of all quality management, traffic management and environmental management as required for the work.	Tonnes of base lift paving completed <u>divided by</u> the total Tonnes of base lift paving required.	
4.7b	roadworks – paving top lift	Supply and placement of asphalt pavement top lift; final pavement markings and delineation; roadside and median barrier supply and placement; final adjustment of signs; provision and execution of all quality management, traffic management and environmental management as required for the work.	Paid as follows: <ul style="list-style-type: none"> - as to 50%, when 50% of the total Tonnes of top lift paving required have been completed; and - as to the remaining 50%, when top lift paving is complete. 	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.8	Structures – Bridge Foundations			
4.8.1	Structures – Bridge Foundations	A Bridge Foundation structure shall consist of one or more footings or piles, caissons, and pile caps and execution of all quality management, traffic management and environmental management as required for the work. A Bridge Foundation structure shall be complete when ready to install a Bridge Substructure.	Number of 4.8.1 Structures – Bridge Foundations complete <u>divided by</u> the total number of Bridge Foundations. No progress measurement shall be made for any Bridge Foundation structure that is not complete.	
4.8.2	Structures – Bridge Foundations - piles	Installation of Structures – Bridge Foundations - piles required for 4.8.1 Structures - Bridge Foundations	Lump sum item for all 4.8.2 Structures – Bridge Foundations - piles installations pro-rated by the percentage completed.	
4.8.3	Structures – Bridge Foundations – pile caps	Installation of Structures – Bridge Foundations - pile caps required for 4.8.1 Structures - Bridge Foundations	Lump sum item for all 4.8.3 Structures – Bridge Foundations - pile caps pro-rated by the percentage completed	
4.8.4	Structures – Bridge Foundations – piles delivery	Supply of Structures - Bridge Foundation - piles required for 4.8.1 Structures - Bridge Foundations purchased and F.O.B. B.C. and stored in a bonded yard acceptable to the Province’s Representative.	Lump sum item for 4.8.4 Structures - Bridge Foundation - piles purchased and F.O.B. B.C. pro-rated by the percentage of Structures - Bridge Foundation - piles required.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.9	Structures – Bridge Substructures			
4.9.1	Structures – Bridge Substructures	A Bridge Substructure shall consist of a column, group of columns, cap-beams or wall structure that supports the Bridge Superstructure in any one location, including bridge piers, abutments and any associated appurtenances (e.g. bearings, etc.) to complete a Bridge Substructure including execution of all quality management, traffic management and environmental management as required for the work. A Bridge Substructure shall be complete when ready to receive the Bridge Superstructure.	Lump sum item for 4.9.1 Structures – Bridge Substructures completed pro-rated by the percentage completed.	
4.9.2	Bridge related retaining walls	Retaining walls and other retaining structures required for 4.9.1 Bridge Substructure consisting of wall foundations (e.g. piling/footing, pile cap, drilled anchors) and all other components required.	Lump sum item for 4.9.2 Bridge related retaining walls completed pro-rated by the percentage of Bridge related retaining walls completed	
4.9.3	Bridge related retaining walls - Foundations - piles	Installation of Bridge related retaining walls – Foundations – piles required for 4.9.2 Bridge related retaining walls	Lump sum item for all 4.9.3 Bridge related retaining walls – Foundations – piles pro-rated by the percentage completed.	
4.9.4	Bridge related retaining walls – Foundations – pile caps	Installation of Bridge related retaining walls – Foundations – pile caps required for 4.9.2 Bridge related retaining walls	Lump sum item for all 4.9.4 Bridge related retaining walls- Foundations – pile caps pro-rated by the percentage completed	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.9.5	Bridge related retaining walls Foundations - piles delivery	Supply of Bridge related retaining wall – Foundations – piles required for 4.9.2 Bridge related retaining walls purchased and F.O.B. B.C. stored in a bonded yard or location acceptable to the Province’s Representative.	Lump sum item for 4.9.5 Bridge related retaining walls – Foundations - piles purchased and F.O.B. B.C. pro-rated by the percentage of Bridge related retaining walls – Foundations - piles required.	
4.10	Structures – steel Superstructures			
4.10.1	Structures – steel Superstructure	Steel Superstructure shall include all steel Structures (e.g. beams, arches, trusses, etc.) necessary to span between Substructures including but not limited to all structural steel works, including execution of all quality management, traffic management and environmental management as required for the work.	Lump sum item for 4.10.1 Structures - steel Superstructure system completed pro-rated by the steel Superstructure of all steel Bridges completed	
4.10.2	Structures – supply of steel components	Supply of Structures - steel components required for 4.10.1 Structures – steel Superstructure purchased and F.O.B. B.C. stored in a bonded yard or location acceptable to the Province’s Representative.	Lump sum item for 4.10.2 Structures - steel components purchased and F.O.B. B.C pro-rated by the percentage of Structures – steel components required	
4.10.3	Structures – precast modular concrete deck panels and cast in place concrete decks	Structures – precast modular concrete deck panels and cast in place concrete deck required for 4.10.1 Structures – steel Superstructure, including deck reinforcing steel and precast or in-situ concrete, bridge parapets and railings, deck joints, approach slabs.	Lump sum for 4.10.3 Structures – precast modular concrete deck panels and cast in place concrete decks pro-rated by the percentage completed	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.11	Structures – concrete Superstructures			
4.11.1	Structures – concrete Superstructure	Concrete Superstructure include all concrete Structures (e.g. beams, slabs, boxes, arches, etc.) necessary to span between Substructures including execution of all quality management, traffic management and environmental management as required for the work.	Lump sum for 4.11.1 Structures - concrete Superstructure system completed pro-rated by the total percentage of concrete Superstructure of all concrete bridges completed.	
4.11.2	Structures – concrete Superstructure – precast concrete girders	Supply of Structures – concrete Superstructure – precast concrete girders required for 4.11.1 Structures – concrete Superstructure purchased and F.O.B. B.C. stored in a bonded yard or location acceptable to the Province’s Representative.	Lump sum item for 4.11.2 Structures – concrete Superstructure – precast concrete girders purchased and F.O.B. B.C. pro-rated by the percentage of Structures – concrete Superstructure – precast concrete girders required.	
4.11.3	Structures – concrete Superstructure – precast modular concrete deck panels and cast in place concrete decks	Structures – concrete Superstructure – precast modular concrete deck panels and cast in place concrete decks required for 4.11.1 Structures – concrete Superstructure including deck reinforcing steel and precast or in-situ concrete, bridge parapets and railings, deck joints, approach slabs.	Lump sum item for 4.11.3 Structures – concrete Superstructure – precast modular concrete deck panels and cast in place concrete decks pro-rated by the percentage completed	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.12	Structures – standalone retaining walls			
4.12.1	Structures – standalone retaining walls	Standalone retaining walls shall consist of wall foundations, including drilled anchors and all other components required and not listed below, including execution of all quality management, traffic management and environmental management as required for the work.	Lump sum for 4.12.1 Structures – standalone retaining walls completed pro-rated for standalone retaining walls completed	
4.12.2	Structures – standalone retaining walls - piles	Installation Structures – standalone retaining walls - piles required for 4.12.1 Structures – standalone retaining walls	Lump sum item for all 4.12.2 Structures – standalone retaining walls - piles installations pro-rated by the percentage completed.	
4.12.3	Structures – standalone retaining walls – pile caps	Installation of Structures – standalone retaining walls – pile caps required for 4.12.1 Structures – standalone retaining walls.	Lump sum item for all 4.12.3 Structures – standalone retaining walls – pile caps pro-rated by the percentage completed	
4.12.4	Structures – standalone retaining walls – piles delivery	Structures – standalone retaining walls – piles required for 4.12.1 Structures – standalone retaining walls purchased and F.O.B. B.C. stored in a bonded yard acceptable to the Province’s Representative.	Lump sum item for 4.12.4 Structures – standalone retaining walls – piles purchased and F.O.B. B.C. pro-rated by the percentage of Structures – standalone retaining walls - piles required.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.13	restoration and revegetation	Restoration and revegetation includes landscaping, berms, grading, placement of top-soil and hydroseeding, and placement of vegetation/trees/plantings and all other restoration and revegetation requirements described by Schedule 6 of this Agreement including execution of all quality management, traffic management and environmental management as required for the work.	Lump sum item for restoration and revegetation pro-rated by the percentage completed.	
5. Railway Protection Measures				
5.1	railway protection measures on CP Lands			
5.1.1	railway protection measures - rock catchment attenuation and protection on CP Lands (temporary and permanent installations)	Protection of CP infrastructure only by rock catchment attenuation on CP Lands during and post construction (permanent and temporary installations) in accordance with Schedule 4 [Design and Construction] including Appendices.	Lump sum item for rock catchment and attenuation on CP Lands pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.1.2	railway protection measures - debris flow and earth slide protection on CP Lands of CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only by attenuation or elimination of debris flow and earth slides on CP Lands during and post construction (permanent and temporary installations) in accordance with Schedule 4 [Design and Construction] including Appendices.	Lump sum item for attenuation or elimination of debris flow and earth slides on CP Lands pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	
5.1.3	railway protection measures - snow avalanche protection on CP Lands of CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only by attenuation or elimination of snow avalanche flows on CP Lands during and post construction (permanent and temporary installations) in accordance with Schedule 4 [Design and Construction] including Appendices.	Lump sum item for attenuation or elimination of snow avalanche flows on CP Lands pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	
5.1.4	railway protection measures - drainage improvements on CP Lands for CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only through drainage alterations and improvements including, but not limited to, culverts on CP Lands including alterations to existing CP infrastructure in accordance with Schedule 4 [Design and Construction] including Appendices	Lump sum item for attenuation or improvement of drainage flows on CP Lands pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.1.5	railway protection measures - landslide protection and mitigation on CP Lands for CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only through mitigation of historic landslides and prevention of potential landslides attributed to Project Work on CP lands including alterations to existing CP infrastructure to mitigate landslides in accordance with Schedule 4 [Design and Construction] including Appendices.	Lump sum item for mitigation of historic landslides and prevention of potential landslides attributed to the Project Work on CP Lands pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	
5.2	railway protection measures on Project Site			
5.2.1	railway protection measures - rock catchment attenuation and protection on Project Site (temporary and permanent installations)	Protection of CP infrastructure only by rock catchment attenuation on Project Site during and post construction (permanent and temporary installations) in accordance with Schedule 4 [Design and Construction] including Appendices	Lump sum item for rock catchment and attenuation on Project Site pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.2.2	railway protection measures - debris flow and earth slide protection on Project Site of CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only by attenuation or elimination of debris flow and earth slides on Project Site during and post construction (permanent and temporary installations) in accordance with Schedule 4 [Design and Construction] including Appendices.	Lump sum item for attenuation or elimination of debris flow and earth slides on Project Site pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	
5.2.3	railway protection measures - snow avalanche protection on Project Site of CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only by attenuation or elimination of snow avalanche flows on Project Site during and post construction (permanent and temporary installations) in accordance with Schedule 4 [Design and Construction] including Appendices.	Lump sum item for attenuation or elimination of snow avalanche flows on Project Site pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.2.4	railway protection measures - drainage improvements on Project Site for CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only through drainage alterations and improvements including, but not limited to, culverts on Project Site including alterations to existing CP infrastructure in accordance with Schedule 4 [Design and Construction] including Appendices	Lump sum item for attenuation or improvement of drainage flows on Project Site pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	
5.2.5	railway protection measures - landslide protection and mitigation on Project Site for CP infrastructure (temporary and permanent installations)	Protection of CP infrastructure only through mitigation of historic landslides and prevention of potential landslides attributed to Project Work on Project Site including alterations to existing CP infrastructure to mitigate landslides in accordance with Schedule 4 [Design and Construction] including Appendices.	Lump sum item for mitigation of historic landslides and prevention of potential landslides attributed to the Project Work on Project Site pro-rated by percentage complete. Cost Item to be categorized and delineated by temporary and permanent installations.	

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TABLE B-2 SPECIFIED COST ITEMS

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
6. Specified Cost Items				
6.1	Construction Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.2	Design Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.3	Construction Environmental Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.4	ARD/ML Material Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.5	Traffic Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.6	Quality Manual	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.7	Design Quality Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
6.8	Construction Quality Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.9	Traffic Quality Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.10	Environmental Quality Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.11	Health and Safety Program Quality Management Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.12	Construction Communications and Engagement Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.13	Indigenous Participation Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.14	Operation and Maintenance Plan	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	

**KICKING HORSE CANYON PROJECT – PHASE 4
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Appendix B: Progress Measurement Principles**

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	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
6.15	Railway Impact Assessment Report	As defined in Section 1.1 of Schedule 1 [Definitions and Interpretation].	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.16	All deliverables pursuant to Part 1 [Deliverables for Substantial Completion] of Appendix A to Schedule 4	As set out in Part 1 [Deliverables for Substantial Completion] of Appendix A to Schedule 4.	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	
6.17	All deliverables pursuant to Part 2 [Deliverables for Total Completion] of Appendix A to Schedule 4	As set out in Part 2 [Deliverables for Total Completion] of Appendix A to Schedule 4.	Considered to be <u>100% complete</u> when “accepted” by the Province pursuant to the Consent Procedure. Prior to 100% completion the total progress shall be 0%.	

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APPENDIX C
[NOT USED]

**APPENDIX D
ASSIGNMENT OF NCE POINTS**

Performance Requirement	Performance Category	Basis of Assessment	NCE Points Assigned
Design-Build Agreement and All Schedules			
Document deliverables submitted or provided to the Province	Timeliness	As specified in this Agreement (including the relevant Schedules)	
	Completeness	Either a Review Procedure (Schedule 2) resulting in repeat ‘comments’ on re-submitted submission documents specified in this Agreement (including the relevant Schedules), or a Consent Procedure (Schedule 2) resulting in repeat ‘rejected’ (other than a “deemed” rejection under Section 2.2(e) of Schedule 2 or a rejection on the merits of a submission) on submission documents specified in this Agreement (including the relevant Schedules)	
	Implementation	Where a Nonconformity occurs in relation to the implementation of any deliverable (where appropriate) required by this Agreement	
Schedule 4 : Design and Construction			
Performance Measures	Design and Construction Performance Measures	As designated as “Minor” in Schedule 4, Part 1, Article 3	
		As designated as “Moderate” in Schedule 4, Part 1, Article 3	
		As designated as “Major” in Schedule 4, Part 1, Article 3	
		As designated as “Severe” in Schedule 4, Part 1, Article 3	
		All other measures (identified as PDCXXX) specified in Schedule 4	
Schedule 6 : Environmental Obligations			
Environmental conditions	Implementation	As designated as “Minor” in Schedule 6, Appendix A	
		As designated as “Moderate” in Schedule 6, Appendix A	
		As designated as “Major” in Schedule 6, Appendix A	
		As designated as “Severe” in Schedule 6, Appendix A	

SCHEDULE 10: PAYMENT AND PERFORMANCE MECHANISM

Appendix D: Assignment of NCE Points

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Performance Requirement	Performance Category	Basis of Assessment	NCE Points Assigned
Performance Measures	Environmental Performance Measures	All other measures (identified as PEXXX) specified in Schedule 6	
Schedule 7 : Quality Management			
Unresolved NCEs	Implementation	Where an NCE is not resolved within the response time specified on the Nonconformity Report in accordance with Schedule 7, Part 6 (each, an “Unresolved NCE”).	the greater of: (a) the number that is equal to the number of NCE Points initially assigned for the NCE; and (b)
Performance Measures	Quality Performance Measures	All other measures (identified as PQXXX) specified in Schedule 7	
Traffic Management	Implementation of Traffic Management requirements	Where a Site Condition Rating Category 1 is assigned, or where a follow-up audit discloses that such Site Condition Rating Category 1 has not been remedied in accordance with Section 4.8 of Schedule 7	
		Where a Site Condition Rating Category 2 is assigned, or where a follow-up audit discloses that such Site Condition Rating Category 2 has not been remedied in accordance with Section 4.8 of Schedule 7	
		Where a Site Condition Rating Category 3 is assigned, or where a follow-up audit discloses that such Site Condition Rating Category 3 has not been remedied in accordance with Section 4.8 of Schedule 7	
Schedule 9 : Communication and Engagement			
Performance Measures	Communication and Engagement	As designated as “Minor” in Schedule 9	
		As designated as “Moderate” in Schedule 9	
		As designated as “Major” in Schedule 9	
		As designated as “Severe” in Schedule 9	
		All other measures (identified as PCXXX) specified in Schedule 9	
Schedule 17 : Records and Reports			
Performance Measures	Records Performance Measures	All measures (identified as PRXXX) specified in Schedule 17	

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Appendix D: Assignment of NCE Points**

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Performance Requirement	Performance Category	Basis of Assessment	NCE Points Assigned
Schedule 22 : Indigenous Requirements			
Performance Measures	Indigenous Performance Measures	All measures (identified as PIRXXX) specified in Schedule 22	

**KICKING HORSE CANYON PROJECT – PHASE 4
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**APPENDIX E
PAYMENT APPLICATION FORMS**

- 10A Draw Request
- 10B Deficiency Holdback Payment Application
- 10C Warranty Holdback Payment Application
- 10D Statutory Declaration in Support of Payment Application

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**FORM 10A
DRAW REQUEST**

[Date]

HER MAJESTY THE QUEEN
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

[Address]

Attention: •

Facsimile No.: •

Dear Sirs and Mesdames:

Re: Design-Build Agreement dated as of the Effective Date (as amended, modified, supplemented and restated from time to time, the “**Agreement**”) among Her Majesty the Queen in Right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and Kicking Horse Canyon Constructors (GP) (the “**Design-Builder**”)

And Re: Draw Request under Section 6.1 [Draw Requests for Progress Payments] of Schedule 10 to the Agreement for Progress Payment for the Payment Period beginning • and ending • (the “**Relevant Payment Period**”)

1. This letter, including the Statement of Progress and other documentation attached hereto, constitutes a Draw Request pursuant to Section 6.1 [Draw Requests for Progress Payments] of Schedule 10 for a Progress Payment. Capitalized terms used and not defined in this Draw Request have the meanings given to them in the Agreement and references to Sections and Schedules are to Sections of and Schedules to the Agreement.

Calculation of Progress Payment

2. The Design-Builder hereby applies for a Progress Payment in the amount of \$• for the portion of the Project Work progressed during the Relevant Payment Period.

3. The Design-Builder hereby confirms that the Progress Payment for the Relevant Payment Period is calculated by reference to the following:

- (i) the Progress Amount in respect of the Relevant Payment Period: \$•
- (ii) the aggregate of all Cost Item Progress Amounts in respect of all Specified Cost Items, each of which is determined in accordance with Section 2.1(b) of Schedule 10 to be payable in respect of the Relevant Payment Period: \$•

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- (iii) the amount of any amount payable for such Payment Period in respect of previous Progress Payments Holdbacks pursuant to Section 2.1(a)(iii) of this Schedule;
- (iv) the amount of any holdback on account of the Progress Payment Holdback to be made for such Payment Period pursuant to Section 2.1(a)(iv) of this Schedule;
- (v) the amount of any holdback on account of the Warranty Holdback to be made for such Payment Period pursuant to Section 2.1(a)(v) of this Schedule;
- (vi) the amount of any holdback on account of the Deficiency Holdback to be made for such Payment Period pursuant to Section 2.1(a)(vi) of this Schedule;
- (vii) the total Progress Payment payable in respect of the Relevant Payment Period, determined pursuant to Section 2.1(a) of Schedule 10: \$●
- (viii) the applicable taxes payable in respect of any of the payments referred to above: \$●

[NTD: list breakdown of tax calculations]

- (ix) the following adjustments to reflect over-payments and/or underpayments (each such adjustment stated separately) in respect of Progress Payments made by the Province during the period prior to the Relevant Payment Period (for which adjustment has not already been made, including by way of determination of a negative Relevant Completion Percentage applicable to any Cost Item):

[NTD: list each adjustment, and the applicable dollar value]

- (x) interest payable in respect of any amounts owed, as described above:

[NTD: list each relevant amount, as described above, and the applicable amount of interest payable]

- (xi) the net amount owing by the Province to the Design-Builder or by the Design-Builder to the Province as at the end of the Relevant Payment Period in respect of the Province's obligation to make Progress Payments pursuant to Section 1.1 [Obligation to make Progress Payments] of Schedule 10: \$●

Claim for payment for additional or varied Project Work and Minor Works

- 4. The Design-Builder hereby applies for payment for the following amount in respect of any additional or varied Project Work performed by the Design-Builder pursuant to a Change Certificate issued pursuant to Part 2 [Changes] of Schedule 11 or for Minor Works performed by the Design-Builder pursuant to Section 1.2(a) of Schedule 11 [Changes]:
 - (i) the total amount payable in respect of any additional or varied Project Work authorized or approved by a Change Certificate and performed by the Design-Builder during the Relevant Payment Period: \$●

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- (ii) the total amount payable in respect of any Minor Works performed by the Design-Builder pursuant to Section 1.2(a) of Schedule 11 [Changes] during the Relevant Payment Period: \$•
- (iii) the applicable taxes payable in respect of the payment referred to above: \$•
[NTD: list breakdown of tax calculations]
- (iv) interest payable in respect of any amounts owed, as described above:
[NTD: list each relevant amount, as described above, and the applicable amount of interest payable]
- (v) the net amount owing by the Province to the Design-Builder, or by the Design-Builder to the Province, as at the end of the Relevant Payment Period in respect of the Province's obligation to pay for additional or varied Project Work and for Minor Works, in each case pursuant to Schedule 11 [Changes].

Net Amount Claimed

- 5. The final net amount payable by the Province to the Design-Builder, or payable by the Design-Builder to the Province, as the case may be, pursuant to this Draw Request (being the aggregate of the amounts set out in paragraphs 3(xi) and 4(v) above) is: \$•

Representations and Warranties

- 6. As of the date hereof but subject to any exceptions set out in Attachment A hereto, and as to the payment of Subcontractors as described in paragraph (iv) below, partly or wholly in reliance on statutory declarations of others, the Design-Builder hereby represents, warrants and certifies to the Province that:
 - (i) the Project Work has progressed to the point indicated in this Draw Request;
 - (ii) the Cost Item Progress Amounts identified in this Draw Request have been properly incurred in accordance with Appendix B [Progress Measurement Principles] to Schedule 10;
 - (iii) the Project Work described in this Draw Request as having been done, has been done in accordance with the Design-Builder's obligations under the Agreement;
 - (iv) all of the Subcontractors have been paid in full up to the last Progress Payment received by the Design-Builder, subject to holdbacks (including for amounts disputed in good faith) required or permitted by the Subcontracts and the *Builders Lien Act* (British Columbia), if applicable;
 - (v) except to the extent communicated by the Design-Builder to the Province in writing, no Adverse Claim exists with respect to or as a result of or in relation to the Project Work;
 - (vi) the Design-Builder is entitled to payment in the amount requested;

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- (vii) no Design-Builder Default has occurred which has not been either waived in writing by the Province or remedied to the satisfaction of the Province;
- (viii) there has not been any material adverse change in the Design-Builder's ability to perform its obligations under the Agreement; and
- (ix) to the best of the Design-Builder's knowledge, there has not been any materially adverse change in any Subcontractor's ability to perform its obligations under the applicable Subcontract.

Attachments

7. Attached hereto is the Statement of Progress, as certified by the Independent Engineer, in respect of the Relevant Payment Period, together with working papers clearly setting forth the derivation of the percentages and amounts set out therein.
8. Attached hereto are working papers clearly setting forth the derivation of the percentages and amounts set out herein (to the extent the same are not already set forth in the working papers attached to the Statement of Progress) in accordance with all applicable calculations specified or referred to in Section 2.1 [Calculation of Progress Payments] of Schedule 10, Part 2 [Province Changes] of Schedule 11 or Part 1 [Minor Works] of Schedule 11.
9. Attached hereto is a statutory declaration in the form attached as Appendix E, Form 10D [Form of Statutory Declaration] of Schedule 10 which confirms compliance by the Design-Builder with the *Builders Lien Act* (British Columbia). **[NTD: Not required to be attached to Draw Request for first Payment Period – where this applies, note “not attached”]**
10. Attached hereto is the letter from the Workers' Compensation Board which confirms that the Design-Builder is in good standing with the Workers' Compensation Board and that all required remittances and assessments required by the WCA have been made to a date which is no more than three Business Days prior to the date of this Draw Request.
11. Attached hereto is a report on the status of the Project, including (i) a description of (A) the Design-Builder's progress during the Relevant Payment Period, (B) progress to date in relation to the Project Schedule and (C) the major activities performed by the Design-Builder during the Relevant Payment Period; and (ii) a look-ahead work plan for the three months following the Relevant Payment Period.

This Draw Request is made subject to and in accordance with the terms and conditions of the Agreement.

EXECUTED AND DELIVERED as of the date first written above.

KICKING HORSE CANYON CONSTRUCTORS
(GP)

By: _____
Name:
Title: Design-Builder's Representative

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Attachment A

[NTD: List any exceptions to representations and warranties]

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**FORM 10B
DEFICIENCY HOLDBACK PAYMENT APPLICATION
[TO BE PRINTED ON THE DESIGN-BUILDER LETTERHEAD]**

[Date]

HER MAJESTY THE QUEEN
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA
[Address]

Attention: •

Facsimile No.: •

Dear Sirs and Mesdames:

Re: Design-Build Agreement dated as of the Effective Date (as amended, modified, supplemented and restated from time to time, the “**Agreement**”) among Her Majesty the Queen in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and Kicking Horse Canyon Constructors (GP) (the “**Design-Builder**”)

And Re: Payment Application for amount retained by the Province for the Deficiency Holdback under Section 3.1(b) of Schedule 5 of the Agreement for the month ending • (the “**Relevant Period**”).

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 3.1(b) of Schedule 5 for payment of an amount retained by the Province for the Deficiency Holdback in respect of any Final Deficiency List Deficiencies. Capitalized terms used and not defined in this Payment Application have the meanings given to them in the Agreement and references to Sections and Schedules are to Sections of and Schedules to the Agreement.
 2. The Design-Builder hereby applies for payment in the amount of \$• retained by the Province for the Deficiency Holdback in respect of any Final Deficiency List Deficiencies, being the amount in respect of those Final Deficiency List Deficiencies that have been remedied to the satisfaction of the Province during the Relevant Period.

Representations and Warranties

3. As of the date hereof but subject to any exceptions which are set out in Attachment A hereto, and as to the payment of Subcontractors as described in paragraph (iv) below, partly or wholly in reliance on statutory declarations of others, the Design-Builder hereby represents, warrants and certifies to the Province that:

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- (i) this Payment Application relates to the Final Deficiency List Deficiencies (each a “**Resolved Deficiency**”) described in the table below, in respect of which:
 - (A) the amount(s), as indicated in the table below, were withheld in accordance with Schedule 10; and
 - (B) the Province’s Representative has confirmed by his or her initials on the attached Final Deficiency List have been satisfactorily completed during the Relevant Period;

Resolved Deficiency	Amount in respect of Resolved Deficiency

- (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 3.1 [Deficiency Holdback] of Schedule 5 to the Agreement and the Design-Builder is entitled to payment in the amount requested;
- (iii) the quality of the Project Work undertaken by the Design-Builder in respect of the Resolved Deficiencies is in accordance with the Design-Builder’s obligations under the Agreement;
- (iv) all of the Subcontractors have been paid in full up to the last Progress Payment received by the Design-Builder, subject to holdbacks (including for amounts disputed in good faith) required or permitted by the Subcontracts and the *Builders Lien Act* (British Columbia), if applicable;
- (v) except to the extent communicated by the Design-Builder to the Province in writing, no Adverse Claim exists with respect to or as a result of or in relation to the Project Work;
- (vi) no Design-Builder Default has occurred which has not been either waived in writing by the Province or remedied to the satisfaction of the Province;
- (vii) there has not been any material adverse change in the Design-Builder’s ability to perform its obligations under the Agreement; and

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- (viii) to the best of the Design-Builder's knowledge, there has not been any materially adverse change in any Subcontractor's ability to perform its obligations under the applicable Subcontract.

Attachments

4. Attached hereto is a copy of the Final Deficiency List, which has been initialled by the Province's Representative to confirm which Final Deficiency List Deficiencies have been satisfactorily completed during the Relevant Period.
5. Attached hereto is a statutory declaration in the form attached at Appendix E, Form 10D [Form of Statutory Declaration] of Schedule 10 which confirms compliance by the Design-Builder with the *Builders Lien Act* (British Columbia).
6. Attached hereto is the letter from the Workers' Compensation Board which confirms that the Design-Builder is in good standing with the Workers' Compensation Board and that all required remittances and assessments required by the WCA have been made to a date which is no more than three Business Days prior to the date of this Payment Application.

This Payment Application is made subject to and in accordance with the terms and conditions of the Agreement.

EXECUTED AND DELIVERED as of the date first written above.

KICKING HORSE CANYON CONSTRUCTORS
(GP)

By: _____
Name:
Title: Design-Builder's Representative

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Attachment A

[NTD: List any exceptions to representations and warranties.]

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FORM 10C
WARRANTY HOLDBACK PAYMENT APPLICATION

[Date]

HER MAJESTY THE QUEEN
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA
[Address]

Attention: •

Facsimile No.: •

Dear Sirs and Mesdames:

Re: Design-Build Agreement dated as of the Effective Date (as amended, modified, supplemented and restated from time to time, the “**Agreement**”) among Her Majesty the Queen in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and Kicking Horse Canyon Constructors (GP) (the “**Design-Builder**”)

And Re: Payment Application under Section 3.2(b) of Schedule 5 to the Agreement for payment of the Warranty Holdback

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 3.2(b) of Schedule 5 for payment of the Warranty Holdback. Capitalized terms used and not defined in this Payment Application have the meanings given to them in the Agreement and references to Sections and Schedules are to Sections of and Schedules to the Agreement.
 2. The Design-Builder hereby applies for payment in the amount of \$• , being the amount of the Warranty Holdback, less any amounts applied therefrom by the Province in accordance with Sections 2.3(c) and/or Section 2.3(d) of Schedule 5 to the Agreement.

Representations and Warranties

3. As of the date hereof (being a date following the expiry of the General Project Work Defect Warranty Period) but subject to any exceptions which are set out in Attachment A hereto, and as to the payment of Subcontractors as described in paragraph (iv) below, partly or wholly in reliance on statutory declarations of others, the Design-Builder hereby represents, warrants and certifies to the Province that:
 - (i) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 3.2 {Warranty Holdback} of Schedule 5 and other relevant provisions of the Agreement;

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- (ii) the Design-Builder is entitled to payment in the amount requested;
 - (iii) all of the Subcontractors have been paid in full up to the last Progress Payment received by the Design-Builder, subject to holdbacks (including for amounts disputed in good faith) required or permitted by the Subcontracts and the *Builders Lien Act* (British Columbia), if applicable;
 - (iv) except to the extent communicated by the Design-Builder to the Province in writing, no Adverse Claim exists with respect to or as a result of or in relation to the Project Work;
 - (v) no Design-Builder Default has occurred which has not been either waived in writing by the Province or remedied to the satisfaction of the Province;
 - (vi) there has not been any material adverse change in the Design-Builder's ability to perform its obligations under the Agreement; and
 - (vii) to the best of the Design-Builder's knowledge, there has not been any materially adverse change in any Subcontractor's ability to perform its obligations under the applicable Subcontract.
4. Attached hereto is a statutory declaration in the form attached at Appendix C, Form 10D [Form of Statutory Declaration] of Schedule 10 which confirms compliance by the Design-Builder with the *Builders Lien Act* (British Columbia).
5. Attached hereto is the letter from the Workers' Compensation Board which confirms that the Design-Builder is in good standing with the Workers' Compensation Board and that all required remittances and assessments required by the WCA have been made to a date which is no more than three Business Days prior to the date of this Payment Application.

This Payment Application is made subject to and in accordance with the terms and conditions of the Agreement.

EXECUTED AND DELIVERED as of the date first written above.

KICKING HORSE CANYON CONSTRUCTORS
(GP)

By: _____
Name:
Title: Design-Builder's Representative

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Attachment A

[NTD: List any exceptions to representations and warranties.]

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FORM 10D
STATUTORY DECLARATION IN SUPPORT OF PAYMENT APPLICATION

Re: Design-Build Agreement dated as of the Effective Date (as amended, modified, supplemented and restated from time to time, the “**Agreement**”) among Her Majesty the Queen in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and Kicking Horse Canyon Constructors (GP) (the “**Design-Builder**”)

And Re: Payment Application under Section • [•] of Schedule 10 to the Agreement for • [describe relevant payment]

Capitalized terms used and not defined herein shall have the meanings given to them in the Agreement and references to Sections and Schedules are to Sections of and Schedules to the Agreement.

I solemnly declare that, as of the date of this statutory declaration, I am • [senior officer] of the Design-Builder, and as such have authority to bind the Design-Builder and have personal knowledge of the fact that, or have relied on one or more statutory declarations of others to establish that:

1. All of the Subcontractors have been paid in full up to the payment of the last Progress Payment in accordance with Section 1.1 of Schedule 10 to the Agreement, subject to holdbacks (including for amounts disputed in good faith) required or permitted by the Subcontracts and the *Builders Lien Act* (British Columbia).
2. The Design-Builder is in full compliance with the *Builders Lien Act* (British Columbia) and the WCA.
3. All accounts for labour, services, materials, equipment and overhead which have been incurred directly by the Design-Builder in the performance of the Project Work pursuant to the Agreement, have been paid in full up to and including the payment of the last Progress Payment in accordance with Section 1.1 of Schedule 10 to the Agreement.

I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

DECLARED BEFORE ME)
at Vancouver, British Columbia,)
on this ___ day of _____, in the year _____.)
)
) _____)
) Name:)
A Commissioner for taking Affidavits for British) Title:)
Columbia)

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**PART 1
MINOR WORKS**

1.1 Procedure for Minor Works

The procedure set out in this Part 1 of this Schedule shall apply to any Minor Works initiated by either the Province or the Design-Builder pursuant to Section 7.3 [Minor Works]. No Change Report or Change Certificate shall be required for any such Minor Works, and neither the Review Procedure nor the Consent Procedure shall apply to the consideration of any such Minor Works.

1.2 Minor Works Initiated by Province

- (a) Upon receipt by the Design-Builder of a request by the Province for Minor Works pursuant to Section 7.3(a), then subject only to the Design-Builder within 14 days of the receipt of such request, delivering a notice to the Province's Representative objecting to such Minor Works pursuant to Section 4.2 [Design-Builder Objection] of this Schedule (in which case, the terms of Section 4.2 [Design-Builder Objection] of this Schedule will apply), the Design-Builder shall proceed to perform the Minor Works to completion as soon as reasonably practicable.
- (b) If, in the opinion of the Province, the Province is or would be likely to be required by the Competitive Procurement Requirements to competitively tender or seek competitive proposals, bids or tenders in respect of any contract in connection with or relating to the Minor Works, the Province may, in the notice delivered under Section 7.3(a), require the Design-Builder to seek and evaluate competitive proposals, bids or tenders for the Minor Works in accordance with Section 4.4 [Requirement to Undertake Competition] of this Schedule.
- (c) The Province shall, subject to Section 4.3 [Design-Builder Delay in Responding] of this Schedule, at its discretion, as the sole compensation to which the Design-Builder is entitled to in respect of such Minor Works, in accordance with Section 2.5 [Consequences of Province Change] of this Schedule on the same basis as payment for a Province Change:
 - (i) pay to the Design-Builder the amount of the Minor Works Valuation set out in the request delivered by the Province pursuant to Section 7.3(a) or as otherwise agreed between the parties;
 - (ii) pay the Design-Builder for any Minor Works performed pursuant to Section 1.2(a) of this Schedule, an amount calculated following the methodology set out in Sections 2.3 [Preparation of Change Report] and 2.4 [Valuation of Change in Costs] of this Schedule with respect to valuation of Change Reports; or
 - (iii) if competitive proposals, bids or tenders are obtained pursuant to Section 4.4 [Requirement to Undertake Competition] of this Schedule for any Minor Works performed pursuant to Section 1.2(a) of this Schedule, pay to the Design-Builder for any such Minor Works, the amount of the proposal, bid or tender which best satisfies the requirements of the competitive process undertaken pursuant to Section 4.4(a) of this Schedule plus the out of pocket costs that the Design-Builder reasonably and necessarily incurs to obtain such competitive proposals,

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bids or tenders and that are approved by the Province prior to being incurred by the Design-Builder, unless otherwise agreed by the parties.

1.3 Minor Works Initiated by Design-Builder

Upon receipt by the Province's Representative of a Design-Builder Proposal to carry out Minor Works pursuant to Section 7.3(b), then, unless the Province, within 14 days of the receipt of such Design-Builder Proposal, delivers a notice to the Design-Builder objecting to the proposed Minor Works on any of the following grounds:

- (a) the proposed Minor Works fail to meet the requirements set out in Section 7.3(b);
- (b) if such Minor Works had been initiated by the Province, the Design-Builder would have been able to object to implementing such Minor Works on any of the grounds set out in Section 4.2(a) of this Schedule;
- (c) such Minor Works would result in a material departure from, material failure to comply with or material variation to any of the Project Requirements;
- (d) following such Minor Works the Project Infrastructure would not be of a quality or standard of performance or value (to the Province) equal to or better than that required under the Project Requirements prior to such Minor Works, or the residual value of the Project Infrastructure would be negatively affected;
- (e) the conduct of the Project Work in accordance with the proposed Minor Works would be less likely to achieve compliance with the Project Requirements and the Proposal Extracts or would be likely to provide for compliance to a lower standard or quality than the conduct of the Project Work in accordance with the Project Requirements and the Proposal Extracts prior to such Minor Works;
- (f) such Minor Works would interfere with the relationship of the Province with third parties, or would require the Province to obtain any permission, consent, approval, certificate, permit, licence, statutory agreement or authorization from any Governmental Authority, including the Province, or any other third party;
- (g) such Minor Works would otherwise materially affect the risks or costs to which the Province is exposed to in respect of the Project; or
- (h) such Minor Works would require any amendment to any Design Data in respect of the Construction, thereby requiring the submission of such amendment of Design Data to the Design and Certification Procedure,

The Design-Builder may proceed to perform the Minor Works at the Design-Builder's sole risk and expense.

1.4 Consequential Amendments

The Province and the Design-Builder shall each use all reasonable efforts to reach agreement as to the amendments to the Project Requirements, and any other consequential non-material amendments to

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this Agreement, necessary as a consequence of any Minor Works carried out in accordance with this Part 1. If the Province and the Design-Builder are unable to reach agreement on such matters within 14 days, then either party may refer the matter for resolution under the Dispute Resolution Procedure.

PART 2 PROVINCE CHANGES

2.1 Notice of Province Change

The Province may, subject to the Province's ability to initiate a Province Change as a Minor Works under Section 7.3 [Minor Works], issue to the Design-Builder a request for a Province Change under Section 7.1 [Province Changes] setting out the nature, extent and timing of the relevant Province Change with sufficient detail and information to permit the Design-Builder to prepare and deliver to the Province's Representative a Change Report, and including whether:

- (a) in the opinion of the Province, the Province is or would be likely to be required by the Competitive Procurement Requirements to seek competitive proposals, bids or tenders in respect of any contract in connection with or relating to the Province Change such that the Design-Builder shall be required to seek and evaluate competitive proposals, bids or tenders for the Province Change under Section 4.4 [Requirement to Undertake Competition] of this Schedule; and
- (b) the Province requires the Design-Builder to provide a preliminary estimate of the impacts of the Province Change in accordance with Section 2.2 [Preliminary Estimate of Impacts of Province Change] of this Schedule.

2.2 Preliminary Estimate of Impacts of Province Change

- (a) When required by the Province for any Province Change pursuant to Section 2.1(b) of this Schedule, but subject to Section 4.2 [Design-Builder Objection] of this Schedule, within 14 days (or such later date as the Province may specify acting reasonably in the circumstances) of:
 - (i) the receipt by the Design-Builder of a request for a Province Change under Section 2.1 [Notice of Province Change] of this Schedule; or
 - (ii) where a Design-Builder Objection is received under Section 4.2 [Design-Builder Objection] of this Schedule, the receipt by the Design-Builder of a notice of disagreement from the Province in accordance with Section 4.2(b) of this Schedule;

the Design-Builder shall, at its sole cost and expense, deliver to the Province's Representative a written preliminary estimate of the impacts of such Province Change determined in accordance with this Schedule. Within 14 days of the delivery of such a preliminary estimate, the Province shall notify the Design-Builder in writing whether or not the Province desires to proceed with such Province Change.

- (b) The Design-Builder shall promptly provide the Province's Representative with such further or additional details and other information as the Province may request with

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respect to any preliminary estimate delivered by the Design-Builder pursuant to Section 2.2(a) of this Schedule, and, in the case of any such request, the 14 day period referred to in the last sentence of Section 2.2(a) of this Schedule shall not commence to run until such further details and other information have been provided to the Province's Representative.

2.3 Preparation of Change Report

- (a) Subject to Section 4.2 [Design-Builder Objection] of this Schedule:
 - (i) in circumstances where Section 2.2 [Preliminary Estimate of Impacts of Province Change] of this Schedule applies, within 7 weeks of receipt of notification from the Province pursuant thereto that the Province desires to proceed with a Province Change; or
 - (ii) in all other circumstances, within 9 weeks of:
 - (A) the receipt of a request for a Province Change under Section 2.1 [Notice of Province Change] of this Schedule; or
 - (B) where a Design-Builder Objection is received under Section 4.2 [Design-Builder Objection] of this Schedule, the receipt by the Design-Builder of a notice of disagreement from the Province in accordance with s. 4.2(b) of this Schedule;

the Design-Builder shall consider how to accommodate a proposed Province Change in a cost effective manner so as to minimize the cost of such Province Change and its impact on the Project Schedule and the Project, and otherwise on the performance of the Project Work, and shall prepare and submit to the Province's Representative pursuant to the Consent Procedure (subject to the specific time periods set out in Section 2.6 [Agreement or Disagreement Regarding Change Report] of this Schedule) a written report (a "**Change Report**") identifying all aspects of the Province Change as they relate to the Project, the Project Work and this Agreement including, without limitation:

- (iii) an estimate in accordance with Section 2.4 [Valuation of Change in Costs] of this Schedule of the Change in Costs arising from the implementation of the Province Change, and providing with such estimate:
 - (A) all necessary supporting calculations and information including particulars of additional sums to be paid to Subcontractors, financiers and professional advisors as reasonably requested and necessary for the Province to be able to understand and evaluate the estimate;
 - (B) any time periods after which such estimated prices or parts thereof shall no longer be valid, which periods shall be of sufficient length to allow the Province a reasonable time to consider the Change Report and arrive at an initial evaluation;

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- (C) any resulting lump sum payment which the Design-Builder proposes is required to be made pursuant to Section 2.5(a) of this Schedule to reflect the Change in Costs estimated by the Design-Builder under Section 2.3(a)(iii) of this Schedule, together with all supporting information required in accordance with this Agreement;
 - (iv) any impact on any other amounts payable by one party to another party as a result of the implementation of the Province Change;
 - (v) the Design-Builder's proposal for how any payments related to the Province Change will be invoiced and processed;
 - (vi) any adjustments required to any of the dates set out in the Project Schedule due to the effect of carrying out such Province Change on any milestone dates set out in the Project Schedule, including any adjustment to the Substantial Completion Target Date or the Total Completion Target Date, which the Design-Builder shall require as a result of the implementation of the Province Change (including details of any corresponding adjustments required by any Subcontractors);
 - (vii) any changes to the Design Data in respect of the Construction required to be submitted to the Design and Certification Procedure in order to implement such Province Change;
 - (viii) any other amendments required to this Agreement, the Project Requirements or any Project Document as a result of such Province Change;
 - (ix) the Design-Builder's requirements for any other assistance and resources from the Province or any other requirements of the Province reasonably required to implement the Province Change;
 - (x) any required additional Permits or amendments to existing Permits or Permits that are in the course of being obtained;
 - (xi) any additional Land Rights necessary for the purpose of implementing the Province Change;
 - (xii) the extent to which the Province Change would interfere with the Design-Builder's ability to comply with any of its obligations under this Agreement, any Project Document or any Permits;
 - (xiii) the identity of any Subcontractors which the Design-Builder intends to engage for the purposes of implementing the Province Change; and
 - (xiv) any further effects (including benefits and impairments) which the Design-Builder foresees as being likely to result from the Province Change.
- (b) Without limiting any other rights of the Province to request further or additional information pursuant to Section 2.2(b) of this Schedule or any other provision of this Agreement, the Design-Builder shall promptly provide the Province's Representative

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with such further or additional details and other information as the Province may request with respect to any Change Report submitted by the Design-Builder pursuant to Section 2.3(a) of this Schedule and, in the case of any such request, any time period within which the Province is required to provide any response in respect of such Change Report shall not commence to run until such further details and other information have been provided to the Province's Representative.

2.4 Valuation of Change in Costs

The Design-Builder shall estimate and provide to the Province's Representative in the Change Report pursuant to Section 2.3(a)(iii) of this Schedule, the Change in Costs and shall, subject to Section 4.4 [Requirement to Undertake Competition] of this Schedule, incorporate in such estimate all such information in sufficient detail, including quantities, as the Province may reasonably require to enable it to properly evaluate and understand such estimate, including a detailed summary of the prices, costs, charges and Mark-ups used to calculate such estimate, and sufficient additional information (including a statement of the Design-Builder confirming such matters) to demonstrate to the satisfaction of the Province, acting reasonably, that the position of the Design-Builder will be no better and no worse than had the Province Change not been implemented, and including:

- (a) confirming that the Design-Builder has used all reasonable efforts, including where required in accordance with Section 4.4(a) of this Schedule or by the Competitive Procurement Requirements, or where otherwise reasonably appropriate, the use of competitive proposals, bids or tenders, to oblige its Subcontractors to minimize any increase in costs and to maximize any reduction in costs;
- (b) confirming that all costs of the Design-Builder and its Subcontractors are limited to actual amounts to the extent such amounts relate specifically to the Province Change and would not otherwise have been incurred and are:
 - (i) paid or to be paid or invoiced to the Design-Builder or its Subcontractors; or
 - (ii) paid by the Design-Builder or its Subcontractors,all without addition of any Mark-ups except as otherwise expressly provided for in this Section 2.4;
- (c) setting out the major elements and components of the additional costs and scope of work involved in implementing the Province Change, including:
 - (i) all costs reasonably necessary for and directly associated with the implementation of the Province Change, including the cost of labour, material and equipment, together with any quotations from Subcontractors;
 - (ii) estimated Design costs based on the estimated number of hours reasonably required to perform any additional Design required to implement the Province Change; and
 - (iii) estimated additional costs of site management, including the supervision of trade foremen, and site establishment including, without duplication, any costs related

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to the Design-Builder's management and oversight of the Project Work that should reasonably be included in the Province Change,

and with such estimated additional costs to be based and evaluated on the following principles:

- (iv) construction labour costs, except labour associated with Design and engineering, regardless of whether in operations, management or administration roles, shall be based on the hourly rate paid including allowance for all payroll burdens such as overtime premiums (when paid), vacation pay, pension funds, statutory payments, workers compensation insurance, union dues, tool money, medical insurance and any other payments directly paid in the ordinary course;
- (v) except as otherwise specified in this Agreement, including pursuant to the BCIB-Contractor Agreement or any BCIB-Subcontractor Agreement, costs of Design (excluding Design and engineering comprised in the cost of supply of equipment and systems) shall be determined based on the number of hours reasonably estimated to be required to perform the work multiplied by the net estimated hourly amount (based on base salary) paid to Design and engineering staff, multiplied by 3.0 (or such lower rate as may have been agreed by the Design-Builder or a Subcontractor for Design services pursuant to a Subcontract), and provided that if the Province requests to review the calculation of Design or engineering costs under a Subcontract as part of its review and evaluation, the Design-Builder shall make available all contractual provisions that are relevant to such calculation;
- (vi) costs of supply and delivery of materials, consumables and equipment, including associated costs such as costs of associated testing (including any laboratory and testing fees), any wastage as a direct result of the implementation of the Province Change, commissioning, spare parts, manuals and software, and including the Design and engineering related thereto, shall be based on the estimated price to be charged by the Subcontractor supplying such materials, consumables or equipment;
- (vii) costs of construction equipment shall be calculated using the rates as may have been agreed with the applicable Subcontractor supplying such construction equipment, or, if no such agreed rates exist, at the then current rates set out in the Blue Book, or as are otherwise reasonably commercially available, and the number of hours such equipment is estimated to be required to implement the Province Change, together with appropriate amounts for delivering such equipment to and from the place of Construction;
- (viii) the cost of any other rental, fabrication facility or factory costs directly associated with the implementation of the Province Change shall be calculated based on the reasonable direct costs estimated to be paid by the Design-Builder or a Subcontractor;
- (ix) all other associated costs attributable to the implementation of the Province Change, including costs of additional site establishment, disposal, traffic

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management, quality control, insurance, bonding, Permits, reasonable and appropriate disbursements and import duties, shall be calculated based on the estimated direct cost (using hourly rates, material costs and equipment costs calculated in accordance with Sections 2.4(c)(iv), (vi), (vii) and (viii) of this Schedule, quotations from Subcontractors and suppliers or other appropriate methods to ascertain costs) attributable to the Province Change that will be payable by the Design-Builder or a Subcontractor;

- (x) appropriate allowances shall be made for warranty obligations; and
- (xi) Mark-ups on additional costs attributable to the implementation of a Province Change shall, subject to Section 2.4(f) of this Schedule, be calculated as follows:
 - (A) Design Personnel: the entity actually undertaking the Design shall not be entitled to add a Mark-up for its Design personnel (for certainty, the multiplier referred to in Section 2.4(c)(v) of this Schedule shall be deemed not to be a Mark-up);
 - (B) Construction: regarding the costs of Construction involved in the implementation of the Province Change, the entity actually undertaking the Construction may be entitled to include, subject to Section 2.4(d) of this Schedule, a Mark-up of up to 15% of the net additional direct costs incurred in such Construction actually undertaken by such entity (excluding costs referred to in Section 2.4(c)(v) of this Schedule); and
 - (C) Subcontracts: regarding costs of management and supervision, for certainty, to the extent that any Change in Costs estimated by the Design-Builder includes additional management and supervision costs to be incurred by a Subcontractor, such costs shall be included in the breakdown of costs referred to in Section 2.4(c)(ix) of this Schedule, and Subcontractors shall not be entitled to include a Mark-up of the net additional price to be charged to the Subcontractor by a lower tier Subcontractor for work undertaken by such lower tier Subcontractor;

(d) confirming that:

- (i) the amounts of profit and overhead included in the calculation of such estimated costs do not exceed the amounts referred to in Sections 2.4(c)(xi)(B) and (C);
- (ii) the aggregate amount of:
 - (A) all Mark-ups for profit and overhead included by the Subcontractors; and
 - (B) the Mark-up for profit and overhead included on amounts charged directly by the Design-Builder,

included in the calculation of such estimated costs does not exceed 15% of the Change in Costs; and

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- (iii) no other Mark-ups (except for any Mark-up referred to in Section 2.4(f) of this Schedule) are included,

and with the Mark-up so incorporated in such estimate reflecting the principles that overhead costs are not necessarily a linear geometric function of direct and indirect costs, and that the rate of profit should be commensurate with the risks and the commitment of capital that the Province Change requires of the Design-Builder;

- (e) confirming that the estimate includes an estimate, without any Mark-up, of:
 - (i) all additional amounts that would be payable by the Design-Builder to the Province under Schedule 10 [Payment and Performance Mechanism] as a result of the implementation of the Province Change; and
 - (ii) any reduced amounts that would be payable by the Province to the Design-Builder under Schedule 10 [Payment and Performance Mechanism] as a result of the implementation of the Province Change;
- (f) to the extent that the Province Change would directly result in a material adverse change to the Design-Builder in the overall risk allocation (which may include for such purpose where Project Schedule delays resulting from such Province Change have a material adverse impact on the Design-Builder's site overhead costs) under this Agreement as at the date of the delivery of the notice of the Province Change to the Design-Builder, taking into account any other factors mitigating the effect of the Province Change on the overall risk allocation (including any changes in this Agreement or the Project Requirements arising out of the Province Change), confirming that the amount of any Mark-ups included in the calculation of such estimated costs (in excess of the Mark-up for profit and overhead referred to in Section 2.4(d) of this Schedule) fairly and appropriately reflects such change in overall risk allocation;
- (g) confirming that all costs included in such estimate reflect:
 - (i) labour and material rates applying in the open market to providers of services similar to those required in connection with the implementation of the Province Change;
 - (ii) rates in accordance with Section 2.4(c)(vii);
 - (iii) any and all changes in this Agreement or the Project Requirements arising out of the Province Change; and
 - (iv) any and all changes in risk allocation (including any Mark-up referred to in Section 2.4(f) of this Schedule);
- (h) confirming that any costs of preparing the Change Report included in such estimate are recoverable by the Design-Builder pursuant to Section 2.9 [Costs of Preparing Change Report] of this Schedule;

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- (i) confirming that the estimated costs will provide good overall value to the Province and take into account any reasonably foreseeable changes in Laws; and
- (j) confirming that the Design-Builder has obtained or will obtain the best value for money when procuring any work, services, supplies, materials or equipment required in connection with the implementation of the proposed Province Change and has complied or will comply with Good Industry Practice in relation to any such procurement, to a standard no less than the Design-Builder would apply if all costs incurred were to its own account without recourse to the Province.

2.5 Consequences of Province Changes

If it has been agreed or determined in accordance with this Part 2 that, as a result of a Province Change, a party is required to make a payment to another party, such payment shall be made by a lump sum payment in accordance with Section 10.2 [Additional Payments], or at such other times and in such other manner as may be set out in the Change Certificate for such Province Change.

2.6 Agreement or Disagreement Regarding Change Report

- (a) Following receipt by the Province's Representative of a Change Report prepared in accordance with Section 2.3 [Preparation of Change Report] of this Schedule in respect of a proposed Province Change, the Province and the Design-Builder shall each use all reasonable efforts to reach agreement on the matters described in Section 2.5 [Consequences of Province Change] of this Schedule and all other information contained in the Change Report, and any agreement so reached in writing shall, if recorded in a Change Certificate issued in accordance with Section 2.7 [Change Certificate] of this Schedule, be binding upon the Province and the Design-Builder with respect to the Province Change in accordance with Section 2.8 [Effect of Change Certificate] of this Schedule.
- (b) If the Province and the Design-Builder are unable to agree on the resolution of all matters referred to in the Change Report within 21 days of its receipt by the Province's Representative, the Province:
 - (i) may elect not to proceed with the relevant Province Change by notice to the Design-Builder; or
 - (ii) otherwise shall issue to the Design-Builder a Change Certificate stating the determination of the Province of the matters referred to in the Change Report.
- (c) If the Design-Builder disagrees with all or any of the determinations set out in a Change Certificate issued by the Province pursuant to Section 2.6(b)(ii) of this Schedule, then the Design-Builder may deliver to the Province's Representative within 21 days of the issuance of such Change Certificate notice that it disputes such determinations, failing which such Change Certificate shall be deemed to have been accepted by the Design-Builder. The Province and the Design-Builder shall cooperate to have such dispute resolved in a timely manner pursuant to the Dispute Resolution Procedure. Pending the resolution of any such dispute, the Design-Builder shall proceed with the implementation of the Province Change as directed by the Province in the Change Certificate and in

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accordance with Section 2.8 [Effect of Change Certificate] of this Schedule, provided that any amounts reasonably expensed, and any delay reasonably established, by the Design-Builder in proceeding to implement such Province Change pending resolution pursuant to the Dispute Resolution Procedure shall be dealt with as part of such Province Change.

2.7 Change Certificate

A Province Change shall be authorized by the Province issuing to the Design-Builder a certificate (the “**Change Certificate**”), which shall set out:

- (a) the extent to which such Province Change applies to vary any of the Project Work, the Project Schedule, the Project Requirements, this Agreement or the other Project Documents; and
- (b) any payment to be made in accordance with Section 2.5 of this Schedule and the schedule for the making of such payment; and
- (c) the resolution of any other matters contained in the Change Report.

2.8 Effect of Change Certificate

- (a) A Change Certificate shall have the effect of varying the Project Work, the Project Schedule, the Project Requirements and/or this Agreement to the extent provided therein with effect from the date of issuance of the Change Certificate or as otherwise provided in the Change Certificate, subject only to the contrary resolution of any Dispute Resolution Process initiated by the Design-Builder pursuant to Section 2.6(c) of this Schedule.
- (b) Unless otherwise agreed in writing or unless otherwise directed by the Province in writing, the Design-Builder shall not proceed with the performance of any Province Change prior to the issuance of a Change Certificate or as otherwise provided in the Change Certificate. With effect from the date of issuance of a Change Certificate or as otherwise provided in the Change Certificate or as otherwise agreed or directed by the Province in writing, the Design-Builder shall implement the Province Change as directed in the Change Certificate or as otherwise agreed or directed by the Province in writing, and shall, subject to the resolution of any dispute initiated by the Design-Builder in accordance with Section 2.6(c) of this Schedule be bound by this Agreement in so doing as if the Province Change formed part of the Project Requirements.
- (c) Subject only to a dispute initiated by the Design-Builder in accordance with Section 2.6(c) of this Schedule, once issued a Change Certificate shall be binding upon the Province and the Design-Builder with respect to the Province Change and may not be reopened by any party, and the relief and/or compensation, if any, to which the Design-Builder is entitled in accordance with such Change Certificate shall be the only relief and/or compensation to which the Design-Builder shall be entitled in respect of such Province Change.

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2.9 Costs of Preparing Change Report

- (a) The costs incurred by the Design-Builder in preparing a Change Report shall be paid for as follows:
 - (i) all costs of the Design-Builder's own staff and employees which would normally be part of the general management, administration, and supervision of the Project Work and general construction estimating shall be paid for by the Design-Builder and such costs shall not form part of the Change in Costs; and
 - (ii) subject to Section 2.9(b) of this Schedule, the Design-Builder shall be entitled to receive payment from the Province, as part of the Change in Costs or, if the Province elects not to proceed with the relevant Province Change pursuant to Section 2.6(b)(i) of this Schedule, by separate payment to the Design-Builder by the Province, for any out of pocket costs that the Design-Builder reasonably and necessarily incurs, directly or indirectly, to prepare such Change Report and that are approved by the Province in writing prior to being incurred by the Design-Builder.
- (b) The Design-Builder shall not be entitled to receive payment from the Province pursuant to Section 2.9(a)(ii) of this Schedule for any out of pocket costs in respect of the preparation of a Change Report for a proposed Province Change if the preliminary estimate of the net amount of the Change in Costs arising from such Province Change prepared by the Design-Builder pursuant to Section 2.2 [Preliminary Estimate of Impacts of Province Change] of this Schedule was less than, by more than 20%, the net amount of the Change in Costs subsequently determined by the parties in accordance with this Part 2.

PART 3 VALUE ENGINEERING PROPOSALS

3.1 Notice of Value Engineering Proposal

The Design-Builder may submit to the Province's Representative pursuant to the Consent Procedure a Value Engineering Proposal under Section 7.4 [Value Engineering Proposal], which Value Engineering Proposal shall:

- (a) set out the extent to which such Value Engineering Proposal would, if accepted by the Province, apply to vary the Project Work, the Project Requirements and/or this Agreement;
- (b) set out all the applicable information required in a Change Report;
- (c) provide sufficient information to the Province's Representative to enable it to consider the sharing of benefits under Section 3.4 [Sharing Benefits of Value Engineering Proposal] of this Schedule and, in connection therewith, set out any lump sum payment to be made pursuant to Section 10.2 [Additional Payments] as a result;

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- (d) specify the Design-Builder's reasons and justification for proposing the Value Engineering Proposal, including:
 - (i) the comparative advantages to the Design-Builder and the Province of each variation to the Project Work, the Project Requirements and/or this Agreement referred to in Section 3.1(a) of this Schedule;
 - (ii) confirmation that the financial strength of the Design-Builder is sufficient to implement the Value Engineering Proposal;
 - (iii) confirmation that, if such Value Engineering Proposal had been initiated by the Province, the Design-Builder would not have been able to refuse to implement such Value Engineering Proposal on any of the grounds set out in Section 4.2(a) of this Schedule; and
 - (iv) confirmation whether, if such Value Engineering Proposal had been initiated by the Design-Builder as a Minor Works, the Province could potentially have been able to reject such Value Engineering Proposal on any of the grounds set out in Section 1.3 [Minor Works Initiated by Design-Builder] of this Schedule, together with the Design-Builder's rationale for why the Value Engineering Proposal is nevertheless recommended to the Province notwithstanding the applicability of any such grounds for rejection; and
- (e) indicate if there are any dates by which a decision by the Province is requested.

3.2 Evaluation of Value Engineering Proposal

- (a) In accordance with the Consent Procedure, the Province shall consider any Value Engineering Proposal received from the Design-Builder, including:
 - (i) requesting any clarification or additional information or documentation regarding the Value Engineering Proposal as required by the Province to fully evaluate and consider the Value Engineering Proposal; and
 - (ii) requesting modifications of the Value Engineering Proposal if required by the Province, but provided that the Design-Builder may withdraw any Value Engineering Proposal in respect of which the Province requests any such modifications.
- (b) The Province may accept or reject any Value Engineering Proposal in its discretion.

3.3 Change Certificate for Value Engineering Proposal

If the Province accepts a Value Engineering Proposal pursuant to Section 3.2(b) of this Schedule, with or without modification, the relevant Value Engineering Proposal shall be documented and evidenced by a Change Certificate prepared by the Design-Builder and issued by the Province in the same manner as a Province Change under Section 2.7 [Change Certificate] of this Schedule.

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3.4 Sharing Benefits of Value Engineering Proposal

If the Value Engineering Proposal causes or shall cause the costs of the Design-Builder or of a Subcontractor to decrease, after taking into account the agreed implementation and reasonably allocated development costs of the Value Engineering Proposal incurred by the Design-Builder or any Subcontractor, and taking into account any other uses of the Value Engineering Proposal by the Design-Builder, the net savings in the costs of the Design-Builder and any such Subcontractor shall be shared equally by the Design-Builder and the Province in the manner agreed to by the Province and set out in the relevant Change Certificate in response to the Design-Builder's proposal therefor provided under Section 3.1(c) of this Schedule.

3.5 Costs of Value Engineering Proposal

- (a) The Design-Builder may deliver to the Province's Representative preliminary information with respect to a proposed Value Engineering Proposal and the Province may, at its discretion, agree in advance to pay all or any portion of the costs of developing such Value Engineering Proposal.
- (b) Subject only to an agreement of the Province otherwise in accordance with Section 3.5(a) of this Schedule, all costs of a Value Engineering Proposal shall be borne solely by the Design-Builder, including that the Design-Builder shall pay to the Province promptly after receipt of an invoice therefor all costs and expenses reasonably incurred by the Province in connection with reviewing such Value Engineering Proposal and making a determination as to the acceptance or rejection of such Value Engineering Proposal, whether or not such Value Engineering Proposal is accepted and whether or not the proposed Value Engineering Proposal takes place, such costs and expenses to include professional costs and expenses, advisor fees and other out of pocket expenses, fees, costs and expenses charged to the Province and the Province's reasonable internal administrative and personnel costs. At the time of the Design-Builder's submission of a Value Engineering Proposal pursuant to Section 3.1 [Notice of Value Engineering Proposal] of this Schedule, and as a condition precedent to the commencement of any time period specified for the Province to object or otherwise respond to such submission and to any obligation of the Province to review or consider any matter in respect of which any such submission is made, the Design-Builder shall pay to the Province the sum of \$50,000 to be held by the Province on account of the Design-Builder's obligations to pay under this Section 3.5(b) in respect of such submission. After the relevant decision of the Province is rendered, the Province shall either refund any overpayment by the Design-Builder on account of amounts payable by the Design-Builder under this Section 3.5(b), or invoice the Design-Builder for any additional amounts payable by the Design-Builder under this Section 3.5(b), which additional amounts the Design-Builder shall pay within 14 days after receipt of such invoice.

PART 4 GENERAL PROVISIONS

4.1 Modification of Processes and Procedures

Nothing in this Schedule or Part 7 [Province Changes and Design-Builder Proposals] shall limit the ability of the parties to mutually, in writing, modify, simplify or waive some or all of the processes

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and procedures outlined in this Schedule or such Part in respect of Province Changes or the Design-Builder Proposals, including Minor Works and Value Engineering Proposals.

4.2 Design-Builder Objection

- (a) With the exception of Required Province Changes, the Design-Builder may, acting reasonably, in response to a request for a Province Change or Minor Works, as the case may be, object to providing a preliminary estimate, providing a Change Report, or implementing a Minor Works, as the case may be, on the basis that:
 - (i) to implement the Province Change would not be technically feasible;
 - (ii) the Province Change would, if implemented, materially and adversely affect the Design-Builder's ability to perform its obligations under this Agreement or any other Province Project Document, after having taken into account any amendments to any provision thereof contemplated under this Schedule, and the sufficiency of funds available to the Design-Builder from all sources, including debt, equity and any payments to be made to the Design-Builder by the Province in respect of such Province Change under this Schedule;
 - (iii) to implement the Province Change would be contrary to Good Industry Practice;
 - (iv) to implement the Province Change would be contrary to Laws;
 - (v) to implement the Province Change would be unsafe;
 - (vi) the Design-Builder would be unable (using all reasonable efforts in respect thereof) to obtain any new Permit or any amendment or revision to an existing Permit (other than any new or amended Permit that would be the responsibility of the Province) that is:
 - (A) necessary to implement the Province Change;
 - (B) necessary otherwise to allow compliance with the provisions of this Agreement as a consequence of implementation of such Province Change having regard to the provisions of this Agreement (as amended, where appropriate, to take account of or make provision for the Province Change); or
 - (C) necessitated by the revocation or cancellation of any existing Permit or the imposition of any additional conditions with which the Design-Builder would be unable to comply in relation to any existing Permit occurring as a result of the Province Change;
 - (vii) the Design-Builder would be unable (using all reasonable efforts in respect thereof) to obtain any Land Rights necessary for the purpose of implementing the Province Change except where the Province obtains, directly or indirectly, such Land Rights; or

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- (viii) in the case of Minor Works, the Minor Works fail to meet the applicable requirements set out in Section 7.3(a);

provided that the Design-Builder shall deliver to the Province's Representative, within 14 days after the receipt by the Design-Builder of the request for such Province Change, written notice of such objection together with an explanation of the Design-Builder's reasons therefore in sufficient detail to permit a considered review thereof by the Province. If the Design-Builder does not deliver to the Province's Representative any such written notice of objection within such time period, the Design-Builder shall be deemed to have agreed to such Province Change and shall either proceed with the performance of such Minor Works under Section 1.2(a) of this Schedule or the preparation of a preliminary estimate under Section 2.2 [Preliminary Estimate of Impacts of Province Change] of this Schedule or the preparation a Change Report under Section 2.3 [Preparation of Change Report] of this Schedule for such other Province Change, as the case may be.

- (b) If the Province disagrees with the Design-Builder's objection delivered under Section 4.2(a) of this Schedule, then the Province may notify the Design-Builder of such disagreement within 14 days of the receipt of the Design-Builder's objection, failing which the request for such Province Change shall be deemed to have been cancelled. Upon receipt of a notice of disagreement by the Province, the parties shall cooperate to have any such dispute resolved in a timely manner pursuant to the Dispute Resolution Procedure and, pending the resolution of such dispute, the Design-Builder shall, unless otherwise agreed in writing by the Province, proceed with the performance of such Minor Works under Section 1.2(a) of this Schedule or the preparation of a preliminary estimate under Section 2.2 [Preliminary Estimate of Impacts of Province Change] of this Schedule, or the preparation of a Change Report under Section 2.3 [Preparation of Change Report] of this Schedule for such other Province Change, as the case may be, provided that:
- (i) any amounts reasonably incurred and any delay reasonably established by the Design-Builder in proceeding to implement such Province Change pending resolution pursuant to the Dispute Resolution Procedure shall be dealt with as part of such Province Change; and
- (ii) any claims for costs incurred or suffered by the Design-Builder as a result of proceeding despite the Design-Builder's objection, will be addressed as part of any Dispute Resolution Procedure invoked pursuant to this Section 4.2(b), unless otherwise addressed through a Province Change or the provisions of this Schedule.

4.3 Design-Builder Delay in Responding

In the event that the Design-Builder fails to:

- (a) commence the performance of any Minor Works requested by the Province in accordance with the terms provided for in this Schedule;

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- (b) prepare a preliminary estimate of impacts, if required by the Province, within the applicable time period set out in Section 2.2(a) of this Schedule;
- (c) prepare a Change Report within the applicable time period set out in Section 2.3(a) of this Schedule; or
- (d) meet any other time period required in respect of any Minor Works or other Province Change under either Part 7 [Province Changes and Design-Builder Proposals] or this Schedule,

then, without limiting any rights of the Province under this Agreement in respect of such failure, the Design-Builder shall bear the sole risk and expense of any increase in the amount that the Province would be required to pay to the Design-Builder pursuant to Part 7 [Province Changes and Design-Builder Proposals] and this Schedule in respect of such Minor Works or other Province Change as a result of such delay. The onus for establishing that no such increase has resulted from such delay shall be on the Design-Builder.

4.4 Requirement to Undertake Competition

- (a) If the Province gives notice of the requirement for the Design-Builder to undertake a competition for any Minor Works or other Province Change pursuant to Section 1.2(b) or Section 2.1(a) of this Schedule then, subject to the Competitive Procurement Requirements, the Design-Builder shall obtain or cause its Subcontractors to obtain, as appropriate, at least three competitive proposals, bids or tenders that would (if the Province were procuring such work directly) meet the Competitive Procurement Requirements for the work involved in such Minor Works or other Province Change, and at least one of such proposals, bids or tenders shall, subject to any contrary Competitive Procurement Requirements, be from a third party at arm's length from the Design-Builder and its Affiliates.
- (b) In the case of Minor Works, the Province shall, notwithstanding the receipt of proposals, bids or tenders pursuant to Section 4.4(a) of this Schedule, make payment for such Minor Works in accordance with Section 1.2(c) of this Schedule.
- (c) In the case of any Province Change in respect of which competitive proposals, bids or tenders are required, the Change in Costs for such Province Change (or relevant portion thereof) shall be the amount obtained pursuant to the proposal, bid or tender which best satisfies the requirements of the competitive process undertaken pursuant to Section 4.4(a) of this Schedule, plus any Mark-up contemplated in Sections 2.4(c)(xi) and (f) of this Schedule.

4.5 Changes Not to Correct Errors in Cost Estimates

Neither the Design-Builder nor the Province shall use a Design-Builder Proposal or a Province Change, respectively, to correct or derive benefit from any errors or omissions in the cost estimates provided by the Design-Builder for any Project Work forming part of this Agreement.

4.6 Disputes

Any dispute between the parties arising in connection with any matter in respect of a Province Change or Design-Builder Proposal, including any Minor Works, shall be resolved in accordance with the Dispute Resolution Procedure.

**SCHEDULE 12
PROPOSAL EXTRACTS**

SCHEDULE 3: PROJECT SCHEDULE

1. The Works Schedule shall include CP Interface Activity Codes that allow CP related activities to be easily identified and filtered from the other task activities.
2. The Design-Builder shall incorporate Environmental Timing Windows into the Works Schedule.
3. During the development of the Construction Management Plan, the Design-Builder shall identify risks associated with Project execution. Potential impacts to the Project shall be generated using a risk matrix identifying the frequency and severity of anticipated incidents. These risks shall be compared against the acceptance criteria and prioritized for mitigation of each of the risks. The Design-Builder shall continually monitor and compare the performance against planned metrics and benchmarks.

SCHEDULE 4: DESIGN AND CONSTRUCTION

Part 1: General Provisions

4. Temporary measures such as rock fall fences and/or other similar measures shall be used to mitigate rock fall or debris flow hazards that might affect the CP Lands, CP infrastructure or Railway Operations.
5. The Design-Builder's preliminary flagging schedule to be submitted under Section 3.8(d) of Part 1 [General Provisions] of Schedule 4 shall also include a track occupancy schedule.

Part 2: Design and Construction Requirements

6. The Design-Builder's roadway and drainage Design shall consider operation and maintenance of the roadway during winter conditions where slow melting snow can result in significant deposits of grit and sediment that can reduce conveyance capacity of the drainage system during subsequent heavy rainfall events. Culvert crossings shall also be designed to prevent slow moving water from freezing within the pipes and potentially leading to blockages.
7. Drainage ditches shall be constructed to prevent the subgrade and gravels from becoming saturated during Construction.
8. The Design-Builder shall complete a Road Safety Audit on Traffic Control Plans where required by this Agreement and the Road Safety Audit Team shall provide detailed commentary and mitigation measures in respect of the Traffic Control Plans as part of the quality assurance process for each Design submittal.

Part 3: Design and Certification Procedure

9. The Design-Builder shall prepare a formal design of downslope pioneer/access roads by a Professional Engineer to allow for safe access of equipment to pier, wall and abutment locations.

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Part 4: Traffic Management

10. As part of the Incident Management Plan, the Design-Builder shall develop protocols for providing access to CP in the event of an emergency such as an accident or derailment. These protocols shall be documented for the use of the Design-Builder's traffic control personnel so that safe passage can be planned for where possible. Measures should include screening at the Project Site limits so that CP representatives can be piloted through the closed lanes.
11. The Design-Builder shall hold weekly Traffic Management task force meetings with the Province during Design and Construction. The Communications Director shall attend such meetings.
12. The Design-Builder shall ensure that its Traffic Management team and supporting equipment is available 24 hours a day when active Construction is underway and that the Design-Builder's Traffic Control Supervisor is capable of reaching the Project Site outside active Construction times within 45 minutes of notification.

SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS

13. The Design-Builder shall provide for Large Animal Passage at Bighorn Bridge, Frenchman's Bridge and Blackwall Bridge. Large Animal Passage shall be provided from final ground level to the bridge soffit elevation and the clear distance between piers generally in accordance with the drawings provided in the Proposal.
14. The Design-Builder shall provide daily monitoring and tracking of the Bighorn Sheep herd when planning high-risk activities that may disturb the herd (e.g. blasting operations).
15. Recognizing that bank swallows are only known to currently nest beyond the western limits of the Project Lands, the Design-Builder shall, prior to commencing activities that may disturb the bank swallows, undertake ongoing monitoring and assessment of bank swallows during active bird nest periods (April – August) to identify additional nesting sites, if such become present.

SCHEDULE 9: COMMUNICATIONS AND ENGAGEMENT

16. The Communications Director shall report directly to the Design-Builder's Representative.
17. The Crisis Communications Plan shall include provisions for providing management training and crisis management exercises that have proven effective in identifying how responses can be strengthened, and interfacing with emergency responders and other appropriate parties concerning crisis communications.
18. The Design-Builder shall, as part of the development of the Crisis Management Plan, employ proven techniques such as partner working sessions with the Province and emergency responders to establish and test protocols, structure processes and define roles and responsibilities.
19. In the event of a crisis, the Design-Builder shall establish a tactical room in the Design-Builder's Project office to act as a command center.

**SCHEDULE 13
COMPENSATION ON TERMINATION**

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**PART 1
COMPENSATION ON TERMINATION OTHER THAN FOR DESIGN-BUILDER DEFAULT**

1.1 Obligation to Pay Non-Default Termination Sum

If the Province terminates this Agreement pursuant to Section 8.7(b)(ii) or Section 14.1(a), or if either the Design-Builder or the Province terminates this Agreement pursuant to Section 8.6(a) or 8.7(a)(iv), or if the Design-Builder terminates this Agreement pursuant to Section 13.3(a) or Section 13.3(b), the Province shall pay to the Design-Builder the Non-Default Termination Sum as set out in Section 1.2 [Calculation of Non-Default Termination Sum] of this Schedule, subject to adjustment pursuant to Part 3 [General Provisions] of this Schedule.

1.2 Calculation of Non-Default Termination Sum

The “**Non-Default Termination Sum**” shall be an amount equal to the aggregate of the Design-Builder Breakage Costs less, unless already retained by the Province pursuant to Section 2.1(a)(vi) of Schedule 10 [Payment and Performance Mechanism], the Warranty Holdback.

1.3 Date for Payment of Non-Default Termination Sum

The Province shall pay the Non-Default Termination Sum on or before the later of:

- (a) the date that is 60 Business Days after the Termination Date; and
- (b) the date that is 30 Business Days after the date on which the Non-Default Termination Sum is finally determined by agreement of the Province and the Design-Builder or in accordance with the Dispute Resolution Procedure;

provided that, if there is a dispute as to the calculation of the Non- Default Termination Sum, any undisputed amount shall be paid on or before the payment date referred to in Section 1.3(a) of this Schedule and any remainder shall be paid on or before the payment date referred to in Section 1.3(b) of this Schedule with interest on such remainder at a rate of interest per annum equal to the No Default Interest Rate calculated from the payment date referred to in Section 1.3(a) of this Schedule until the date of payment.

**PART 2
COMPENSATION ON TERMINATION FOR DESIGN-BUILDER DEFAULT**

2.1 Obligation to Pay Compensation on Design-Builder Default

If the Province terminates this Agreement pursuant to any of Sections 8.7(a)(iii), 12.3(b), 12.3(a), 12.3(c)(ii), 12.3(d) and 12.4 [Termination for Failure to Remedy According to Program], the Design-Builder shall pay to the Province or the Province shall pay to the Design-Builder, as determined by this Part 3, the termination sum calculated in accordance with this Part 2 (the “**Design-Builder Default Termination Sum**”), subject to any adjustment in accordance with Part 3 [General Provisions] of this Schedule.

2.2 Components of Design-Builder Default Termination Sum

Subject to the other provisions of this Part 2, the Design-Builder Default Termination Sum shall be an amount calculated by reference to the following amounts:

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- (a) the aggregate, without duplication, of:
 - (i) the Contract Price; and
 - (ii) any sums not forming part of the Contract Price that have become due and payable from the Province to the Design-Builder prior to the Termination Date in accordance with this Agreement, but which remain unpaid as at the Termination Date, to the extent that such sums have not subsequently been paid; and

- (b) the aggregate, without duplication, of the following amounts:
 - (i) all Progress Payments paid by the Province to the Design-Builder on or before the Termination Date;
 - (ii) the amount, if any, of the Deficiency Holdback paid by the Province to the Design-Builder pursuant to Section 3.1(c) of Schedule 5 [Project Work Defects and Warranties] on or before the Termination Date, or treated as having been so paid pursuant to Section 3.2(d)(i) of this Schedule;
 - (iii) the amount, if any, of the Warranty Holdback paid by the Province to the Design-Builder pursuant to Section 3.2(c) of Schedule 5 [Project Work Defects and Warranties] on or before the Termination Date;
 - (iv) the Province's estimate of all costs and expenses paid, payable or that will be payable by the Province associated with the termination of this Agreement including the cost of appointment, mobilisation and installation of a replacement contractor (or procuring the performance of the unfulfilled obligations of the Design-Builder by the Province);
 - (v) the Province's estimate of amounts paid, payable or that will be payable by the Province to any alternative contractor(s) for the performance of obligations equivalent to the unfulfilled obligations of the Province under this Agreement, including for the avoidance of doubt the cost of remedying any Project Work Defects and obtaining warranties for Work in place and to be performed equivalent to those provided for in this Agreement;
 - (vi) the Province's estimate of its costs in reinstating any of its assets or other equipment required for the performance of its obligations under this Agreement, to the extent that such reinstatement is required as a result of a breach by the Design-Builder of any of its obligations under this Agreement;
 - (vii) the Province's estimate of all other Direct Losses incurred or to be incurred by the Province associated with the termination of this Agreement and (to the extent that the Province has not previously been compensated for such Direct Losses) any breach by the Design-Builder of any of its obligations under this Agreement prior to the Termination Date; and
 - (viii) any sums that have become due and payable from the Design-Builder to the Province prior to the Termination Date in accordance with this Agreement but

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which remain unpaid as at the Termination Date, to the extent that such sums have not subsequently been paid.

provided that:

- (c) to the extent that any costs, expenses or Direct Losses included in the calculation of the Design-Builder Default Termination Sum are based on estimates by the Province and the actual costs, expenses or Direct Losses incurred by the Province in respect of the relevant items differ from the estimates by a material amount, the Province and the Design-Builder shall promptly adjust the amount of the Design-Builder Default Termination Sum or, if the Design-Builder Default Termination Sum has been paid in accordance with this Schedule prior to the date on which such difference has been established, make payment or repayment accordingly, without interest; and
- (d) if Section 3.1(e) of Schedule 5 [Project Work Defects and Warranties] applies, the calculation of the Design-Builder Default Termination Sum shall:
 - (i) treat any amount retained by the Province in accordance with Section 3.1(e) of Schedule 5 [Project Work Defects and Warranties] (the “**Retained Deficiency Amount**”) as having been paid by the Province to the Design-Builder on or before the Termination Date; and
 - (ii) not take into account any costs or expenses that the Province has incurred or will incur in remedying any Final Deficiency List Deficiency in respect of which any such Retained Deficiency Amount applies.

2.3 Timing of Calculation of Design-Builder Default Termination Sum

The Design-Builder Default Termination Sum shall be calculated as of the Termination Date.

2.4 Calculation of Design-Builder Default Termination Sum

If the aggregate amount calculated in accordance with:

- (a) Section 2.2(b) of this Schedule exceeds the aggregate amount calculated in accordance with Section 2.2(a) of this Schedule, the Design-Builder Default Termination Sum shall be an amount equal to the excess and shall be payable by the Design-Builder to the Province;
- (b) Section 2.2(a) of this Schedule exceeds the aggregate amount calculated in accordance with Section 2.2(b) of this Schedule, the Design-Builder Default Termination Sum shall be an amount equal to the excess and shall be payable by the Province to the Design-Builder; or
- (c) each of Sections 2.2(a) and 2.2(b) of this Schedule are equal, the Design-Builder Default Termination Sum shall be zero and no amount shall be payable by the Design-Builder to the Province by the Province to the Design-Builder pursuant to this Part 2.

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2.5 Date for Payment of Design-Builder Default Termination Sum

The Design-Builder or the Province, as applicable, as determined by this Part 2, shall pay the Design-Builder Default Termination Sum calculated in accordance with this Part 2 on or before the later to occur of:

- (a) the date that is 60 Business Days after the Termination Date; and
- (b) the date that is 30 Business Days after the date on which the Design-Builder Default Termination Sum is finally determined by agreement of the Province and the Design-Builder or in accordance with the Dispute Resolution Procedure, provided that, if there is a dispute as to the calculation of the Design-Builder Default Termination Sum, any undisputed amount shall be paid on or before the payment date referred to in Section 2.5(a) of this Schedule and any remainder shall be paid on or before the payment date referred to in this Section 2.5(b), with interest on such remainder at a rate of interest per annum equal to the No Default Interest Rate, calculated from the payment date referred to in Section 2.5(a) of this Schedule until the date of payment.

**PART 3
GENERAL PROVISIONS**

3.1 No Compensation to Extent of Insurance

Notwithstanding anything to the contrary in this Schedule or this Agreement, the Design-Builder shall not be entitled to be compensated by the Province under this Schedule, and any amounts payable by the Province under any provisions of this Schedule shall be reduced, to the extent:

- (a) that:
 - (i) the Design-Builder recovers or is entitled to recover under any Required Insurance, or would have been able to recover under any Required Insurance if such Required Insurance had been taken out and maintained in accordance with this Agreement; or
 - (ii) there are insurance proceeds available to the Design-Builder in respect of the Project, or that would have been available to the Design-Builder in respect of the Project under any Required Insurance if such Required Insurance had been taken out and maintained in accordance with this Agreement;

whether or not such Required Insurance was in fact effected or, if effected, was vitiated, and whether vitiated as a result of any act or omission of the Design-Builder or of any person for whom the Design-Builder is in law responsible (including, but not limited to, by reason of non-disclosure or under-insurance or failure or insolvency of the insurer), or for any other reason, excluding only vitiation caused by any act or omission of the Province or any person for whom the Province is in law responsible, but only to the extent non-vitiation terms protecting against vitiation in the case of such act or omission are not required by the terms of this Agreement to be included in the applicable insurance policies, and any such insurance proceeds recovered by or available to the Design-Builder were not taken into account in the calculation of the compensation payable by the Province under this Schedule; or

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- (b) that the Design-Builder recovers or is entitled to recover under any policy of insurance that is not Required Insurance but that the Design-Builder has in fact taken out and maintained, and any such insurance proceeds recovered by or available to the Design-Builder were not taken into account in the calculation of the compensation payable by the Province under this Schedule; or
- (c) that the Province has made or authorized payment to or for the account of or on behalf of the Design-Builder or the Design-Builder is entitled to receive proceeds of insurance, under any of Sections 6.18(b), (c), (d) and (e) and such payments were not taken into account in the calculation of the compensation payable by the Province under this Schedule; or
- (d) of any amounts in respect of deductibles and waiting periods under any of the insurance referred to in either of Sections 3.1(a) and (b) of this Schedule for which the Design-Builder is responsible.

3.2 Adjustment for Net Balance

Any amount payable by the Province as compensation on termination under this Schedule shall be:

- (a) increased by any net balance owing by the Province or BCTFA pursuant to Section 14.6(c); or
- (b) reduced by any net balance owing by the Design-Builder to the Province or BCTFA pursuant to Section 14.6(c).

3.3 Rights of Set-Off

- (a) Subject to Section 3.3(b) of this Schedule, any amount that is payable by the Province to the Design-Builder pursuant to this Schedule shall be reduced by any amount the Province is entitled to set off under Section 10.4 [Province's Right of Set Off] (provided this right of set off shall not apply to an amount payable by the Design-Builder to the Province pursuant to Section 14.6(c) where the amount payable by the Province as compensation on termination has been reduced pursuant to Section 3.2 [Adjustment for Net Balance] of this Schedule by the amount payable by the Design-Builder to the Province pursuant to Section 14.6(c)).
- (b) To any extent that:
 - (i) any amount the Province is entitled to set off referred to in Section 3.3(a) of this Schedule; or
 - (ii) any net balance owing by the Design-Builder referred to in Section 3.2(b) of this Schedule;

is not fully paid and satisfied by deduction from or reduction of any amounts payable by the Province to the Design-Builder under this Schedule because the amount referred to in Section 3.3(b)(i) or Section 3.3(b)(ii) of this Schedule is greater than the amount of compensation on termination payable by the Province under this Schedule, or because no

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compensation on termination is payable by the Province under this Schedule, or for any other reason, the Design-Builder shall pay to the Province on demand the amount remaining unpaid and unsatisfied.

3.4 Full and Final Settlement

Notwithstanding any other provision of this Agreement or rule of law or equity to the contrary:

- (a) either:
 - (i) payment of the amount payable by the Province pursuant to this Schedule in respect of a termination of this Agreement; or
 - (ii) a determination that neither the Province nor the Design-Builder has an obligation to make any payment to the other pursuant to this Schedule in respect of a termination of this Agreement;

shall be in full and final satisfaction of all Claims that, in relation to any Supervening Events, or breaches or defaults under, or termination of, this Agreement, or any other cause, matter or thing whatsoever with respect to this Agreement, can be made or brought against the Province or BCTFA by the Design-Builder, whether under contract, tort, restitution or otherwise;

- (b) the right to compensation payable under this Schedule is the sole and exclusive remedy of the Design-Builder against the Province and BCTFA for any termination of this Agreement and the Design-Builder is excluded from all other rights or remedies in respect thereof; and
- (c) without limiting the generality of the foregoing Sections 3.4(a) and (b), the Design-Builder shall have no Claim against the Province or BCTFA in respect of any Project Work performed up to the Termination Date, or for any refund or repayment of all or any part of the Performance Incentive Payments, apart from any compensation payable by the Province pursuant to this Schedule,

except, in the case of each of Sections 3.4(a), (b) and (c), for any liability of the Province or BCTFA to the Design-Builder that arose prior to the Termination Date (but not from the termination itself) and has not already been compensated for, or taken into account, in determining the relevant compensation amount and adjustments thereto payable by the Province pursuant to this Schedule, and except, in the case of Section 3.4(a), any liability of the Province or BCTFA to make a payment pursuant to Section 3.2(c) of Schedule 5 [Project Work Defects and Warranties].

The Design-Builder acknowledges and agrees that the provisions of this Schedule do not constitute or result in a penalty or forfeiture.

3.5 Calculation of Compensation

- (a) Promptly after the giving of any Notice of Intention to Terminate, or any notice of termination pursuant to a right to terminate the validity of which is or has been determined or accepted in accordance with Section 14.4(b) or Section 14.4(c), in respect of a termination of this Agreement:

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- (i) to which Section 1.1 [Obligation to Pay Non-Default Termination Sum] of this Schedule applies, the Design-Builder shall determine in accordance with the provisions of this Agreement the amount of compensation payable as of the actual Termination Date if known and as of an estimated Termination Date otherwise, and shall provide to the Province's Representative notice of such amount and the details of the calculation of each component thereof; or
- (ii) to which Section 3.1 [Obligation to Pay Compensation on Design-Builder Default] of this Schedule applies, the Province shall give to the Design-Builder a statement setting out the Design-Builder Default Termination Sum,

together in each case with all such documents and information that the Province's Representative or the Design-Builder, as the case may be, may from time to time in a timely manner reasonably request for the purposes of calculating, confirming the calculation of, or verifying, the amount of compensation payable.

- (b) If the amount of compensation calculated pursuant to subsection (a) above was determined as of an estimated Termination Date, promptly after the actual Termination Date the applicable party shall provide to the other party the calculation, information and documents referred to in subsection (a) above as of the actual Termination Date, together with an explanation (with supporting calculations, certificates and documents) of the difference between the amount of compensation calculated as of the estimated Termination Date and the amount of compensation calculated as of the actual Termination Date.
- (c) Within 30 days after the latest of:
 - (i) the date of receipt by the applicable party of a notice of a compensation amount from the other party under subsection (a) above with supporting details of the calculation of each component thereof, certificates and other documents as provided in subsection (a) above;
 - (ii) if applicable, the date of receipt by the applicable party of the additional explanation, calculations, information, certificates and documents referred to in subsection (b) above; and
 - (iii) the date of receipt by the applicable party of any other documents and information reasonably requested by the other party in a timely manner for the purposes of calculating, confirming the calculation of, or verifying, the amount of compensation payable;

the applicable party shall by notice to the other party either:

- (iv) confirm its agreement with the calculation of amount of compensation payable; or
- (v) confirm its disagreement with the calculation of the amount of compensation payable and provide an explanation and reasonable particulars as to the basis for such disagreement.

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- (d) Where the applicable party confirms its disagreement with the calculation of the amount of compensation payable, the matter shall be referred to and resolved according to the Dispute Resolution Procedure.

3.6 Condition Precedent to Payment

Notwithstanding any other provision of this Schedule or this Agreement, it shall be a condition precedent to any payment by the Province to the Design-Builder of any compensation on termination that the Design-Builder shall have complied in all material respects with its obligations under Sections 14.8 [Transfer of Assets] and 14.9(b) to (e) inclusive.

**SCHEDULE 14
SPECIMEN BONDS**

SPECIMEN - PERFORMANCE BOND

NO. _____

• Dollars (\$●)

KNOW ALL PERSONS BY THESE PRESENTS, that **KICKING HORSE CANYON CONSTRUCTORS (GP)** as Principal, hereinafter called the Principal, and **(SURETY/INSURANCE COMPANY NAME(S) AND ADDRESS(ES))**, a corporation or corporations created and existing under the laws of Canada, and duly authorized to transact the business of Suretyship in Canada, as Surety, hereinafter called the Surety if one Surety is named in this Bond and the Co-Sureties if more than one, is/are subject to the conditions hereinafter contained, held and firmly bound, jointly and severally in the case of Co-Sureties, unto HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA AS REPRESENTED BY THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE, as Obligee, hereinafter called the Obligee, in the amount _____ of

_____ Dollars (\$ _____), lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves or Co-Sureties as the case may be, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a contract with the Obligee, dated the **6th** day of **November, 2020** for **KICKING HORSE CANYON PROJECT – PHASE 4** which Contract Documents are by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall well and faithfully observe and perform all the obligations on the part of the Principal to be observed and performed in connection with the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

- (1) Whenever the Principal shall be, and declared by the Obligee to be, in default under the contract, the Surety or Co-Sureties as the case may be shall
 - (a) if the work is not taken out of the Principal's hands, remedy the default of the Principal,
 - (b) if the work is taken out of the Principal's hands, and the Obligee directs the Surety or Co-Sureties as the case may be to undertake the completion of the work, complete the work in accordance with the Contract provided that a contract is entered into for the completion of the work
 - (i) it shall be between the Surety and Co-Sureties as the case may be and the completing contractor, and
 - (ii) the selection of such completing contractor shall be subject to the approval of the Obligee,
 - (c) if the work is taken out of the Principal's hands and the Obligee, after reasonable notice to the Surety or Co-Sureties as the case may be, does not direct the Surety or Co-Sureties as the case may be to undertake the completion of the work, assume the financial responsibility for the cost of completion in excess of the moneys available to the Obligee under the Contract,
 - (d) be liable for and pay all the excess costs of completion of the Contract, and
 - (e) not be entitled to any Contract moneys earned by the Principal, up to the date of Principal's default on the Contract and any holdbacks relating to such earned Contract moneys held by the Obligee, and the liability of the Surety or Co-Sureties as the case may be under this Bond shall remain unchanged provided, however, and without restricting the generality of the foregoing, upon the completion of the Contract to the satisfaction of the Obligee, any Contract moneys earned by the Principal or holdbacks related thereto held by the Obligee may be paid to the Surety or Co-Sureties as the case may be by the Obligee.
- (2) The Surety or Co-Sureties as the case may be shall not be liable for a greater sum than the amount specified in this Bond.
- (3) No suit or action shall be instituted by the Obligee herein against the Surety or Co-Sureties as the case may be pursuant to these presents after the expiration of two (2) years from the date on which final payment under the Contract is payable.
- (4) If this Bond is issued by Co-Sureties, then the Co-Surety that signs the first signature block on this Bond shall be designated as the "Lead Surety" for the purposes of this Bond and the Co-Sureties hereby jointly and severally irrevocably: appoint and authorize the Lead Surety to act as the sole representative of and agent for the Co-Sureties, and with authority to bind the Co-Sureties, in all dealings and matters between the Co-Sureties and the Obligee and/or the Principal arising from or relating to this Bond, including without limitation the receipt on behalf of the Co-Sureties of any notices, directions, demands or draws on or given under this Bond issued by the Obligee and in the investigation, payment, compromise, settlement and defence of any claims, disputes, demands and draws on, arising from or related to this Bond; and, agree and acknowledge that the Obligee and/or Principal shall be entitled to assume that any act done, document executed or entered into or waiver given by the Lead Surety to the Obligee and/or Principal arising from or related to this Bond has been duly

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 14: SPECIMEN BONDS**

**Commercial in Confidence
Execution**

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authorized by each Co-Surety and is binding upon each Co-Surety without the Obligee and/or the Principal being under any obligation to enquire into the authority of the Lead Surety in such matters.

IN WITNESS WHEREOF, the Principal and the Surety or Co-Sureties as the case may be have Signed and Sealed this bond this _____ day of _____, 20 _____.

**[IF MORE THAN ONE SURETY ADD SIGNATURE
BLOCKS AS APPROPRIATE FOR EACH AND EVERY
CO-SURETY OBLIGATED UNDER THIS BOND. THE
FIRST SURETY SIGNATURE BLOCK IS FOR THE
LEAD SURETY]**

SIGNED and SEALED

In the presence of:

For the Principal

SEAL

For the Surety Attorney-in-fact

SEAL

SPECIMEN - LABOUR AND MATERIAL PAYMENT BOND

NO. _____

• Dollars (\$•)

Note: This Bond is issued simultaneously with another Bond in favour of the Oblige conditioned for the full and faithful performance of the contract.

KNOW ALL PERSONS BY THESE PRESENTS THAT **KICKING HORSE CANYON CONSTRUCTORS (GP)** as Principal, hereinafter called the Principal, and (SURETY/INSURANCE COMPANY NAME(S) AND ADDRESS(ES)) a corporation or corporations created and existing under the laws of Canada, and duly authorized to transact the business of Suretyship in Canada, as Surety, hereinafter called the Surety if one Surety is named in this Bond and the Co-Sureties if more than one, is/are, subject to the conditions hereinafter contained, held and firmly bound, jointly and severally in the case of Co-Sureties, unto HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA AS REPRESENTED BY THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE, as Oblige, hereinafter called the Oblige, for the use and benefit of the Claimants, their and each of their heirs, executors, administrators, successors and assigns, in _____ the _____ amount _____ of _____ Dollars (\$ _____) of lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety or Co-Sureties as the case may be bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a written contract with the Oblige, dated the 6th day of November, 2020 for **KICKING HORSE CANYON PROJECT – PHASE 4** which Contract Documents are by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall make payment to all Claimants for all labour and material used or reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A Claimant for the purpose of this Bond is defined as one having a direct contract with the Principal for labour, material, or both, used or reasonably required for use in the performance of the Contract, labour and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment directly applicable to the Contract provided that a person, firm or corporation who rents equipment to the Principal to be used in the performance of the Contract under a contract which provides that all or any part of the rent is to be applied towards the purchase price thereof, shall only be a Claimant to the extent of the prevailing industrial rental value of such equipment for the period during which the equipment was used in the performance of the Contract. The prevailing industrial value of equipment shall be determined, insofar as it is practical to do so, in accordance with and in the manner provided for in the latest revised edition of the publication of the Canadian Construction Association titled "Rental Rates on Contractors Equipment" published prior to the period during which the equipment was used in the performance of the Contract.
2. The Principal and the Surety or Co-Sureties as the case may be, hereby jointly and severally agree with the Oblige, that every Claimant who has not been paid as provided for under the terms of their contract with the Principal, before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's work or labour was done or performed or materials were furnished by such Claimant, sue on this Bond, prosecute the suit to final judgment for such sum or sums as may be justly due to such Claimant under the terms of their contract with the Principal and have execution thereon. Provided that the Oblige is not obliged to do or take any act, action or proceeding against the Surety or Co-Sureties as the case may be on behalf of the Claimants, or any of them, to enforce the provisions of this Bond. If any act, action or proceeding is taken either in the name of the Oblige or by joining the Oblige as a party to such proceeding, then such act, action or proceeding, shall be taken on the understanding and basis that the Claimants, or any of them, who take such act, action or proceeding shall indemnify and save harmless the Oblige against all costs, charges and expenses or liabilities incurred thereon and any loss or damage resulting to the Oblige by reason thereof. Provided still further that, subject to the foregoing terms and conditions, the Claimants, or any of them, may use the name of the Oblige to sue on and enforce the provisions of this Bond.

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3. No suit or action shall be commenced hereunder by any Claimant:
 - (a) unless such Claimant shall have given written notice within the time limits hereinafter set forth to each of the Principal, the Surety or Co-Sureties as the case may be and the Oblige, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail to the Principal, the Surety and the Oblige, at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the Contract is located. Such notice shall be given
 - (1) in respect of any claim for the amount or any portion thereof, required to be held back from the Claimant by the Principal, under either the terms of the Claimant's contract with the Principal or under the Builder's Liens Legislation applicable to the Claimant's contract with the Principal whichever is the greater, within one hundred and twenty (120) days after such Claimant should have been paid in full under the Claimant's contract with the Principal.
 - (2) in respect of any claim other than for the holdback, or portion thereof, referred to above, within one hundred and twenty (120) days after the date upon which such Claimant did, or performed, the last of the work or labour or furnished the last of the materials for which such claim is made, under the Claimant's contract with the Principal;
 - (b) after the expiration of one (1) year following the date on which the Principal ceased work on the contract, including work performed under the guarantees provided in the contract.
 - (c) other than in a Court of competent jurisdiction in a Province or Territory of Canada in which the subject matter of the contract, or any part thereof, is situated and not elsewhere, and the parties hereto agree to submit to the jurisdiction of such Court.
4. The Surety or Co-Sureties as the case may be agrees not to take advantage of Article 2365 of the Civil Code of the Province of Quebec in the event that, by an act or an omission of a Claimant, the Surety or Co-Sureties as the case may be can no longer be subrogated in the rights, hypothecs and privileges of said Claimant.
5. The amount of this Bond shall be reduced by, and to the extent of any payment or payments made in good faith, and in accordance with the provisions hereof, inclusive of the payment by the Surety or Co-Sureties as the case may be of builders liens which may be filed of record against the subject matter of the Contract, whether or not claim for the amount of such lien be presented under and against this Bond.
6. The Surety or Co-Sureties as the case may be shall not be liable for a greater sum than the specified penalty of this Bond.
7. If this Bond is issued by Co-Sureties, then the Co-Surety that signs the first signature block on this Bond shall be designated as the "Lead Surety" for the purposes of this Bond and the Co-Sureties hereby jointly and severally irrevocably: appoint and authorize the Lead Surety to act as the sole representative of and agent for the Co-Sureties, and with authority to bind the Co-Sureties, in all dealings and matters between the Co-Sureties and the Oblige, Principal and/or any Claimant(s) arising from or relating to this Bond, including without limitation the receipt on behalf of the Co-Sureties of any directions, notices, demands or draws on or given under this Bond issued by the Oblige and/or any Claimant(s) and in the investigation, payment, compromise, settlement and defence of any claims, demands and draws on, arising from or related to this Bond; and, agree and acknowledge that the Oblige, the Principal and/or any Claimant(s) shall be entitled to assume that any act done, document executed or entered into or waiver given by the Lead Surety to the Oblige, the Principal and/or the Claimant(s) arising from or related to this Bond has been duly authorized by each Co-Surety and is binding upon each Co-Surety without the Oblige, Principal and/or the Claimant(s) being under any obligation to enquire into the authority of the Lead Surety in such matters.

**KICKING HORSE CANYON PROJECT – PHASE 4
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Execution**

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IN WITNESS WHEREOF, the Principal and the Surety or Co-Sureties as the case may be have Signed and Sealed this Bond
this _____ day of _____ 20____

**[IF MORE THAN ONE SURETY ADD SIGNATURE
BLOCKS AS APPROPRIATE FOR EACH AND EVERY
CO-SURETY OBLIGATED UNDER THIS BOND. THE
FIRST SURETY SIGNATURE BLOCK IS FOR THE
LEAD SURETY]**

SIGNED and SEALED

In the presence of:

For the Principal

SEAL

For the Surety Attorney-in-fact

SEAL

**SCHEDULE 15
INSURANCE REQUIREMENTS**

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**PART 1
INSURANCE REQUIRED - CONSTRUCTION**

1.1 Third Party Liability Insurance - Construction

- (a) From and including the Effective Date and through to and including the Substantial Completion Date, “Wrap-Up” Commercial General Liability insurance with inclusive limits of not less than _____, for bodily injury, death, and property damage arising from any one accident or occurrence and in the term aggregate. The insurance policy will pay on behalf of the named insureds and the additional named insureds under the policy for any sum or sums which the insureds may become liable to pay or shall pay for bodily injury, death or property damage or for loss of use thereof, arising out of or resulting from the work or operations of the Design-Builder or the Subcontractors of any tier, and including all persons, firms, corporations or partnerships who perform any of the Project Work contemplated by this Agreement, anywhere within Canada and the USA. In addition to the above limits, such liability insurance will also pay all costs, charges, and expenses in connection with any claims that may require to be contested by the insureds anywhere within Canada and the USA.
- (b) From and including the Effective Date and through to and including the Substantial Completion Date, if ships, boats or other vessels are used in the performance of the Project Work contemplated by this Agreement and are owned, leased, rented, operated or used by the Design-Builder or any Subcontractor, then for bodily injury or death and property damage arising from any one accident or occurrence for all ships, boats and other vessels, insurance coverage is to be provided through either:
- (i) the “Wrap-Up” Commercial General Liability Insurance policy referred to in Section 1.1(a) of this Schedule; or
 - (ii) a separate Protection and Indemnity insurance policy or such other policy or policies or combination thereof appropriate for this risk in the context of the Project, in any case with limits of not less than _____ for bodily injury or death and property damage arising from any one accident or occurrence and in the term aggregate.

The Design-Builder will be responsible for ensuring that any changes to the requirements of the *Marine Liability Act* (Canada) and/or the regulations of the *Marine Liability Act* (Canada) are reflected in the insurance coverage provided.

- (c) From and including the Effective Date and through to and including the Substantial Completion Date, if aircraft (including helicopters) are used in the performance of the Project Work contemplated by this Agreement and are owned, leased, rented, operated or used by the Design-Builder or any Subcontractor, then third party Aircraft liability coverage with limits of not less than _____ for bodily injury or death and property damage arising from any one accident or occurrence and in the annual aggregate must be provided, together with a waiver of subrogation on the hull.
- (d) From and including the Effective Date and through to and including the Substantial Completion Date, if unmanned air vehicles (UAV) are used in the performance of the Project Work contemplated by this Agreement and are owned, leased, rented, operated or

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used by the Design-Builder or any Subcontractor, then third party Aircraft liability coverage with limits of not less than _____ for bodily injury or death and property damage arising from any one accident or occurrence and in the annual aggregate. This coverage may be provided by a separate policy or with the Wrap-Up Commercial General Liability policy referred to in Section 1.1(a) of this Schedule. All UAV movements to comply with all Transport Canada requirements, including the requirement to obtain, and comply with, a Transport Canada “Special Flight Operation Certificate”.

(e) Extensions of Coverage

The liability insurance referred to in Sections 1.1(a), (b) and (c) of this Schedule will cover liability assumed by the Design-Builder in connection with and applicable to this Agreement and will include the following coverage extensions applicable to the following liability policies:

- (i) Coverage Extensions Applicable to the “Wrap-Up” Commercial General Liability Policy
 - Canada and USA coverage territory
 - Products/Completed Operations
 - Occurrence Property Damage
 - Broad Form Property Damage
 - Broad Form Completed Operations
 - Contingent Employers Liability
 - Medical Payments
 - Incidental Medical Malpractice
 - Blanket Written Contractual
 - Cross Liability
 - Attached Machinery
 - Non Owned Automobile
 - Legal Liability for damage to hired automobiles
 - Hazardous Operations (XCU)
 - _____ Products and Completed Operations (as more fully outlined under Section 1.5(b) of this Schedule)
 - Sudden and Accidental Pollution Coverage with a limit not less than _____ in accordance with the Insurance Bureau of Canada’s sudden and accidental pollution coverage endorsement, subject to _____
 - 60 days notice of Cancellation or Limitation of cover (as more fully outlined under Section 1.6 of this Schedule)
 - Blanket Additional Insureds
- (ii) Coverage Extensions Applicable to the Marine and Aviation Policies
 - Canada and USA coverage territory
 - 60 days notice of Cancellation or Limitation of cover (as more fully outlined under Section 1.6 of this Schedule)

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(f) Inclusions / Exclusions Not Permitted

The following inclusions/exclusions are not permitted for any insurance referred to in Sections 1.1(a), (b) and (c) of this Schedule, except in the case of any insurance referred to in Sections 1.1(b) and (c) of this Schedule where such insurance is obtained under policies that are separate from the policy for the insurance referred to in Section 1.1(a) of this Schedule, as such separate policies are described in Sections 1.1(b) and 1.1(c) of this Schedule:

- (i) Hazardous operations, including excavation, pile driving, shoring, blasting, under-pinning or demolition work or any other operation or work to be performed as part of or in the course of the Project Work will not be excluded from insurance coverage.
- (ii) Claims arising out of the legal liability imposed upon the insured at common law and/or by statute for bodily injury or death to employees of the insured will not be excluded. However, exclusions applicable to liability imposed upon or assumed by the insured under Health and Safety Laws or for assessment by any Workers Compensation Board will be permitted.
- (iii) Liability assumed by the insureds under contract with railroad companies for the use and operation of railway sidings or crossings will not be excluded.
- (iv) Liability arising out of all products where the Design-Builder supplies the material will not be excluded.
- (v) Tort liability assumed by the Design-Builder under this Agreement will not be excluded.
- (vi) Exclusions for design/build, design/build/finance, design/build/finance/operate, or joint venture projects will not be permitted.
- (vii) Other types of services not listed above, to be performed by or on behalf of the Design-Builder under this Agreement will not be excluded.

(g) Deductible

A maximum deductible on the primary insurance policy will be allowed for any one accident or per occurrence of up to

(h) Self-Insured Retention

A maximum self-insured retention of up to _____ for any one accident or per occurrence will be permitted for the Design-Builder providing umbrella/excess liability insurance subject to having a minimum primary insurance policy of _____ underlying the umbrella/excess.

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1.2 Professional Liability Insurance (Errors & Omissions)

- (a) Single Project Specific Professional Liability insurance with minimum limits of _____ per claim and _____ term aggregate insuring against all insured loss or damage including coverage for third party property damage, bodily injury or death, arising out of any professional services rendered by the Design-Builder or the Subcontractors, and/or any engineers, architects, surveyors, and any of their respective employees including personnel on loan to the Design-Builder or the Subcontractors and personnel who perform normal services of the Design-Builder under this Agreement. The named insured shall also include all architectural firms and all engineering firms, including project managers, construction managers and applied science technologists, and all land surveyors, quantity surveyors and others engaged in providing professional services to the Project.
- (b) Coverage will be maintained:
 - (i) From and including the Effective Date and, subject to Section 1.2(b)(ii) of this Schedule, for a period of at least _____ after the Substantial Completion Date; and
 - (ii) in the case of any Project Work carried out by the Design-Builder after the Substantial Completion Date, for a period of at least _____ following completion of the work that is the subject of the Project Work;provided that coverage shall not be required to be maintained for longer than _____ after the effective date of the policy.
- (c) A maximum deductible of _____ will be allowed.
- (d) Exclusions for design/build, design/build/finance, design/build/finance/operate, or joint venture projects will not be permitted.
- (e) The insurance referred to in this Section 1.2 [Professional Liability Insurance (Errors & Omissions)] of this Schedule shall not be cancelled, removed, or endorsed to restrict coverage or limits of liability, without 60 days' notice in writing by registered mail to the Province's Representative with a copy by registered mail to "The Corporate Insurance and Bonds Manager" at Ministry of Transportation and Infrastructure, P.O. Box 9850 STN PROV GOVT, 4th Floor, 940 Blanshard Street, Victoria, BC, V8W 9T5 (or at such other address as the Province may from time to time by notice to the Design-Builder advise).
- (f) The insurance referred to in this Section 1.2 [Professional Liability Insurance (Errors & Omissions)] of this Schedule will be effected on the Effective Date but shall have a "retroactive date" (as such term is understood by the insurance industry with respect to "claims made" policies) to coincide with the verifiable start of design for any work covered by such insurance, such verification to be the sole responsibility of the Design-Builder.

1.3 Automobile Insurance

From and including the Effective Date and through to and including the Substantial Completion Date, Automobile Liability coverage providing third party liability and accident benefits insurance coverage must be provided for all vehicles required by law to be licensed that are owned, leased or rented by the Design-Builder or any Subcontractor and are used in the performance of the Project Work contemplated by this Agreement, with limits of not less than _____ for vehicles owned, leased or rented by the Design-Builder, and limits of not less than _____ for vehicles owned, leased or rented by any Subcontractor.

1.4 Property Insurance

(a) Builders' Risk

From and including the Effective Date and through to and including the Substantial Completion Date, Builders' Risk Property Insurance insuring against all risks (including but not limited to structural collapse and transit risks by any conveyance to and/or from the site, while there, awaiting and/or during erection, installation and testing, occurring anywhere within Canada and the United States, but specifically not including earthquake or flood) of direct physical loss of or damage to (including full resultant loss or damage) all Project Infrastructure (including all Structures forming part thereof) including the value of any material and/or structure and/or property destined for or entering into or forming part of the Project Infrastructure, whether belonging to the Design-Builder or any of the Subcontractors and/or the Province and/or BCTFA and/or the engineers and/or otherwise and including automatically any changes in design or method of construction occurring during the term of the policy, such insurance to specify a policy limit of not less than _____ (including full resultant loss or damage (LEG 3 or equivalent, if available) but excluding any extra expense, delay in start up, business interruption, loss of income and loss of profits insurance).

(b) Equipment Insurance

From and including the Effective Date and through to and including the Substantial Completion Date, "All Risks" Equipment Insurance, including flood and waterborne coverages, satisfactory to the Province covering all Construction Plant, including Construction Plant owned, rented or leased by the Design-Builder or any Subcontractor and used in the performance of any Project Work or for which the Design-Builder may be responsible.

(c) Deductibles Per Occurrence

All losses under the Builders' Risk Property Insurance or the Equipment Insurance - up to _____ per occurrence.

(d) Waiver of Subrogation/Builders' Risk Insurance

The following Waiver of Subrogation is to be added to the Builders' Risk Property Insurance Policies:

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“In the event of any physical loss or damage to property, the settlement or payment of the subsequent claim shall be made without the right of subrogation against Her Majesty the Queen in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the employees, agents and servants of Her Majesty the Queen in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the architects, engineers, consultants or contractors of Her Majesty the Queen in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the servants, agents, employees, volunteers, directors, or parent, subsidiary, affiliated or related firms of any such architects, engineers, consultants or contractors, engaged in or connected with the design, construction and related operations known as the “Kicking Horse Canyon Project - Phase 4”.”

(e) **Waiver of Subrogation / Equipment Insurance**

The following Waiver of Subrogation is to be added to the equipment insurance policies:

“In the event of any physical loss or damage to equipment of Kicking Horse Canyon Constructors (GP) or any of its contractors or subcontractors, the settlement or payment of the subsequent claim shall be made without the right of subrogation against Her Majesty the Queen in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the employees, agents and servants of Her Majesty the Queen in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the architects, engineers, consultants or contractors of Her Majesty the Queen in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the servants, agents, employees, volunteers, directors, or parent, subsidiary, affiliates or related firms of any such architects, engineers, consultants or contractors, engaged in or connected with the design, construction and related operations known as the “Kicking Horse Canyon Project - Phase 4”.”

1.5 Additional Conditions In Property and Liability Policies in this Part

- (a) The Province and BCTFA will be named as additional named insureds in all policies for the property insurance referred to in Section 1.4(a) of this Schedule by an endorsement as follows:

“Her Majesty the Queen in Right of the Province of British Columbia and the BC Transportation Financing Authority are added as Additional Named Insureds.”

- (b) Notwithstanding any other terms, conditions or exclusions elsewhere in the policies or in this Schedule, it is understood and agreed that all policies for the liability insurance referred to in Section 1.1(a) of this Schedule shall be extended to include insurance coverages and clauses as follows:

“Her Majesty the Queen in Right of the Province of British Columbia and the BC Transportation Financing Authority, together with all their employees, agents and servants, and all architects, engineers, consultants, contractors and any of their servants, agents, employees, volunteers, directors, parent, subsidiary, affiliated or related firms, engaged in or connected with the design, construction and related operations known as the “Kicking Horse Canyon Project - Phase 4” (all the foregoing being referred to in this Section as “Additional Named Insureds”), are added as additional named insureds in

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respect of liability arising from the work or operations of the Insured and the Additional Named Insureds, in connection with contracts entered into between the Insured and the Additional Named Insureds.

The insurance provided by this policy shall apply in the same manner and to the same extent as though a separate policy had been issued to each Insured and Additional Named Insured. Any breach of a condition of the policy by any Insured or Additional Named Insured shall not affect the protection given by this policy to any other Insured or Additional Named Insured. The inclusion herein of more than one Insured and Additional Named Insured shall not operate to increase the limit of liability under this policy.

Products and Completed Operations Hazard coverage shall be provided and such cover shall remain in full force and effect for a period of 24 months after the work has been completed, irrespective of the expiry date of the policy.”

1.6 Cancellation/Limitation

- (a) The insurance coverages referred to in this Part (except owned automobile insurance and professional liability insurance) shall not be cancelled, removed, or endorsed to restrict coverage or limits of liability, without 60 days’ notice in writing by registered mail to the Province’s Representative with a copy by registered mail to “The Corporate Insurance and Bonds Manager” at Ministry of Transportation and Infrastructure, P.O. Box 9850 STN PROV GOVT, 4th Floor, 940 Blanshard Street, Victoria, BC, V8W 9T5 (or at such other address as the Province may from time to time by notice to the Design-Builder advise), except in the case of non-payment of premiums, in which case the minimum statutory notice requirements shall apply. In the case of Marine and Aviation Policies the Design-Builder shall use all reasonable efforts to fulfill the 60 days’ notice requirement, but if, after using all reasonable efforts, the Design-Builder cannot fulfill the 60 days’ notice requirement, the notice requirement in this subsection for Marine and Aviation Policies may be reduced to not less than 30 days.
- (b) The insurance coverages referred to in this Part shall not be lapsed without at least 30 days’ notice in writing by registered mail to the Province’s Representative with a copy by registered mail to “The Corporate Insurance and Bonds Manager” at Ministry of Transportation and Infrastructure, P.O. Box 9850 STN PROV GOVT, 4th Floor, 940 Blanshard Street, Victoria, BC, V8W 9T5 (or at such other address as the Province may from time to time by notice to the Design-Builder advise).

1.7 Loss Payable

The insurance policies under Section 1.4(a) of this Schedule must contain a loss payable clause directing payment in accordance with the provisions of Section 6.18 [Application of Proceeds of Insurance] of this Agreement.

1.8 Use and Occupancy

Use and occupancy of any Project Infrastructure or any part thereof prior to any applicable date of completion shall not be cause for any termination of insurance coverage shown in the applicable sections of this Part.

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**PART 2
INSURANCE REQUIRED – OPERATION AND MAINTENANCE**

2.1 Insurance - Operation and Maintenance

For any Operation and Maintenance activities that are not covered under the insurances provided in Part 1 [Insurance Required – Construction] of this Schedule, the Design-Builder shall maintain, from and including the Effective Date and through to and including the Substantial Completion Date, the following:

- (a) Third Party Liability Insurance consistent with the coverages, extensions of coverage and endorsements set out in Section 1.1 [Third Party Liability Insurance – Construction] of this Schedule, with limits of not less than
- (b) Automotive Liability Insurance consistent with the coverages and endorsements set out in Section 1.3 [Automobile Insurance] of this Schedule, with limits of not less than
; and
- (c) Equipment Insurance consistent with the coverages and endorsements set out in Section 1.4(b) of this Schedule.

2.2 Additional Conditions in Liability Policies in this Part

Notwithstanding any other terms, conditions or exclusions elsewhere in the policies or in this Schedule, it is understood and agreed that all policies for the liability insurance referred to in Section 2.1(a) of this Schedule shall be extended to include insurance coverages and clauses as follows:

“Her Majesty the Queen in Right of the Province of British Columbia and the BC Transportation Financing Authority, together with all their employees, agents and servants, and all architects, engineers, consultants, contractors and any of their servants, agents, employees, volunteers, directors, parent, subsidiary, affiliated or related firms, engaged in or connected with the design, construction and related operations known as the “Kicking Horse Canyon Project - Phase 4” (all the foregoing being referred to in this Section as “Additional Named Insureds”), are added as additional named insureds in respect of liability arising from the work or operations of the Insured and the Additional Named Insureds, in connection with contracts entered into between the Insured and the Additional Named Insureds.

The insurance provided by this policy shall apply in the same manner and to the same extent as though a separate policy had been issued to each Insured and Additional Named Insured. Any breach of a condition of the policy by any Insured or Additional Named Insured shall not affect the protection given by this policy to any other Insured or Additional Named Insured. The inclusion herein of more than one Insured and Additional Named Insured shall not operate to increase the limit of liability under this policy.

Products and Completed Operations Hazard coverage shall be provided and such cover shall remain in full force and effect for a period of _____ after the work has been completed, irrespective of the expiry date of the policy.”

2.3 Cancellation/Limitation

- (a) The insurance coverages referred to in this Part (except owned automobile insurance) shall not be cancelled, removed, or endorsed to restrict coverage or limits of liability, without 60 days' notice in writing by registered mail to the Province's Representative with a copy by registered mail to "The Corporate Insurance and Bonds Manager" at Ministry of Transportation and Infrastructure, P.O. Box 9850 STN PROV GOVT, 4th Floor, 940 Blanshard Street, Victoria, BC, V8W 9T5 (or at such other address as the Province may from time to time by notice to the Design-Builder advise), except in the case of non-payment of premiums, in which case the minimum statutory notice requirements shall apply. In the case of Marine and Aviation Policies the Design-Builder shall use all reasonable efforts to fulfill the 60 days' notice requirement, but if, after using all reasonable efforts, the Design-Builder cannot fulfill the 60 days' notice requirement, the notice requirement in this subsection for Marine and Aviation Policies may be reduced to not less than 30 days.
- (b) The insurance coverages referred to in this Part shall not be lapsed without at least 30 days' notice in writing by registered mail to the Province's Representative with a copy by registered mail to "The Corporate Insurance and Bonds Manager" at Ministry of Transportation and Infrastructure, P.O. Box 9850 STN PROV GOVT, 4th Floor, 940 Blanshard Street, Victoria, BC, V8W 9T5 (or at such other address as the Province may from time to time by notice to the Design-Builder advise).

2.4 Use and Occupancy

Use and occupancy of any Project Infrastructure or any part thereof prior to any applicable date of completion shall not be cause for any termination of insurance coverage shown in the applicable sections of this Part.

PART 3 GENERAL PROVISIONS

3.1 Project Work after the Substantial Completion Date

- (a) The insurance described in this Schedule shall apply *mutatis mutandis* in connection with any Project Work carried out after the Substantial Completion Date and any warranty period extending beyond the Substantial Completion Date, in each case until completion of the relevant part of the Project Work, provided that the Province shall have the right to make, and the Design-Builder shall comply with, any reasonable variations in such insurance requirements, including adjustments in policy limits and additions of coverages in connection with any particular part of the Project Work.
- (b) Any variations made by the Province as contemplated in Section 3.1(a) of this Schedule shall not impose more stringent or less stringent requirements than those imposed by the Province for contracts of a similar nature or value to the relevant part of the Project Work undertaken after the Substantial Completion Date and any warranty period extending beyond the Substantial Completion Date and shall be based on the Province's assessment of the risks involved, based on the then current version of the Ministry Form INS152 or INS172, as appropriate. If the Design-Builder disputes the Province's assessment of the relevant risks and any resulting variation to the insurance requirements under this Section

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with respect to any particular part of the Project Work, the Design-Builder shall notify the Province of its dispute within 10 Business Days after the Province has notified the Design-Builder of the insurance requirements that shall apply to the relevant part of the Project Work. If the Province and the Design-Builder have not resolved the dispute within 10 Business Days after the Design-Builder's notice of disagreement, the dispute shall be referred for resolution under the Dispute Resolution Procedure. If the Province does not propose any variation or adjustment to the insurance requirements in respect of any particular part of the Project Work, then the insurance described in this Schedule shall be required.

3.2 Amendments to Insurance Coverages

The Province may from time to time, acting reasonably, and on written notice to the Design-Builder, amend or vary the insurance coverages described in Parts 1 or 2 of this Schedule, including by adjusting the policy limits and by changing the scope of coverages. Any such amendment will be considered a Province Change unless the amendment or variation is contemplated by the other provisions of this Schedule.

3.3 Primary and Excess Coverage

The Design-Builder may satisfy limit requirements through the use of primary and excess insurance programs.

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**PART 1
GENERAL**

1.1 Resolution of Disputes

- (a) Each of the Province and the Design-Builder agrees that it shall at all times, provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate the resolution of any dispute and shall make bona fide efforts to:
 - (i) resolve by amicable negotiations any and all disputes arising between the Province and the Design-Builder;
 - (ii) resolve all disputes at the lowest level of management possible; and
 - (iii) exhaust all reasonable efforts to resolve a dispute at all available levels of management, including escalation to the senior executive levels of the Province and the Design-Builder where the dispute is not resolved at lower levels of management, before issuing a notice pursuant to Section 1.1(b) of this Schedule to refer the dispute to any of the escalated dispute resolution processes available pursuant to and in accordance with Part 2 [Referral to Expert Referee], Part 3 [Referral to Expert Panel], Part 4 [Referral to Arbitration] and Part 5 [Court Proceedings] of this Schedule.
- (b) If the Province and the Design-Builder are unable to resolve a dispute pursuant to Section 1.1(a) of this Schedule within 10 Business Days of the dispute having been identified as such by the Province or the Design-Builder, then for any dispute described in Section 18.1 [Dispute Resolution Procedure] a party may deliver to the Design-Builder or the Province's Representative, as applicable:
 - (i) where the parties have each waived in writing their right to have a dispute determined by an Expert Referee or an Expert Panel, an Arbitration Dispute Notice issued pursuant to Part 4 [Referral to Arbitration] of this Schedule;
 - (ii) when, pursuant to Section 2.1 of this Schedule, it is reasonably determined that the expected value of a determination of a dispute is less than \$200,000, an Expert Referee Dispute Notice issued pursuant to Part 2 [Referral to Expert Referee] of this Schedule; or
 - (iii) when, pursuant to Section 3.1 of this Schedule, it is reasonably determined that the expected value of a determination of a dispute is equal to or greater than \$200,000, an Expert Panel Dispute Notice issued pursuant to Part 3 [Referral to Expert Panel] of this Schedule.

To be effective, any such notice must expressly state that it is an Arbitration Dispute Notice, Expert Referee Dispute Notice or Expert Panel Dispute Notice, as the case may be, set out the particulars of the matter in dispute, describe the remedy or resolution sought by the party issuing such notice, and comply with any other requirements provided in this Schedule as well as the notice requirements under Section 18.5 [Notices].

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1.2 No Joinder

No proceedings to resolve any dispute arising out of or relating to this Agreement in accordance with this Schedule shall include, by consolidation or joinder or in any other manner, any additional person not a party to this Agreement, including any Subcontractor, except with the written consent of the parties to this Agreement and any other person sought to be so joined.

1.3 Survival

Notwithstanding any other provision of this Agreement, the provisions of this Schedule will survive the expiry or any earlier termination of this Agreement.

1.4 Limitation Defences

The parties acknowledge and agree that the running of time in relation to a particular dispute as it may apply to any and all defences that are based on the lapse of time, including those prescribed by the *Limitation Act* (British Columbia), will be suspended from the date an Expert Panel Dispute Notice is issued in accordance with Section 3.1 [Referral to Expert Panel] of this Schedule until 60 days after either a decision is rendered by the Expert Panel or the parties receive a notification from the Expert Panel of its inability to achieve a unanimous decision, each in accordance with Section 3.9 [Decision of Expert Panel] of this Schedule. For the avoidance of doubt, the suspension of time in accordance with this Section 1.4 does not apply to the running of time in relation to any time period associated with the process and procedure provided under Part 3 [Referral to Expert Panel] of this Schedule.

PART 2 REFERRAL TO EXPERT REFEREE

2.1 Referral to Expert Referee

If the Province and the Design-Builder are unable to resolve a dispute in the manner contemplated in Section 1.1(a) of this Schedule and it is reasonably determined by the initiating party that the expected value of a determination of the dispute is less than \$200,000 (index linked) then a party may by written notice to the other party (the “**Expert Referee Dispute Notice**”) require the dispute to be resolved on an expedited basis by an appointed referee (the “**Expert Referee**”). If the other party does not give a notice of objection (“**Notice of Objection to Expert Referee**”) to the initiating party within two Business Days following the delivery of the Expert Referee Dispute Notice, then the parties will appoint an Expert Referee in the following manner to resolve the dispute and will participate in the resolution of the dispute as set out below:

- (a) within two Business Days of the delivery of an Expert Referee Dispute Notice, each party will submit in writing to the other party, the names of no more than two candidates for Expert Referee who are independent of the parties, experienced in the resolution of similar disputes and immediately available to perform the role of Expert Referee in respect of the dispute at hand;
- (b) if a party has an objection to a proposed candidate, it will give written notice of such objection with reasons to the other party; or
- (c) if for any reason within three Business Days of the delivery of an Expert Referee Dispute Notice, an Expert Referee has not been appointed, then either party may apply to the

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BCICAC for an arbitrator to be promptly appointed under its “Domestic Commercial Arbitration Rules of Procedure” to act as a Referee under this Agreement in relation to the dispute.

2.2 Expert Referee Agreement

The parties will enter into an agreement (the “**Expert Referee Agreement**”) with the Expert Referee to act as Expert Referee generally in the form attached as Appendix A [Expert Referee Agreement] to this Schedule, such agreement to be entered into no later than two Business Days after the Expert Referee’s appointment.

2.3 Procedure for Expert Referee Review

- (a) The Expert Referee will conduct an impartial review of the dispute in such manner as the Expert Referee thinks fit, including carrying out on site inspections and interviews with any persons that the Expert Referee thinks fit. The parties will comply with all reasonable requests from the Expert Referee for additional information, documents and access to personnel which the Expert Referee considers necessary for the review. Any submission or documentation in respect of the dispute provided to the Expert Referee by a party will also be provided to the other party.
- (b) The Expert Referee may, with the written approval of both parties, retain other professional persons or experts to assist with the review and will pay due regard to any request by either party for the Expert Referee to retain such other professional persons or experts.
- (c) The Expert Referee will not be obliged to conduct enquiries in the presence of the parties or receive submissions from the parties, except to the extent that the Expert Referee thinks fit, and may render a decision notwithstanding the failure of a party to participate in the proceedings.

2.4 Decision of the Expert Referee

- (a) The Expert Referee will render a brief, written, reasoned and impartial decision on the dispute, with copies to both parties within five Business Days of the signing by the Expert Referee and both parties of the Expert Referee Agreement referred to in Section 2.2 of this Schedule, or such longer period as agreed to in writing by both parties. The Expert Referee’s decision will be in the form of a proposed determination of the rights of the parties having regard to the Expert Referee’s understanding of the relevant contractual provisions, the applicable law and the facts as agreed by the parties or as best the Expert Referee is able to determine them.
- (b) Each party acknowledges the value of having the Expert Referee render a timely decision regarding the dispute. If the Expert Referee is unable to render a decision within the time set or as extended by mutual agreement of the parties, then the parties will request that the Expert Referee provide to the parties within such time such analysis of the dispute as the Expert Referee is able to make within that time and describe the further work the Expert Referee recommends would be required in order to arrive at a reasoned decision.

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- (c) A decision of an Expert Referee is not binding on the parties but is intended to assist the parties to reach agreement with respect to the dispute.

2.5 Confidentiality of Expert Referee

- (a) The proceedings under this Part 2 will be confidential and all information, data or documentation disclosed or delivered by either party to the Expert Referee as a result or in connection with the Expert Referee's duties as Expert Referee will be treated as confidential and neither the parties nor the Expert Referee will disclose to any person any such information, data or documentation unless the parties otherwise agree in writing. Nothing contained in this provision will prevent the submission in any subsequent proceedings of any evidence other than evidence that came into existence for the express purpose of submission to, or assistance of, the Expert Referee.
- (b) The proceedings by or before an Expert Referee will be without prejudice in any subsequent proceedings.

2.6 Costs of Expert Referee Review

Notwithstanding Section 9.1 [Indemnification by Design-Builder], Section 9.5 [Indemnification by the Province] and Section 9.6 [Limited Province Indemnities], or any other provision of this Agreement, the Province and the Design-Builder shall each bear its own costs of the process for resolution of the dispute by the Expert Referee (including all legal fees and expenses). As between the Province and the Design-Builder, and notwithstanding the terms of the Expert Referee Agreement, the Province and the Design-Builder shall share equally, and be responsible for their respective share of all costs of the Expert Referee as and when due.

PART 3 REFERRAL TO EXPERT PANEL

3.1 Referral to Expert Panel

If

- (a) the Province and the Design-Builder are unable to resolve a dispute in the manner contemplated in Section 1.1(a) of this Schedule;
- (b) it is reasonably determined by the initiating party that the expected value of a determination of the dispute is greater than \$200,000 (index linked); or
- (c) a party delivers a Notice of Objection to Referee in accordance with Section 2.1 [Referral to Expert Referee] of this Schedule,

then a party may by written notice to the other party and the Expert Panel (the "**Expert Panel Dispute Notice**") require the dispute to be resolved on an expedited basis by a qualified and experienced Expert Panel, or where the parties both agree, by a single member of the Expert Panel, in accordance with this Part 3.

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3.2 Expert Panel

- (a) The Province and the Design-Builder shall jointly appoint one panel of three experts (the “**Expert Panel**”) within 120 days following the Effective Date consisting of:
 - (i) at least one expert who shall have demonstrated experience with design or construction work, or both; and
 - (ii) at least one expert who shall be a barrister and solicitor duly licensed to practice law in the Province of British Columbia.
- (b) If any Expert Panel member resigns, dies or otherwise withdraws from the Expert Panel at any time, a replacement expert shall be appointed by the Province and the Design-Builder jointly as soon as practicable thereafter and in a manner consistent with the Expert Panel composition requirements provided for in this Section 3.2 and Section 3.4(a) of this Schedule.
- (c) If the Province and the Design-Builder fail to agree on the identity of any expert to be appointed to the Expert Panel pursuant to Section 3.2(a) of this Schedule within the 120 day period following the Effective Date or, pursuant to Section 3.2(b) of this Schedule, within a reasonable time, the Province or the Design-Builder may apply to the BCICAC or to a judge of the Supreme Court of the Province of British Columbia for appointment of such expert or experts, in which case the BCICAC or such Court shall appoint an expert or experts at the earliest opportunity from the list of potential experts submitted by the Province and the Design-Builder or, if a party fails to submit its list of potential experts within 10 days of applying to the BCICAC or to the Court, the BCICAC or such Court may appoint such person or persons as members of the Expert Panel who meet the requirements set out in this Schedule.
- (d) The parties will enter into an agreement (an “**Expert Panel Member Agreement**”) with each Expert Panel member to act as Expert Panel member generally in the form attached as Appendix B [Expert Panel Member Agreement] to this Schedule, such agreement to be entered into no later than two Business Days after the Expert Panel member’s appointment.

3.3 Retention Payments to Expert Panel Members

As between the Province and the Design-Builder, and notwithstanding the terms of the Expert Panel Member Agreement, the Design-Builder shall be responsible for the payment of retention payments to the members of the Expert Panel, in such amounts and at such times as determined by the parties, each acting reasonably.

3.4 No Conflict for Expert Panel Members

- (a) Unless the Province and the Design-Builder otherwise agree, no person shall be nominated or appointed to act as a member of the Expert Panel who, or any of whose partners, shareholders, unitholders or Affiliates:
 - (i) is or at any time has been involved or interested in the conduct of:

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- (A) any of the Project Work on behalf of the Design-Builder or any of its Subcontractors; or
- (B) the Project on behalf of the Province; or
- (ii) is a present or former Expert Referee.
- (b) The parties shall cause each expert appointed to the Expert Panel, as part of the documentation required to retain the Expert Panel member, to sign a statement declaring that the Expert Panel member knows of no circumstance likely to give rise to justifiable doubts as to his or her independence or impartiality and that he or she agrees to disclose any such circumstance to the parties should such circumstance arise after that time.

3.5 Appointment of Single Expert Panel Member

- (a) The parties may agree in writing to have a single, specific member of the Expert Panel resolve a particular dispute.
- (b) Upon the Expert Panel receiving a notice executed by both parties indicating the parties' agreement to have a specified Expert Panel member resolve a dispute, the specified Expert Panel member shall thereafter take conduct of the dispute.
- (c) Where a single member of the Expert Panel is jointly appointed by the parties in accordance with this Section 3.5, the provisions of this Schedule, including Sections 3.7 through 3.12 of this Part, will apply *mutatis mutandi* as though the single Expert Panel member were standing in the place of the Expert Panel.

3.6 Expert Panel Dispute Notice

The Expert Panel Dispute Notice will provide the following and be limited to 15 single-sided pages:

- (a) a summary of the issues in dispute and the position of the initiating party with respect to those issues;
- (b) the relief sought by the initiating party and, where applicable, particulars of any costs or damages claimed;
- (c) the specific provision(s) of this Agreement relied on by the initiating party in relation to its position; and
- (d) a list of any documentary, witness or other form of evidence that the initiating party intends to rely on in support of its position.

3.7 Response to Expert Panel Dispute Notice

Within 28 days following receipt of an Expert Panel Dispute Notice, the party receiving the Expert Panel Dispute Notice, hereafter and for the purposes of this Part 4 referred to as the responding party, shall submit to the initiating party and the Expert Panel a response to the Expert Panel Dispute Notice, which shall be limited to 15 single-sided pages in total and shall include:

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- (a) a summary of the responding party's position in response to the initiating party's claim;
- (b) identification of any additional related issues;
- (c) any relief sought by the responding party or, where applicable, the responding party's position with respect to any costs or damages claimed;
- (d) any provision(s) of this Agreement relied on by the responding party in relation to its position; and
- (e) a list of any documentary, witness or other form of evidence that the responding party intends to rely on in support of its position.

3.8 Procedure for Expert Panel Review

The procedure for an Expert Panel resolution process will be as follows:

- (a) Subject to Section 3.8(b), within 28 days following receipt of the responding party's response to the Expert Panel Dispute Notice and in consultation with the parties as required, the Expert Panel shall:
 - (i) determine the issues to be resolved;
 - (ii) determine what documents will need to be produced and by what date;
 - (iii) determine what witness evidence will be required and, if required, determine how it will be provided and any dates associated with securing such evidence;
 - (iv) determine if a physical site inspection is required and, if required, arrange a date for inspection;
 - (v) determine if any independent expert evidence will be required and, if required, how such evidence will be obtained and a date for submission; and
 - (vi) any other determinations required to allow the Expert Panel to conduct its investigation and render a decision with respect to the dispute.
- (b) The Expert Panel shall determine the appropriate process for the timely and cost effective resolution of the dispute and, without limiting the generality of the foregoing, have discretion to, among other things:
 - (i) solicit submissions and documents from the parties, and impose deadlines for the receipt of such submissions;
 - (ii) require a party to supply or prepare for examination by the Expert Panel and the other parties any document or written or oral information or evidence the Expert Panel considers necessary and provide any process associated therewith;
 - (iii) proceed with the Expert Panel process notwithstanding any failure or refusal of a party to comply with the provisions of this Part 3 or with the Expert Panel's

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directions or determinations or to attend any meeting or hearing, but only after giving such party reasonable notice that the Expert Panel intends to do so;

- (iv) convene meetings of the parties to have the parties discuss the issues in dispute in the presence of the Expert Panel;
- (v) provide process for the parties to communicate with the Expert Panel; and
- (vi) seek advice from any other qualified independent professional advisors in respect of the dispute,

all with the objective of devising and adopting the simplest, least expensive and most expeditious manner of determining the dispute in issue and the Expert Panel shall use all reasonable efforts to complete the Expert Panel's investigation of the dispute within six weeks of any determinations made in accordance with Section 3.8(a) of this Schedule.

- (c) Neither the Province nor the Design-Builder shall unreasonably delay or impede the Expert Panel in completing its investigation and determination with respect to any dispute and both parties acknowledge that the resolution process by the Expert Panel is intended to be based on an investigative process directed by the Expert Panel.

3.9 Decision of Expert Panel

- (a) The Expert Panel shall render a unanimous decision as soon as possible and, in any event, shall use all reasonable efforts to render a decision no later than 14 days after the Expert Panel has completed its investigations in accordance with Section 3.8 of this Schedule. The Expert Panel shall give written reasons or a written summary of reasons for the Expert Panel's decision.
- (b) Where the Expert Panel cannot reach a unanimous decision, the Expert Panel will notify the parties of its inability to achieve a unanimous decision no later than 14 days after the Expert Panel has completed its investigations in accordance with Section 3.8 of this Schedule, without providing any details with respect to the conflicting opinions of the Expert Panel members, and upon receipt of any such notification either of the parties may refer the matter to arbitration by issuing an Arbitration Dispute Notice in accordance with Part 4 [Referral to Arbitration] of this Schedule.

3.10 Confidentiality of Expert Panel

The parties shall cause each member of the Expert Panel, as part of the documentation required to retain the Expert Panel member, to agree to keep all information about the dispute confidential and to not disclose that information to anyone other than the parties and, as required, representatives and advisors of each of them or as required by the Expert Panel in accordance with Section 3.8(b)(vi), on an as-needed basis.

3.11 Costs of Expert Panel Review

Notwithstanding Section 9.1 [Indemnification by Design-Builder], Section 9.5 [Indemnification by the Province] and Section 9.6 [Limited Province Indemnities], or any other provision of this Agreement and without limiting Section 3.3 [Retention Payments to Expert Panel Members] of this

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Schedule, the Province and the Design-Builder shall each bear its own costs of the process for resolution of the dispute by the Expert Panel (including all legal fees and expenses). As between the Province and the Design-Builder, and notwithstanding the terms of the Expert Panel Member Agreement, the Province and the Design-Builder shall share equally, and be responsible for their respective share of all costs of the Expert Panel as and when due.

3.12 Expert Panel Decision Binding

The Expert Panel's award or determination shall be final and binding on the parties unless and until revised, cancelled, varied or overturned by an Arbitrator or Court in accordance with the provisions of this Schedule, and each of the parties expressly waives all rights of appeal in connection with the Expert Panel's decision except as expressly provided in this Schedule.

PART 4 REFERRAL TO ARBITRATION

4.1 Referral to Arbitration

- (a) A party may commence arbitration proceedings in respect of a dispute by giving a written notice (the "**Arbitration Dispute Notice**") to another party requiring that the dispute be resolved by arbitration proceedings in accordance with this Part 4 where a dispute has arisen between the Province and the Design-Builder and one of the following applies:
 - (i) the parties have referred the dispute for resolution through reference to an Expert Referee pursuant to Part 2 [Referral to Expert Referee] of this Schedule and the dispute is not completely resolved by agreement between the parties within 10 Business Days of the receipt of the Expert Referee's decision and a notice of objection ("**Notice of Objection to Arbitration**") is not delivered to the initiating party within five Business Days from receipt of the Arbitration Dispute Notice;
 - (ii) the parties have referred the dispute for resolution through reference to an Expert Panel pursuant to Part 3 [Referral to Expert Panel] of this Schedule and:
 - (A) the amount awarded to a party through that process; or
 - (B) the determination results in a party doing or not doing something that has a value or consequence to that party or to another party that, in the reasonable opinion of the initiating party,

is more than more than \$500,000 in the aggregate;
 - (iii) the determination by the Expert Panel involves issues other than monetary claims by one party against another party that the initiating party reasonably believes are material and significant to the initiating party;
 - (iv) the Expert Panel notifies the parties that it is unable to reach a unanimous decision with respect to the dispute in accordance with Section 3.9(b) of this Schedule; or

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- (v) the parties agree in writing in any other circumstance to refer a dispute to be resolved by arbitration in accordance with this Part 4, including where the parties waive their right to resolve the dispute through reference to an Expert Referee or Expert Panel.
- (b) The Arbitration Dispute Notice shall set out, in addition to the requirements provided for in Section 1.1(b) of this Schedule, as applicable:
 - (i) the determination of the Expert Referee;
 - (ii) the determination of the Expert Panel; or
 - (iii) the notification of the Expert Panel to the parties of the Expert Panel's inability to reach a unanimous decision.

4.2 Initiation of Court Proceedings rather than Arbitration

- (a) If the parties have referred the dispute for resolution through reference to an Expert Referee pursuant to Part 2 [Referral to Expert Referee] of this Schedule and the dispute is not completely resolved by agreement between the parties within 10 Business Days of the receipt of the Expert Referee's decision and:
 - (i) no Arbitration Dispute Notice has been delivered by one party to the other; or
 - (ii) a Notice of Objection to Arbitration has been delivered by one party to the initiating party within five Business Days of receipt of the Arbitration Dispute Notice,then either party may commence proceedings in respect of the dispute in the courts of British Columbia. If a party has commenced such proceedings but has not served the other party as required for such proceedings prior to the other party delivering an Arbitration Dispute Notice, the party commencing such proceedings will either give the Notice of Objection to Arbitrate or serve such party the required notice within five Business Days of receipt of the Arbitration Dispute Notice, failing which the dispute will be resolved by Arbitration pursuant to Section 4.1 of this Schedule.
- (b) If the amount in respect of a specific dispute, as determined by the Expert Panel in accordance with Section 4.1(a)(ii) of this Schedule, is greater than \$2,000,000:
 - (i) an initiating party may, instead of issuing an Arbitration Dispute Notice pursuant to Section 4.1(a) of this Schedule in respect of such dispute, give to the other party written notice that it will initiate a proceeding in a Court to resolve the dispute in accordance with Part 5 of this Schedule; or
 - (ii) a responding party may, within 14 days of receipt of an Arbitration Dispute Notice pursuant to Section 4.1(a) of this Schedule in respect of such dispute, give a Notice of Objection to Arbitration to the initiating party, and may initiate a proceeding in a Court to resolve the dispute in accordance with Part 5 of this Schedule.

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(c) If a responding party issues a Notice of Objection to Arbitration to an initiating party pursuant to Section 4.2(b)(ii) of this Schedule then, unless within 14 days of receiving notice from the responding party:

- (i) the initiating party gives written confirmation to the responding party that it will initiate Court proceedings to resolve the dispute in accordance with Part 5 of this Schedule;
- (ii) the initiating party has initiated Court proceedings; or
- (iii) the responding party has initiated Court proceedings,

the initiating party shall have no further access to any appeal, arbitration, litigation or other dispute resolution process in respect of such dispute without the express written agreement of the responding party.

4.3 Arbitration Act and BCICAC Rules of Procedure

The parties acknowledge and agree that any dispute referred to arbitration pursuant to this Part 4 is governed by the *Arbitration Act* (British Columbia) and that the Domestic Commercial Arbitration Rules shall apply to any arbitration conducted hereunder except to the extent that its provisions are modified by the express provisions of this Part 4 or by written agreement of the parties.

4.4 Appointment of Arbitrator

- (a) Within 21 days following receipt of an Arbitration Dispute Notice by the responding party under Section 4.1(a) of this Schedule, and subject to the responding party issuing a Notice of Objection to Arbitration pursuant to Section 4.2(b)(ii) of this Schedule, the initiating party and the responding party shall designate a single arbitrator acceptable to both of them.
- (b) If the parties fail to appoint such a single arbitrator within the period of time and in the circumstances set out in Section 4.4(a) of this Schedule, either party may apply to the BCICAC to select the arbitrator, in which case the BCICAC shall appoint the arbitrator at the earliest opportunity in accordance with Article 14 of the Domestic Commercial Arbitration Rules.

4.5 No Conflict for Arbitrator

Unless the Province and the Design-Builder otherwise agree, no person may be nominated or appointed to act as arbitrator pursuant to Section 4.4 [Appointment of Arbitrator] of this Schedule (the “**Arbitrator**”) who, or any of whose partners, shareholders, unitholders or Affiliates:

- (a) is or at any time has been involved or interested in the conduct of:
 - (i) any of the Project Work on behalf of the Design-Builder or any of its Subcontractors; or
 - (ii) the Project on behalf of the Province; or

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- (b) is a present or former Expert Referee or Expert Panel member.

4.6 Qualifications of Arbitrator

The Arbitrator shall have appropriate qualifications by profession or occupation to decide the matter in dispute.

4.7 No Oral Discovery

There shall be no oral discovery unless otherwise ordered by the Arbitrator.

4.8 Meetings and Hearings of Arbitrator

Meetings and hearings of the Arbitrator shall take place in Vancouver, British Columbia or in such other place as the Province and the Design-Builder may agree. Subject to the foregoing, the Arbitrator may at any time fix the date, time and place of meetings and hearings in the arbitration and shall give the Province and the Design-Builder adequate notice thereof. All meetings and hearings shall be in private unless the Province and the Design-Builder otherwise agree, and each party may be represented at any meetings or hearings by legal counsel. Where the Arbitrator directs the parties to provide oral evidence, each party may examine and re-examine its witnesses and cross-examine those of the other party during the conduct of the arbitration.

4.9 Inadmissibility of Prior Decisions

- (a) If a party is entitled to refer a decision of an Expert Referee under Part 2 [Referral to Expert Referee] or an Expert Panel under Part 3 [Referral to Expert Panel] of this Schedule to arbitration pursuant to Section 4.1 [Referral to Arbitration] of this Schedule or otherwise to initiate or pursue any dispute resolution process, appeal or legal proceeding, then, subject to Section 4.9(b) of this Schedule or unless the parties otherwise expressly agree in writing:
- (i) all submissions prepared by a party in connection with any proceedings under Part 2 [Referral to Expert Referee] or Part 3 [Referral to Expert Panel] of this Schedule and all information, documents, notes and records prepared by the Expert Referee or Expert Panel and all decisions and determinations of the Expert Referee or Expert Panel shall be confidential and inadmissible in any arbitration or other such dispute resolution process, appeal or legal proceeding, unless otherwise provided by the terms of this Schedule; and
 - (ii) all submissions prepared by a party in connection with any proceedings involving the Arbitrator and all information, documents, notes and records prepared by the Arbitrator and all decisions and determinations of the Arbitrator shall be confidential and inadmissible in any other such dispute resolution process, appeal or legal proceeding, unless otherwise provided by the terms of this Schedule.
- (b) The restrictions on admissibility set out in Section 4.9(a) of this Schedule shall not apply to any appeal or litigation permitted pursuant to Section 4.11 [Limitation on Appeal of Arbitrator's Decision] of this Schedule or any proceeding permitted under Section 4.2 of this Schedule.

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- (c) For greater certainty, nothing herein shall prevent the tendering of the same oral or written evidence before a proceeding adjudicated by an Expert Panel and a proceeding adjudicated by an Arbitrator or a judge of the Supreme Court of British Columbia, as the case may be, and, despite Section 4.9(a)(i) above, a party will not be precluded from making the same or similar submissions to an Arbitrator or a Judge to those made by that party before an Expert Panel.
- (d) No Expert Referee, Expert Panel member nor any Arbitrator may be required to testify or otherwise be compellable in or in connection with any dispute resolution process, litigation, arbitration, appeal or legal proceeding.

4.10 Decision of Arbitrator

Subject to the provisions of the *Arbitration Act* (British Columbia), the Arbitrator shall send a decision in writing to the Province and the Design-Builder within 45 days following the conclusion of all hearings referred to in Section 4.8 [Meetings and Hearings of Arbitrator] of this Schedule unless such period of time is extended for a fixed period by the Arbitrator on written notice to each party because of illness or other cause beyond the Arbitrator's control and, unless the Province and the Design-Builder otherwise agree, shall state the reasons for the decision.

4.11 Limitation on Appeal of Arbitrator's Decision

Subject to the rights of appeal that either party may have under the provisions of the *Arbitration Act* (British Columbia), the decision of the Arbitrator shall be final and binding on the Province and the Design-Builder.

4.12 Arbitrator's Powers

The object of an arbitration hereunder is to ensure the just, expeditious, economical and final determination of the dispute. Without limiting the jurisdiction or powers of the Arbitrator under the *Arbitration Act* (British Columbia), a submission to arbitration hereunder shall confer on the Arbitrator the jurisdiction and power to:

- (a) determine any question of law arising in the arbitration;
- (b) determine any question as to the Arbitrator's jurisdiction;
- (c) determine any question of good faith or dishonesty arising in the dispute;
- (d) order any party to furnish further details of its case, in fact or in law to another party;
- (e) proceed with the arbitration notwithstanding any failure or refusal of a party to comply with these provisions or with the Arbitrator's orders or directions or to attend any meeting or hearing, but only after giving such party reasonable notice that the Arbitrator intends to do so;
- (f) receive and take into account such written or oral evidence tendered by the parties as the Arbitrator determines is relevant, whether or not strictly admissible in law;
- (g) make one or more interim awards;

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- (h) hold meetings and hearings and make a decision (including without limitation a final decision) in British Columbia or elsewhere with the concurrence of the parties;
- (i) order the parties to produce to the Arbitrator, and to each other for inspection, and to supply copies of, any books and records, documents, materials and other information in their possession or control which the Arbitrator determines to be relevant;
- (j) order the preservation or storage of any property or thing relevant to the subject matter of the arbitration under the control of either of the parties; and
- (k) include, as part of any award, the payment of interest at the Prime Rate from an appropriate date as determined by the Arbitrator.

The jurisdiction and powers referred to in this Section 4.12 shall be exercised at the discretion of the Arbitrator subject only to applicable Laws and the provisions of this Agreement.

4.13 Costs of Arbitration

Notwithstanding Section 9.1 [Indemnification by Design-Builder], Section 9.5 [Indemnification by the Province] and Section 9.6 [Limited Province Indemnities], or any other provision of this Agreement, each party shall bear its own costs of the process for resolution of the dispute by arbitration (including all legal fees and expenses). The Province and the Design-Builder shall share equally, and be responsible for their respective share of all costs of the Arbitrator, as and when due.

PART 5 COURT PROCEEDINGS

5.1 Court Proceedings

- (a) The Province or the Design-Builder may initiate a proceeding in a Court to resolve a dispute between the parties in the following circumstances:
 - (i) the circumstances set out in Section 4.2 [Initiation of Court Proceedings rather than Arbitration] of this Schedule; or
 - (ii) such party is appealing a decision of the Arbitrator in accordance with Section 4.11 [Limitation on Appeal of Arbitrator's Decision] of this Schedule.
- (b) Notwithstanding any other provision of this Schedule, no party shall be precluded from initiating a proceeding in a Court for the purpose of obtaining any emergency or provisional remedy to protect its rights that may be necessary and that is not otherwise available under this Agreement, including temporary and preliminary injunctive relief and restraining orders and the appointment of a receiver or receiver and manager or any remedy or relief as expressly contemplated by Sections 14.4(b)(ii) or 15.1(c).

**APPENDIX A
EXPERT REFEREE AGREEMENT**

BETWEEN:

**[NAME AND ADDRESS OF EXPERT REFEREE]
(the “Expert Referee”)**

AND:

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH
COLUMBIA
(the “Province”)**

AND:

**KICKING HORSE CANYON CONSTRUCTORS (GP)
(the “Design-Builder”)**

We write to confirm your appointment as an Expert Referee under the Design-Build Agreement (the “**Design-Build Agreement**”) dated November 6, 2019 among the Province, BC Transportation Financing Authority and the Design-Builder. The terms of your appointment are as contained in Part 2 [Referral to Expert Referee] of Schedule 16 to the Design-Build Agreement.

We confirm our agreement for you to review the Dispute(s) described in the Dispute Notice in accordance with the provisions of the Design-Build Agreement, and to perform the functions of an Expert Referee as described in Part 2 [Referral to Expert Referee] of Schedule 16 to the Design-Build Agreement. A copy of the Design-Build Agreement and related materials will be forwarded to you shortly.

We confirm that your daily/hourly rate for fees is \$• **[Insert applicable rate]**. In addition to your invoiced fees, the Province will pay any and all reasonable disbursements incurred in providing your services.

Please submit your invoices on a monthly basis directly to • **[Insert name of Province’s Representative]** (the “**Province’s Representative**”). The Province will make payment within 30 calendar days of receipt.

Please confirm your agreement to the terms as set out in this letter by signing a copy of the enclosed letter and returning it to the Province’s Representative.

Yours truly,

Authorized Signatory of the Province

Date

Authorized Signatory of the Design-Builder

Date

Expert Referee

Date

**APPENDIX B
EXPERT PANEL MEMBER AGREEMENT**

BETWEEN:

**[NAME AND ADDRESS OF EXPERT PANEL MEMBER]
(the “Expert Panel Member”)**

AND:

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH
COLUMBIA
(the “Province”)**

AND:

**KICKING HORSE CANYON CONSTRUCTORS (GP)
(the “Design-Builder”)**

We write to confirm your appointment as an Expert Panel member under the Design-Build Agreement (the “**Design-Build Agreement**”) dated November 6, 2019 among the Province, BC Transportation Financing Authority and the Design-Builder. The terms of your appointment are as contained in Part 3 [Referral to Expert Panel] of Schedule 16 to the Design-Build Agreement.

We confirm our agreement for you to review the Dispute(s) described in the Dispute Notice in accordance with the provisions of the Design-Build Agreement, and to perform the functions of an Expert Panel member as described in Part 3 [Referral to Expert Panel] of Schedule 16 to the Design-Build Agreement. A copy of the Design-Build Agreement and related materials will be forwarded to you shortly.

We confirm that your daily/hourly rate for fees is \$• [Insert applicable rate]. In addition to your invoiced fees, the Province will pay any and all reasonable disbursements incurred in providing your services.

Please submit your invoices on a monthly basis directly to • [Insert name of Province’s Representative] (the “**Province’s Representative**”). The Province will make payment within 30 calendar days of receipt.

Please confirm your agreement to the terms as set out in this letter by signing a copy of the enclosed letter and returning it to the Province’s Representative.

Yours truly,

Authorized Signatory of the Province

Date

Authorized Signatory of the Design-Builder

Date

Expert Panel Member

Date

**SCHEDULE 17
RECORDS AND REPORTS**

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**PART 1
RECORDS**

1.1 Design-Builder Records

The Design-Builder shall produce, maintain and update in accordance with this Agreement and the Records Management Protocol all records (collectively, the “**Records**”) required by this Agreement (including by Good Industry Practice) to be produced, maintained and updated by the Design-Builder, including all records specified or referred to in the Project Requirements or otherwise in connection with the Project, the Project Work, the Project Infrastructure and the Project Site.

1.2 Management of Records

- (a) The requirements set out in this Schedule and the Records Management Protocol include the minimum requirements to be complied with, and are without prejudice to any Laws or Good Industry Practice which require the keeping of specified Records for a longer period or the production and maintenance of additional Records.
- (b) All Records produced and maintained by the Design-Builder in accordance with this Agreement must be accurate, complete, legible, readily identifiable, readily retrievable, reliable, authentic, secure and in English.
- (c) The financial Records produced and maintained by the Design-Builder in accordance with this Agreement must provide sufficient detail to identify all revenue and expenditures in respect of the Project on a gross basis.
- (d) The text of all documents shall be prepared and recorded using software systems agreed to by the Province.
- (e) The Design-Builder shall comply promptly and at its expense with:
 - (i) all Laws relating to information, records and other documentation relating to or acquired, obtained or produced in connection with the Project, the Project Work, the Project Infrastructure or the Project Site or any part thereof; and
 - (ii) all requests or requirements of the Province from time to time for the purpose of enabling the Province or any other Governmental Authority to comply with its obligations under any Laws relating to information, records and other documentation relating to or acquired, obtained or produced in connection with the Project, the Project Work, the Project Infrastructure or the Project Site or any part thereof.
- (f) The Design-Builder, the Province and BCTFA shall cooperate to develop documentation to support each party’s compliance requirements under Laws, including the *Excise Tax Act* (Canada).
- (g) The Design-Builder shall maintain proper, accurate and complete financial accounts and records, including Subcontracts, invoices, statements, receipts and vouchers, and supporting documentation, in respect of the Project and all expenditures related to the Project, and shall permit the Province, the Federal Government, the Auditor General of Canada and their designated representatives, to the extent permitted by Law, to at all times be permitted to inspect, review, copy and audit any records and accounts respecting

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the Project and to have reasonable and timely access to the Project Site and to any documentation relevant for the purpose of audit.

1.3 Records Management Protocol

PR1.3a

Within 90 days following the Effective Date, the Design-Builder shall submit to the Province's Representative, for acceptance, acting reasonably, in accordance with the Consent Procedure, an initial protocol (the "**Records Management Protocol**") which complies with all requirements set forth in this Agreement (including compliance with Good Industry Practice and Laws) and any other policies, requirements and information schedules approved under the *Information Management Act* (British Columbia) that would from time to time be applicable to the creation, maintenance, management, holding, transfer, retention, preservation and disposal of the Records if they were maintained by the Province, including that:

- (i) the Records Management Protocol must be consistent with and comply with the Design-Builder's Quality Management System and Quality Documentation and Schedule 7 [Quality Management];
- (ii) the Records Management Protocol shall set forth minimum retention periods consistent with Section 1.4 [Retention of Records] of this Schedule and otherwise satisfactory to the Province for each class of Records produced and maintained by the Design-Builder;
- (iii) the Records Management Protocol shall set forth records management practices and procedures sufficient to ensure that the Records are organized, classified and retained in formats that enable the Design-Builder to meet all of its obligations in respect of the management of the Records under this Agreement, including the requirements set out in Section 1.2 [Management of Records] of this Schedule;
- (iv) the Records Management Protocol shall include procedures (consistent with the Project Requirements and in accordance with Good Industry Practice) for backing-up and storage in safe custody of all Records that are generated by or maintained on a computer or in any other machine readable format;
- (v) the Design-Builder shall keep all Records in safekeeping in such a manner as to ensure the integrity of the Records and at a location within British Columbia that is satisfactory to and approved by the Province;
- (vi) any warehouse or other facility used to store Records must meet any storage and security standards established by the Province's Corporate Information and Records Management Office;
- (vii) notwithstanding any other terms of this Agreement, no Records shall be destroyed or otherwise disposed of without the express written consent of the Province or as authorized under an information schedule approved under the *Information Management Act* (British Columbia);
- (viii) any Records authorized for disposition shall be disposed of only in accordance with disposition standards for secure disposal established by the Province, the

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Ministry or by the Province's Corporate Information and Records Management Office;

- (ix) the Design-Builder shall ensure that there is a designated and appropriately qualified person at all times responsible for the management of the Records and for liaison with the Province in connection with all matters relating thereto;
- (x) the Design-Builder shall keep on the Project Site at all times during Construction one copy of all drawings for such Construction;
- (xi) the Design-Builder shall not sell, transfer or relocate any Records to the custody, physical or otherwise, of another jurisdiction, or person other than to the Subcontractors; and
- (xii) the Design-Builder shall not disclose any of the Records or contents thereof except subject to and in accordance with the provisions of this Agreement, including Section 17.1 [Confidentiality].

(b) The Design-Builder shall:

- (i) where necessary; and
- (ii) as otherwise required by the Province from time to time,

submit updates to the Records Management Protocol to the Province's Representative from time to time, for review, acting reasonably, in accordance with the Review Procedure to ensure that the Records Management Protocol continues to meet the requirements of this Part 1 and Good Industry Practice.

PR1.3c The Design-Builder shall comply with, and shall cause the Subcontractors to comply with, the Records Management Protocol, as submitted and updated from time to time in accordance with this Part 1, in connection with all Records maintained or required to be maintained under this Agreement.

1.4 Retention of Records

- (a) Without prejudice to any longer retention periods required under Laws (which shall be complied with by the Design-Builder), all Records shall be retained in accordance with the retention policies of the Province, Good Industry Practice and Laws, and in any event for no less than the following periods:
 - (i) all as-built drawings shall be retained for at least seven years after the Total Completion Date; and
 - (ii) all Records relating to the subject matter of any dispute between the parties must be retained for at least seven years after the resolution of such dispute.
- (b) Where the required period set out in the Records Management Protocol for the retention of any Records has expired, the Design-Builder shall notify the Province as to what it intends to do with such Records. If the Design-Builder intends then or subsequently to dispose of such Records, the Design-Builder shall so notify the Province and, if the

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Province elects within 40 days of receipt of notice from the Design-Builder to receive such Records or any part thereof, then the Design-Builder, at its own cost, shall deliver such Records to the Province in the manner and at such location in British Columbia as the Province specifies.

1.5 Procedure on Termination

- (a) As and when required by Section 14.8(a)(vii), the Design-Builder shall, at its own cost, deliver up to the Province, in the manner and at such location in British Columbia as the Province specifies, such Records as are in existence at the Termination Date or, where any such Records are required by Law to remain with the Design-Builder, copies thereof.
- (b) The Province, so long as it retains possession thereof, shall allow the Design-Builder to inspect all Records delivered to the Province pursuant to Section 1.5(a) of this Schedule on reasonable notice.

1.6 Province Access to Records

PR1.6a The Design-Builder shall provide live, internet-based access to all current, up-to-date Records (with the exception only of financial records) to the Province, the Province's Representative and the Province's authorized representatives. The means by which such access is provided shall enable efficient "read-only" access to and retrieval of specific records when performing record searches.

- (b) All Records shall be kept in good order and in such form as to be capable of audit and inspection (including by electronic means to the extent that such Records were delivered by the Province or otherwise are maintained in an electronic format) by the Province. the Design-Builder shall make all Records available at all reasonable times for audit or inspection by or on behalf of the Province, the Province's Representative, BCTFA or any of the Province's authorized representatives.

1.7 Copies

The Province, BCTFA and the Province's Representative and any of their authorized representatives shall be entitled to take copies of the Records or any part thereof at the Design-Builder's cost and for that purpose to use such copying facilities as are maintained at the place where the Records are kept.

PART 2 REPORTS AND INFORMATION

2.1 Required Reports

The Design-Builder shall submit to the Province, in accordance with this Agreement, all reports (collectively, the "**Reports**") provided for or specified in or required under the provisions of this Agreement and the Project Requirements.

2.2 Number and Time

All Reports shall be submitted in such number and by such times as required by this Agreement or the applicable Project Requirements or, where no such number or time is so specified, in such number and by such time as may be reasonably required by the Province.

2.3 Form

- (a) Unless otherwise specified in this Agreement, including the applicable Project Requirements, the Reports shall be in such form as reasonably required by the Province or, where a Report is required to be submitted periodically, in the same form as such Report was previously submitted until otherwise required by the Province.
- (b) At the request of the Province, each Report shall be accompanied by a copy of such Report or any part thereof for electronic storage in such form and compatible with such software as the Province reasonably requires.

2.4 Further Information

The Design-Builder shall at any time and from time to time at its own cost provide the Province with such further or other information with respect to the Project, the Project Work, the Project Infrastructure and the Project Site as the Province may reasonably require.

2.5 Objections to Reports

- (a) If the Province considers that any Report either has not been compiled in accordance with the provisions of this Agreement or has been based on erroneous information or data, then the Province may serve a notice objecting to such Report on the Design-Builder within 30 days of receipt of such Report.
- (b) If any objection under Section 2.5(a) of this Schedule has not been resolved by agreement between the Province and the Design-Builder within 14 days after the service of such notice, then either of the Province or the Design-Builder may refer the matter to the Dispute Resolution Procedure for determination.

2.6 Revisions to Reports

If the resolution (whether by agreement or determination under the Dispute Resolution Procedure) of any objection made by the Province pursuant to Section 2.5(a) of this Schedule requires any revision or adjustment to any Report, then the Design-Builder shall as soon as practicable issue revised versions of each affected Report and such revised Report shall for all purposes of this Agreement take the place of the original Report.

2.7 Tax Verification Letter

At any time and from time to time upon the Province's request, the Design-Builder shall provide current tax verification letters issued by the Province of British Columbia's Ministry of Finance verifying that the Design-Builder and each of the Partners meets its applicable British Columbia corporate income tax filing obligations and provincial sales tax filing and payment obligations.

**SCHEDULE 18
INTERFACE REQUIREMENTS**

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PART 2 INTERFACE COMMITTEE 2

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**PART 1
INTERFACE REQUIREMENTS**

1.1 Definitions

In this Schedule:

- (a) “**Concessionaire Parties**” means any subcontractors and their respective representatives involved in the Concession Project and, as applicable in the context, their respective directors, officers and employees, and any other person for whom they are respectively responsible under the Concession Agreement or under Law;
- (b) “**Concession Project**” has the meaning given to “Project” in the Concession Agreement; and
- (c) “**Interface Committee**” has the meaning given in Section 2.1 of this Schedule.

1.2 Interface Requirements

The Design-Builder shall at its expense comply with, observe, satisfy and perform all of the obligations and requirements of the Design-Builder set out in this Schedule (the “**Interface Requirements**”).

1.3 Review of Concession Agreement

The Design-Builder acknowledges and agrees that it has reviewed and understands the terms and conditions of the Concession Agreement and the obligations of the Concessionaire thereunder (including the modifications to those obligations resulting from the carrying out of the Project Work by the Design-Builder) as it relates to the Project Site and any possible overlap of responsibilities with the Design-Builder under this Agreement.

1.4 Cooperation

The Design-Builder will, and will cause any Subcontractor and any other person for whom the Design-Builder is responsible in law to, cooperate with the Concessionaire and the Concessionaire Parties in a commercially reasonable manner in the performance of the Design-Builder’s obligations under this Agreement, with such cooperation to include:

- (a) cooperation and coordination with the Concessionaire’s obligations under the Concession Agreement;
- (b) providing such access to the Concessionaire and any Concessionaire Party to the Project Site as may be reasonably necessary for the Concessionaire to fully perform its obligations under the Concession Agreement, subject to and in accordance with the health and safety procedures established by the Design-Builder pursuant to Section 4.13 [Health and Safety Program] and Section 4.14 [Design-Builder’s Occupational Health and Safety Obligations] for the time being in force in relation to the relevant parts of the Project Site, and which health and safety procedures will be provided to the Concessionaire; and

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- (c) providing such information or access that may be requested by the Province at the reasonable request of the Concessionaire in connection with the Concessionaire's obligations under the Concession Agreement.

1.5 No Interference or Obstruction

The Design-Builder shall not:

- (a) materially interfere with, obstruct, impede or delay the Concessionaire or any Concessionaire Party in the performance of the Concessionaire's obligations under the Concession Agreement; or
- (b) permit any act or omission on either its part or the part of any Subcontractor or any other person for which it is in law responsible which will, or would reasonably be expected to, contribute to, cause or constitute a breach by the Concessionaire of the Concession Agreement, or lead to any diminution or loss of any of the Concessionaire's rights or entitlements under the Concession Agreement.

1.6 Changes to Project Schedule

The Design-Builder shall keep the Interface Committee informed of all material changes to the Project Schedule, including changes to the Substantial Completion Target Date.

PART 2 INTERFACE COMMITTEE

2.1 Goals of Interface Committee

The Province, the Design-Builder and the Concessionaire shall establish and maintain, until the Total Completion Date, a committee (the "**Interface Committee**") with the goals of:

- (a) minimizing interference and disruption with the Design-Builder's and the Concessionaire's respective obligations under this Agreement and the Concession Agreement; and
- (b) informally addressing any possible disputes arising among the Province, the Design-Builder and the Concessionaire from time to time.

2.2 Establishment of Interface Committee

The Interface Committee shall be established as follows:

- (a) The Interface Committee shall be established by the Province, the Design-Builder and the Concessionaire within 30 days of the Effective Date.
- (b) The Interface Committee shall be comprised of three individuals, being one representative (each, a "**Representative**") from each of the Province, the Design-Builder and the Concessionaire, and each of which shall appoint a primary Representative and an alternate Representative to serve on the Interface Committee when the primary representative is unavailable for any reason.

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- (c) Both the primary and the alternate Representative of each of the Province, the Design-Builder and the Concessionaire may, but shall not be required to, attend any meeting of the Interface Committee, provided that, for the purposes of quorum and any actions or decisions to be taken at such meeting, if both the primary and the alternate Representative attend a particular meeting, only the primary Representative shall be deemed to be present.
- (d) The Representatives shall select a chairman (the “**Chairman**”) from among themselves from time to time, who shall have the duties and obligations as may be specified by the Interface Committee.
- (e) One Representative of each of the Province, the Design-Builder and the Concessionaire shall make reasonable efforts to attend all meetings of the Interface Committee. If any Representative is routinely absent, he or she shall be replaced by the applicable party that appointed such Representatives upon the request of the other Representatives.
- (f) The Interface Committee shall meet monthly to discuss the progress of the Project Work and any other matters raised by any of the Province, the Design-Builder or the Concessionaire. During Construction, such meetings shall be in person in or near Golden, British Columbia or as agreed to by the parties.
- (g) Additional meetings of the Interface Committee may be held at the request of any Representative, provided that at least two Business Days’ prior notice in writing of such meeting shall be given to each other Representative unless the requirement for such notice is expressly waived in writing by such other Representatives or such other Representatives attend the meeting and do not object to the absence of such required notice. Unless otherwise agreed to by the Representatives, each such notice shall be accompanied by a written agenda setting out in reasonable detail the matters to be discussed at the meeting together with any relevant supporting materials.
- (h) Except as otherwise provided for in the Agreement, the Interface Committee shall have the authority, by consensus approval of all Representative, to establish its own reasonable procedures for meetings, notices, minutes and all other matters necessary for efficient operation of the Interface Committee.
- (i) Minutes shall be kept of all meetings of the Interface Committee by the Design-Builder, which shall be approved by the Chairman and circulated to all Representatives within five Business Days of each meeting.
- (j) A quorum for a meeting of the Interface Committee shall be three Representatives, including one Representative of each of the Province, the Design-Builder and the Concessionaire. If a meeting is called and a quorum is not present, the meeting shall be adjourned for not less than 24 hours.

**SCHEDULE 19
CLOSING DELIVERIES**

In this Schedule, “certified” means that the relevant document is certified (for and on behalf of the relevant corporation or other entity and without personal liability) by an officer, director or authorized signatory of the relevant corporation or other entity as a true, complete and correct copy in full force and effect and unamended as of the date of the relevant certificate.

PART 1 DOCUMENTS TO BE DELIVERED BY THE DESIGN-BUILDER

The Design-Builder shall deliver each of the following documents in accordance with Section 2.17, in such form and substance as shall be satisfactory to the Province:

- (a) this Agreement executed by the Design-Builder;
- (b) the BCIB-Contractor Agreement executed by the Design-Builder, and each BCIB-Subcontractor Agreement required to be entered into by the Subcontractors as of the Effective Date in accordance with Section 1.4(a) of Schedule 21 [Community Benefits Requirements], each executed by the applicable Subcontractor;
- (c) the original Bonds;
- (d) [Not Used];
- (e) insurance binders, including the terms of the relevant policies, for the Required Insurance required to be taken out by the Design-Builder with effect from the Effective Date;
- (f) a certificate of an officer of each Partner certifying true copies of the following:
 - (i) all constating documents of the Design-Builder and such Partner;
 - (ii) incumbency of the officers of such Partner; and
 - (iii) all corporate and partnership action required to authorize the execution and delivery of all Project Documents to which the Design-Builder and such Partner is a party;
- (g) a British Columbia certificate of good standing or equivalent of the Design-Builder and each Partner and, for each such entity not formed in British Columbia, a certificate of good standing or equivalent of such entity from its jurisdiction of formation;
- (h) an opinion, addressed to the Province, of counsel to the Design-Builder and each Partner as to the formation, including due incorporation or formation, of the Design-Builder and each Partner, due authorization, execution and delivery on behalf of the Design-Builder by each Partner and by each Partner of all Project Documents to which the Design-Builder and each Partner is a party and the enforceability against the Design-Builder and each Partner of the terms of all Project Documents to which the Design-Builder is a party;
- (i) tax verification letters, valid as of the Effective Date, issued by the Province of British Columbia’s Ministry of Finance verifying that the Design-Builder and each Partner meets

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its applicable British Columbia corporate income tax filing obligations and provincial sales tax filing and payment obligations; and

- (j) such other documents as the parties may agree, each acting reasonably.

PART 2 DOCUMENTS TO BE DELIVERED BY THE PROVINCE AND BCTFA

The Province and BCTFA shall deliver each of the following documents in accordance with Section 2.17, in such form and substance as shall be satisfactory to the Design-Builder:

- (a) this Agreement, executed by the Province and BCTFA;
- (b) the BCIB-Contractor Agreement, and each BCIB-Subcontractor Agreement required to be entered into by the Subcontractors as of the Effective Date in accordance with Section 1.4(a) of Schedule 21 [Community Benefits Requirements], each executed by BCIB;
- (c) a certificate of fact of the Deputy Minister of Transportation and Infrastructure under the *Financial Administration Act* (British Columbia), including certification of the following:
- (i) Guarantees and Indemnities Regulation letter(s) from the Ministry of Finance regarding the indemnities provided by each of the Province and BCTFA under the Province Project Documents;
- (ii) a certificate of the Ministry of Transportation and Infrastructure pursuant to section 4 of the *Transportation Act* (British Columbia); and
- (iii) an Order in Council under the *Transportation Act* (British Columbia) authorizing BCTFA to enter into the Design-Build Agreement;
- (d) a certificate of an officer of BCTFA certifying a true copy of a resolution of the directors of BCTFA authorizing the execution and delivery by BCTFA of this Agreement;
- (e) a certificate of an officer of BCIB certifying a true copy of a resolution of the directors of BCIB authorizing the execution and delivery by BCIB of the BCIB-Contractor Agreement and each BCIB-Subcontractor Agreement required to be entered into by the Subcontractors as of the Effective Date in accordance with Section 1.3(a) of Schedule 21 [Community Benefits Requirements];
- (f) a notice appointing the Province' Representative pursuant to Section 1.1(a) of Schedule 2 [Representatives, Review Procedure and Consent Procedure]; and
- (g) such other documents as the parties may agree, each acting reasonably.

**SCHEDULE 20
WAIVER OF MORAL RIGHTS**

For good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged) I, _____ do agree and hereby irrevocably waive in favour of HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA (the “**Province**”), her servants, agents and employees, all of my moral rights (including but not limited to those established under the *Copyright Act* (Canada) as amended from time to time) *droits moraux*, and all similar rights arising pursuant to the laws of any country or at common law in any of the Project Intellectual Property including but not limited to the right to prevent distortion, mutilation or modification of the Project Intellectual Property, the right to prevent the Project Intellectual Property, any Modifications to Province Provided Materials or the Records from being used in association with a product, service cause or institution, and the right to have my name associated with the Project Intellectual Property, any Modifications to Province Provided Materials or the Records, and I will not make any claim against the Province, BC Transportation Financing Authority (“**BCTFA**”) or their respective servants, agents, employees or licensees with respect to these rights.

I further acknowledge and agree that the Province and BCTFA may license or assign the Project Intellectual Property, any Modifications to Province Provided Materials or the Records to third parties and agree that the preceding sentence will extend to all such parties, and their assignees and licensees.

Capitalized terms used and not defined herein shall have the meaning given to such terms in the Design-Build Agreement made as of November 6, 2020 among Kicking Horse Canyon Constructors (GP), the Province and BCTFA.

EXECUTED at _____, this _____ day of _____, _____

SIGNED AND DELIVERED BY

in the presence of:

(Witness)

Name:

**SCHEDULE 21
COMMUNITY BENEFITS REQUIREMENTS**

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Appendix A Form of BCIB-Contractor Agreement

**PART 1
COMMUNITY BENEFITS REQUIREMENTS**

1.1 Community Benefits Requirements

The Design-Builder shall at its expense comply with, observe, satisfy and perform all of the obligations and requirements set out in this Schedule (the “**Community Benefits Requirements**”).

1.2 Definitions

For the purposes of this Schedule:

- (a) “**Apprenticeship and Training Plan**” has the meaning given in the BCIB-Contractor Agreement;
- (b) “**Employees**” has the meaning given in the BCIB-Contractor Agreement;
- (c) “**Workplace Discrimination and Harassment Policy And Procedures**” has the meaning given in the BCIB-Contractor Agreement; and
- (d) “**Workplace Drug and Alcohol Policy And Procedures**” has the meaning given in the BCIB-Contractor Agreement.

1.3 BCIB-Contractor Agreement

The Design-Builder shall:

- (a) on or before the Effective Date, execute and deliver the BCIB-Contractor Agreement in the form attached as Appendix A to this Schedule; and
- (b) observe, perform and be bound by all the obligations contained in the BCIB-Contractor Agreement on the part of the “Contractor” thereunder to be observed and performed.

1.4 BCIB-Subcontractor Agreements

The Design-Builder shall cause:

- (a) on or before the Effective Date, each Subcontractor as of the Effective Date, other than a Subcontractor described in Section 1.5(b)(i) or (ii) of this Schedule to execute and deliver a BCIB-Subcontractor Agreement in the form attached as Schedule 4 to the BCIB-Contractor Agreement, subject only to variations in form required by BCIB, in its sole and absolute discretion, to suit the circumstances
- (b) during the Term, each other Subcontractor, other than a Subcontractor described in Section 1.5(b)(i) or (ii) of this Schedule, to execute and deliver a BCIB-Subcontractor Agreement in the form attached as Schedule 4 to the BCIB-Contractor Agreement, subject only to variations in form required by BCIB, in its sole and absolute discretion, to suit the circumstances; and
- (c) each Subcontractor that has executed and delivered a BCIB-Subcontractor Agreement in accordance with this Section, to observe, perform and be bound by all the obligations

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contained in the BCIB-Subcontractor Agreement on the part of the “Subcontractor” thereunder to be observed and performed.

1.5 Employees

- (a) The Design-Builder shall obtain from BCIB in accordance with the BCIB-Contractor Agreement all the Employees required by the Design-Builder to fulfill its obligations under this Agreement.
- (b) The Design-Builder shall not permit any Subcontractor to perform any Project Work at the Project Site, nor will the Design-Builder enter into, or permit any Subcontractor to enter into, any agreement with any other Subcontractor for the performance of any Project Work at the Project Site, unless and until such Subcontractor:
 - (i) confirms in writing to the Design-Builder, for delivery to BCIB pursuant to the BCIB-Contractor Agreement, that such Subcontractor will not require any Employees to be provided by BCIB, and BCIB agrees with such determination in accordance with the BCIB-Contractor Agreement;
 - (ii) is granted a permit pursuant to Article 8.400 of the Community Benefits Agreement; or
 - (iii) executes a BCIB-Subcontractor Agreement in accordance with Section 1.4 [BCIB-Subcontractor Agreements] of this Schedule to obtain from BCIB the Employees that such Subcontractor will require for the performance of its portion of the Project Work at the Project Site.

1.6 Apprenticeship and Training Obligations

The implementation by the Design-Builder of the Apprenticeship and Training Plan in accordance with the BCIB-Contractor Agreement, and compliance by the Design-Builder with all other applicable requirements in accordance with Laws, shall satisfy all apprenticeship and training obligations of the Design-Builder under this Agreement.

1.7 Workplace Anti-Discrimination and Harassment Obligations

The implementation by the Design-Builder of the Workplace Discrimination and Harassment Policy And Procedures in accordance with the BCIB-Contractor Agreement, and compliance by the Design-Builder with all other applicable requirements in accordance with Laws, shall satisfy all workplace anti-discrimination and harassment obligations of the Design-Builder under this Agreement.

1.8 Workplace Anti-Drug and Alcohol Obligations

The implementation by the Design-Builder of the Workplace Drug and Alcohol Policy And Procedures in accordance with the BCIB-Contractor Agreement, and compliance by the Design-Builder with all other applicable requirements in accordance with Laws, shall satisfy all workplace anti-drug and alcohol obligations of the Design-Builder under this Agreement.

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**PART 2
OTHER COMMUNITY BENEFITS MATTERS**

2.1 Changes to Community Benefits Agreement or Regime

The Province shall issue a Province Change, and the provisions of Part 7 [Province Changes and Design-Builder Proposals] will apply:

- (a) in the case of any amendment to the Apprenticeship and Training Plan, the Workplace Discrimination and Harassment Policy And Procedures or the Workplace Drug and Alcohol Policy And Procedures made after the Financial Submittal Date;
- (b) in the case of any amendment to the Community Benefits Agreement made after the Financial Submittal Date, except in the event that such amendment to the Community Benefits Agreement was requested or initiated by the Design-Builder or any of its Subcontractors; and
- (c) if it has been determined at any time after the Financial Submittal Date by the Province, or by a court of competent jurisdiction, without any further rights of appeal, that the Community Benefits Agreement does not, or will not continue to, apply to the Project.

**KICKING HORSE CANYON PROJECT – PHASE 4
DESIGN-BUILD AGREEMENT
SCHEDULE 21: COMMUNITY BENEFITS REQUIREMENTS**

*Commercial in Confidence
Execution*

**APPENDIX A
FORM OF BCIB-CONTRACTOR AGREEMENT**

See attached.

**BCIB-CONTRACTOR AGREEMENT
KICKING HORSE CANYON PROJECT PHASE 4**

BC INFRASTRUCTURE BENEFITS INC.

AND

AECON CONSTRUCTORS, A DIVISION OF AECON CONSTRUCTION GROUP INC.

AND

PARSONS INC.

AND

EMIL ANDERSON CONSTRUCTION (EAC) INC.

SEPTEMBER 18, 2020

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BCIB-CONTRACTOR AGREEMENT

THIS BCIB-CONTRACTOR AGREEMENT is made effective as of the 18th day of September, 2020

AMONG:

BC INFRASTRUCTURE BENEFITS INC., a company incorporated under the laws of British Columbia having its head office at Suite 1050 – 89 West Georgia Street, Vancouver, BC V6B 0N8 (“**BCIB**”)

AND:

AECON CONSTRUCTORS, A DIVISION OF AECON CONSTRUCTION GROUP INC. (“**Aecon**”)

AND:

PARSONS INC. (“**Parsons**”)

AND:

EMIL ANDERSON CONSTRUCTION (EAC) INC. (together with Aecon and Parsons, the “**Contractor**”)

WHEREAS:

- A. BCIB has entered into a Community Benefits Agreement dated the 17th day of July, 2018, as may be amended, supplemented or restated from time to time (the “**Community Benefits Agreement**”) with the Allied Infrastructure and Related Construction Council of British Columbia (the “**Council**”) which governs the terms and conditions of employment for Employees in respect of the Project;
- B. BCIB has entered into an agreement with the Owner made and dated for reference as of the 23rd day of May, 2019 whereby BCIB has, subject to the Community Benefits Agreement, the sole and exclusive right to provide Employees to contractors who will perform work or provide services at the Site in respect of the Project;
- C. The Owner and the Contractor have entered into the Construction Contract;
- D. The Construction Contract requires the Contractor to enter into this Agreement with BCIB;
- E. The Contractor requires Employees in order to fulfill its obligations under the Construction Contract; and
- F. The parties wish to enter into a formal contract for the provision of such Employees to the Contractor by BCIB.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the sum of One Hundred Dollars (\$100.00) now paid by each of the Contractor and BCIB to the other (the receipt of which sum by the Contractor and by BCIB is hereby irrevocably acknowledged) and of the mutual promises and agreements contained in this Agreement, the parties agree as follows:

1.0 DEFINITIONS AND INTERPRETATION

1.1 In this Agreement, except as otherwise expressly provided or unless the context otherwise requires, capitalized terms have the meanings set out in Schedule 1.

2.0 REPRESENTATIVES

2.1 Within two Business Days after the Effective Date, and thereafter from time to time as BCIB deems necessary, BCIB will designate one person (“**BCIB’s Representative**”), and an alternate in the event BCIB’s Representative is absent, to be BCIB’s single point of contact for the Contractor with respect to this Agreement. BCIB will, upon designating such person, advise the Contractor in writing of the name, address, telephone number and email address of BCIB’s Representative.

2.2 Within two Business Days after the Effective Date, and thereafter from time to time as the Contractor deems necessary, the Contractor will designate one person (the “**Contractor’s Representative**”), and an alternate in the event the Contractor’s Representative is absent, to be the Contractor’s single point of contact for BCIB with respect to this Agreement. The Contractor will, upon designating such person, advise BCIB in writing of the name, address, telephone number and email address of the Contractor’s Representative. If, at any time, BCIB’s Representative, acting reasonably, objects to the Contractor’s Representative, then the Contractor will replace the Contractor’s Representative with a person acceptable to BCIB’s Representative.

2.3 As soon as practicable after the Effective Date, and thereafter from time to time as may be necessary, BCIB’s Representative will advise the Contractor’s Representative of the name, address, telephone number and email address of the Council’s Representative.

2.4 The Contractor acknowledges that BCIB will have a presence on the construction Site. The parties will, within ten Business Days after the Effective Date, establish a system for ongoing communication and liaison for the purpose of ensuring the timely exchange of information that the parties agree is required for the effective coordination and implementation of this Agreement, including regular, active and open communication with respect to the Contractor’s requirements for Employees, information the Contractor already has in its possession with respect to individuals who may be available to become Employees and BCIB’s sourcing of Employees and its anticipated ability to fulfill Employee Requests.

3.0 OBLIGATION TO OBTAIN EMPLOYEES

- 3.1 The Contractor will obtain from BCIB all Employees required by the Contractor to fulfill its obligations under the Construction Contract.
- 3.2 Notwithstanding the powers expressly delegated by this Agreement to the Contractor by BCIB, all Employees provided to the Contractor by BCIB will be employed by BCIB, and BCIB will retain, with respect to all such Employees, the exclusive rights as employer in all aspects of labour relations and in all aspects of the employment relationship. The Contractor will not in any way derogate or attempt to derogate from the rights and authority of BCIB as employer.

4.0 OBTAINING EMPLOYEES

- 4.1 The Contractor will participate in any pre-job conference(s) arranged by BCIB, and will present, after collaboration with BCIB and the Council, details of the Work, including schedule, work type and anticipated numbers and Job Classifications of Employees.
- 4.2 Pursuant to the Enabling Agreement entered into between BCIB and the Council dated May 14, 2020 (which agreement will be subsumed within the Kicking Horse Canyon Project Phase 4 sub-Appendix to the Project Definition: Trans Canada #1 – Kamloops to Alberta Border 4-Laning Project Appendix of the Community Benefits Agreement) (the “**Enabling Agreement**”), BCIB is entitled to ‘name hire’ Employees to perform the Rock Slope Work (as defined in the Enabling Agreement) above the number of ‘name hires’ provided for in the Community Benefits Agreement (such additional ‘name hires’, the “**Rock Slope Name Hires**”). BCIB hereby delegates the ability to ‘name hire’ all Rock Slope Name Hires to the Contractor to further delegate as the Contractor considers appropriate among itself and its Applicable Subcontractors. The Contractor acknowledges the provisions of Section 2(d) (to become Section 1(d)) of the Enabling Agreement and will work collaboratively with BCIB, and in accordance with Section 2.4, to establish a method by which to implement the provisions of Section 2(d) (to become Section 1(d)) of the Enabling Agreement, including determining which of the Contractor and its Applicable Subcontractors shall be subject to the described reduction in ‘name hires’.
- 4.3 The Contractor will, on no less than a monthly basis, provide to BCIB’s Representative a written report identifying all entities that have been delegated the ability to ‘name hire’ Rock Slope Name Hires as described in Section 4.2.
- 4.4 The Contractor will provide the following forecasts and requests:
- (a) *Six Month Forecast.* The Contractor will, no later than five Business Days after the Effective Date, provide to BCIB’s Representative:
 - (i) the Contractor’s best estimate of the anticipated Employees that will be required by the Contractor and all of the Applicable Subcontractors for the first six months of the Work, giving estimates of the numbers and Job

Classifications of Employees that will be required on a month-by-month basis; and

- (ii) the Contractor's then current overall Work schedule, including Primavera P6 data files in both XER and XML formats, that includes manpower resource loading that the Contractor anticipates will be utilized by the Contractor and all of the then known Applicable Subcontractors for the performance of the Work.
- (b) *Three Month Forecast.* The Contractor will, on the first Business Day of each month starting with the second month after the Effective Date, provide to BCIB's Representative:
- (i) the Contractor's best estimate of the anticipated Employees that will be required by the Contractor and all of the Applicable Subcontractors for the then current month and the next following two months of the Work, giving details of the numbers and Job Classifications of Employees required on a month-by-month basis; and
 - (ii) the Contractor's then current overall Work schedule, including Primavera P6 data files in both XER and XML formats, that includes manpower resource loading that the Contractor anticipates will be utilized by the Contractor and all of the then known Applicable Subcontractors for the performance of the Work.
- (c) *Employee Request.* The Contractor will, from time to time during the term of this Agreement but in any event not later than 30 days prior to the date that the Contractor requires certain Employees, provide to BCIB's Representative a request for Employees (each, an "**Employee Request**") in the form and format required by BCIB, and setting out the following information:
- (i) the number and Job Classifications of Employees required by the Contractor;
 - (ii) the 'name hires' requested by the Contractor (the "**CBA Name Hires**");
 - (iii) to the extent the Contractor has retained the ability to 'name hire' Rock Slope Name Hires as described in Section 4.2, the Rock Slope Name Hires requested by the Contractor;
 - (iv) the names of prospective Employees the Contractor wishes to name request from the information provided pursuant to Section 4.9 or from other information that may be available to the Contractor;
 - (v) the number and type of apprentices requested by the Contractor;
 - (vi) the date upon which each such Employee will be required to commence working under the direction of the Contractor;

- (vii) the Contractor's best estimate of the time period each such Employee will be required by the Contractor;
 - (viii) the details of any special experience or technical or other qualifications required in respect of any particular Employee;
 - (ix) the intended work assignments in compliance with Article 6 of the Community Benefits Agreement; and
 - (x) such other relevant information with respect to potential Employees as BCIB's Representative may reasonably request (and which the Contractor possesses and is legally permitted to disclose), or that the Contractor may consider beneficial, in order to enable BCIB to provide the Employees required by the Contractor.
- (d) The parties agree that the forecasts provided pursuant to Section 4.4(a) and Section 4.4(b) are non-binding and are estimates only, but that such forecasts will be used by BCIB to source an appropriate workforce for the Project in collaboration with the Contractor.
- 4.5 BCIB will, in accordance with the dispatch provisions of the Community Benefits Agreement, including Articles 8.200, 8.600 and 9.100 of the Community Benefits Agreement, and subject to the minimum time period described in Section 4.7 where applicable, use reasonable efforts to provide the Contractor with Employees to perform the Work in the numbers and Job Classifications set out in the Employee Request submitted pursuant to Section 4.4(c) to the extent that BCIB is itself able to obtain Employees in such numbers and Job Classifications.
- 4.6 Unless:
- (a) the CBA Name Hires have already been provided or committed by BCIB to another contractor or they are unavailable due to circumstances beyond BCIB's control, in each case at the time of the Employee Request, BCIB will provide the CBA Name Hires to the Contractor in accordance with the dispatch provisions of the Community Benefits Agreement; and
 - (b) the Rock Slope Name Hires have already been provided or committed by BCIB to another contractor or they are unavailable due to circumstances beyond BCIB's control, in each case at the time of the Employee Request, and provided that the Contractor has retained the ability to 'name hire' Rock Slope Name Hires as described in Section 4.2, BCIB will provide the Rock Slope Name Hires to the Contractor.
- 4.7 If, due to unforeseen circumstances related to the timing of the performance of the Work or a component of the Work, the Contractor is not able to provide an Employee Request which provides for the 30 day time period described in Section 4.4(c), the Contractor acknowledges that, despite any request for Employees to be provided by a certain date,

BCIB requires a minimum of three Business Days prior written notice of the date upon which the Contractor requires an Employee or Employees to commence performance of the Work in order to be able to provide the requested Employee(s).

4.8 In the case of:

- (a) an Employee Request submitted in accordance with Section 4.4(c), BCIB will advise the Contractor as soon as practicable but in any event not later than 21 days prior to the date that the Contractor requires Employees as set out in a particular Employee Request if BCIB is unable to fulfill such particular Employee Request; and
- (b) an Employee Request submitted pursuant to Section 4.7, BCIB will advise the Contractor as soon as practicable if BCIB is unable to fulfill such particular Employee Request.

If BCIB advises the Contractor that BCIB is unable to fulfill a particular Employee Request, the Contractor will provide information already in the possession of the Contractor with respect to individuals who may be available to become Employees, who are suitable for performing the Work and who, if hired by BCIB as Employees, could allow BCIB to fulfill the Employee Request. Unless such identified individuals refuse to become Employees, or have already been provided or committed by BCIB to another contractor, or such individuals are unavailable due to circumstances beyond BCIB's control, in each of the latter two cases at the time the information is provided to BCIB, BCIB will provide such identified individuals to the Contractor. Any failure to so advise the Contractor, or any indication that BCIB will be able to or unable to fulfill a particular Employee Request, does not derogate from or negate any of the provisions of Section 22.0.

4.9 BCIB will promptly provide to the Contractor's Representative information that BCIB:

- (a) has in its possession which relates to work task or activity accommodations that are to be made in respect of the Employees provided to the Contractor by BCIB; and
- (b) receives from the Affiliated Unions with respect to prospective Employees that may be available to work on the Project for the purpose of the Contractor name requesting prospective Employees from the Affiliated Unions.

4.10 The Contractor will, if and when requested by BCIB's Representative from time to time, provide one representative of the Contractor to assist in the interviewing of individuals who are proposed to be hired by BCIB for subsequent assignment to the Contractor.

5.0 EMPLOYEE RELATIONS

5.1 To the extent necessary to enable the Contractor to perform its obligations under this Agreement, BCIB does hereby delegate to the Contractor, consistent with the provisions of Article 7.400 of the Community Benefits Agreement, BCIB's right to operate, direct

and supervise on a day-to-day basis the Employees provided to the Contractor by BCIB. For certainty, but without limiting the foregoing, the Contractor, pursuant to the delegation provided by this Section 5.1, has the authority:

- (a) to assign work tasks and activities to such Employees and to reassign such Employees to other work tasks and activities;
- (b) to issue warnings to Employees as described in Section 8.2; and
- (c) to require such an Employee to cease performing work or vacate the Site or to report to BCIB's Representative for further action by BCIB, or all of the foregoing.

5.2 The Contractor will, with respect to the Employees provided to the Contractor by BCIB:

- (a) be solely responsible for the operation, direction and supervision of the Employees pursuant to the delegation of such responsibility in accordance with Section 5.1;
- (b) be solely responsible for the performance of the Work by the Employees;
- (c) promptly advise BCIB's Representative in writing of any requested changes in the status of any Employee, including any changes which may be necessitated by changes in work assignment, completion of work, lack of work or absence of the Employee from the Work for whatever reason;
- (d) give full consideration to a request from BCIB to transfer an Employee from the Contractor to another entity which has a contract with BCIB, recognizing that, pursuant to Article 7.600 of the Community Benefits Agreement, any such transfer will require the agreement of the appropriate Affiliated Union, the contractors involved, the Employee and BCIB;
- (e) promptly upon receipt of a written request from BCIB's Representative, provide BCIB's Representative with such information and documents relating to the Employees who are under the direction of the Contractor as BCIB may from time to time require;
- (f) comply with any instruction which may be given by BCIB or BCIB's Representative with respect to the Job Classifications of any Employee to be used with respect to any type of Work;
- (g) not use or seek to use any full-time Employee for anything other than performing the Work;
- (h) not do anything which could cause and will not direct a lockout of Employees;
- (i) recognize the Council's Representative and any Affiliated Union's representative and, provided reasonable written notice has been provided to the Contractor's

Representative, provide such representatives access to all parts of the Site as may be necessary for the administration and application of the Community Benefits Agreement. All such representatives will be required to comply with the health and safety protocols for attendance on the Site as required by the applicable designated “prime contractor” under the *Workers Compensation Act* (British Columbia);

- (j) to the extent necessary to reflect Work-specific and Site-specific matters, provide orientation to Employees that is required by the Community Benefits Agreement and applicable law on the following topics:
 - (i) general matters, including, at a minimum, Site orientation and a discussion of housekeeping, environmental stewardship and cultural awareness; and
 - (ii) occupational health and safety matters, including health and safety training and health and safety-related skills training; and
- (k) to the extent necessary and applicable to the Contractor or the performance of the Work, comply with and give effect to the results of negotiations and any rulings, interpretations, orders and decisions made in labour relations matters of which BCIB notifies the Contractor’s Representative and that relate to the Employees.

5.3 BCIB will:

- (a) provide to each Employee to be provided to the Contractor:
 - (i) two hours of onboarding training;
 - (ii) a maximum of 10 hours of introductory safety training; and
 - (iii) for each supervisor (including any Employee who will be supervising other Employees for safety), a maximum of two days of supervisor training,such training to be provided either prior to the date upon which the Employee will be required to commence working under the direction of the Contractor, or immediately upon the Employee commencing work under the direction of the Contractor, at the election of the Contractor;
- (b) notify the Contractor in writing of any change under the Community Benefits Agreement, including changes to:
 - (i) initiation fees or dues, or of assessments by the Affiliated Unions;
 - (ii) steward appointments;
 - (iii) hourly wage rates and trade provisions; and

- (iv) new or revised Job Classifications and associated wage rates and trade provisions;
 - (c) acting in the best interests of the Project and to uphold the spirit and intent of the Community Benefits Agreement, enforce its rights under the Community Benefits Agreement, it being acknowledged that it is in the mutual best interest of BCIB and the Contractor to prevent and resolve strikes, lockouts, slowdowns or other interruptions in the orderly performance of the Work;
 - (d) seek input from the Contractor regarding and will act in good faith in all labour relations matters which are relevant to the Contractor, including in grievance, arbitration and jurisdictional proceedings, including in the settlement of such proceedings, it being acknowledged that it is in the mutual best interest of BCIB and the Contractor to prevent strikes, lockouts, slowdowns or other interruptions in the orderly performance of the Work;
 - (e) keep the Contractor's Representative informed of the results of any negotiations and any rulings, interpretations, orders and decisions made in labour relations matters which are relevant to the Contractor so that the Contractor may, to the extent necessary and applicable to the Contractor or the performance of the Work, comply with and give effect to any such results and rulings, interpretations, orders and decisions; and
 - (f) provide the Contractor with any and all Employee information which is required by the Contractor in order for the Contractor to fulfill its duties and responsibilities at law.
- 5.4 The Contractor may implement an employee appreciation and/or recognition program to supplement the wages paid to Employees under the Community Benefits Agreement or to recognize the performance of Employees, provided that any such system is consented to in writing by BCIB, in its discretion, prior to its implementation and which system may require the approval or consent of the Council.

6.0 COMMUNITY BENEFITS AGREEMENT

- 6.1 A true copy of the Community Benefits Agreement has been made available to the Contractor. The Contractor represents and warrants it has full knowledge of and understands the provisions of the Community Benefits Agreement.
- 6.2 The Contractor acknowledges that for all purposes of this Agreement any reference to the Community Benefits Agreement will include all amendments to, supplements to or restatements of the Community Benefits Agreement, and will include all agreements entered into between BCIB and the Council as contemplated by Article 24 of the Community Benefits Agreement.
- 6.3 Unless otherwise expressly modified by the terms of this Agreement, the Contractor, in performing its obligations under this Agreement and to fulfill its obligations under the

Construction Contract, will give effect to, and will observe, comply with and perform all terms and conditions of the Community Benefits Agreement that are specified to apply to the Contractor as a “Contractor” (as that term is used in the Community Benefits Agreement), as well as all consequent functions, obligations and responsibilities that are associated with such terms and conditions.

- 6.4 The Contractor, on behalf of BCIB, will give effect to, and will observe, comply with and perform all of BCIB’s functions, obligations and responsibilities described in the provisions of the Community Benefits Agreement set out in Schedule 2, as well as all consequent functions, obligations and responsibilities that are associated with such terms and conditions.
- 6.5 The Contractor will not act in any way which may obstruct, interfere with or impede BCIB’s ability to observe, comply with and perform each and every provision of the Community Benefits Agreement.
- 6.6 The Contractor will perform such acts and do such things, including attending meetings, whether or not with the Council, as BCIB may from time to time reasonably require in order to permit BCIB to perform its obligations under and to comply with the Community Benefits Agreement.
- 6.7 The Contractor acknowledges BCIB’s authority to act on behalf of the Contractor in all matters related to the interpretation, application, administration or alleged violation of the Community Benefits Agreement, including BCIB’s sole responsibility for discussing, resolving or arbitrating any grievance that may arise under the Community Benefits Agreement. BCIB will keep the Contractor informed of, involve the Contractor in and seek input from the Contractor regarding such matters, including in the settlement of such matters, to the extent those matters are relevant to the Contractor or the performance of the Work.

7.0 PAYROLL

- 7.1 Whenever required by BCIB, the Contractor will provide to BCIB payroll administration support by providing information reasonably requested by BCIB in the form and format required by BCIB. Such information will include recruitment information, hours of work schedules, timesheets, change of status requests and termination information, and any other information deemed necessary by BCIB. If requested by BCIB’s Representative, the Contractor will review and approve the timesheets prior to submitting them to BCIB.
- 7.2 BCIB will prepare and deliver an invoice (each, a “**Payroll Invoice**”) to the Contractor for each pay period. The Payroll Invoice will set out the amount owing by the Contractor to BCIB (the “**Payroll Amount**”) in respect of:
 - (a) all amounts required by the Community Benefits Agreement (to the extent each is applicable to the Project):

- (i) to be paid to Employees provided to the Contractor by BCIB during the applicable pay period. For clarity, the Contractor will be responsible for amounts to be paid to Employees in respect of the time Employees are being trained by BCIB as described in Section 5.3(a); and
- (ii) to be paid to third parties other than the Employees provided to the Contractor by BCIB based on the number of hours worked by the Employees provided to the Contractor by BCIB, such as the Funds described in Article 13.200 of the Community Benefits Agreement;
- (b) all applicable payroll taxes and assessments, including Employment Insurance, Canada Pension Plan, and Employer Health Tax; and
- (c) all other applicable taxes.

Promptly upon receipt of a Payroll Invoice, the Contractor will review the Payroll Invoice against the Contractor's records and advise BCIB's Representative of any necessary changes. If any changes to a Payroll Invoice are necessary, BCIB will endeavour to revise and reissue the Payroll Invoice in sufficient time to allow the Contractor to comply with Section 7.3. If there is not sufficient time, BCIB will capture the necessary changes on the next issued Payroll Invoice.

- 7.3 The Contractor will pay to the account specified in the Payroll Invoice the Payroll Amount no later than five Business Days after receipt of each initial Payroll Invoice.
- 7.4 If BCIB delivers Employee payroll cheques or payslips, or both, to the Contractor's Representative, the Contractor will promptly distribute such documents to the applicable Employees.
- 7.5 In the event that an Employee or other person or authority on behalf of such Employee was overpaid by BCIB, BCIB and the Contractor will cooperate to obtain repayment of such overpaid amount from such Employee or other person or authority who received such overpayment, and amounts recovered will be credited to the Contractor on the next applicable Payroll Invoice.
- 7.6 The Contractor will remit to WorkSafeBC the WorkSafeBC assessments calculated by the Contractor on each payroll, at the rate or rates which are applicable to the Contractor according to the classification and rates determined by WorkSafeBC. The rate or rates will be applied to the applicable gross amounts earned in accordance with the *Workers Compensation Act* (British Columbia).

8.0 DISCIPLINE, DISMISSAL, REINSTATEMENT AND TERMINATION OF EMPLOYMENT

- 8.1 The Contractor acknowledges the provisions of Article 10 of the Community Benefits Agreement and agrees to give effect to, and to observe, comply with and perform the terms and conditions set out in that Article.

8.2 Notwithstanding anything to the contrary contained in this Agreement, the Contractor will be permitted to issue warnings to the Employees provided to the Contractor by BCIB. As soon as practicable after issuing a warning, the Contractor's Representative will notify BCIB's Representative in writing providing details of the warning.

8.3 Without limiting the Contractor's abilities as described in Section 5.1 and Section 8.2, if and whenever:

- (a) BCIB has knowledge of any conduct of an Employee who is under the direction of the Contractor which would justify discipline, dismissal or the taking of other corrective or rehabilitative action in respect of such Employee, whether it be for incompetence, insubordination, unreliability or otherwise; or
- (b) the Contractor's Representative recommends to BCIB that an Employee be disciplined or dismissed or that other corrective or rehabilitative action be taken in respect of an Employee, whether it be for incompetence, insubordination, unreliability or otherwise,

BCIB will, in its sole and absolute discretion:

- (c) take no action where the circumstances do not support the application of discipline or the taking of other corrective or rehabilitative action; or
- (d) promptly discipline or take such other corrective or rehabilitative action in respect of such Employee as the situation requires; or
- (e)
 - (i) promptly remove such Employee from the direction of the Contractor; and
 - (ii) terminate such Employee's employment with BCIB in accordance with the provisions of the Community Benefits Agreement and applicable law.

8.4 In the event that any Employee whose employment has been terminated pursuant to Section 8.3 initiates a grievance under the Community Benefits Agreement, the Contractor and BCIB will make every effort to complete Stage I of the grievance procedure under the Community Benefits Agreement before the grieving Employee leaves the Site.

8.5 With respect to any Employee that has been removed, whether temporarily or permanently, from the direction of the Contractor pursuant to Section 8.3, if the Contractor's Representative requests in writing a replacement Employee, BCIB will, in accordance with the dispatch provisions of the Community Benefits Agreement, including Articles 8.200, 8.600 and 9.100 of the Community Benefits Agreement, and within three Business Days of such request, provide a replacement Employee to the Contractor, such replacement Employee to be in the same Job Classification as and with comparable qualifications, certifications, if any, and experience to the Employee being replaced.

- 8.6 BCIB will permit the Contractor to have an active role in supporting any investigation BCIB conducts into Employee conduct which may lead to BCIB taking action pursuant to Section 8.3 and in connection with a grievance initiated by an Employee provided to the Contractor by BCIB.
- 8.7 The Contractor will comply with the terms of any grievance award, and any order, judgment, direction or interpretation made under the procedures set forth in the Community Benefits Agreement, or by any arbitrator, court or other authority having jurisdiction over the Employees which in any way relates to the Employees provided to the Contractor by BCIB, including awards of the Jurisdictional Assignment Plan Umpire of Work Assignment as described in Article 6.103 of the Community Benefits Agreement, and including any reinstatement order, judgement or direction, to the extent that the Contractor's compliance is necessary in order to enable BCIB to comply with any such award, order, judgment, direction or interpretation.
- 8.8 The Contractor will provide to BCIB, at a location designated by BCIB, any information required by BCIB in a form and format required by BCIB to enable BCIB to complete end of employment documentation in respect of an Employee whose services have been terminated.

9.0 SUBCONTRACTING

- 9.1 The Contractor will notify BCIB's Representative in writing of the names of all of the Contractor's subcontractors (of any and all tiers) (each, a "**Subcontractor**") engaged to perform a portion of the Work at the Site, whether or not such Subcontractor requires Employees. Except in circumstances where two weeks prior notice is not commercially reasonable, the Contractor will provide such notice no less than two weeks prior to the Subcontractor commencing work at the Site.
- 9.2 The Contractor will not permit any Subcontractor to perform any work at the Site unless and until that Subcontractor:
- (a) confirms in writing to BCIB that the Subcontractor will not require any Employees to be provided by BCIB, and BCIB agrees with such determination;
 - (b) is granted a permit pursuant to Article 8.400 of the Community Benefits Agreement; or
 - (c) executes a BCIB-Subcontractor Agreement pursuant to Section 9.3.
- 9.3 The Contractor will cause each Subcontractor (other than a Subcontractor described in Section 9.2(a) or Section 9.2(b)) (each, an "**Applicable Subcontractor**") to enter into an agreement with BCIB (each, a "**BCIB-Subcontractor Agreement**") to obtain from BCIB the Employees that the Applicable Subcontractor will require for the performance of its portion of the Work at the Site. Each BCIB-Subcontractor Agreement will be in the form attached to this Agreement at Schedule 4, subject only to variations in form required by BCIB, in its sole and absolute discretion, to suit the circumstances.

- 9.4 BCIB will provide a written report to the Contractor promptly after each Payroll Amount becomes due and payable identifying all Applicable Subcontractors who have failed to pay BCIB as required by the applicable BCIB-Subcontractor Agreements, together with the amount that remains outstanding for each such Applicable Subcontractor.
- 9.5 Without duplication of recovery under Section 12.0, if, under any BCIB-Subcontractor Agreement, an Applicable Subcontractor fails to pay any amount required to be paid to BCIB beyond any period permitted for the payment of such amount as set out in the BCIB-Subcontractor Agreement, then, upon written notice to the Contractor, the Contractor will pay such amount to BCIB, or cause BCIB to be paid such amount, no later than five Business Days after receipt of such notice.

10.0 PERMITTEES

- 10.1 The Contractor may request that permits be granted to Subcontractors or employees (who would ordinarily be “Employees” for the purposes of the Community Benefits Agreement), or both, as described in Article 8.400 of the Community Benefits Agreement.
- 10.2 For any permit request, the Contractor will be responsible for completing a permit request form (in the form required by the Council), and will submit the completed permit request form along with the required fee made payable to the Council to BCIB’s Representative for review. Provided the permit request form and associated fee comply with the provisions of Article 8.400 of the Community Benefits Agreement, BCIB will promptly sign the permit request form and submit it and the fee to the Council. If BCIB refuses to sign the permit request form, then BCIB’s Representative will promptly return the form and fee to the Contractor’s Representative with reasons for BCIB’s refusal to sign the form.
- 10.3 BCIB will, to the extent necessary, arrange meetings between the Contractor and the Council to resolve any issues with respect to the granting of permits, however, the Contractor remains fully responsible for satisfying the conditions required for the granting of a permit.
- 10.4 The Contractor acknowledges the provisions of Articles 8.403 and 8.409 of the Community Benefits Agreement and agrees to give effect to, and observe, comply with and perform the terms and conditions set out in those Articles.

11.0 BCIB COSTS

- 11.1 In addition to paying the Payroll Amount, the Contractor will pay to BCIB the following costs and expenses reasonably incurred by BCIB (“**BCIB Costs**”) in connection with or with respect to the Employees provided to the Contractor by BCIB for performing the Work, without duplication of items included in the Payroll Amount:
- (a) the following costs described in the Community Benefits Agreement, to the extent each is applicable to the Project:

- (i) Article 14.602 (pay in lieu of meal);
 - (ii) Article 17.200 (for mileage or ferry costs);
 - (iii) Article 17.401 (weekend checkout);
 - (iv) Article 21.100 (transportation to Project on initial hire);
 - (v) Article 21.201 (transportation from Project when an Employee on the job for 30 days or more);
 - (vi) Article 21.700 (compassionate leave transportation); and
 - (vii) Article 22.100 (daily travel reimbursement);
- (b) the fees and disbursements charged to BCIB by those lawyers, accountants, consultants, witnesses or other professionals or experts retained by BCIB at the request of the Contractor;
 - (c) the amount of any damages, salary, severance pay, expenses, costs, penalties, fines or other monies which BCIB is ordered to pay by any arbitrator, court or other authority having jurisdiction, or which BCIB reasonably agrees to pay after consultation with the Contractor, in respect of any Employee, with respect to grievance, arbitration, court or other labour relations proceedings initiated by any Employee, the Council or any Affiliated Union which relates to the Contractor's operation, direction and supervision of the Employees or the performance of the Work;
 - (d) the costs incurred by, including third party fees and disbursements charged to, BCIB in investigating complaints made by an Employee against the Contractor or against an employee or other representative of the Contractor (who is not an Employee) under the Workplace Discrimination and Harassment Policy and Procedures, but only in circumstances where the investigation determines that the Contractor or such Contractor employee or representative has violated the Workplace Discrimination and Harassment Policy and Procedures;
 - (e) notwithstanding Section 12.01 of the Workplace Drug and Alcohol Policy and Procedures, the cost of all Substance Testing (as defined in the Workplace Drug and Alcohol Policy and Procedures) conducted under the Workplace Drug and Alcohol Policy and Procedures;
 - (f) the amount paid to or on behalf of any Employee by BCIB in respect of transportation to or from the Site at the time of hire, upon termination of employment, or in order to facilitate such Employee undergoing tests or examinations which may be required in connection with such Employee's employment and compensated by BCIB pursuant to the Community Benefits Agreement, or in connection with any special training provided for such Employee at the request of or with the approval of the Contractor;

- (g) the amount of any medical doctor's charges or other charges paid by BCIB in connection with the provision of food handling certificates, underground certificates, audio certificates or any other certificate relating to the fitness or qualifications of any Employee;
 - (h) advances on salary and any special payments in respect of labour relations matters made by BCIB to or on behalf of any Employee which are required to be made by the Community Benefits Agreement;
 - (i) the costs of any items or services required to be provided to or for any Employee by the provisions of the Community Benefits Agreement which are the responsibility of the Contractor to provide pursuant to the provisions of this Agreement, but which were not provided by the Contractor, including the costs of providing orientation, training, tools, safety equipment, clothing and transportation;
 - (j) in the event that BCIB requests an amount from the Owner under the provisions of Section 12.0, the sum of \$1,000.00 for each such request as compensation to BCIB for its costs of administering such request to the Owner. For clarity, BCIB will not charge the Contractor this fee if BCIB has already charged an equivalent fee to an Applicable Subcontractor pursuant to a BCIB-Subcontractor Agreement in respect of the same delinquent amount;
 - (k) any WorkSafeBC levies, assessments, reassessments, penalties or other amounts required to be paid by BCIB under the *Workers' Compensation Act* (British Columbia) which are applied to BCIB but which are in respect specifically to the Contractor and which are not payroll WorkSafeBC assessments as described in Section 7.6; and
 - (l) the Contractor's *pro rata* share of any WorkSafeBC levies, assessments, reassessments, penalties or other amounts required to be paid by BCIB under the *Workers' Compensation Act* (British Columbia) which are applied on a Project-wide basis and which are not payroll WorkSafeBC assessments as described in Section 7.6. Such levies, assessments, reassessments, penalties and other amounts will be shared amongst all entities having a contract with BCIB in respect of the Project and be calculated based on the total number of hours worked by the Employees provided to each such entity up to the date of such levy, assessment, reassessment, penalty or other amount.
- 11.2 BCIB will, from time to time but not more frequently than monthly, prepare and deliver an invoice (each, a "**Cost Invoice**") to the Contractor setting out the amount of BCIB Costs owing by the Contractor to BCIB for the relevant time period. The Contractor will pay to the account specified in the Cost Invoice the amount of such BCIB Costs plus all applicable taxes no later than ten Business Days after receipt of the Cost Invoice. The Contractor will pay the full amount set out in the Cost Invoice without prejudice to the Contractor's rights of dispute under Section 23.0.

11.3 The Contractor or its authorized agent may, at the Contractor's discretion and expense, at any time and from time to time during the time BCIB is required to keep records pursuant to applicable law, during normal business hours and with reasonable notice and without undue disturbance of BCIB's business operations, enter upon BCIB's premises and, subject to solicitor-client privilege, audit the records of BCIB which relate in any way to BCIB Costs. BCIB will make all such records available for examination and copying by the Contractor at BCIB's premises.

12.0 PAYMENT BY OWNER UPON A FAILURE TO PAY

12.1 The Contractor acknowledges that if at any time the Contractor or any Applicable Subcontractor fails to pay any amount required to be paid to BCIB under this Agreement or under a BCIB-Subcontractor Agreement, as the case may be, beyond any period permitted for the payment of such amount as set out in this Agreement or in the BCIB-Subcontractor Agreement, as the case may be, BCIB may advise the Owner in writing and may request payment by the Owner of such amount.

12.2 In the event that the Owner pays BCIB the amount requested by BCIB under the provisions of Section 12.1, and provided that the Contractor compensates BCIB for its administration costs as described in Section 11.1(j) in accordance with Section 11.2, then the Contractor will not be in default of its obligation to pay such amount under this Agreement. For clarity, the payment by the Owner of an amount requested by BCIB will be deemed to satisfy the Contractor's obligation to pay that same amount to BCIB.

13.0 OCCUPATIONAL HEALTH AND SAFETY

13.1 The parties acknowledge that each has obligations under applicable law as an "employer" for the health and safety of the Employees provided to the Contractor by BCIB. For the purposes of clearly defining and establishing respective responsibilities without duplication of any overlapping responsibilities, and for the purposes of achieving a consistent, proactive and preventative health and safety culture, and implementing effective health and safety programs, the following will apply with respect to occupational health and safety:

- (a) The Contractor will comply with all applicable law relating to occupational health and safety, including:
 - (i) the *Workers Compensation Act* (British Columbia); and
 - (ii) the *Mines Act* (British Columbia).
- (b) The Contractor will be responsible for and will fulfill all of its obligations as an "employer" (as that term is used in Part 2 of the *Workers Compensation Act* (British Columbia)) pursuant to Part 2 of the *Workers Compensation Act* (British Columbia), including as such obligations relate to the Employees provided to the Contractor by BCIB.

- (c) The Contractor will, as an “employer” (as that term is used in Part 2 of the *Workers Compensation Act* (British Columbia)), ensure that any Employee provided to the Contractor by BCIB that is acting in the capacity of “supervisor” (as that term is used in Part 2 of the *Workers Compensation Act* (British Columbia)) has the information, instruction, training and supervision necessary to effectively discharge their responsibilities.
- (d) The Contractor acknowledges receipt of the Health and Safety Policy and Program. The Contractor will, as part of and not in substitution for any health and safety obligations that the Contractor must meet under the Construction Contract and applicable law, including the *Workers Compensation Act* (British Columbia), implement the Health and Safety Policy and Program in order to achieve or exceed the objectives set out in the Health and Safety Policy and Program.
- (e) Each party acknowledges that the Health and Safety Policy and Program and the Contractor’s health and safety program, policies and work procedures will in no way fetter the authority and responsibilities of the applicable designated “prime contractor” under the *Workers Compensation Act* (British Columbia), and each of the parties will recognize the authority of such “prime contractor” and will comply with such “prime contractor’s” health and safety program, policies, systems, processes and procedures.
- (f) The parties will, within ten Business Days after the Effective Date, establish a system for ongoing communication and liaison for the purpose of ensuring the timely exchange of information that the parties agree is required for the effective coordination and implementation of the Health and Safety Policy and Program and the Contractor’s health and safety program, policies and work procedures, and the ongoing health and safety of all Employees provided to the Contractor by BCIB.
- (g) The Contractor will, in respect of the Employees provided to the Contractor by BCIB, fulfill all health and safety-related obligations required by the Community Benefits Agreement, and the Contractor will, for certainty:
 - (i) provide to all such Employees such safety equipment and clothing as required by the Community Benefits Agreement, the Health and Safety Policy and Program and applicable law, including the *Workers Compensation Act* (British Columbia) and the *Mines Act* (British Columbia); and
 - (ii) bear transportation costs not covered by WorkSafeBC for sick or injured Employees from the Site to the Point of Hire (as defined in the Community Benefits Agreement) as well as the transportation costs of such Employee’s tools to the Point of Hire.

Where the Contractor fails to meet the requirements of this Section 13.1(g), the same may be provided by BCIB and the Contractor will reimburse BCIB in accordance with Section 11.1(i).

- (h) Where the Contractor fails to meet the requirements of Section 5.2(j) within a reasonable time after receipt of written notice from BCIB's Representative to provide such orientation, the same may be provided by BCIB and the Contractor will reimburse BCIB in accordance with Section 11.1(i).
- (i) The Contractor will, provided reasonable written notice has been provided to the Contractor's Representative and to the applicable designated "prime contractor" under the *Workers Compensation Act* (British Columbia), provide BCIB representatives full access to all parts of the Site and the activities of the Contractor on the Site. All BCIB representatives will be required to comply with the health and safety protocols for attendance on the Site as required by the applicable designated "prime contractor" under the *Workers Compensation Act* (British Columbia).
- (j) Each party will fully cooperate with the other party in any activity performed by the other party to ensure both party's fulfilment of the health and safety obligations under this Agreement, including inspections, investigations, and attending and participating in initiatives such as Joint Health and Safety Committee meetings and tool box talks.
- (k) Prior to commencing performance of the Work at the Site, and at any time on BCIB's Representative's request, the Contractor will deliver to BCIB's Representative a statement from WorkSafeBC that the Contractor is registered and in good standing.
- (l) The Contractor will provide to BCIB's Representative:
 - (i) notice of any worker compensation claims that are made against the Contractor by the Employees provided to the Contractor by BCIB; and
 - (ii) copies of all correspondence and forms, including claim forms, papers and reports, received by or sent to governmental authorities concerning any such claims and any other health and safety matters on the Site.
- (m) For the purpose of this Agreement only, the Contractor acknowledges and agrees that any claims made by Employees provided to the Contractor by BCIB under and pursuant to the *Workers Compensation Act* (British Columbia) will be reported to WorkSafeBC under the Contractor's account with WorkSafeBC and will be considered and reflected in and may therefore adversely affect the experience rating (for purposes of assessments made under the *Workers Compensation Act* (British Columbia)) of the Contractor and not of BCIB. BCIB will not be liable to the Contractor, and the Contractor will have no claim against BCIB, for any loss, cost, damage, assessments, reassessments, penalties or

expense suffered or incurred by the Contractor by reason of any claim brought under the *Workers Compensation Act* (British Columbia) by any such Employee, including for any increase in the Contractor's experience rating under the *Workers Compensation Act* (British Columbia) arising as a result of any such claim.

- (n) For the purpose of this Agreement only, BCIB hereby gives and grants to the Contractor authority to act on behalf of BCIB in all matters related to WorkSafeBC claims management and in all adjudications of WorkSafeBC claims, as such relate to the Employees provided to the Contractor by BCIB, and the Contractor undertakes to provide all such claims management and adjudications of claims. For certainty, in all such matters involving Employees provided to the Contractor by BCIB, the Contractor will keep BCIB informed of the status and progress of such matters, and will consult and collaborate with BCIB, and take into account BCIB's input, prior to resolving any such matters with WorkSafeBC.

14.0 GENERAL TRAINING AND APPRENTICESHIPS

- 14.1 The Contractor will provide, at its sole cost and expense, any and all on-the-job skills development and specialized task-specific training beyond that provided under a general trade curriculum.
- 14.2 The Contractor acknowledges receipt of the Apprenticeship and Training Targets. The Contractor will, as part of and not in substitution for any apprenticeship and training obligations that the Contractor must meet under the Construction Contract, seek from BCIB, pursuant to Employee Requests, a sufficient number and type of apprentices that if provided by BCIB would achieve or exceed the objectives set out in the Apprenticeship and Training Targets.

15.0 WORKPLACE DISCRIMINATION AND HARASSMENT POLICY AND PROCEDURES

- 15.1 The Contractor acknowledges receipt of the Workplace Discrimination and Harassment Policy and Procedures. The Contractor will, as part of and not in substitution for any workplace discrimination and harassment obligations that the Contractor must meet under the Construction Contract and applicable law, including the *Workers Compensation Act* (British Columbia), implement the Workplace Discrimination and Harassment Policy and Procedures in order to achieve or exceed the objectives set out in the Workplace Discrimination and Harassment Policy and Procedures.
- 15.2 Any complaint made by or against an Employee provided to the Contractor by BCIB under the Workplace Discrimination and Harassment Policy and Procedures will be processed and investigated pursuant to the Workplace Discrimination and Harassment Policy and Procedures, and the outcome will be binding on the Contractor.

16.0 WORKPLACE DRUG AND ALCOHOL POLICY AND PROCEDURES

16.1 The Contractor acknowledges receipt of the Workplace Drug and Alcohol Policy and Procedures. The Contractor will, as part of and not in substitution for any workplace drug and alcohol obligations that the Contractor must meet under the Construction Contract and applicable law, including the *Workers Compensation Act* (British Columbia), implement the Workplace Drug and Alcohol Policy and Procedures in order to achieve or exceed the objectives set out in the Workplace Drug and Alcohol Policy and Procedures.

17.0 INDEMNIFICATION

17.1 The Contractor will indemnify and save harmless BCIB, the Owner, Transportation Investment Corporation and their respective officers, directors, servants (including BCIB's Representative), agents and shareholders (collectively, the "**BCIB Indemnified Parties**"), from and against any and all losses, liabilities, damages, fines, penalties, costs, expenses and claims of any and every kind whatsoever which at any time or from time to time may be paid, incurred or asserted by or against the BCIB Indemnified Parties, or any one of them, for, with respect to, or as a result of:

- (a) any act or omission of the Contractor, the Contractor's Representative, or any other person or entity not subject to or otherwise excluded from coverage of the Community Benefits Agreement but who is engaged by the Contractor to perform a portion of the Work;
- (b) any act or omission of an Employee which occurs while such Employee is under the direction of the Contractor whether or not such losses, liabilities, damages, fines, penalties, costs, expenses or claims arise by reason of the employment relationship existing between BCIB and such Employee;
- (c) any failure by the Contractor to perform its obligations under this Agreement, including any failure to give effect to, observe, comply with or perform the terms and conditions of the Community Benefits Agreement, or the functions, obligations or responsibilities of the Community Benefits Agreement, that have been expressly delegated or allocated to the Contractor by this Agreement; and
- (d) any failure by the Contractor to perform its obligations under applicable law.

For certainty, the obligations of the Contractor set forth in this Section 17.1 shall not apply to the extent that the losses, liabilities, damages, fines, penalties, costs, expenses and claims for which indemnity is being sought were caused by the negligence or willful misconduct of any of the BCIB Indemnified Parties.

17.2 BCIB will indemnify and save harmless the Contractor, its officers, directors, servants (including the Contractor's Representative), agents and shareholders (collectively, the "**Contractor Indemnified Parties**"), from and against any and all losses, liabilities, damages, fines, penalties, costs, expenses and claims of any and every kind whatsoever

which at any time or from time to time may be paid, incurred or asserted by or against the Contractor Indemnified Parties, or any one of them, to the extent resulting from the negligent act or negligent omission of the BCIB Indemnified Parties in connection only with BCIB's relationship as employer of the Employees provided to the Contractor by BCIB.

For certainty, the obligations of BCIB set forth in this Section 17.2 shall not apply to the extent that the losses, liabilities, damages, fines, penalties, costs, expenses and claims for which indemnity is being sought were caused by the negligence or willful misconduct of any of the Contractor Indemnified Parties.

- 17.3 The obligations of indemnification set forth in Section 17.0 will survive termination of this Agreement and will continue in full force and effect.

18.0 CONFIDENTIALITY AND DISCLOSURE OF INFORMATION

- 18.1 Subject to Section 18.3, each party will keep confidential all matters respecting the Employees provided to the Contractor by BCIB and all commercial, financial and legal issues relating to or arising out of this Agreement and will not disclose such information, except as follows:

- (a) with the prior written consent of BCIB's Representative or the Contractor's Representative, as the case may be, which consent may be arbitrarily withheld;
- (b) in the case of BCIB, BCIB may disclose information regarding the Contractor's non-payment of BCIB to the Owner, in order for BCIB to seek recovery of such non-payment;
- (c) in the case of the Contractor, the Contractor may disclose information respecting the Employees provided to the Contractor by BCIB to the Owner but only to the extent the information to be disclosed is specifically required by the Owner pursuant to the Construction Contract;
- (d) in strict confidence to the party's professional advisors; or
- (e) as otherwise required by applicable law.

- 18.2 The obligations of confidentiality described in Section 18.1 will not apply to:

- (a) information that is, or subsequently becomes, publicly available other than through a breach of this Agreement or through a breach of a confidentiality agreement which another entity has entered into concerning such confidential information;
- (b) information which the disclosing party already possessed before commencing to participate in the Project;

- (c) information which is rightfully received from a third party without breach of any obligation of confidence by such third party; or
- (d) information which is independently developed without the use of such confidential information.

18.3 Notwithstanding anything to the contrary contained in this Agreement, the Contractor acknowledges and agrees that BCIB may disclose any and all workforce-related information created or obtained as a result of this Agreement or in respect of the Contractor performing its obligations under this Agreement, or both, including the existence and terms of this Agreement and any BCIB-Subcontractor Agreement, the nature and number of permits requested and issued as described in Section 10.0, the Contractor's fulfillment of its obligations pursuant to Sections 13.0, 14.0, 15.0 and 16.0, the Contractor's fulfillment and compliance with the functions, obligations and responsibilities set out in Schedule 2 and any other Records, to any provincial ministry or other Governmental Authority which requires or requests the information in relation to the Project or to permit BCIB to comply with applicable law.

19.0 FREEDOM OF INFORMATION AND PRIVACY PROTECTION

19.1 The Contractor acknowledges that:

- (a) it is aware that FOIPPA applies to this Agreement and to all documents and records relating to this Agreement;
- (b) BCIB is required to fully comply with FOIPPA; and
- (c) no action taken or required to be taken by BCIB for the purpose of complying with FOIPPA shall be considered a breach of any obligation under this Agreement.

19.2 To the extent the Contractor has access to, whether direct, indirect or incidental, or the opportunity to access, any Personal Information, the Contractor will inform all of its personnel and Subcontractors having access to any Personal Information in the course of performing the Work of the confidential nature of the Personal Information and will ensure that its personnel and Subcontractors maintain the confidentiality of the Personal Information in accordance with the terms of Schedule 3. BCIB and the Contractor will have the respective rights and obligations applicable to each of them as provided in Schedule 3, and Section 18.0 will not apply in respect of such Personal Information.

20.0 CONTRACTOR'S RECORDS

20.1 The Contractor will record and maintain within British Columbia during the term of this Agreement, and for so as long as required by applicable law, full, true, proper and accurate records relating to the Employees provided to the Contractor by BCIB (collectively, the "**Records**"), including:

- (a) records of the time worked by Employees;

- (b) records relating to the Contractor's fulfillment of its obligations pursuant to Sections 13.0, 14.0, 15.0 and 16.0; and
- (c) records relating to the Contractor's fulfillment and compliance with the functions, obligations and responsibilities set out in Schedule 2,

utilizing such recording system and in such form as BCIB may from time to time require. Promptly upon the reasonable written request of BCIB's Representative, the Contractor will deliver such Records to BCIB at BCIB's expense.

- 20.2 The Contractor will advise BCIB's Representative of the location of the Records upon the written request of BCIB.
- 20.3 Upon expiration of the retention period(s) described in Section 20.1, and prior to disposing of the applicable Records, the Contractor will notify BCIB in writing as to what the Contractor intends to do with such Records. BCIB may, within 40 days of receipt of such notice, require the Contractor to deliver to BCIB, at BCIB's sole cost and expense, all such Records.
- 20.4 BCIB or its authorized agent may, at BCIB's discretion and expense, at any time and from time to time during the time the Contractor is required to keep the Records under this Agreement, during normal business hours and with reasonable notice and without undue disturbance of the Contractor's business operations, enter upon the Contractor's premises and audit the Records and any other records of the Contractor which relate in any way to the Employees provided to the Contractor by BCIB. The Contractor will make all such records available for examination and copying by BCIB at the Contractor's premises.

21.0 TERMINATION

- 21.1 This Agreement will continue in effect for so long as the Contractor requires Employees to perform the Work at the Site.
- 21.2 The obligations of the Contractor to pay any amounts which are payable to BCIB under this Agreement will survive termination of this Agreement and will continue in full force and effect.

22.0 DISCLAIMERS

- 22.1 BCIB does not warrant nor guarantee to the Contractor that BCIB will provide to the Contractor any particular quality of Employee or that BCIB will provide all or any of the Employees for which the Contractor may submit Employee Requests.
- 22.2 Neither party will be responsible or liable to the other party, and neither party will have a claim against the other party, for any economic loss, loss of anticipated revenue, overhead or profit, loss of production, business or contracts, loss by reason of shutdowns, slowdowns, non-operation or increased costs of construction, manufacturing or operation, or loss of business reputation or opportunities, in connection with this Agreement and

whether or not such losses or costs were foreseeable even if the relevant party was advised of the possibility of them. For certainty, nothing in this Section 22.2 will apply to, or be interpreted so as to preclude, or otherwise limit recovery of liquidated damages specified as payable to BCIB pursuant to this Agreement, if any.

- 22.3 Notwithstanding any other provision of this Agreement, including Section 17.2, but without limiting the other provisions of Section 22.0, BCIB will not be responsible or liable (whether in contract, tort (including negligence), for breach of statutory duty, pursuant to equitable principles or under any other theory of law) to the Contractor, and the Contractor will have no claim against BCIB, for:
- (a) any loss, cost, damage or expense suffered or incurred by the Contractor by reason of or in respect of the Contractor being delayed in performing the Work or having to re-perform the Work, whether such delay or re-performance is caused by work stoppage, work slowdown, labour shortages, lack of appropriately qualified or skilled labour or otherwise. The Contractor acknowledges that its sole remedies, if any, in respect of any such foregoing matters lie against the Owner under the Construction Contract; or
 - (b) the operation, direction or supervision of Employees provided to the Contractor by BCIB nor for the performance of the Work by such Employees; or
 - (c) paying any of the Contractor's costs of providing Employees with room or board or commissary facilities or commissary supplies whether or not such costs are recovered or are recoverable by the Contractor from Employees.
- 22.4 Except as specifically provided under the Construction Contract (and then solely with respect to the rights and obligations as between the Owner and the Contractor), nothing done as a result of this Agreement or omitted to be done will be cause for a justifiable delay by the Contractor under the Construction Contract or a justifiable increase in the Contractor's price under the Construction Contract, and the Contractor will not have any right to or claim for an extension of time under the Construction Contract nor any right to or claim for any payment or additional payment from BCIB or the Owner as a result of such matters.
- 22.5 The Contractor will be fully responsible for all costs and expenses incurred by it in performing its obligations under this Agreement and in providing assistance or input to and in cooperating, consulting or collaborating with BCIB as contemplated by this Agreement and in participating in any formal process set out in the Community Benefits Agreement, and including for all costs and expenses incurred by the Contractor with respect to grievances initiated by the Contractor. The Contractor will not be entitled to, nor will BCIB be liable to the Contractor for, any compensation or reimbursement of such costs and expenses in respect of the foregoing, such compensation and reimbursement will be deemed to be fully addressed pursuant to the Construction Contract.

23.0 DISPUTE RESOLUTION

- 23.1 The parties agree that, both during and after the term of this Agreement, each of them will make *bona fide* efforts to resolve any disputes arising between them by amicable negotiations.
- 23.2 Either party may require the dispute be mediated by a skilled commercial mediator chosen jointly by the parties. If a mediator is appointed pursuant to this Section 23.2, the mediated negotiations will be terminated ten Business Days after the appointment unless the parties agree otherwise.
- 23.3 Any unresolved dispute arising out of or in connection with this Agreement or in respect of any defined legal relationship associated with it or derived from it, will be referred to and finally resolved by arbitration under the rules of the British Columbia International Commercial Arbitration Centre. Any arbitration will be conducted in Vancouver, British Columbia and heard by a single arbitrator chosen jointly by the parties, or in the absence of mutual agreement appointed by a court of competent jurisdiction.
- 23.4 If the parties agree, any unresolved disputes referred to arbitration under this Agreement may be:
- (a) held in abeyance until completion of the Work; and
 - (b) consolidated into a single arbitration.
- 23.5 Notwithstanding any dispute, the parties will continue to fulfill their obligations pursuant to this Agreement, without prejudice to either party's rights relating to the dispute.

24.0 NOTICES

- 24.1 Unless otherwise expressly required to be given to BCIB's Representative or the Contractor's Representative pursuant to this Agreement, any notice or communication required or permitted to be given under this Agreement will be in writing and will be considered to have been sufficiently given when delivered by hand or by email to the address or email address of the applicable party set out below:
- (a) if to BCIB:

BC Infrastructure Benefits Inc.
Suite 1050 – 89 West Georgia Street
Vancouver, BC V6B 0N8

Attn: Martin Fyfe, Director, Workforce Operations

Email: mfyfe@bcib.ca;

- (b) if to the Contractor:

Kicking Horse Canyon Constructors
1055 Dunsmuir Street, Suite 2124
Vancouver, BC
V7X 1G4

Attention: Darren Nally

Email: dnally@aecon.com; or

- (c) to such other address or email address as either party may, from time to time, designate in the manner set out above.

24.2 Any such notice or communication will be considered to have been received:

- (a) if delivered by hand or by a courier service during business hours on a Business Day, when delivered, and if not delivered during business hours, upon the commencement of business hours on the next Business Day; and
- (b) if sent by email during business hours on a Business Day, upon receipt, and if not delivered during business hours, upon the commencement of business hours on the next Business Day, provided that:
- (i) the receiving party has, by email or by hand delivery, acknowledged to the notifying party in writing that it has received such notice; or
- (ii) within 24 hours after sending the notice, the notifying party has also delivered a copy of such notice to the receiving party by hand delivery.

25.0 ASSIGNMENT RESTRICTED

25.1 This Agreement and the rights, duties and obligations of the Contractor under this Agreement will not be assigned, transferred, encumbered or otherwise alienated in whole or in part by the Contractor without the prior written consent of BCIB, which consent may be arbitrarily withheld, and any attempt by the Contractor to assign, transfer, encumber or otherwise alienate its rights, duties or obligations under this Agreement without such consent will be of no effect. Notwithstanding the above, BCIB will provide its consent to any assignment, transfer, encumbrance or other alienation of this Agreement to the extent necessary to give effect to any permitted assignment, transfer, encumbrance or other alienation of the Construction Contract. For certainty, and notwithstanding anything to the contrary above, BCIB, without the need to provide any further consent, hereby consents to the assignment of this Agreement by the Contractor to the entity that enters into a subsequent design-build agreement with the Owner pursuant to which that entity will undertake the Work.

26.0 MISCELLANEOUS

26.1 Schedules. The following Schedules are incorporated into this Agreement by reference and are deemed to be fully included as part of this Agreement and to be an integral part of this Agreement:

- (a) Schedule 1 – Definitions and Interpretation;
- (b) Schedule 2 – Functions, Obligations and Responsibilities;
- (c) Schedule 3 – Privacy Protection; and
- (d) Schedule 4 – Form of BCIB-Subcontractor Agreement.

26.2 No Agency. The Contractor acknowledges and agrees that BCIB is entering into this Agreement for itself and on its own behalf as principal and that BCIB is not an agent of the Owner or the Government of British Columbia for purposes of this Agreement or for purposes of the Construction Contract or otherwise.

26.3 Third Party Beneficiary. The provisions of Section 22.4 are intended for the benefit of the Owner and will be enforceable by the Owner and are in addition to, and not in substitution for, any other rights that the Owner may have by contract or otherwise. For clarity, BCIB will also be able to enforce the provisions of Section 22.4.

26.4 Independent Contractor. The Contractor is an independent contractor in the performance of the Work and nothing in this Agreement will constitute the Contractor as an agent, partner, joint venture or employee of BCIB for any purpose.

26.5 Currency. All payments to be made pursuant to this Agreement will be made in lawful money of Canada.

26.6 Public Announcements. The Contractor will not make any public releases, announcements, other disclosure or issue advertising pertaining to this Agreement or the Community Benefits Agreement without the prior written approval of BCIB, approval of which may be arbitrarily withheld. The Contractor will refer any media enquiries to BCIB's Representative, but will not otherwise respond to media enquiries.

26.7 Further Assurances. Each of the parties hereby covenants and agrees to execute any further and other documents and instruments and to do any further and other things that may be reasonably necessary to implement and carry out the intent of this Agreement.

26.8 Governing Law. This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia which will be deemed to be the proper law of this Agreement.

26.9 Survival. All rights, obligations and remedies of the parties which accrued prior to the termination of this Agreement, or which are by their nature continuing, or which by their express terms survive, and all other provisions necessary for the interpretation or

enforcement of such rights, obligations and remedies, will survive termination of this Agreement.

- 26.10 Modification and Waiver. No amendment or waiver of this Agreement or any provision of this Agreement will be binding unless executed in writing by both the parties. No waiver of any provision of this Agreement will be deemed or will constitute a waiver of any other provision nor will any such waiver constitute a continuing waiver unless otherwise expressly provided in writing signed by each of the parties.
- 26.11 Enurement. This Agreement will enure to the benefit of and be binding upon the parties and their respective heirs, personal representatives, successors and permitted assigns.
- 26.12 Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter of this Agreement, expressing superseding all prior communications, understandings and agreements (both oral and written) between the parties with respect to all matters contained in this Agreement. There are no representations, warranties, terms, conditions, undertakings or collateral agreements express, implied or statutory, between the parties other than as expressly set forth in this Agreement.
- 26.13 Counterparts. This Agreement may be executed by counterparts, each of which will be deemed to be an original and all of which taken together will be deemed to constitute one and the same instrument. Delivery by email in portable document format (PDF) of an executed counterpart of this Agreement is as effective as delivery of an originally executed counterpart of this Agreement.
- 26.14 Joint and Several:
- (a) If the Contractor is comprised of more than one legal entity, the obligations and liabilities of the Contractor under this Agreement shall be the obligations and liabilities of each legal entity comprising the Contractor, jointly and severally with each other such legal entity.
 - (b) If the Contractor is a general partnership, the obligations and liabilities of the Contractor under this Agreement shall be the obligations and liabilities of the Contractor and each of its partners, jointly and severally with each other.

[signature page follows]

IN WITNESS WHEREOF the parties have executed this Agreement as of the Effective Date.

BC INFRASTRUCTURE BENEFITS INC.

Per: _____
Name:
Title:

**AECON CONSTRUCTORS, A DIVISION OF
AECON CONSTRUCTION GROUP INC.**

Per: _____
Name:
Title:

PARSONS INC.

Per: _____
Name:
Title:

EMIL ANDERSON CONSTRUCTION (EAC) INC.

Per: _____
Name:
Title:

**SCHEDULE 1
DEFINITIONS AND INTERPRETATION**

1. Definitions. In this Agreement, except as otherwise expressly provided or unless the context otherwise requires:
 - (a) “**Affiliated Unions**” has the meaning set out in the Community Benefits Agreement;
 - (b) “**Agreement**” means this BCIB-Contractor Agreement as it may be amended, restated or supplemented from time to time;
 - (c) “**Applicable Subcontractor**” has the meaning set out in Section 9.3;
 - (d) “**Apprenticeship and Training Targets**” means the apprenticeship and training targets established by BCIB dated July 17, 2020;
 - (e) “**BCIB**” has the meaning set out on the first page of this Agreement;
 - (f) “**BCIB Costs**” has the meaning set out in Section 11.1;
 - (g) “**BCIB Indemnified Parties**” has the meaning set out in Section 17.1;
 - (h) “**BCIB-Subcontractor Agreement**” has the meaning set out in Section 9.3;
 - (i) “**BCIB’s Representative**” has the meaning set out in Section 2.1;
 - (j) “**Business Day**” means a day other than a Saturday, Sunday or Recognized Holiday (as described in Article 16.100 of the Community Benefits Agreement) on the days observed in British Columbia;
 - (k) “**CBA Name Hires**” has the meaning set out in Section 4.4(c)(ii);
 - (l) “**Community Benefits Agreement**” has the meaning set out in Recital A;
 - (m) “**Contractor**” has the meaning set out on the first page of this Agreement;
 - (n) “**Contractor Indemnified Parties**” has the meaning set out in Section 17.2;
 - (o) “**Contractor’s Representative**” has the meaning set out in Section 2.2;
 - (p) “**Construction Contract**” means the agreement between the Owner and the Contractor dated on or about the date of this Agreement pursuant to which the Contractor will undertake the Work, and any subsequent agreement entered into between the Owner and the Contractor (or an affiliate(s) of the Contractor) pursuant to which the Contractor (or an affiliate(s) of the Contractor) will undertake the Work;
 - (q) “**Cost Invoice**” has the meaning set out in Section 11.2;

- (r) “**Council**” has the meaning set out in Recital A;
- (s) “**Council’s Representative**” means the person designated from time to time by the Council who will represent the Council in the administration and application of the Community Benefits Agreement;
- (t) “**Effective Date**” means the effective date of this Agreement as set out on the first page of this Agreement;
- (u) “**Employees**” has the meaning set out in the Community Benefits Agreement, but for clarity, does not include employees of Subcontractors described in Section 9.2(a) or Section 9.2(b) or employees granted a permit pursuant to Article 8.400 of the Community Benefits Agreement;
- (v) “**Employee Request**” has the meaning set out in Section 4.4(c);
- (w) “**Enabling Agreement**” has the meaning set out in Section 4.2;
- (x) “**FOIPPA**” means the *Freedom of Information and Protection of Privacy Act* (British Columbia);
- (y) “**Governmental Authority**” means any federal, provincial, territorial, regional, municipal or local authority, quasi-governmental authority, court, government, or self-regulatory organization, commission, board, tribunal, organization, or any regulatory, administrative or other agency, or any political or other subdivision, department or branch of any of the foregoing, having jurisdiction in any way over or in respect of any aspect of the performance of the Construction Contract, this Agreement or the Project;
- (z) “**Health and Safety Policy and Program**” means the health and safety policy and program established by BCIB dated March 12, 2020;
- (aa) “**Job Classifications**” means those job classifications set out in the applicable “Trade Sections” of the Community Benefits Agreement;
- (bb) “**Owner**” means, collectively, Her Majesty the Queen in right of the Province of British Columbia as represented by the Minister of Transportation and Infrastructure, and BC Transportation Financing Authority;
- (cc) “**Payroll Amount**” has the meaning set out in Section 7.2;
- (dd) “**Payroll Invoice**” has the meaning set out in Section 7.2;
- (ee) “**Personal Information**” means recorded information about an identifiable individual, other than contact information (as defined in FOIPPA), collected, created or otherwise acquired by the Contractor as a result of this Agreement or any previous agreement between BCIB and the Contractor dealing with the same subject matter as this Agreement;

- (ff) “**Project**” means the Kicking Horse Canyon Project Phase 4;
- (gg) “**Records**” has the meaning set out in Section 20.1;
- (hh) “**Rock Slope Name Hires**” has the meaning set out in Section 4.2;
- (ii) “**Site**” means “Project Site” as defined in the Construction Contract, and will be deemed to include the sites of all facilities purpose built for the Project;
- (jj) “**Subcontractor**” has the meaning set out in Section 9.1;
- (kk) “**Work**” means “Project Work” as defined in the Construction Contract;
- (ll) “**Workplace Discrimination and Harassment Policy and Procedures**” means the workplace discrimination and harassment policy and procedures established by BCIB dated March 12, 2020; and
- (mm) “**Workplace Drug and Alcohol Policy and Procedures**” means the workplace drug and alcohol policy and procedures established by BCIB dated March 12, 2020.

Any words or phrases defined elsewhere in this Agreement will have the particular meaning assigned to such words or phrases.

2. Interpretation. For all purposes of this Agreement, except as otherwise expressly provided or unless the context otherwise requires:
- (a) the provision of headings and the division of this Agreement into Sections, paragraphs and other subdivisions are for convenience only and will not define or limit the scope, extent or intent of this Agreement or affect the interpretation of this Agreement or any provision of this Agreement;
 - (b) any reference to a statute will include such statute and its corresponding regulations, together with all amendments made to such statute and regulations and in force from time to time, and any statute or regulation that may be passed which has the effect of amending, supplementing or superseding the statute referred to or such statute’s corresponding regulations;
 - (c) any reference to the *Mines Act* (British Columbia) will include the Health, Safety and Reclamation Code for Mines in British Columbia, together with all amendments made to such code and in force from time to time, and any instrument established pursuant to the *Mines Act* (British Columbia) which has the effect of amending, supplementing or superseding the Health, Safety and Reclamation Code for Mines in British Columbia;
 - (d) any reference to an entity will include and will be deemed to be a reference to any entity that is a successor to such entity;

- (e) words in the singular include the plural, and vice-versa, wherever the context requires;
- (f) references in this Agreement to a Recital, a Section, a paragraph, a Schedule or other subdivision are to the corresponding Recital, Section, paragraph, Schedule or other subdivision of this Agreement, unless otherwise indicated;
- (g) where a reference is made to a “day”, “week”, “month” or “year”, the reference is to the calendar period;
- (h) the word “including” is deemed to be followed by “without limitation”;
- (i) if the time for doing an act falls or expires on a day that is not a Business Day, the time for doing such act will be extended to the next Business Day;
- (j) in the calculation of time, the first day will be excluded and the last day included; and
- (k) the parties confirm that they each have obtained independent legal advice, or elected not to obtain such advice, and accordingly agree that any rule of construction to the effect that any ambiguity is to be resolved against the drafting party will not be applicable in the interpretation of this Agreement.

**SCHEDULE 2
FUNCTIONS, OBLIGATIONS AND RESPONSIBILITIES**

The following are the functions, obligations and responsibilities referred to in Section 6.4 of this Agreement:

1. General:

The Contractor will provide to Employees:

- (a) all food and beverages; and
- (b) all room and board and living out allowances, as applicable,

as required by the Community Benefits Agreement.

2. Master Section:

CBA Article	Function, Obligation or Responsibility
14.501	The Employer may establish a flex work week schedule which allows for a work week starting on a day other than Monday (for example: Tuesday to Saturday).
17.402 (if applicable to the Project)	Where the accommodation is a hotel/motel the Employee may be required to vacate the room and remove all belongings out of the room. If an Employee wishes to store belongings, a lockup shall be provided.
19.100	A suitable heated lockup must be provided by the Employer for workers using their own tools.
19.201	In case of fire or burglary the Employer shall protect the value of an Employee's work clothes up to a total of three hundred and fifty dollars (\$350.00), required tools up to the total value of the tools, (tool for tool, make for make).
23.100	On commercial and institutional projects, heated lunchroom and women's and men's change rooms shall be provided for Employees for drying clothes, and changing clothes. The lunch and change rooms shall have tables, and benches, and provision for drying clothes. Such lunch and change rooms shall have windows and venting with adequate lighting and provision for continuous heat twenty-four (24) hours a day. The lunch and change rooms will be cleaned on each working shift and kept cleared of working materials and other construction paraphernalia. Lunchrooms shall provide enough room for all the workers to be seated at a table for lunch.
23.301	The Contractor/Employer shall be responsible for the provision, maintenance and cleanliness of sanitary facilities on the Site and for keeping all areas free of hazards and debris.

CBA Article	Function, Obligation or Responsibility
23.302	Chemical or flush toilets shall be provided for both women and men from the commencement of work on all jobs. Toilet paper shall be provided and facilities shall be cleaned on each working shift.
23.304	Where clean-up facilities are not provided and in mechanical and trade shops, hand cleanser and paper towels shall be provided at no cost to the Employee.
23.401	When working in a Fabrication Shop, proper ventilation shall be provided. In the event of a dispute, WorkSafeBC Regulations shall prevail.
23.402	When working in confined spaces with fibreglass or toxic fumes or smoke, proper ventilation and/or proper respiratory equipment shall be provided.
23.700	Telephone service shall be made available to all Employees at all times for incoming or outgoing emergency purposes and incoming emergency messages shall be relayed immediately.
23.800	When non-working foreperson(s) are required, they shall be appointed by the Employer. Employees covered by this Agreement shall take orders only from their Foreperson selected or if not immediately available, from general management. Other provisions concerning Forepersons and General Forepersons are contained in the appropriate Trade Sections.

3. Interior Road Building Addendum, if applicable to the Project:

CBA Article	Function, Obligation or Responsibility
14.201(e)	During inclement weather, where practical, the Employer shall provide a warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their meal breaks.
14.202(d)	During inclement weather, where practical, the Employer shall provide a warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their rest breaks.
General re Trade Sections – 1(b)	Where the Employer requires a specific Employee to upgrade or renew a certification or license, or perform a private procedure skills test on Site, unless the applicable Trade Sections indicates another party will pay, the Employer will pay the applicable costs and provide the time necessary.

4. Lower Mainland Road Building Addendum, if applicable to the Project:

CBA Article	Function, Obligation or Responsibility
14.201(e)	During inclement weather, where practical, the Employer shall provide a warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their meal breaks.
14.202(d)	During inclement weather, where practical, the Employer shall provide a

CBA Article	Function, Obligation or Responsibility
	warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their rest breaks.
General re Trade Sections – 1(b)	Where the Employer requires a specific Employee to upgrade or renew a certification or license, or perform a private procedure skills test on Site, unless the applicable Trade Sections indicates another party will pay, the Employer will pay the applicable costs and provide the time necessary.

5. Appendices:

If applicable to the Project, all references to a BCIB function, obligation and responsibility in the Camp Standards Appendix will be read as a function, obligation and responsibility of the Contractor.

6. Trade Sections:

CBA Article	Function, Obligation or Responsibility	Additional Contractor Obligation
BM.203	When six (6) or more welders are employed, one (1) welder with the qualifications shall be "Welder foreperson" and will receive Foreperson rate. The Welder Foreperson shall work on the tools if required by the Employer.	
BM.204	A Boilermaker General Foreperson may be utilized by the Employer whenever the Employer has established this level of supervision of the work on a job or when this level is appropriate to the size and nature of the job as determined by the Employer.	
BM.414	<u>Handicapped Workers</u> The Employer agrees, subject to prior consultation with the Affiliated Union, to employ any member on work which suits their physical ability and which is acceptable to the member (this shall include but not be limited to tool crib). Those who have suffered injury or disability in the trade should be employed when their capabilities are considered suitable, provided workers have the approval of the Workers' Compensation Board.	The Contractor will support and cooperate with BCIB to encourage the use of Handicapped Workers.
BM.420	<u>Tools</u> When it is deemed necessary to maintain a special tool crib for the Boilermakers, such shall be under the jurisdiction of the Boilermakers' Union. It being understood the necessity of a tool crib and/or an attendant	

CBA Article	Function, Obligation or Responsibility	Additional Contractor Obligation
	shall be determined by the Employer.	
CE.204	<p><u>General Foreperson</u> Where more than nineteen (19) Cement Masons or four (4) Forepersons are employed, the Employer shall appoint a General Foreperson at sixteen percent (16%) over the basic Industrial Hourly Rate plus one-half hour at straight time per shift (at Overtime rates on Overtime shifts).</p> <p>General Forepersons shall not be required to work with the tools unless the General Foreperson considers it necessary.</p> <p>Appointment of any Foreperson(s) is subject to the Master Section and Addenda “predominant trade” and “composite crew provisions”, and any Employees under the Foreperson’s supervision shall take instructions from that Foreperson.</p>	
DR.205	All Forepersons and Leadhands shall be selected and assigned at the option of the Employer.	
EL.416	Where requested by the Employer to use explosive activated tools, time spent to obtain certificate shall be during working hours and considered as time worked. (High explosive activated tools shall not be used).	
FL.420	<p><u>Older Workers</u> An Employee incapacitated by age or accident may be permitted to be employed at less than the regular scale of wages at a rate of pay mutually agreed upon by the Employee, the Employer, and the Affiliated Union. The conditions of employment shall be amended so as to enable such Employees to continue with their employment.</p>	The Contractor will cooperate with BCIB in determining the reduced scale of wages and conditions of employment.
OPR.412	<p>All Mechanics, Welders, Servicepersons, Drill Doctors, Steel Sharpeners, Vehicle Body Painters, and Mechanics and Welder Apprentices who request coveralls shall have these supplied and cleaned by the Employer. There shall be one change a week available in the Employee's proper size.</p> <p>Employees are expected to take reasonable care of coveralls supplied. In the event that an Employee does not return the coveralls supplied by the Employer, the Employer shall charge the cost of same to the Employee and deduct this cost from any monies owing to the</p>	<p>If such items are not returned, the Contractor will advise BCIB and BCIB will deduct the applicable amount of the next Payroll Invoice.</p> <p>The Contractor</p>

CBA Article	Function, Obligation or Responsibility	Additional Contractor Obligation
	<p>Employee.</p> <p>When requested, coveralls shall be supplied on a temporary basis to Employees who assist on work as described above, or where the Employer and the Union mutually agree that coveralls are required.</p> <p>Employees entitled to receive coveralls as provided herein may obtain an additional change of coveralls in any one week providing the condition of the coveralls requires a change. The shop Foreperson shall use discretion in authorizing the additional change.</p>	<p>will provide input to BCIB to assist in the determination of whether coveralls are required.</p>
OPS.412	<p>Work Scope – Apprentice Crane Operators shall be allowed to operate specific equipment based upon management evaluation of their qualifications, work experience and the requirements of the specific work in question. Notwithstanding this provision, the Employer shall provide the Apprentice Crane Operators so working with appropriate supervision and suitable communication options.</p>	
TER.203	<p>When the Employer works six (6) or more Employees on any one (1) shift on any one job (number shall include owner operated and/or rented equipment) under the jurisdiction of Teamsters Local Union No. 213, a Non-Operating Foreperson should be appointed and shall receive a premium of ten percent (10%) per hour over the hourly rate of the highest Teamster classification supervised</p>	

**SCHEDULE 3
PRIVACY PROTECTION**

1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Schedule 3, in addition to the definitions set out in Schedule 1:

“**access**” means disclosure by the provision of access.

1.2 Interpretation

- (a) Any reference to “the Contractor” in this Schedule 3 includes any “associate” as defined in FOIPPA and the Contractor must ensure that all such persons comply with this Schedule 3.
- (b) The obligations of the Contractor in this Schedule 3 will survive the termination of this Agreement.
- (c) If a provision of this Agreement (including any authorization or direction given by BCIB under this Schedule 3) conflicts with a requirement of FOIPPA or an applicable order of the Information and Privacy Commissioner under FOIPPA, the conflicting provision of this Agreement (or authorization or direction) will be inoperative to the extent of the conflict.
- (d) The Contractor will comply with this Schedule 3 notwithstanding any conflicting provisions of this Agreement or the law of any jurisdiction outside Canada.

2 PURPOSE

2.1 Purpose

The purpose of this Schedule 3 is to:

- (a) enable BCIB to comply with its statutory obligations under FOIPPA with respect to Personal Information that is within BCIB’s control and in the Contractor’s custody; and
- (b) assist the Contractor, as a service provider to BCIB, to comply with its statutory obligations under FOIPPA.

3 COLLECTION OF PERSONAL INFORMATION

3.1 Collection

Unless this Agreement otherwise specifies or BCIB otherwise authorizes or directs in writing:

- (a) the Contractor may only collect or create Personal Information that is necessary for the performance of the Contractor's obligations, or the exercise of the Contractor's rights, under this Agreement or the Construction Contract;
- (b) the Contractor must collect Personal Information directly from the individual the information is about or from another source other than that individual with the written consent of the individual, or the individual's lawful representative; and
- (c) the Contractor must advise an individual from whom the Contractor collects Personal Information:
 - (i) the purpose for collecting it;
 - (ii) the legal authority for collecting it; and
 - (iii) the title, business address and business telephone number of the person designated by BCIB to answer questions concerning the Contractor's collection of Personal Information.

3.2 Accuracy of Personal Information

The Contractor must make every reasonable effort to ensure the accuracy and completeness of any Personal Information to be used by the Contractor or BCIB to make a decision that directly affects an individual the information is about.

3.3 Requests for Access to Personal Information

If the Contractor receives a request, from a person other than BCIB, for access to Personal Information, the Contractor must promptly advise the person to make the request to BCIB unless this Agreement expressly requires the Contractor to provide such access, and, if BCIB has advised the Contractor of the name or title and contact information of an official of BCIB to whom such requests are to be made, the Contractor must also promptly provide that official's name or title and contact information to the person making the request.

3.4 Correction of Personal Information

- (a) Within five Business Days of receiving a written direction from BCIB to correct or annotate any Personal Information, the Contractor must correct or annotate the information in accordance with the direction.
- (b) When issuing a written direction under Section 3.4(a) of this Schedule 3 BCIB must advise the Contractor of the date the correction request to which the direction relates was

received by BCIB in order that the Contractor may comply with Section 3.4(c) of this Schedule 3.

- (c) Within five Business Days of correcting or annotating any Personal Information under Section 3.4(a) of this Schedule 3, the Contractor must provide the corrected or annotated information to any party to whom, within one year prior to the date the correction request was made to BCIB, the Contractor disclosed the information being corrected or annotated.
- (d) If the Contractor receives a request for correction of Personal Information from a person other than BCIB, the individual whose Personal Information has been requested, or that individual's lawful representative, the Contractor must promptly advise the person to make the request to BCIB and, if BCIB has advised the Contractor of the name or title and contact information of an official of BCIB to whom such requests are to be made, the Contractor must also promptly provide that official's name or title and contact information to the person making the request.

3.5 Protection of Personal Information

The Contractor must protect Personal Information by making reasonable security arrangements against such risks as unauthorized access, collection, use, disclosure or disposal, including any expressly set out in this Agreement.

3.6 Storage and Access to Personal Information

Unless BCIB otherwise authorizes or directs in writing, the Contractor must not store Personal Information outside Canada or permit access to Personal Information from outside Canada.

3.7 Retention of Personal Information

Unless this Agreement otherwise specifies, the Contractor must retain Personal Information until authorized or directed by BCIB in writing to dispose of it or deliver it as specified in the authorization or direction.

3.8 Use of Personal Information

Unless BCIB otherwise authorizes or directs in writing, the Contractor may only use Personal Information if that use is for the performance of the Contractor's obligations, or the exercise of the Contractor's rights, under this Agreement, and for clarity in accordance with Section 3.6 of this Schedule 3.

3.9 Disclosure of Personal Information

The Contractor must not disclose Personal Information inside or outside Canada to any person other than BCIB or the Owner (but only to the extent the Personal Information to be disclosed is specifically required by the Owner pursuant to the Construction Contract) unless the disclosure is to an entity that can legitimately compel disclosure under the laws of British Columbia or the disclosure is directed or authorized by BCIB or the disclosure is requested or authorized by the

individual whose Personal Information is at issue or that individual's lawful representative. BCIB will not unreasonably withhold its authorization under this Section 3.9.

3.10 Inspection of Personal Information

In addition to any other rights of inspection BCIB may have under this Agreement or under statute, BCIB may, at any reasonable time and on reasonable notice to the Contractor, enter on the Contractor's premises to inspect any Personal Information in the possession of the Contractor or any of the Contractor's information management policies or practices relevant to its management of Personal Information or its compliance with this Schedule 3 and the Contractor must permit, and provide reasonable assistance in respect to, any such inspection.

4 COMPLIANCE WITH FOIPPA AND AUTHORIZATIONS

4.1 Service Provider

- (a) The Contractor understands and acknowledges that it is a service provider of a public body as defined in FOIPPA.
- (b) The Contractor acknowledges that it is familiar with the requirements of FOIPPA governing Personal Information that are applicable to it as a service provider.
- (c) The Contractor must in relation to Personal Information comply with:
 - (i) the requirements of FOIPPA applicable to the Contractor as a service provider, including any applicable order of the Information and Privacy Commissioner under FOIPPA; and
 - (ii) any direction given by BCIB under this Schedule 3.

4.2 Notice of Non-Compliance

If for any reason the Contractor does not comply, or anticipates that it will be unable to comply, with a provision in this Schedule 3 in any respect, the Contractor must promptly notify BCIB of the particulars of the non-compliance or anticipated non-compliance and what steps it proposes to take to address, or prevent recurrence of, the non-compliance or anticipated non-compliance.

**SCHEDULE 4
FORM OF BCIB-SUBCONTRACTOR AGREEMENT**

(see attached)

37262647.10

**BCIB-SUBCONTRACTOR AGREEMENT
KICKING HORSE CANYON PROJECT PHASE 4**

BC INFRASTRUCTURE BENEFITS INC.

AND

[SUBCONTRACTOR]

[INSERT DATE]

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BCIB-SUBCONTRACTOR AGREEMENT

THIS BCIB-SUBCONTRACTOR AGREEMENT is made effective as of the <*> day of <*>, 202<*>

BETWEEN:

BC INFRASTRUCTURE BENEFITS INC., a company incorporated under the laws of British Columbia having its head office at Suite 1050 – 89 West Georgia Street, Vancouver, BC V6B 0N8 (“**BCIB**”)

AND:

<*> (the “**Subcontractor**”)

WHEREAS:

- A. BCIB has entered into a Community Benefits Agreement dated the 17th day of July, 2018, as may be amended, supplemented or restated from time to time (the “**Community Benefits Agreement**”) with the Allied Infrastructure and Related Construction Council of British Columbia (the “**Council**”) which governs the terms and conditions of employment for Employees in respect of the Project;
- B. BCIB has entered into an agreement with the Owner made and dated for reference as of the 23rd day of May, 2019 whereby BCIB has, subject to the Community Benefits Agreement, the sole and exclusive right to provide Employees to contractors who will perform work or provide services at the Site in respect of the Project;
- C. The Owner and the Contractor have entered into the Construction Contract;
- D. BCIB and the Contractor have entered into the BCIB-Contractor Agreement, which, among other things, requires the Contractor to cause the Subcontractor to enter into this Agreement with BCIB;
- E. The Subcontractor requires Employees in order to fulfill its obligations under the Subcontract; and
- F. The parties wish to enter into a formal contract for the provision of such Employees to the Subcontractor by BCIB.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the sum of One Hundred Dollars (\$100.00) now paid by each of the Subcontractor and BCIB to the other (the receipt of which sum by the Subcontractor and by BCIB is hereby irrevocably acknowledged) and of the mutual promises and agreements contained in this Agreement, the parties agree as follows:

1.0 DEFINITIONS AND INTERPRETATION

1.1 In this Agreement, except as otherwise expressly provided or unless the context otherwise requires, capitalized terms have the meanings set out in Schedule 1.

2.0 REPRESENTATIVES

2.1 Within two Business Days after the Effective Date, and thereafter from time to time as BCIB deems necessary, BCIB will designate one person (“**BCIB’s Representative**”), and an alternate in the event BCIB’s Representative is absent, to be BCIB’s single point of contact for the Subcontractor with respect to this Agreement. BCIB will, upon designating such person, advise the Subcontractor in writing of the name, address, telephone number and email address of BCIB’s Representative.

2.2 Within two Business Days after the Effective Date, and thereafter from time to time as the Subcontractor deems necessary, the Subcontractor will designate one person (the “**Subcontractor’s Representative**”), and an alternate in the event the Subcontractor’s Representative is absent, to be the Subcontractor’s single point of contact for BCIB with respect to this Agreement. The Subcontractor will, upon designating such person, advise BCIB in writing of the name, address, telephone number and email address of the Subcontractor’s Representative. If, at any time, BCIB’s Representative, acting reasonably, objects to the Subcontractor’s Representative, then the Subcontractor will replace the Subcontractor’s Representative with a person acceptable to BCIB’s Representative.

2.3 As soon as practicable after the Effective Date, and thereafter from time to time as may be necessary, BCIB’s Representative will advise the Subcontractor’s Representative of the name, address, telephone number and email address of the Council’s Representative.

2.4 The Subcontractor acknowledges that BCIB will have a presence on the construction Site. The parties will, within ten Business Days after the Effective Date, establish a system for ongoing communication and liaison for the purpose of ensuring the timely exchange of information that the parties agree is required for the effective coordination and implementation of this Agreement, including regular, active and open communication with respect to the Subcontractor’s requirements for Employees, information the Subcontractor already has in its possession with respect to individuals who may be available to become Employees and BCIB’s sourcing of Employees and its anticipated ability to fulfill Employee Requests.

3.0 OBLIGATION TO OBTAIN EMPLOYEES

3.1 The Subcontractor will obtain from BCIB all Employees required by the Subcontractor to fulfill its obligations under the Subcontract.

3.2 Notwithstanding the powers expressly delegated by this Agreement to the Subcontractor by BCIB, all Employees provided to the Subcontractor by BCIB will be employed by BCIB, and BCIB will retain, with respect to all such Employees, the exclusive rights as

employer in all aspects of labour relations and in all aspects of the employment relationship. The Subcontractor will not in any way derogate or attempt to derogate from the rights and authority of BCIB as employer.

4.0 OBTAINING EMPLOYEES

4.1 The Subcontractor will participate in any pre-job conference(s) arranged by BCIB, and will present, after collaboration with BCIB and the Council, details of the Subcontract Work, including schedule, work type and anticipated numbers and Job Classifications of Employees.

4.2 The Subcontractor will provide the following forecasts and requests:

- (a) *Six Month Forecast.* The Subcontractor will, no later than five Business Days after the Effective Date, provide to BCIB's Representative:
 - (i) the Subcontractor's best estimate of the anticipated Employees that will be required by the Subcontractor and all of the Applicable Sub-subcontractors for the first six months of the Subcontract Work, giving estimates of the numbers and Job Classifications of Employees that will be required on a month-by-month basis; and
 - (ii) the Subcontractor's then current overall Subcontract Work schedule, including Primavera P6 data files in both XER and XML formats, that includes manpower resource loading that the Subcontractor anticipates will be utilized by the Subcontractor and all of the then known Applicable Sub-subcontractors for the performance of the Subcontract Work.
- (b) *Three Month Forecast.* The Subcontractor will, on the first Business Day of each month starting with the second month after the Effective Date, provide to BCIB's Representative:
 - (i) the Subcontractor's best estimate of the anticipated Employees that will be required by the Subcontractor and all of the Applicable Sub-subcontractors for the then current month and the next following two months of the Subcontract Work, giving details of the numbers and Job Classifications of Employees required on a month-by-month basis; and
 - (ii) the Subcontractor's then current overall Subcontract Work schedule, including Primavera P6 data files in both XER and XML formats, that includes manpower resource loading that the Subcontractor anticipates will be utilized by the Subcontractor and all of the then known Applicable Sub-subcontractors for the performance of the Subcontract Work.
- (c) *Employee Request.* The Subcontractor will, from time to time during the term of this Agreement but in any event not later than 30 days prior to the date that the Subcontractor requires certain Employees, provide to BCIB's Representative a

request for Employees (each, an “**Employee Request**”) in the form and format required by BCIB, and setting out the following information:

- (i) the number and Job Classifications of Employees required by the Subcontractor;
 - (ii) the ‘name hires’ requested by the Subcontractor (the “**CBA Name Hires**”);
 - (iii) to the extent the Contractor has delegated the ability to ‘name hire’ Employees to perform Rock Slope Work (as defined in the Enabling Agreement) above the number of ‘name hires’ provided for in the Community Benefits Agreement to the Subcontractor (such additional ‘name hires’, the “**Rock Slope Name Hires**”), the Rock Slope Name Hires requested by the Subcontractor;
 - (iv) the names of prospective Employees the Subcontractor wishes to name request from the information provided pursuant to Section 4.8 or from other information that may be available to the Subcontractor;
 - (v) the number and type of apprentices requested by the Subcontractor;
 - (vi) the date upon which each such Employee will be required to commence working under the direction of the Subcontractor;
 - (vii) the Subcontractor’s best estimate of the time period each such Employee will be required by the Subcontractor;
 - (viii) the details of any special experience or technical or other qualifications required in respect of any particular Employee;
 - (ix) the intended work assignments in compliance with Article 6 of the Community Benefits Agreement; and
 - (x) such other relevant information with respect to potential Employees as BCIB’s Representative may reasonably request (and which the Subcontractor possesses and is legally permitted to disclose), or that the Subcontractor may consider beneficial, in order to enable BCIB to provide the Employees required by the Subcontractor.
- (d) The parties agree that the forecasts provided pursuant to Section 4.2(a) and Section 4.2(b) are non-binding and are estimates only, but that such forecasts will be used by BCIB to source an appropriate workforce for the Project in collaboration with the Contractor.

4.3 The Subcontractor acknowledges the provisions of Section 2(d) (to become Section 1(d)) of the Enabling Agreement and, if the Subcontractor has been delegated the ability to ‘name hire’ Rock Slope Name Hires, the Subcontractor will work collaboratively with

BCIB and the Contractor, and in accordance with Section 2.4, to establish a method by which to implement the provisions of Section 2(d) (to become Section 1(d)) of the Enabling Agreement, including determining which of the Contractor, the Subcontractor and, if applicable, the Applicable Sub-subcontractors shall be subject to the described reduction in 'name hires'.

4.4 BCIB will, in accordance with the dispatch provisions of the Community Benefits Agreement, including Articles 8.200, 8.600 and 9.100 of the Community Benefits Agreement, and subject to the minimum time period described in Section 4.6 where applicable, use reasonable efforts to provide the Subcontractor with Employees to perform the Subcontract Work in the numbers and Job Classifications set out in the Employee Request submitted pursuant to Section 4.2(c) to the extent that BCIB is itself able to obtain Employees in such numbers and Job Classifications.

4.5 Unless:

(a) the CBA Name Hires have already been provided or committed by BCIB to another contractor or they are unavailable due to circumstances beyond BCIB's control, in each case at the time of the Employee Request, BCIB will provide the CBA Name Hires to the Subcontractor, in accordance with the dispatch provisions of the Community Benefits Agreement; and

(b) the Rock Slope Name Hires have already been provided or committed by BCIB to another contractor or they are unavailable due to circumstances beyond BCIB's control, in each case at the time of the Employee Request, and provided that the Subcontractor has been delegated the ability to 'name hire' Rock Slope Name Hires, BCIB will provide the Rock Slope Name Hires to the Subcontractor.

4.6 If, due to unforeseen circumstances related to the timing of the performance of the Subcontract Work or a component of the Subcontract Work, the Subcontractor is not able to provide an Employee Request which provides for the 30 day time period described in Section 4.2(c), the Subcontractor acknowledges that, despite any request for Employees to be provided by a certain date, BCIB requires a minimum of three Business Days prior written notice of the date upon which the Subcontractor requires an Employee or Employees to commence performance of the Subcontract Work in order to be able to provide the requested Employee(s).

4.7 In the case of:

(a) an Employee Request submitted in accordance with Section 4.2(c), BCIB will advise the Subcontractor as soon as practicable but in any event not later than 21 days prior to the date that the Subcontractor requires Employees as set out in a particular Employee Request if BCIB is unable to fulfill such particular Employee Request; and

- (b) an Employee Request submitted pursuant to Section 4.6, BCIB will advise the Subcontractor as soon as practicable if BCIB is unable to fulfill such particular Employee Request.

If BCIB advises the Subcontractor that BCIB is unable to fulfill a particular Employee Request, the Subcontractor will provide information already in the possession of the Subcontractor with respect to individuals who may be available to become Employees, who are suitable for performing the Subcontract Work and who, if hired by BCIB as Employees, could allow BCIB to fulfill the Employee Request. Unless such identified individuals refuse to become Employees, or have already been provided or committed by BCIB to another contractor, or such individuals are unavailable due to circumstances beyond BCIB's control, in each of the latter two cases at the time the information is provided to BCIB, BCIB will provide such identified individuals to the Subcontractor. Any failure to so advise the Subcontractor, or any indication that BCIB will be able to or unable to fulfill a particular Employee Request, does not derogate from or negate any of the provisions of Section 22.0.

- 4.8 BCIB will promptly provide to the Subcontractor's Representative information that BCIB:
 - (a) has in its possession which relates to work task or activity accommodations that are to be made in respect of the Employees provided to the Subcontractor by BCIB; and
 - (b) receives from the Affiliated Unions with respect to prospective Employees that may be available to work on the Project for the purpose of the Subcontractor name requesting prospective Employees from the Affiliated Unions.
- 4.9 The Subcontractor will, if and when requested by BCIB's Representative from time to time provide one representative of the Subcontractor to assist in the interviewing of individuals who are proposed to be hired by BCIB for subsequent assignment to the Subcontractor.

5.0 EMPLOYEE RELATIONS

- 5.1 To the extent necessary to enable the Subcontractor to perform its obligations under this Agreement, BCIB does hereby delegate to the Subcontractor, consistent with the provisions of Article 7.400 of the Community Benefits Agreement, BCIB's right to operate, direct and supervise on a day-to-day basis the Employees provided to the Subcontractor by BCIB. For certainty, but without limiting the foregoing, the Subcontractor, pursuant to the delegation provided by this Section 5.1, has the authority:
 - (a) to assign work tasks and activities to such Employees and to reassign such Employees to other work tasks and activities;
 - (b) to issue warnings to Employees as described in Section 8.2; and

- (c) to require such an Employee to cease performing work or vacate the Site or to report to BCIB's Representative for further action by BCIB, or all of the foregoing.

5.2 The Subcontractor will, with respect to the Employees provided to the Subcontractor by BCIB:

- (a) be solely responsible for the operation, direction and supervision of the Employees pursuant to the delegation of such responsibility in accordance with Section 5.1;
- (b) be solely responsible for the performance of the Subcontract Work by the Employees;
- (c) promptly advise BCIB's Representative in writing of any requested changes in the status of any Employee, including any changes which may be necessitated by changes in work assignment, completion of work, lack of work or absence of the Employee from the Subcontract Work for whatever reason;
- (d) give full consideration to a request from BCIB to transfer an Employee from the Subcontractor to another entity which has a contract with BCIB, recognizing that, pursuant to Article 7.600 of the Community Benefits Agreement, any such transfer will require the agreement of the appropriate Affiliated Union, the contractors involved, the Employee and BCIB;
- (e) promptly upon receipt of a written request from BCIB's Representative, provide BCIB's Representative with such information and documents relating to the Employees who are under the direction of the Subcontractor as BCIB may from time to time require;
- (f) comply with any instruction which may be given by BCIB or BCIB's Representative with respect to the Job Classifications of any Employee to be used with respect to any type of Subcontract Work;
- (g) not use or seek to use any full-time Employee for anything other than performing the Subcontract Work;
- (h) not do anything which could cause and will not direct a lockout of Employees;
- (i) recognize the Council's Representative and any Affiliated Union's representative and, provided reasonable written notice has been provided to the Subcontractor's Representative, provide such representatives access to all parts of the Site as may be necessary for the administration and application of the Community Benefits Agreement. All such representatives will be required to comply with the health and safety protocols for attendance on the Site as required by the applicable designated "prime contractor" under the *Workers Compensation Act* (British Columbia);

- (j) to the extent necessary to reflect Subcontract Work-specific and Site-specific matters, provide orientation to Employees that is required by the Community Benefits Agreement and applicable law on the following topics:
 - (i) general matters, including, at a minimum, Site orientation and a discussion of housekeeping, environmental stewardship and cultural awareness; and
 - (ii) occupational health and safety matters, including health and safety training and health and safety-related skills training; and
- (k) to the extent necessary and applicable to the Subcontractor or the performance of the Subcontract Work, comply with and give effect to the results of negotiations and any rulings, interpretations, orders and decisions made in labour relations matters of which BCIB notifies the Subcontractor's Representative and that relate to the Employees.

5.3 BCIB will:

- (a) provide to each Employee to be provided to the Subcontractor:
 - (i) two hours of onboarding training;
 - (ii) a maximum of 10 hours of introductory safety training; and
 - (iii) for each supervisor (including any Employee who will be supervising other Employees for safety), a maximum of two days of supervisor training,

such training to be provided either prior to the date upon which the Employee will be required to commence working under the direction of the Subcontractor, or immediately upon the Employee commencing work under the direction of the Subcontractor, at the election of the Subcontractor;
- (b) notify the Subcontractor in writing of any change under the Community Benefits Agreement, including changes to:
 - (i) initiation fees or dues, or of assessments by the Affiliated Unions;
 - (ii) steward appointments;
 - (iii) hourly wage rates and trade provisions; and
 - (iv) new or revised Job Classifications and associated wage rates and trade provisions;
- (c) acting in the best interests of the Project and to uphold the spirit and intent of the Community Benefits Agreement, enforce its rights under the Community Benefits Agreement, it being acknowledged that it is in the mutual best interest of BCIB

and the Subcontractor to prevent and resolve strikes, lockouts, slowdowns or other interruptions in the orderly performance of the Work, including the Subcontract Work;

- (d) seek input from the Subcontractor regarding and will act in good faith in all labour relations matters which are relevant to the Subcontractor, including in grievance, arbitration and jurisdictional proceedings, including in the settlement of such proceedings, it being acknowledged that it is in the mutual best interest of BCIB and the Subcontractor to prevent strikes, lockouts, slowdowns or other interruptions in the orderly performance of the Work, including the Subcontract Work;
- (e) keep the Subcontractor's Representative informed of the results of any negotiations and any rulings, interpretations, orders and decisions made in labour relations matters which are relevant to the Subcontractor so that the Subcontractor may, to the extent necessary and applicable to the Subcontractor or the performance of the Subcontract Work, comply with and give effect to any such results and rulings, interpretations, orders and decisions; and
- (f) provide the Subcontractor with any and all Employee information which is required by the Subcontractor in order for the Subcontractor to fulfill its duties and responsibilities at law.

5.4 The Subcontractor may implement an employee appreciation and/or recognition program to supplement the wages paid to Employees under the Community Benefits Agreement or to recognize the performance of Employees, provided that any such system is consented to in writing by BCIB, in its discretion, prior to its implementation and which system may require the approval or consent of the Council.

6.0 COMMUNITY BENEFITS AGREEMENT

6.1 A true copy of the Community Benefits Agreement has been made available to the Subcontractor. The Subcontractor represents and warrants it has full knowledge of and understands the provisions of the Community Benefits Agreement.

6.2 The Subcontractor acknowledges that for all purposes of this Agreement any reference to the Community Benefits Agreement will include all amendments to, supplements to or restatements of the Community Benefits Agreement, and will include all agreements entered into between BCIB and the Council as contemplated by Article 24 of the Community Benefits Agreement.

6.3 Unless otherwise expressly modified by the terms of this Agreement, the Subcontractor, in performing its obligations under this Agreement and to fulfill its obligations under the Subcontract, will give effect to, and will observe, comply with and perform all terms and conditions of the Community Benefits Agreement that are specified to apply to the Subcontractor as a "Contractor" (as that term is used in the Community Benefits

Agreement), as well as all consequent functions, obligations and responsibilities that are associated with such terms and conditions.

- 6.4 The Subcontractor, on behalf of BCIB, will give effect to, and will observe, comply with and perform all of BCIB's functions, obligations and responsibilities described in the provisions of the Community Benefits Agreement set out in Schedule 2, as well as all consequent functions, obligations and responsibilities that are associated with such terms and conditions.
- 6.5 The Subcontractor will not act in any way which may obstruct, interfere with or impede BCIB's ability to observe, comply with and perform each and every provision of the Community Benefits Agreement.
- 6.6 The Subcontractor will perform such acts and do such things, including attending meetings, whether or not with the Council, as BCIB may from time to time reasonably require in order to permit BCIB to perform its obligations under and to comply with the Community Benefits Agreement.
- 6.7 The Subcontractor acknowledges BCIB's authority to act on behalf of the Subcontractor in all matters related to the interpretation, application, administration or alleged violation of the Community Benefits Agreement, including BCIB's sole responsibility for discussing, resolving or arbitrating any grievance that may arise under the Community Benefits Agreement. BCIB will keep the Subcontractor informed of, involve the Subcontractor in and seek input from the Subcontractor regarding such matters, including in the settlement of such matters, to the extent those matters are relevant to the Subcontractor or the performance of the Subcontract Work.

7.0 PAYROLL

- 7.1 Whenever required by BCIB, the Subcontractor will provide to BCIB payroll administration support by providing information reasonably requested by BCIB in the form and format required by BCIB. Such information will include recruitment information, hours of work schedules, timesheets, change of status requests and termination information, and any other information deemed necessary by BCIB. If requested by BCIB's Representative, the Subcontractor will review and approve the timesheets prior to submitting them to BCIB.
- 7.2 BCIB will prepare and deliver an invoice (each, a "**Payroll Invoice**") to the Subcontractor for each pay period. The Payroll Invoice will set out the amount owing by the Subcontractor to BCIB (the "**Payroll Amount**") in respect of:
 - (a) all amounts required by the Community Benefits Agreement (to the extent each is applicable to the Project):
 - (i) to be paid to Employees provided to the Subcontractor by BCIB during the applicable pay period. For clarity, the Subcontractor will be responsible

for amounts to be paid to Employees in respect of the time Employees are being trained by BCIB as described in Section 5.3(a); and

- (ii) to be paid to third parties other than the Employees provided to the Subcontractor by BCIB based on the number of hours worked by the Employees provided to the Subcontractor by BCIB, such as the Funds described in Article 13.200 of the Community Benefits Agreement;
- (b) all applicable payroll taxes and assessments, including Employment Insurance, Canada Pension Plan, and Employer Health Tax; and
- (c) all other applicable taxes.

Promptly upon receipt of a Payroll Invoice, the Subcontractor will review the Payroll Invoice against the Subcontractor's records and advise BCIB's Representative of any necessary changes. If any changes to a Payroll Invoice are necessary, BCIB will endeavour to revise and reissue the Payroll Invoice in sufficient time to allow the Subcontractor to comply with Section 7.3. If there is not sufficient time, BCIB will capture the necessary changes on the next issued Payroll Invoice.

- 7.3 The Subcontractor will pay to the account specified in the Payroll Invoice the Payroll Amount no later than five Business Days after receipt of each initial Payroll Invoice.
- 7.4 If BCIB delivers Employee payroll cheques or payslips, or both, to the Subcontractor's Representative, the Subcontractor will promptly distribute such documents to the applicable Employees.
- 7.5 In the event that an Employee or other person or authority on behalf of such Employee was overpaid by BCIB, BCIB and the Subcontractor will cooperate to obtain repayment of such overpaid amount from such Employee or other person or authority who received such overpayment, and amounts recovered will be credited to the Subcontractor on the next applicable Payroll Invoice.
- 7.6 The Subcontractor will remit to WorkSafeBC the WorkSafeBC assessments calculated by the Subcontractor on each payroll, at the rate or rates which are applicable to the Subcontractor according to the classification and rates determined by WorkSafeBC. The rate or rates will be applied to the applicable gross amounts earned in accordance with the *Workers Compensation Act* (British Columbia).

8.0 DISCIPLINE, DISMISSAL, REINSTATEMENT AND TERMINATION OF EMPLOYMENT

- 8.1 The Subcontractor acknowledges the provisions of Article 10 of the Community Benefits Agreement and agrees to give effect to, and to observe, comply with and perform the terms and conditions set out in that Article.
- 8.2 Notwithstanding anything to the contrary contained in this Agreement, the Subcontractor will be permitted to issue warnings to the Employees provided to the Subcontractor by

BCIB. As soon as practicable after issuing a warning, the Subcontractor's Representative will notify BCIB's Representative in writing providing details of the warning.

8.3 Without limiting the Subcontractor's abilities as described in Section 5.1 and Section 8.2, if and whenever:

- (a) BCIB has knowledge of any conduct of an Employee who is under the direction of the Subcontractor which would justify discipline, dismissal or the taking of other corrective or rehabilitative action in respect of such Employee, whether it be for incompetence, insubordination, unreliability or otherwise; or
- (b) the Subcontractor's Representative recommends to BCIB that an Employee be disciplined or dismissed or that other corrective or rehabilitative action be taken in respect of an Employee, whether it be for incompetence, insubordination, unreliability or otherwise,

BCIB will, in its sole and absolute discretion:

- (c) take no action where the circumstances do not support the application of discipline or the taking of other corrective or rehabilitative action; or
- (d) promptly discipline or take such other corrective or rehabilitative action in respect of such Employee as the situation requires; or
- (e)
 - (i) promptly remove such Employee from the direction of the Subcontractor; and
 - (ii) terminate such Employee's employment with BCIB in accordance with the provisions of the Community Benefits Agreement and applicable law.

8.4 In the event that any Employee whose employment has been terminated pursuant to Section 8.3 initiates a grievance under the Community Benefits Agreement, the Subcontractor and BCIB will make every effort to complete Stage I of the grievance procedure under the Community Benefits Agreement before the grieving Employee leaves the Site.

8.5 With respect to any Employee that has been removed, whether temporarily or permanently, from the direction of the Subcontractor pursuant to Section 8.3, if the Subcontractor's Representative requests in writing a replacement Employee, BCIB will, in accordance with the dispatch provisions of the Community Benefits Agreement, including Articles 8.200, 8.600 and 9.100 of the Community Benefits Agreement, and within three Business Days of such request, provide a replacement Employee to the Subcontractor, such replacement Employee to be in the same Job Classification as and with comparable qualifications, certifications, if any, and experience to the Employee being replaced.

8.6 BCIB will permit the Subcontractor to have an active role in supporting any investigation BCIB conducts into Employee conduct which may lead to BCIB taking action pursuant

to Section 8.3 and in connection with a grievance initiated by an Employee provided to the Subcontractor by BCIB.

- 8.7 The Subcontractor will comply with the terms of any grievance award, and any order, judgment, direction or interpretation made under the procedures set forth in the Community Benefits Agreement, or by any arbitrator, court or other authority having jurisdiction over the Employees which in any way relates to the Employees provided to the Subcontractor by BCIB, including awards of the Jurisdictional Assignment Plan Umpire of Work Assignment as described in Article 6.103 of the Community Benefits Agreement, and including any reinstatement order, judgement or direction, to the extent that the Subcontractor's compliance is necessary in order to enable BCIB to comply with any such award, order, judgment, direction or interpretation.
- 8.8 The Subcontractor will provide to BCIB, at a location designated by BCIB, any information required by BCIB in a form and format required by BCIB to enable BCIB to complete end of employment documentation in respect of an Employee whose services have been terminated.

9.0 SUBCONTRACTING

- 9.1 The Subcontractor will notify BCIB's Representative in writing of the names of all of the Subcontractor's sub-subcontractors (of any and all tiers) (each, a "**Sub-subcontractor**") engaged to perform a portion of the Subcontract Work at the Site, whether or not such Sub-subcontractor requires Employees. Except in circumstances where two weeks prior notice is not commercially reasonable, the Subcontractor will provide such notice no less than two weeks prior to the Sub-subcontractor commencing work at the Site.
- 9.2 The Subcontractor will not permit any Sub-subcontractor to perform any work at the Site unless and until that Sub-subcontractor:
- (a) confirms in writing to BCIB that the Sub-subcontractor will not require any Employees to be provided by BCIB, and BCIB agrees with such determination;
 - (b) is granted a permit pursuant to Article 8.400 of the Community Benefits Agreement; or
 - (c) executes a BCIB-Subcontractor Agreement pursuant to Section 9.3.
- 9.3 The Subcontractor will cause each Sub-subcontractor (other than a Sub-subcontractor described in Section 9.2(a) or Section 9.2(b)) (each, an "**Applicable Sub-subcontractor**") to enter into an agreement with BCIB (each, also a "**BCIB-Subcontractor Agreement**") to obtain from BCIB the Employees that the Applicable Sub-subcontractor will require for the performance of its portion of the Subcontract Work at the Site. Each other BCIB-Subcontractor Agreement will be in the form of this Agreement, subject only to variations in form required by BCIB, in its sole and absolute discretion, to suit the circumstances.

9.4 Without duplication of recovery under Section 12.0, if, under any other BCIB-Subcontractor Agreement, an Applicable Sub-subcontractor fails to pay any amount required to be paid to BCIB beyond any period permitted for the payment of such amount as out in the BCIB-Subcontractor Agreement, then, upon written notice to the Subcontractor, the Subcontractor will pay such amount to BCIB, or cause BCIB to be paid such amount, no later than five Business Days after receipt of such notice.

10.0 PERMITTEES

10.1 The Subcontractor may request that permits be granted to Sub-subcontractors or employees (who would ordinarily be “Employees” for the purposes of the Community Benefits Agreement), or both, as described in Article 8.400 of the Community Benefits Agreement.

10.2 For any permit request, the Subcontractor will be responsible for completing a permit request form (in the form required by the Council), and will submit the completed permit request form along with the required fee made payable to the Council to BCIB’s Representative for review. Provided the permit request form and associated fee comply with the provisions of Article 8.400 of the Community Benefits Agreement, BCIB will promptly sign the permit request form and submit it and the fee to the Council. If BCIB refuses to sign the permit request form, then BCIB’s Representative will promptly return the form and fee to the Subcontractor’s Representative with reasons for BCIB’s refusal to sign the form.

10.3 BCIB will, to the extent necessary, arrange meetings between the Subcontractor and the Council to resolve any issues with respect to the granting of permits, however, the Subcontractor remains fully responsible for satisfying the conditions required for the granting of a permit.

10.4 The Subcontractor acknowledges the provisions of Articles 8.403 and 8.409 of the Community Benefits Agreement and agrees to give effect to, and observe, comply with and perform the terms and conditions set out in those Articles.

11.0 BCIB COSTS

11.1 In addition to paying the Payroll Amount, the Subcontractor will pay to BCIB the following costs and expenses reasonably incurred by BCIB (“**BCIB Costs**”) in connection with or with respect to the Employees provided to the Subcontractor by BCIB for performing the Subcontract Work, without duplication of items included in the Payroll Amount:

- (a) the following costs described in the Community Benefits Agreement, to the extent each is applicable to the Project:
 - (i) Article 14.602 (pay in lieu of meal);
 - (ii) Article 17.200 (for mileage or ferry costs);

- (iii) Article 17.401 (weekend checkout);
 - (iv) Article 21.100 (transportation to Project on initial hire);
 - (v) Article 21.201 (transportation from Project when an Employee on the job for 30 days or more);
 - (vi) Article 21.700 (compassionate leave transportation); and
 - (vii) Article 22.100 (daily travel reimbursement);
- (b) the fees and disbursements charged to BCIB by those lawyers, accountants, consultants, witnesses or other professionals or experts retained by BCIB at the request of the Subcontractor;
 - (c) the amount of any damages, salary, severance pay, expenses, costs, penalties, fines or other monies which BCIB is ordered to pay by any arbitrator, court or other authority having jurisdiction, or which BCIB reasonably agrees to pay after consultation with the Subcontractor, in respect of any Employee, with respect to grievance, arbitration, court or other labour relations proceedings initiated by any Employee, the Council or any Affiliated Union which relates to the Subcontractor's operation, direction and supervision of the Employees or the performance of the Subcontract Work;
 - (d) the costs incurred by, including third party fees and disbursements charged to, BCIB in investigating complaints made by an Employee against the Subcontractor or against an employee or other representative of the Subcontractor (who is not an Employee) under the Workplace Discrimination and Harassment Policy and Procedures, but only in circumstances where the investigation determines that the Subcontractor or such Subcontractor employee or representative has violated the Workplace Discrimination and Harassment Policy and Procedures;
 - (e) notwithstanding Section 12.01 of the Workplace Drug and Alcohol Policy and Procedures, the cost of all Substance Testing (as defined in the Workplace Drug and Alcohol Policy and Procedures) conducted under the Workplace Drug and Alcohol Policy and Procedures;
 - (f) the amount paid to or on behalf of any Employee by BCIB in respect of transportation to or from the Site at the time of hire, upon termination of employment, or in order to facilitate such Employee undergoing tests or examinations which may be required in connection with such Employee's employment and compensated by BCIB pursuant to the Community Benefits Agreement, or in connection with any special training provided for such Employee at the request of or with the approval of the Subcontractor;
 - (g) the amount of any medical doctor's charges or other charges paid by BCIB in connection with the provision of food handling certificates, underground

certificates, audio certificates or any other certificate relating to the fitness or qualifications of any Employee;

- (h) advances on salary and any special payments in respect of labour relations matters made by BCIB to or on behalf of any Employee which are required to be made by the Community Benefits Agreement;
 - (i) the costs of any items or services required to be provided to or for any Employee by the provisions of the Community Benefits Agreement which are the responsibility of the Subcontractor to provide pursuant to the provisions of this Agreement, but which were not provided by the Subcontractor, including the costs of providing orientation, training, tools, safety equipment, clothing and transportation;
 - (j) in the event that BCIB requests an amount from the Owner under the provisions of Section 12.0, the sum of \$1,000.00 for each such request as compensation to BCIB for its costs of administering such request to the Owner. For clarity, BCIB will not charge the Subcontractor this fee if BCIB has already charged an equivalent fee to an Applicable Sub-subcontractor pursuant to a BCIB-Subcontractor Agreement in respect of the same delinquent amount;
 - (k) any WorkSafeBC levies, assessments, reassessments, penalties or other amounts required to be paid by BCIB under the *Workers' Compensation Act* (British Columbia) which are applied to BCIB but which are in respect specifically to the Subcontractor and which are not payroll WorkSafeBC assessments as described in Section 7.6; and
 - (l) the Subcontractor's *pro rata* share of any WorkSafeBC levies, assessments, reassessments, penalties or other amounts required to be paid by BCIB under the *Workers' Compensation Act* (British Columbia) which are applied on a Project-wide basis and which are not payroll WorkSafeBC assessments as described in Section 7.6. Such levies, assessments, reassessments, penalties and other amounts will be shared amongst all entities having a contract with BCIB in respect of the Project and be calculated based on the total number of hours worked by the Employees provided to each such entity up to the date of such levy, assessment, reassessment, penalty or other amount.
- 11.2 BCIB will, from time to time but not more frequently than monthly, prepare and deliver an invoice (each, a "**Cost Invoice**") to the Subcontractor setting out the amount of BCIB Costs owing by the Subcontractor to BCIB for the relevant time period. The Subcontractor will pay to the account specified in the Cost Invoice the amount of such BCIB Costs plus all applicable taxes no later than ten Business Days after receipt of the Cost Invoice. The Subcontractor will pay the full amount set out in the Cost Invoice without prejudice to the Subcontractor's rights of dispute under Section 23.0.
- 11.3 The Subcontractor or its authorized agent may, at the Subcontractor's discretion and expense, at any time and from time to time during the time BCIB is required to keep

records pursuant to applicable law, during normal business hours and with reasonable notice and without undue disturbance of BCIB's business operations, enter upon BCIB's premises and, subject to solicitor-client privilege, audit the records of BCIB which relate in any way to BCIB Costs. BCIB will make all such records available for examination and copying by the Subcontractor at BCIB's premises.

12.0 PAYMENT BY OWNER UPON A FAILURE TO PAY

- 12.1 The Subcontractor acknowledges that if at any time the Subcontractor or any Applicable Sub-subcontractor fails to pay any amount required to be paid to BCIB under this Agreement or under another BCIB-Subcontractor Agreement, as the case may be, beyond any period permitted for the payment of such amount as set out in this Agreement or in the BCIB-Subcontractor Agreement, as the case may be, BCIB may advise the Owner in writing and may request payment by the Owner of such amount.
- 12.2 In the event that the Owner pays BCIB the amount requested by BCIB under the provisions of Section 12.1, and provided that the Subcontractor compensates BCIB for its administration costs as described in Section 11.1(j) in accordance with Section 11.2, then the Subcontractor will not be in default of its obligation to pay such amount under this Agreement. For clarity, the payment by the Owner of an amount requested by BCIB will be deemed to satisfy the Subcontractor's obligation to pay that same amount to BCIB.

13.0 OCCUPATIONAL HEALTH AND SAFETY

- 13.1 The parties acknowledge that each has obligations under applicable law as an "employer" for the health and safety of the Employees provided to the Subcontractor by BCIB. For the purposes of clearly defining and establishing respective responsibilities without duplication of any overlapping responsibilities, and for the purposes of achieving a consistent, proactive and preventative health and safety culture, and implementing effective health and safety programs, the following will apply with respect to occupational health and safety:
- (a) The Subcontractor will comply with all applicable law relating to occupational health and safety, including:
 - (i) the *Workers Compensation Act* (British Columbia); and
 - (ii) the *Mines Act* (British Columbia).
 - (b) The Subcontractor will be responsible for and will fulfill all of its obligations as an "employer" (as that term is used in Part 2 of the *Workers Compensation Act* (British Columbia)) pursuant to Part 2 of the *Workers Compensation Act* (British Columbia), including as such obligations relate to the Employees provided to the Subcontractor by BCIB.
 - (c) The Subcontractor will, as an "employer" (as that term is used in Part 2 of the *Workers Compensation Act* (British Columbia)), ensure that any Employee provided to the Subcontractor by BCIB that is acting in the capacity of

“supervisor” (as that term is used in Part 2 of the *Workers Compensation Act* (British Columbia)) has the information, instruction, training and supervision necessary to effectively discharge their responsibilities.

- (d) The Subcontractor acknowledges receipt of the Health and Safety Policy and Program. The Subcontractor will, as part of and not in substitution for any health and safety obligations that the Subcontractor must meet under the Subcontract and applicable law, including the *Workers Compensation Act* (British Columbia), implement the Health and Safety Policy and Program in order to achieve or exceed the objectives set out in the Health and Safety Policy and Program.
- (e) Each party acknowledges that the Health and Safety Policy and Program and the Subcontractor’s health and safety program, policies and work procedures will in no way fetter the authority and responsibilities of the applicable designated “prime contractor” under the *Workers Compensation Act* (British Columbia), and each of the parties will recognize the authority of such “prime contractor” and will comply with such “prime contractor’s” health and safety program, policies, systems, processes and procedures.
- (f) The parties will, within ten Business Days after the Effective Date, establish a system for ongoing communication and liaison for the purpose of ensuring the timely exchange of information that the parties agree is required for the effective coordination and implementation of the Health and Safety Policy and Program and the Subcontractor’s health and safety program, policies and work procedures, and the ongoing health and safety of all Employees provided to the Subcontractor by BCIB.
- (g) The Subcontractor will, in respect of the Employees provided to the Subcontractor by BCIB, fulfill all health and safety-related obligations required by the Community Benefits Agreement, and the Subcontractor will, for certainty:
 - (i) provide to all such Employees such safety equipment and clothing as required by the Community Benefits Agreement, the Health and Safety Policy and Program and applicable law, including the *Workers Compensation Act* (British Columbia) and the *Mines Act* (British Columbia); and
 - (ii) bear transportation costs not covered by WorkSafeBC for sick or injured Employees from the Site to the Point of Hire (as defined in the Community Benefits Agreement) as well as the transportation costs of such Employee’s tools to the Point of Hire.

Where the Subcontractor fails to meet the requirements of this Section 13.1(g), the same may be provided by BCIB and the Subcontractor will reimburse BCIB in accordance with Section 11.1(i).

- (h) Where the Subcontractor fails to meet the requirements of Section 5.2(j) within a reasonable time after receipt of written notice from BCIB's Representative to provide such orientation, the same may be provided by BCIB and the Subcontractor will reimburse BCIB in accordance with Section 11.1(i).
- (i) The Subcontractor will, provided reasonable written notice has been provided to the Subcontractor's Representative and to the applicable designated "prime contractor" under the *Workers Compensation Act* (British Columbia), provide BCIB representatives full access to all parts of the Site and the activities of the Subcontractor on the Site. All BCIB representatives will be required to comply with the health and safety protocols for attendance on the Site as required by the applicable designated "prime contractor" under the *Workers Compensation Act* (British Columbia).
- (j) Each party will fully cooperate with the other party in any activity performed by the other party to ensure both party's fulfilment of the health and safety obligations under this Agreement, including inspections, investigations, and attending and participating in initiatives such as Joint Health and Safety Committee meetings and tool box talks.
- (k) Prior to commencing performance of the Subcontract Work at the Site, and at any time on BCIB's Representative's request, the Subcontractor will deliver to BCIB's Representative a statement from WorkSafeBC that the Subcontractor is registered and in good standing.
- (l) The Subcontractor will provide to BCIB's Representative:
 - (i) notice of any worker compensation claims that are made against the Subcontractor by the Employees provided to the Subcontractor by BCIB; and
 - (ii) copies of all correspondence and forms, including claim forms, papers and reports, received by or sent to governmental authorities concerning any such claims and any other health and safety matters on the Site.
- (m) For the purpose of this Agreement only, the Subcontractor acknowledges and agrees that any claims made by Employees provided to the Subcontractor by BCIB under and pursuant to the *Workers Compensation Act* (British Columbia) will be reported to WorkSafeBC under the Subcontractor's account with WorkSafeBC and will be considered and reflected in and may therefore adversely affect the experience rating (for purposes of assessments made under the *Workers Compensation Act* (British Columbia)) of the Subcontractor and not of BCIB. BCIB will not be liable to the Subcontractor, and the Subcontractor will have no claim against BCIB, for any loss, cost, damage, assessments, reassessments, penalties or expense suffered or incurred by the Subcontractor by reason of any claim brought under the *Workers Compensation Act* (British Columbia) by any such Employee, including for any increase in the

Subcontractor's experience rating under the *Workers Compensation Act* (British Columbia) arising as a result of any such claim.

- (n) For the purpose of this Agreement only, BCIB hereby gives and grants to the Subcontractor authority to act on behalf of BCIB in all matters related to WorkSafeBC claims management and in all adjudications of WorkSafeBC claims, as such relate to the Employees provided to the Subcontractor by BCIB, and the Subcontractor undertakes to provide all such claims management and adjudications of claims. For certainty, in all such matters involving Employees provided to the Subcontractor by BCIB, the Subcontractor will keep BCIB informed of the status and progress of such matters, and will consult and collaborate with BCIB, and take into account BCIB's input, prior to resolving any such matters with WorkSafeBC.

14.0 GENERAL TRAINING AND APPRENTICESHIPS

- 14.1 The Subcontractor will provide, at its sole cost and expense, any and all on-the-job skills development and specialized task-specific training beyond that provided under a general trade curriculum.
- 14.2 The Subcontractor acknowledges receipt of the Apprenticeship and Training Targets. The Subcontractor will, as part of and not in substitution for any apprenticeship and training obligations that the Subcontractor must meet under the Subcontract, seek from BCIB, pursuant to Employee Requests, a sufficient number and type of apprentices that if provided by BCIB would achieve or exceed the objectives set out in the Apprenticeship and Training Targets.

15.0 WORKPLACE DISCRIMINATION AND HARASSMENT POLICY AND PROCEDURES

- 15.1 The Subcontractor acknowledges receipt of the Workplace Discrimination and Harassment Policy and Procedures. The Subcontractor will, as part of and not in substitution for any workplace discrimination and harassment obligations that the Subcontractor must meet under the Subcontract and applicable law, including the *Workers Compensation Act* (British Columbia), implement the Workplace Discrimination and Harassment Policy and Procedures in order to achieve or exceed the objectives set out in the Workplace Discrimination and Harassment Policy and Procedures.
- 15.2 Any complaint made by or against an Employee provided to the Subcontractor by BCIB under the Workplace Discrimination and Harassment Policy and Procedures will be processed and investigated pursuant to the Workplace Discrimination and Harassment Policy and Procedures, and the outcome will be binding on the Subcontractor.

16.0 WORKPLACE DRUG AND ALCOHOL POLICY AND PROCEDURES

- 16.1 The Subcontractor acknowledges receipt of the Workplace Drug and Alcohol Policy and Procedures. The Subcontractor will, as part of and not in substitution for any workplace

drug and alcohol obligations that the Subcontractor must meet under the Subcontract and applicable law, including the *Workers Compensation Act* (British Columbia), implement the Workplace Drug and Alcohol Policy and Procedures in order to achieve or exceed the objectives set out in the Workplace Drug and Alcohol Policy and Procedures.

17.0 INDEMNIFICATION

17.1 The Subcontractor will indemnify and save harmless BCIB, the Owner, Transportation Investment Corporation and their respective officers, directors, servants (including BCIB's Representative), agents and shareholders (collectively, the "**BCIB Indemnified Parties**"), from and against any and all losses, liabilities, damages, fines, penalties, costs, expenses and claims of any and every kind whatsoever which at any time or from time to time may be paid, incurred or asserted by or against the BCIB Indemnified Parties, or any one of them, for, with respect to, or as a result of:

- (a) any act or omission of the Subcontractor, the Subcontractor's Representative, or any other person or entity not subject to or otherwise excluded from coverage of the Community Benefits Agreement but who is engaged by the Subcontractor to perform a portion of the Subcontract Work;
- (b) any act or omission of an Employee which occurs while such Employee is under the direction of the Subcontractor whether or not such losses, liabilities, damages, fines, penalties, costs, expenses or claims arise by reason of the employment relationship existing between BCIB and such Employee;
- (c) any failure by the Subcontractor to perform its obligations under this Agreement, including any failure to give effect to, observe, comply with or perform the terms and conditions of the Community Benefits Agreement, or the functions, obligations or responsibilities of the Community Benefits Agreement, that have been expressly delegated or allocated to the Subcontractor by this Agreement; and
- (d) any failure by the Subcontractor to perform its obligations under applicable law.

For certainty, the obligations of the Subcontractor set forth in this Section 17.1 shall not apply to the extent that the losses, liabilities, damages, fines, penalties, costs, expenses and claims for which indemnity is being sought were caused by the negligence or willful misconduct of any of the BCIB Indemnified Parties.

17.2 BCIB will indemnify and save harmless the Subcontractor, its officers, directors, servants (including the Subcontractor's Representative), agents and shareholders (collectively, the "**Subcontractor Indemnified Parties**"), from and against any and all losses, liabilities, damages, fines, penalties, costs, expenses and claims of any and every kind whatsoever which at any time or from time to time may be paid, incurred or asserted by or against the Subcontractor Indemnified Parties, or any one of them, to the extent resulting from the negligent act or negligent omission of the BCIB Indemnified Parties in connection only with BCIB's relationship as employer of the Employees provided to the Subcontractor by BCIB.

For certainty, the obligations of BCIB set forth in this Section 17.2 shall not apply to the extent that the losses, liabilities, damages, fines, penalties, costs, expenses and claims for which indemnity is being sought were caused by the negligence or willful misconduct of any of the Subcontractor Indemnified Parties.

- 17.3 The obligations of indemnification set forth in Section 17.0 will survive termination of this Agreement and will continue in full force and effect.

18.0 CONFIDENTIALITY AND DISCLOSURE OF INFORMATION

- 18.1 Subject to Section 18.3, each party will keep confidential all matters respecting the Employees provided to the Subcontractor by BCIB and all commercial, financial and legal issues relating to or arising out of this Agreement and will not disclose such information, except as follows:

- (a) with the prior written consent of BCIB's Representative or the Subcontractor's Representative, as the case may be, which consent may be arbitrarily withheld;
- (b) in the case of BCIB, BCIB may disclose information regarding the Subcontractor's non-payment of BCIB to the Contractor, any entity engaged by the Contractor who has entered into a BCIB-Subcontractor Agreement and which is in the same subcontract chain but in a tier higher than the Subcontractor or the Owner, or all of them, in order for BCIB to seek recovery of such non-payment;
- (c) in the case of the Subcontractor, the Subcontractor may disclose information respecting the Employees provided to the Subcontractor by BCIB to the Contractor but only to the extent the information to be disclosed is specifically required by the Owner pursuant to the Construction Contract;
- (d) in strict confidence to the party's professional advisors; or
- (e) as otherwise required by applicable law.

- 18.2 The obligations of confidentiality described in Section 18.1 will not apply to:

- (a) information that is, or subsequently becomes, publicly available other than through a breach of this Agreement or through a breach of a confidentiality agreement which another entity has entered into concerning such confidential information;
- (b) information which the disclosing party already possessed before commencing to participate in the Project;
- (c) information which is rightfully received from a third party without breach of any obligation of confidence by such third party; or
- (d) information which is independently developed without the use of such confidential information.

18.3 Notwithstanding anything to the contrary contained in this Agreement, the Subcontractor acknowledges and agrees that BCIB may disclose any and all workforce-related information created or obtained as a result of this Agreement or in respect of the Subcontractor performing its obligations under this Agreement, or both, including the existence and terms of this Agreement and any BCIB-Subcontractor Agreement, the nature and number of permits requested and issued as described in Section 10.0, the Subcontractor's fulfillment of its obligations pursuant to Sections 13.0, 14.0, 15.0 and 16.0, the Subcontractor's fulfillment and compliance with the functions, obligations and responsibilities set out in Schedule 2 and any other Records, to any provincial ministry or other Governmental Authority which requires or requests the information in relation to the Project or to permit BCIB to comply with applicable law.

19.0 FREEDOM OF INFORMATION AND PRIVACY PROTECTION

19.1 The Subcontractor acknowledges that:

- (a) it is aware that FOIPPA applies to this Agreement and to all documents and records relating to this Agreement;
- (b) BCIB is required to fully comply with FOIPPA; and
- (c) no action taken or required to be taken by BCIB for the purpose of complying with FOIPPA shall be considered a breach of any obligation under this Agreement.

19.2 To the extent the Subcontractor has access to, whether direct, indirect or incidental, or the opportunity to access, any Personal Information, the Subcontractor will inform all of its personnel and Sub-subcontractors having access to any Personal Information in the course of performing the Subcontract Work of the confidential nature of the Personal Information and will ensure that its personnel and Sub-subcontractors maintain the confidentiality of the Personal Information in accordance with the terms of Schedule 3. BCIB and the Subcontractor will have the respective rights and obligations applicable to each of them as provided in Schedule 3, and Section 18.0 will not apply in respect of such Personal Information.

20.0 SUBCONTRACTOR'S RECORDS

20.1 The Subcontractor will record and maintain within British Columbia during the term of this Agreement, and for so as long as required by applicable law, full, true, proper and accurate records relating to the Employees provided to the Subcontractor by BCIB (collectively, the "**Records**"), including:

- (a) records of the time worked by Employees;
- (b) records relating to the Subcontractor's fulfillment of its obligations pursuant to Sections 13.0, 14.0, 15.0 and 16.0; and

- (c) records relating to the Subcontractor's fulfillment and compliance with the functions, obligations and responsibilities set out in Schedule 2,

utilizing such recording system and in such form as BCIB may from time to time require. Promptly upon the reasonable written request of BCIB's Representative, the Subcontractor will deliver such Records to BCIB at BCIB's expense.

- 20.2 The Subcontractor will advise BCIB's Representative of the location of the Records upon the written request of BCIB.
- 20.3 Upon expiration of the retention period(s) described in Section 20.1, and prior to disposing of the applicable Records, the Subcontractor will notify BCIB in writing as to what the Subcontractor intends to do with such Records. BCIB may, within 40 days of receipt of such notice, require the Subcontractor to deliver to BCIB, at BCIB's sole cost and expense, all such Records.
- 20.4 BCIB or its authorized agent may, at BCIB's discretion and expense, at any time and from time to time during the time the Subcontractor is required to keep the Records under this Agreement, during normal business hours and with reasonable notice and without undue disturbance of the Subcontractor's business operations, enter upon the Subcontractor's premises and audit the Records and any other records of the Subcontractor which relate in any way to the Employees provided to the Subcontractor by BCIB. The Subcontractor will make all such records available for examination and copying by BCIB at the Subcontractor's premises.

21.0 TERMINATION

- 21.1 This Agreement will continue in effect for so long as the Subcontractor requires Employees to perform the Subcontract Work at the Site.
- 21.2 The obligations of the Subcontractor to pay any amounts which are payable to BCIB under this Agreement will survive termination of this Agreement and will continue in full force and effect.

22.0 DISCLAIMERS

- 22.1 BCIB does not warrant nor guarantee to the Subcontractor that BCIB will provide to the Subcontractor any particular quality of Employee or that BCIB will provide all or any of the Employees for which the Subcontractor may submit Employee Requests.
- 22.2 Neither party will be responsible or liable to the other party, and neither party will have a claim against the other party, for any economic loss, loss of anticipated revenue, overhead or profit, loss of production, business or contracts, loss by reason of shutdowns, slowdowns, non-operation or increased costs of construction, manufacturing or operation, or loss of business reputation or opportunities, in connection with this Agreement and whether or not such losses or costs were foreseeable even if the relevant party was advised of the possibility of them. For certainty, nothing in this Section 22.2 will apply

to, or be interpreted so as to preclude, or otherwise limit recovery of liquidated damages specified as payable to BCIB pursuant to this Agreement, if any.

22.3 Notwithstanding any other provision of this Agreement, including Section 17.2, but without limiting the other provisions of Section 22.0, BCIB will not be responsible or liable (whether in contract, tort (including negligence), for breach of statutory duty, pursuant to equitable principles or under any other theory of law) to the Subcontractor, and the Subcontractor will have no claim against BCIB, for:

- (a) any loss, cost, damage or expense suffered or incurred by the Subcontractor by reason of or in respect of the Subcontractor being delayed in performing the Subcontract Work or having to re-perform the Subcontract Work, whether such delay or re-performance is caused by work stoppage, work slowdown, labour shortages, lack of appropriately qualified or skilled labour or otherwise. The Subcontractor acknowledges that its sole remedies, if any, in respect of any such foregoing matters lie against its counterparty under the Subcontract; or
- (b) the operation, direction or supervision of Employees provided to the Subcontractor by BCIB nor for the performance of the Subcontract Work by such Employees; or
- (c) paying any of the Subcontractor's costs of providing Employees with room or board or commissary facilities or commissary supplies whether or not such costs are recovered or are recoverable by the Subcontractor from Employees.

22.4 Nothing done as a result of this Agreement or omitted to be done will be cause for a justifiable delay by the Subcontractor under the Subcontract or a justifiable increase in the Subcontractor's price under the Subcontract, and the Subcontractor will not have any right to or claim for an extension of time under the Subcontract nor any right to or claim for any payment or additional payment from BCIB or the Third Party Beneficiaries, or any one of them, as a result of such matters.

22.5 The Subcontractor will be fully responsible for all costs and expenses incurred by it in performing its obligations under this Agreement and in providing assistance or input to and in cooperating, consulting or collaborating with BCIB as contemplated by this Agreement and in participating in any formal process set out in the Community Benefits Agreement, and including for all costs and expenses incurred by the Subcontractor with respect to grievances initiated by the Subcontractor. The Subcontractor will not be entitled to, nor will BCIB be liable to the Subcontractor for, any compensation or reimbursement of such costs and expenses in respect of the foregoing, such compensation and reimbursement will be deemed to be fully addressed pursuant to the Subcontract.

23.0 DISPUTE RESOLUTION

23.1 The parties agree that, both during and after the term of this Agreement, each of them will make *bona fide* efforts to resolve any disputes arising between them by amicable negotiations.

- 23.2 Either party may require the dispute be mediated by a skilled commercial mediator chosen jointly by the parties. If a mediator is appointed pursuant to this Section 23.2, the mediated negotiations will be terminated ten Business Days after the appointment unless the parties agree otherwise.
- 23.3 Any unresolved dispute arising out of or in connection with this Agreement or in respect of any defined legal relationship associated with it or derived from it, will be referred to and finally resolved by arbitration under the rules of the British Columbia International Commercial Arbitration Centre. Any arbitration will be conducted in Vancouver, British Columbia and heard by a single arbitrator chosen jointly by the parties, or in the absence of mutual agreement appointed by a court of competent jurisdiction.
- 23.4 If the parties agree, any unresolved disputes referred to arbitration under this Agreement may be:
- (a) held in abeyance until completion of the Subcontract Work; and
 - (b) consolidated into a single arbitration.
- 23.5 Notwithstanding any dispute, the parties will continue to fulfill their obligations pursuant to this Agreement, without prejudice to either party's rights relating to the dispute.

24.0 NOTICES

- 24.1 Unless otherwise expressly required to be given to BCIB's Representative or the Subcontractor's Representative pursuant to this Agreement, any notice or communication required or permitted to be given under this Agreement will be in writing and will be considered to have been sufficiently given when delivered by hand or by email to the address or email address of the applicable party set out below:

- (a) if to BCIB:

BC Infrastructure Benefits Inc.
Suite 1050 – 89 West Georgia Street
Vancouver, BC V6B 0N8

Attn: Martin Fyfe, Director, Workforce Operations

Email: mfyfe@bcib.ca;

- (b) if to the Subcontractor:

[insert address]

Attn: [insert appropriate addressee, i.e. President]

Email: [insert appropriate email address]; or

- (c) to such other address or email address as either party may, from time to time, designate in the manner set out above.

24.2 Any such notice or communication will be considered to have been received:

- (a) if delivered by hand or by a courier service during business hours on a Business Day, when delivered, and if not delivered during business hours, upon the commencement of business hours on the next Business Day; and
- (b) if sent by email during business hours on a Business Day, upon receipt, and if not delivered during business hours, upon the commencement of business hours on the next Business Day, provided that:
 - (i) the receiving party has, by email or by hand delivery, acknowledged to the notifying party in writing that it has received such notice; or
 - (ii) within 24 hours after sending the notice, the notifying party has also delivered a copy of such notice to the receiving party by hand delivery.

25.0 ASSIGNMENT RESTRICTED

25.1 This Agreement and the rights, duties and obligations of the Subcontractor under this Agreement will not be assigned, transferred, encumbered or otherwise alienated in whole or in part by the Subcontractor without the prior written consent of BCIB, which consent may be arbitrarily withheld, and any attempt by the Subcontractor to assign, transfer, encumber or otherwise alienate its rights, duties or obligations under this Agreement without such consent will be of no effect. Notwithstanding the above, BCIB will provide its consent to any assignment, transfer, encumbrance or other alienation of this Agreement to the extent necessary to give effect to any permitted assignment, transfer, encumbrance or other alienation of the Construction Contract.

26.0 MISCELLANEOUS

26.1 Schedules. The following Schedules are incorporated into this Agreement by reference and are deemed to be fully included as part of this Agreement and to be an integral part of this Agreement:

- (a) Schedule 1 – Definitions and Interpretation;
- (b) Schedule 2 – Functions, Obligations and Responsibilities; and
- (c) Schedule 3 – Privacy Protection.

26.2 No Agency. The Subcontractor acknowledges and agrees that BCIB is entering into this Agreement for itself and on its own behalf as principal and that BCIB is not an agent of the Owner, the Government of British Columbia or any other entity for purposes of this Agreement or for purposes of the Subcontract or otherwise.

- 26.3 Third Party Beneficiary. The provisions of Section 22.4 are intended for the benefit of the Third Party Beneficiaries and will be enforceable by the Third Party Beneficiaries, or any one of them, and are in addition to, and not in substitution for, any other rights that the Third Party Beneficiaries may have by contract or otherwise. For clarity, BCIB will also be able to enforce the provisions of Section 22.4.
- 26.4 Independent Contractor. The Subcontractor is an independent contractor in the performance of the Subcontract Work and nothing in this Agreement will constitute the Subcontractor as an agent, partner, joint venture or employee of BCIB for any purpose.
- 26.5 Currency. All payments to be made pursuant to this Agreement will be made in lawful money of Canada.
- 26.6 Public Announcements. The Subcontractor will not make any public releases, announcements, other disclosure or issue advertising pertaining to this Agreement or the Community Benefits Agreement without the prior written approval of BCIB, approval of which may be arbitrarily withheld. The Subcontractor will refer any media enquiries to BCIB's Representative, but will not otherwise respond to media enquiries.
- 26.7 Further Assurances. Each of the parties hereby covenants and agrees to execute any further and other documents and instruments and to do any further and other things that may be reasonably necessary to implement and carry out the intent of this Agreement.
- 26.8 Governing Law. This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia which will be deemed to be the proper law of this Agreement.
- 26.9 Survival. All rights, obligations and remedies of the parties which accrued prior to the termination of this Agreement, or which are by their nature continuing, or which by their express terms survive, and all other provisions necessary for the interpretation or enforcement of such rights, obligations and remedies, will survive termination of this Agreement.
- 26.10 Modification and Waiver. No amendment or waiver of this Agreement or any provision of this Agreement will be binding unless executed in writing by both the parties. No waiver of any provision of this Agreement will be deemed or will constitute a waiver of any other provision nor will any such waiver constitute a continuing waiver unless otherwise expressly provided in writing signed by each of the parties.
- 26.11 Enurement. This Agreement will enure to the benefit of and be binding upon the parties and their respective heirs, personal representatives, successors and permitted assigns.
- 26.12 Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter of this Agreement, expressing superseding all prior communications, understandings and agreements (both oral and written) between the parties with respect to all matters contained in this Agreement. There are no representations, warranties, terms, conditions, undertakings or collateral agreements

express, implied or statutory, between the parties other than as expressly set forth in this Agreement.

26.13 Counterparts. This Agreement may be executed by counterparts, each of which will be deemed to be an original and all of which taken together will be deemed to constitute one and the same instrument. Delivery by email in portable document format (PDF) of an executed counterpart of this Agreement is as effective as delivery of an originally executed counterpart of this Agreement.

26.14 Joint and Several:

- (a) If the Subcontractor is comprised of more than one legal entity, the obligations and liabilities of the Subcontractor under this Agreement shall be the obligations and liabilities of each legal entity comprising the Subcontractor, jointly and severally with each other such legal entity.
- (b) If the Subcontractor is a general partnership, the obligations and liabilities of the Subcontractor under this Agreement shall be the obligations and liabilities of the Subcontractor and each of its partners, jointly and severally with each other.

IN WITNESS WHEREOF the parties have executed this Agreement as of the Effective Date.

BC INFRASTRUCTURE BENEFITS INC.

Per: _____
Name:
Title:

[INSERT LEGAL NAME OF SUBCONTRACTOR]

Per: _____
Name:
Title:

**SCHEDULE 1
DEFINITIONS AND INTERPRETATION**

1. Definitions. In this Agreement, except as otherwise expressly provided or unless the context otherwise requires:
- (a) “**Affiliated Unions**” has the meaning set out in the Community Benefits Agreement;
 - (b) “**Agreement**” means this BCIB-Subcontractor Agreement as it may be amended, restated or supplemented from time to time;
 - (c) “**Applicable Sub-subcontractor**” has the meaning set out in Section 9.3;
 - (d) “**Apprenticeship and Training Targets**” means the apprenticeship and training targets established by BCIB dated July 17, 2020;
 - (e) “**BCIB**” has the meaning set out on the first page of this Agreement;
 - (f) “**BCIB Costs**” has the meaning set out in Section 11.1;
 - (g) “**BCIB-Contractor Agreement**” means the agreement between BCIB and the Contractor pursuant to which the Contractor will obtain Employees from BCIB;
 - (h) “**BCIB Indemnified Parties**” has the meaning set out in Section 17.1;
 - (i) “**BCIB-Subcontractor Agreement**” has the meaning set out in Section 9.3;
 - (j) “**BCIB’s Representative**” has the meaning set out in Section 2.1;
 - (k) “**Business Day**” means a day other than a Saturday, Sunday or Recognized Holiday (as described in Article 16.100 of the Community Benefits Agreement) on the days observed in British Columbia;
 - (l) “**CBA Name Hires**” has the meaning set out in Section 4.2(c)(ii);
 - (m) “**Community Benefits Agreement**” has the meaning set out in Recital A;
 - (n) “**Contractor**” means [insert legal name of the contractor who entered into the Construction Contract with the Owner], and any assignee of the Contractor permitted by BCIB;
 - (o) “**Construction Contract**” means the agreement between the Owner and the Contractor pursuant to which the Contractor will undertake the Work;
 - (p) “**Cost Invoice**” has the meaning set out in Section 11.2;
 - (q) “**Council**” has the meaning set out in Recital A;

- (r) “**Council’s Representative**” means the person designated from time to time by the Council who will represent the Council in the administration and application of the Community Benefits Agreement;
- (s) “**Effective Date**” means the effective date of this Agreement as set out on the first page of this Agreement;
- (t) “**Employees**” has the meaning set out in the Community Benefits Agreement, but for clarity, does not include employees of Sub-subcontractors described in Section 9.2(a) or Section 9.2(b) or employees granted a permit pursuant to Article 8.400 of the Community Benefits Agreement;
- (u) “**Employee Request**” has the meaning set out in Section 4.2(c);
- (v) “**Enabling Agreement**” means the Enabling Agreement entered into between BCIB and the Council dated May 14, 2020 (which agreement will be subsumed within the Kicking Horse Canyon Project Phase 4 sub-Appendix to the Project Definition: Trans Canada #1 – Kamloops to Alberta Border 4-Laning Project Appendix of the Community Benefits Agreement);
- (w) “**FOIPPA**” means the *Freedom of Information and Protection of Privacy Act* (British Columbia);
- (x) “**Governmental Authority**” means any federal, provincial, territorial, regional, municipal or local authority, quasi-governmental authority, court, government, or self-regulatory organization, commission, board, tribunal, organization, or any regulatory, administrative or other agency, or any political or other subdivision, department or branch of any of the foregoing, having jurisdiction in any way over or in respect of any aspect of the performance of the Construction Contract, the Subcontract, this Agreement or the Project;
- (y) “**Health and Safety Policy and Program**” means the health and safety policy and program established by BCIB dated March 12, 2020;
- (z) “**Job Classifications**” means those job classifications set out in the applicable “Trade Sections” of the Community Benefits Agreement;
- (aa) “**Owner**” means, collectively, Her Majesty the Queen in right of the Province of British Columbia as represented by the Minister of Transportation and Infrastructure, and BC Transportation Financing Authority;
- (bb) “**Payroll Amount**” has the meaning set out in Section 7.2;
- (cc) “**Payroll Invoice**” has the meaning set out in Section 7.2;
- (dd) “**Personal Information**” means recorded information about an identifiable individual, other than contact information (as defined in FOIPPA), collected, created or otherwise acquired by the Subcontractor as a result of this Agreement

or any previous agreement between BCIB and the Subcontractor dealing with the same subject matter as this Agreement;

- (ee) **“Project”** means the Kicking Horse Canyon Project Phase 4;
- (ff) **“Records”** has the meaning set out in Section 20.1;
- (gg) **“Rock Slope Name Hires”** has the meaning set out in Section 4.2(c)(iii);
- (hh) **“Site”** means “Project Site” as defined in the Construction Contract, and will be deemed to include the sites of all facilities purpose built for the Project;
- (ii) **“Subcontract”** means the agreement entered into by the Subcontractor pursuant to which the Subcontractor will undertake the Subcontract Work;
- (jj) **“Subcontractor”** has the meaning set out on the first page of this Agreement;
- (kk) **“Subcontractor Indemnified Parties”** has the meaning set out in Section 17.2;
- (ll) **“Subcontractor’s Representative”** has the meaning set out in Section 2.2;
- (mm) **“Subcontract Work”** means the portion of the Work to be performed by the Subcontractor;
- (nn) **“Sub-subcontractor”** has the meaning set out in Section 9.1;
- (oo) **“Third Party Beneficiaries”** means the Owner, the Contractor and the Subcontractor’s counterparty in respect of the Subcontract;
- (pp) **“Work”** means “Project Work” as defined in the Construction Contract;
- (qq) **“Workplace Discrimination and Harassment Policy and Procedures”** means the workplace discrimination and harassment policy and procedures established by BCIB dated March 12, 2020; and
- (rr) **“Workplace Drug and Alcohol Policy and Procedures”** means the workplace drug and alcohol policy and procedures established by BCIB dated March 12, 2020.

Any words or phrases defined elsewhere in this Agreement will have the particular meaning assigned to such words or phrases.

2. Interpretation. For all purposes of this Agreement, except as otherwise expressly provided or unless the context otherwise requires:

- (a) the provision of headings and the division of this Agreement into Sections, paragraphs and other subdivisions are for convenience only and will not define or

limit the scope, extent or intent of this Agreement or affect the interpretation of this Agreement or any provision of this Agreement;

- (b) any reference to a statute will include such statute and its corresponding regulations, together with all amendments made to such statute and regulations and in force from time to time, and any statute or regulation that may be passed which has the effect of amending, supplementing or superseding the statute referred to or such statute's corresponding regulations;
- (c) any reference to the *Mines Act* (British Columbia) will include the Health, Safety and Reclamation Code for Mines in British Columbia, together with all amendments made to such code and in force from time to time, and any instrument established pursuant to the *Mines Act* (British Columbia) which has the effect of amending, supplementing or superseding the Health, Safety and Reclamation Code for Mines in British Columbia;
- (d) any reference to an entity will include and will be deemed to be a reference to any entity that is a successor to such entity;
- (e) words in the singular include the plural, and vice-versa, wherever the context requires;
- (f) references in this Agreement to a Recital, a Section, a paragraph, a Schedule or other subdivision are to the corresponding Recital, Section, paragraph, Schedule or other subdivision of this Agreement, unless otherwise indicated;
- (g) where a reference is made to a "day", "week", "month" or "year", the reference is to the calendar period;
- (h) the word "including" is deemed to be followed by "without limitation";
- (i) if the time for doing an act falls or expires on a day that is not a Business Day, the time for doing such act will be extended to the next Business Day;
- (j) in the calculation of time, the first day will be excluded and the last day included; and
- (k) the parties confirm that they each have obtained independent legal advice, or elected not to obtain such advice, and accordingly agree that any rule of construction to the effect that any ambiguity is to be resolved against the drafting party will not be applicable in the interpretation of this Agreement.

**SCHEDULE 2
FUNCTIONS, OBLIGATIONS AND RESPONSIBILITIES**

The following are the functions, obligations and responsibilities referred to in Section 6.4 of this Agreement:

1. General:

The Subcontractor will provide to Employees:

- (a) all food and beverages; and
- (b) all room and board and living out allowances, as applicable,

as required by the Community Benefits Agreement.

2. Master Section:

CBA Article	Function, Obligation or Responsibility
14.501	The Employer may establish a flex work week schedule which allows for a work week starting on a day other than Monday (for example: Tuesday to Saturday).
17.402 (if applicable to the Project)	Where the accommodation is a hotel/motel the Employee may be required to vacate the room and remove all belongings out of the room. If an Employee wishes to store belongings, a lockup shall be provided.
19.100	A suitable heated lockup must be provided by the Employer for workers using their own tools.
19.201	In case of fire or burglary the Employer shall protect the value of an Employee's work clothes up to a total of three hundred and fifty dollars (\$350.00), required tools up to the total value of the tools, (tool for tool, make for make).
23.100	On commercial and institutional projects, heated lunchroom and women's and men's change rooms shall be provided for Employees for drying clothes, and changing clothes. The lunch and change rooms shall have tables, and benches, and provision for drying clothes. Such lunch and change rooms shall have windows and venting with adequate lighting and provision for continuous heat twenty-four (24) hours a day. The lunch and change rooms will be cleaned on each working shift and kept cleared of working materials and other construction paraphernalia. Lunchrooms shall provide enough room for all the workers to be seated at a table for lunch.
23.301	The Contractor/Employer shall be responsible for the provision, maintenance and cleanliness of sanitary facilities on the Site and for keeping all areas free of hazards and debris.

CBA Article	Function, Obligation or Responsibility
23.302	Chemical or flush toilets shall be provided for both women and men from the commencement of work on all jobs. Toilet paper shall be provided and facilities shall be cleaned on each working shift.
23.304	Where clean-up facilities are not provided and in mechanical and trade shops, hand cleanser and paper towels shall be provided at no cost to the Employee.
23.401	When working in a Fabrication Shop, proper ventilation shall be provided. In the event of a dispute, WorkSafeBC Regulations shall prevail.
23.402	When working in confined spaces with fibreglass or toxic fumes or smoke, proper ventilation and/or proper respiratory equipment shall be provided.
23.700	Telephone service shall be made available to all Employees at all times for incoming or outgoing emergency purposes and incoming emergency messages shall be relayed immediately.
23.800	When non-working foreperson(s) are required, they shall be appointed by the Employer. Employees covered by this Agreement shall take orders only from their Foreperson selected or if not immediately available, from general management. Other provisions concerning Forepersons and General Forepersons are contained in the appropriate Trade Sections.

3. Interior Road Building Addendum, if applicable to the Project:

CBA Article	Function, Obligation or Responsibility
14.201(e)	During inclement weather, where practical, the Employer shall provide a warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their meal breaks.
14.202(d)	During inclement weather, where practical, the Employer shall provide a warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their rest breaks.
General re Trade Sections – 1(b)	Where the Employer requires a specific Employee to upgrade or renew a certification or license, or perform a private procedure skills test on Site, unless the applicable Trade Sections indicates another party will pay, the Employer will pay the applicable costs and provide the time necessary.

4. Lower Mainland Road Building Addendum, if applicable to the Project:

CBA Article	Function, Obligation or Responsibility
14.201(e)	During inclement weather, where practical, the Employer shall provide a warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their meal breaks.
14.202(d)	During inclement weather, where practical, the Employer shall provide a

CBA Article	Function, Obligation or Responsibility
	warm, dry area, such as an assembly room, equipment cab, or crew vehicle in which Employees may take their rest breaks.
General re Trade Sections – 1(b)	Where the Employer requires a specific Employee to upgrade or renew a certification or license, or perform a private procedure skills test on Site, unless the applicable Trade Sections indicates another party will pay, the Employer will pay the applicable costs and provide the time necessary.

5. Appendices:

If applicable to the Project, all references to a BCIB function, obligation and responsibility in the Camp Standards Appendix will be read as a function, obligation and responsibility of the Subcontractor.

6. Trade Sections:

CBA Article	Function, Obligation or Responsibility	Additional Subcontractor Obligation
BM.203	When six (6) or more welders are employed, one (1) welder with the qualifications shall be "Welder foreperson" and will receive Foreperson rate. The Welder Foreperson shall work on the tools if required by the Employer.	
BM.204	A Boilermaker General Foreperson may be utilized by the Employer whenever the Employer has established this level of supervision of the work on a job or when this level is appropriate to the size and nature of the job as determined by the Employer.	
BM.414	<u>Handicapped Workers</u> The Employer agrees, subject to prior consultation with the Affiliated Union, to employ any member on work which suits their physical ability and which is acceptable to the member (this shall include but not be limited to tool crib). Those who have suffered injury or disability in the trade should be employed when their capabilities are considered suitable, provided workers have the approval of the Workers' Compensation Board.	The Subcontractor will support and cooperate with BCIB to encourage the use of Handicapped Workers.
BM.420	<u>Tools</u> When it is deemed necessary to maintain a special tool crib for the Boilermakers, such shall be under the jurisdiction of the Boilermakers' Union. It being understood the necessity of a tool crib and/or an attendant	

CBA Article	Function, Obligation or Responsibility	Additional Subcontractor Obligation
	shall be determined by the Employer.	
CE.204	<p><u>General Foreperson</u> Where more than nineteen (19) Cement Masons or four (4) Forepersons are employed, the Employer shall appoint a General Foreperson at sixteen percent (16%) over the basic Industrial Hourly Rate plus one-half hour at straight time per shift (at Overtime rates on Overtime shifts).</p> <p>General Forepersons shall not be required to work with the tools unless the General Foreperson considers it necessary.</p> <p>Appointment of any Foreperson(s) is subject to the Master Section and Addenda “predominant trade” and “composite crew provisions”, and any Employees under the Foreperson’s supervision shall take instructions from that Foreperson.</p>	
DR.205	All Forepersons and Leadhands shall be selected and assigned at the option of the Employer.	
EL.416	Where requested by the Employer to use explosive activated tools, time spent to obtain certificate shall be during working hours and considered as time worked. (High explosive activated tools shall not be used).	
FL.420	<p><u>Older Workers</u> An Employee incapacitated by age or accident may be permitted to be employed at less than the regular scale of wages at a rate of pay mutually agreed upon by the Employee, the Employer, and the Affiliated Union. The conditions of employment shall be amended so as to enable such Employees to continue with their employment.</p>	The Subcontractor will cooperate with BCIB in determining the reduced scale of wages and conditions of employment.
OPR.412	<p>All Mechanics, Welders, Servicepersons, Drill Doctors, Steel Sharpeners, Vehicle Body Painters, and Mechanics and Welder Apprentices who request coveralls shall have these supplied and cleaned by the Employer. There shall be one change a week available in the Employee's proper size.</p> <p>Employees are expected to take reasonable care of coveralls supplied. In the event that an Employee does not return the coveralls supplied by the Employer, the Employer shall charge the cost of same to the Employee</p>	If such items are not returned, the Subcontractor will advise BCIB and BCIB will deduct the applicable amount of the next Payroll Invoice.

CBA Article	Function, Obligation or Responsibility	Additional Subcontractor Obligation
	<p>and deduct this cost from any monies owing to the Employee.</p> <p>When requested, coveralls shall be supplied on a temporary basis to Employees who assist on work as described above, or where the Employer and the Union mutually agree that coveralls are required.</p> <p>Employees entitled to receive coveralls as provided herein may obtain an additional change of coveralls in any one week providing the condition of the coveralls requires a change. The shop Foreperson shall use discretion in authorizing the additional change.</p>	<p>The Subcontractor will provide input to BCIB to assist in the determination of whether coveralls are required.</p>
OPS.412	<p>Work Scope – Apprentice Crane Operators shall be allowed to operate specific equipment based upon management evaluation of their qualifications, work experience and the requirements of the specific work in question. Notwithstanding this provision, the Employer shall provide the Apprentice Crane Operators so working with appropriate supervision and suitable communication options.</p>	
TER.203	<p>When the Employer works six (6) or more Employees on any one (1) shift on any one job (number shall include owner operated and/or rented equipment) under the jurisdiction of Teamsters Local Union No. 213, a Non-Operating Foreperson should be appointed and shall receive a premium of ten percent (10%) per hour over the hourly rate of the highest Teamster classification supervised</p>	

**SCHEDULE 3
PRIVACY PROTECTION**

1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Schedule 3, in addition to the definitions set out in Schedule 1:

“**access**” means disclosure by the provision of access.

1.2 Interpretation

- (a) Any reference to “the Subcontractor” in this Schedule 3 includes any “associate” as defined in FOIPPA and the Subcontractor must ensure that all such persons comply with this Schedule 3.
- (b) The obligations of the Subcontractor in this Schedule 3 will survive the termination of this Agreement.
- (c) If a provision of this Agreement (including any authorization or direction given by BCIB under this Schedule 3) conflicts with a requirement of FOIPPA or an applicable order of the Information and Privacy Commissioner under FOIPPA, the conflicting provision of this Agreement (or authorization or direction) will be inoperative to the extent of the conflict.
- (d) The Subcontractor will comply with this Schedule 3 notwithstanding any conflicting provisions of this Agreement or the law of any jurisdiction outside Canada.

2 PURPOSE

2.1 Purpose

The purpose of this Schedule 3 is to:

- (a) enable BCIB to comply with its statutory obligations under FOIPPA with respect to Personal Information that is within BCIB’s control and in the Subcontractor’s custody; and
- (b) assist the Subcontractor, as a service provider to BCIB, to comply with its statutory obligations under FOIPPA.

3 COLLECTION OF PERSONAL INFORMATION

3.1 Collection

Unless this Agreement otherwise specifies or BCIB otherwise authorizes or directs in writing:

- (a) the Subcontractor may only collect or create Personal Information that is necessary for the performance of the Subcontractor's obligations, or the exercise of the Subcontractor's rights, under this Agreement or the Subcontract;
- (b) the Subcontractor must collect Personal Information directly from the individual the information is about or from another source other than that individual with the written consent of the individual, or the individual's lawful representative; and
- (c) the Subcontractor must advise an individual from whom the Subcontractor collects Personal Information:
 - (i) the purpose for collecting it;
 - (ii) the legal authority for collecting it; and
 - (iii) the title, business address and business telephone number of the person designated by BCIB to answer questions concerning the Subcontractor's collection of Personal Information.

3.2 Accuracy of Personal Information

The Subcontractor must make every reasonable effort to ensure the accuracy and completeness of any Personal Information to be used by the Subcontractor or BCIB to make a decision that directly affects an individual the information is about.

3.3 Requests for Access to Personal Information

If the Subcontractor receives a request, from a person other than BCIB, for access to Personal Information, the Subcontractor must promptly advise the person to make the request to BCIB unless this Agreement expressly requires the Subcontractor to provide such access, and, if BCIB has advised the Subcontractor of the name or title and contact information of an official of BCIB to whom such requests are to be made, the Subcontractor must also promptly provide that official's name or title and contact information to the person making the request.

3.4 Correction of Personal Information

- (a) Within five Business Days of receiving a written direction from BCIB to correct or annotate any Personal Information, the Subcontractor must correct or annotate the information in accordance with the direction.
- (b) When issuing a written direction under Section 3.4(a) of this Schedule 3 BCIB must advise the Subcontractor of the date the correction request to which the direction relates

was received by BCIB in order that the Subcontractor may comply with Section 3.4(c) of this Schedule 3.

- (c) Within five Business Days of correcting or annotating any Personal Information under Section 3.4(a) of this Schedule 3, the Subcontractor must provide the corrected or annotated information to any party to whom, within one year prior to the date the correction request was made to BCIB, the Subcontractor disclosed the information being corrected or annotated.
- (d) If the Subcontractor receives a request for correction of Personal Information from a person other than BCIB, the individual whose Personal Information has been requested, or that individual's lawful representative, the Subcontractor must promptly advise the person to make the request to BCIB and, if BCIB has advised the Subcontractor of the name or title and contact information of an official of BCIB to whom such requests are to be made, the Subcontractor must also promptly provide that official's name or title and contact information to the person making the request.

3.5 Protection of Personal Information

The Subcontractor must protect Personal Information by making reasonable security arrangements against such risks as unauthorized access, collection, use, disclosure or disposal, including any expressly set out in this Agreement.

3.6 Storage and Access to Personal Information

Unless BCIB otherwise authorizes or directs in writing, the Subcontractor must not store Personal Information outside Canada or permit access to Personal Information from outside Canada.

3.7 Retention of Personal Information

Unless this Agreement otherwise specifies, the Subcontractor must retain Personal Information until authorized or directed by BCIB in writing to dispose of it or deliver it as specified in the authorization or direction.

3.8 Use of Personal Information

Unless BCIB otherwise authorizes or directs in writing, the Subcontractor may only use Personal Information if that use is for the performance of the Subcontractor's obligations, or the exercise of the Subcontractor's rights, under this Agreement, and for clarity in accordance with Section 3.6 of this Schedule 3.

3.9 Disclosure of Personal Information

The Subcontractor must not disclose Personal Information inside or outside Canada to any person other than BCIB or the Contractor (but only to the extent the Personal Information to be disclosed is specifically required by the Owner pursuant to the Construction Contract) unless the disclosure is to an entity that can legitimately compel disclosure under the laws of British

Columbia or the disclosure is directed or authorized by BCIB or the disclosure is requested or authorized by the individual whose Personal Information is at issue or that individual's lawful representative. BCIB will not unreasonably withhold its authorization under this Section 3.9.

3.10 Inspection of Personal Information

In addition to any other rights of inspection BCIB may have under this Agreement or under statute, BCIB may, at any reasonable time and on reasonable notice to the Subcontractor, enter on the Subcontractor's premises to inspect any Personal Information in the possession of the Subcontractor or any of the Subcontractor's information management policies or practices relevant to its management of Personal Information or its compliance with this Schedule 3 and the Subcontractor must permit, and provide reasonable assistance in respect to, any such inspection.

4 COMPLIANCE WITH FOIPPA AND AUTHORIZATIONS

4.1 Service Provider

- (a) The Subcontractor understands and acknowledges that it is a service provider of a public body as defined in FOIPPA.
- (b) The Subcontractor acknowledges that it is familiar with the requirements of FOIPPA governing Personal Information that are applicable to it as a service provider.
- (c) The Subcontractor must in relation to Personal Information comply with:
 - (i) the requirements of FOIPPA applicable to the Subcontractor as a service provider, including any applicable order of the Information and Privacy Commissioner under FOIPPA; and
 - (ii) any direction given by BCIB under this Schedule 3.

4.2 Notice of Non-Compliance

If for any reason the Subcontractor does not comply, or anticipates that it will be unable to comply, with a provision in this Schedule 3 in any respect, the Subcontractor must promptly notify BCIB of the particulars of the non-compliance or anticipated non-compliance and what steps it proposes to take to address, or prevent recurrence of, the non-compliance or anticipated non-compliance.

**SCHEDULE 22
INDIGENOUS REQUIREMENTS**

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**PART 1
INDIGENOUS REQUIREMENTS**

1.1 General Requirements

The Design-Builder shall at its expense comply with, observe, satisfy and perform all of the obligations and requirements set out in this Part 1 (the “**Indigenous Requirements**”), including the following:

- (a) The Design-Builder shall provide to the Identified Indigenous Groups during each Contract Year from the Effective Date to the Substantial Completion Date the total Person Years of employment as set out in the table provided by the Province to the Design-Builder prior to the Financial Submittal Date (the “**Table of Minimum Indigenous Employment Requirements**”) and identifying a minimum requirement of Person Years of employment for either an individual Identified Indigenous Group, or an aggregate for certain specified Identified Indigenous Groups, in each case as identified in such table (each, a “**Minimum Indigenous Employment Requirement**”), provided that, for each of the first and last such Contract Years, each such Minimum Indigenous Employment Requirement shall be pro-rated based on the number of days within such Contract Year. Employment opportunities shall be administered by BCIB or the Design-Builder at the discretion of the Identified Indigenous Groups and as noted in the Table of Minimum Indigenous Employment Requirements.
- (b) The Design-Builder shall provide to the Identified Indigenous Groups during each Contract Year from the Effective Date to the Substantial Completion Date the total apprenticeship opportunities as set out in the table provided by the Province to the Design-Builder prior to the Financial Submittal Date (the “**Table of Minimum Indigenous Apprenticeship Requirements**”) and identifying a minimum requirement of Apprenticeship Opportunities for either an individual Identified Indigenous Group, or an aggregate for certain specified Identified Indigenous Groups, in each case as identified in the table (each, a “**Minimum Indigenous Apprenticeship Requirement**”), provided that, for each of the first and last such Contract Years, each such Minimum Indigenous Employment Requirement shall be pro-rated based on the number of days within such Contract Year. Apprenticeship opportunities shall be administered by BCIB or the Design-Builder at the discretion of the Identified Indigenous Groups and as noted in the Table of Minimum Indigenous Apprenticeship Requirements.;
- (c) The Design-Builder shall provide to the Identified Indigenous Groups during the period from the Effective Date to the Substantial Completion Date the total value of contracts to Qualified Indigenous-sourced Resources in relation to the Project Work as set out in the table provide by the Province to the Design-Builder prior to the Financial Submittal Date (the “**Table of Minimum Indigenous Contracts Requirements**”) and identifying a minimum value of contracts for either an individual Identified Indigenous Group, or an aggregate for certain specified Identified Indigenous Groups, in each case as identified in such table (each a “**Minimum Indigenous Contracts Requirement**”).
- (d) The Design-Builder shall have an initial meeting with each of the Identified Indigenous Groups within 30 days of the Effective Date to initiate the process for the determination of the employment, apprenticeships, and contract opportunities to be established with the respective Identified Indigenous Groups in relation to the Project Work to fulfil the requirements set out in Section 1.1(a), 1.1(b) and 1.1(c) of this Schedule.

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- (e) To inform the development of the Indigenous Participation Plan in accordance with Section 1.2 [Indigenous Participation Plan] of this Schedule, the Design-Builder shall meet with the Identified Indigenous Groups monthly, or as otherwise agreed to with the Identified Indigenous Groups, until the Indigenous Participation Plan has been developed and accepted in accordance with Section 1.2 [Indigenous Participation Plan] of this Schedule.
- (f)
- (g) The Design-Builder (including its relevant Subcontractors) shall attend and participate in any business-to-business or other workshops initiated by the Province in relation to the Indigenous Requirements.
- (h) The Design-Builder (including its relevant Subcontractors) shall engage with the Identified Indigenous Groups in a respectful manner that upholds the relationship between the Province and the Identified Indigenous Groups.
- (i) In addition to the minimum requirements set out in Section 1.1(a), 1.1(b) and 1.1(c) of this Schedule, the Design-Builder shall work with the Identified Indigenous Groups to explore additional employment, apprenticeship and contract opportunities that could be awarded by the Design-Builder or its Subcontractors to the respective Identified Indigenous Groups in support of the Project Work. The Design-Builder shall make reasonable efforts to reach mutual agreement with the respective Identified Indigenous Groups for the provision of any such additional employment and contract opportunities in support of the Project Work, and details of all such efforts shall be included in each quarterly report submitted to the Province's Representative pursuant to Section 1.6(a) of this Schedule.

1.2 Indigenous Participation Plan

- (a) The Design-Builder shall develop and submit to the Province's Representative for approval, acting reasonably, pursuant to the Consent Procedure within 60 days of the Effective Date, a written plan (the "**Indigenous Participation Plan**") which describes the procedures for achieving the Indigenous Requirements specified in Section 1.1 [General Requirements] of this Schedule. Three separate sub-plans of the Indigenous Participation Plan will be required to be developed, one for each of the Ktunaxa Nation Council, the Shuswap Indian Band and the four Secwepemc Bands (Adams Lake Indian Band, Little Shuswap Lake Indian Band, Neskonlith Indian Band, and Splotsin).
- (b) The Design-Builder shall update the Indigenous Participation Plan as required and annually, at a minimum, and submit all proposed amendments or updates to the Indigenous Participation Plan to the Province's Representative pursuant to the Consent Procedure.
- (c) The Indigenous Participation Plan shall describe, as a minimum:

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- (i) how the Design-Builder has engaged Identified Indigenous Groups in relation to the development of the Indigenous Participation Plan, including how input from the Identified Indigenous Groups has been considered in its development;
- (ii) the identification of the capacities for the types of employment of, training of, and contracts with, each Identified Indigenous Group;
- (iii) the identification of priority areas for types of employment, training, and contract opportunities for each Identified Indigenous Group, based on the priority areas identified by each Identified Indigenous Group;
- (iv) the identification of potential applicable contract opportunities for each Identified Indigenous Group;
- (v) how the Design-Builder intends to comply with its obligations under Sections 1.1(a), 1.1(b), 1.1(c) and 1.1(i) of this Schedule and its obligations under Schedule 6 [Environmental Obligations], including the Table of Commitments, and work with the Identified Indigenous Groups to ensure successful implementation (including describing appropriate procedural mechanisms for developing and maintaining the ongoing working relationship between the Design-Builder and the respective Identified Indigenous Groups);
- (vi) communications protocols, including frequency of meetings and frequency of updates and communications with Identified Indigenous Groups and identification of key contacts for each Identified Indigenous Group and the Design-Builder's team, which the Design-Builder has agreed with the Identified Indigenous Groups at the meetings referred to in Sections 1.1(d) and 1.1(e) of this Schedule;
- (vii) the specific decision-making and procurement processes and how they will be applied to achieve success related to
 - (A) recruitment and hiring of employees pursuant to Section 1.1(a) of this Schedule;
 - (B) recruitment and delivery of apprenticeship opportunities pursuant to Section 1.1(b) of this Schedule; and
 - (C) contracting opportunities pursuant to Section 1.1(c) of this Schedule;
- (viii) a milestone schedule by Contract Year for the attainment of each Minimum Indigenous Contracts Requirement;
- (ix) the process by which additional employment, apprenticeship and contracting opportunities as contemplated in Section 1.1(i) of this Schedule will be identified and awarded, including how this process has been communicated to the Identified Indigenous Groups and clearly distinguishing between the process in relation to the opportunities described in Sections 1.1(a), 1.1(b) and 1.1(c) of this Schedule and these additional employment, apprenticeship and contracting opportunities described in Section 1.1(i) of this Schedule;

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- (x) how the Design-Builder will liaise and meet regularly, bi-annually at a minimum, with the Identified Indigenous Groups to identify changes to the priorities and capacities for types of employment and contract opportunities for each Identified Indigenous Group, based on the areas identified by each Identified Indigenous Group;
- (xi) training opportunities for the Identified Indigenous Groups, with reference to the priority areas identified for each Identified Indigenous Group in accordance with Section 1.2(c)(iii) of this Schedule, and timeframes within which training will be provided;
- (xii) a format of a monthly report to be submitted to the Province's Representative reporting on the following items:
 - (A) all employment provided to date in furtherance of achieving the Indigenous Requirements, including the status of the Design-Builder's achievement in respect of each Minimum Indigenous Employment Requirement for the current Contract Year, with reference to the priority areas identified for each Identified Indigenous Group in accordance with Section 1.2(c)(iii) of this Schedule;
 - (B) all employment provided to date in furtherance of achieving the Indigenous Requirements, including the status of the Design-Builder's achievement in respect of each Minimum Indigenous Apprenticeship Requirement for the current Contract Year, with reference to the priority areas identified for each Identified Indigenous Group in accordance with Section 1.2(c)(iii) of this Schedule
 - (C) all contracts entered into to date in furtherance of achieving the Indigenous Requirements, including the status of the Design-Builder's achievement in respect of the identified milestones for each Minimum Indigenous Contracts Requirement, with reference to the priority areas identified for each Identified Indigenous Group in accordance with Section 1.2(c)(iii) of this Schedule;
 - (D) explanations for any variances between the status of the Design-Builder's realized achievements referenced in paragraphs (A), (B) and (C) above and the planned achievements as identified in the Indigenous Participation Plan, and
 - (E) any remedial actions or improvements or updates to the Indigenous Participation Plan that may be necessary to achieve the Indigenous Requirements; and
- (xiii) a format of a final report to be submitted to the Province's Representative prior to Total Completion which:
 - (A) summarizes all employment and apprenticeships provided to and contracts entered into with each Identified Indigenous Group throughout the Project; and

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- (B) sets out the Design-Builder's achievement in respect of:
- (1) each Minimum Indigenous Employment Requirement for the final Contract Year;
 - (2) each Minimum Indigenous Apprenticeship Requirement for the final Contract Year; and
 - (3) each Minimum Indigenous Contracts Requirement.

1.3 Indigenous Contracting and Employment Coordinator

- (a) The Design-Builder's Indigenous Contracting and Employment Coordinator will be a Key Individual subject to the applicable requirements of Section 3.3 [Key Individuals] of Schedule 2.
- (b) The Design-Builder's Indigenous Contracting and Employment Coordinator will have excellent communication skills and proven skill and experience in:
 - (i) developing and maintaining productive working relationships with the Indigenous Communities; and
 - (ii) coordinating aboriginal procurement, training, and employment opportunities on infrastructure projects.
- (c) Without limiting the generality of the foregoing, the job specification and responsibilities of the Indigenous Contracting and Employment Coordinator will include the following:
 - (i) establishing and maintaining productive working relationships with the Identified Indigenous Groups;
 - (ii) planning, establishing, maintaining and reporting on engagement and consultation with the Identified Indigenous Groups in accordance with this Agreement;
 - (iii) in collaboration with the Identified Indigenous Groups developing and implementing a plan for Indigenous cultural awareness and recognition;
 - (iv) developing, administering and managing the day-to-day implementation of the Indigenous Participation Plan and undertaking related tracking and reporting;
 - (v) undertaking tracking and reporting in relation to the implementation of the Indigenous Participation Plan and the Indigenous Requirements; and
 - (vi) updating the Indigenous Participation Plan with input from Identified Indigenous Groups.

1.4 Amendment of Indigenous Requirements

The Design-Builder may at any time submit to the Province's Representative for acceptance, acting reasonably, in accordance with the Consent Procedure any proposed revision to the Indigenous

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Requirements (as the same may previously have been revised in accordance with this Section 1.4) or any part thereof. The Province shall consult with the Affected Indigenous Groups prior to approving the amendment. If any such proposed revision is accepted by the Province in accordance with the Consent Procedure, then the Indigenous Requirements as so revised shall be the Indigenous Requirements for the purposes of this Agreement, subject to any further revision accepted by the Province, acting reasonably, in accordance with the Consent Procedure. For greater certainty, no payment shall be made by the Province to the Design-Builder as a consequence of implementation of a revision to the Indigenous Requirements pursuant to this Section 1.4 (including, for greater certainty, any revisions to the Indigenous Requirements resulting from the implementation of any additional contract opportunities contemplated by Section 1.1(i) of this Schedule).

1.5 Failure to Meet Indigenous Requirements

- (a) The Design-Builder, the Province, and the Identified Indigenous Groups will meet bi-annually to review the progress, identify obstacles, and work collaboratively to resolve issues with meeting the Indigenous Requirements and the Indigenous Participation Plan.
- (b) The Design-Builder acknowledges that the achievement of each Minimum Indigenous Contracts Requirement is crucial to the purpose and objectives of the Indigenous Requirements and that if the Design-Builder fails to meet any of the Minimum Indigenous Contracts Requirements, the Province will not be obtaining the level of Project Work assumed to be included in the payments to be made to the Design-Builder hereunder, may suffer losses and damages associated with the Project Work that are difficult to quantify in advance and that are reflected in the payments set out in Section 1.5(c)(iii) below.
- (c) Without prejudice to any other right or remedy available to the Province and BCTFA, including the assignment of NCE Points and/or Default Points pursuant to Schedule 10 [Payment and Performance Mechanism], in the event that the Design-Builder fails to meet:
 - (i) in any Contract Year, any Minimum Indigenous Employment Requirement or any Minimum Indigenous Apprenticeship Requirement, the Design-Builder and the Province shall meet to determine an appropriate remedial strategy to address such failure, provided that, at the option of the Province, the Design-Builder shall, along with the Province, meet with each Identified Indigenous Group in order to seek the views of that Identified Indigenous Group in relation to an appropriate remedial strategy;
 - (ii) any milestone for the attainment of each Minimum Indigenous Contracts Requirement as set out in the Indigenous Participation Plan, the Design-Builder and the Province shall meet to determine an appropriate remedial strategy to address such failure, provided that, at the option of the Province, the Design-Builder shall, along with the Province, meet with each Identified Indigenous Group in order to seek the views of that Identified Indigenous Group in relation to an appropriate remedial strategy; and
 - (iii) for the period from the Effective Date to the Substantial Completion Date, any Minimum Indigenous Contracts Requirement, such failure shall be a Non-Compliance Event and the Design-Builder shall pay to the Province in respect

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thereof a NCE (Cash) Payment determined in accordance with the following formula:

$$NCECP_{IIG} = 10\% \times [OV_{IIG} - AV_{IIG}]$$

where:

$NCECP_{IIG}$ = the NCE (Cash) Payment in respect of Identified Indigenous Group *IIG*

OV_{IIG} = the Objective Value of the Minimum Indigenous Contracts Requirement in respect of Identified Indigenous Group *IIG* as set out in the Table of Minimum Indigenous Contracts Requirements and calculated as the minimum dollar value of the Project Work required to be delivered using Qualified Indigenous-sourced Resources of Identified Indigenous Group *IIG*

AV_{IIG} = the Achieved Value of the Minimum Indigenous Contracts Requirement in respect of Identified Indigenous Group *IIG* calculated as the aggregate of the actual payments made by the Design-Builder and the Subcontractors directly to Qualified Indigenous-sourced Resources of Identified Indigenous Group *IIG* for performance of a portion of the Project Work, as determined by the Province's Representative

and provided that $NCECP_{IIG}$ shall be zero where AV_{IIG} is greater than or equal to OV_{IIG} .

- (d) Despite anything else in this Section 1.5, and without limiting the generality of Section 18.6 [Waiver] and Section 4.3(b) of Schedule 10 [Payment and Performance Mechanism], the Province expressly reserves the right to waive the obligation to pay all or any portion of any Non-Compliance Event Payment otherwise payable pursuant to Section 1.5(c) of this Schedule if and to the extent that the Design-Builder demonstrates to the satisfaction of the Province's Representative that it has made all reasonable efforts to meet the Minimum Indigenous Contracts Requirements and that the reasons for the Design-Builder's failure to meet any Minimum Indigenous Contracts Requirement were beyond the Design-Builder's control.

1.6 Indigenous Requirements Reporting

The Design-Builder shall submit to the Province's Representative in accordance with the Consent Procedure:

PIR1.6a on a monthly basis from the Effective Date until the Total Completion Date, the monthly report referred to in Section 1.2(c)(xii) of this Schedule; and

PIR1.6b on or before the Total Completion Date, the final report referred to in Section 1.2(c)(xiii) of this Schedule,

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and provide to the Province such other documentation and information in respect of the Indigenous Participation Plan as the Province may reasonably request.

**PART 2
OTHER INDIGENOUS MATTERS**

2.1 Cooperation with Consultation

The Design-Builder shall, at its own reasonable cost and expense (except to the extent expressly provided otherwise in this Agreement), having regard to and without detracting in any way from the Indigenous Requirements and the Design-Builder's other obligations contained in this Agreement, cooperate with and assist the Province in connection with any consultations with any Indigenous group on issues pertaining to the Project.

2.2 Other Agreements with Indigenous Groups

In addition to the Indigenous Requirements, the Design-Builder shall observe and cause all of its Subcontractors and any other person for whom the Design-Builder is in law responsible to observe the terms and conditions of any agreement between the Province and any Indigenous group with respect to the Project to the extent that such terms and conditions are disclosed from time to time by the Province to the Design-Builder and the Province requires the Design-Builder to observe such terms and conditions, and the Design-Builder shall not in the course of exercising its rights or performing its obligations under this Agreement take or omit to take or permit to be taken or omitted any action that would breach any such terms and conditions. Any requirement to comply imposed by the Province pursuant to this Section 2.2 after the Financial Submittal Date shall constitute a Province Change.

2.3 Acknowledgement by the Province

As between the Province and the Design-Builder, the Province acknowledges that it is responsible for responding to any court proceeding alleging infringement of indigenous rights or alleging that the Province has failed to discharge legal obligations of consultation and accommodation.

**SCHEDULE 23
PRIVACY PROTECTION**

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1. Definitions

1.1 In this Schedule,

- (a) “**access**” means disclosure by the provision of access;
- (b) “**contact information**” means information to enable an individual at a place of business to be contacted and includes the name, position name or title, business telephone number, business address, business email or business fax number of the individual;
- (c) “**Personal Information**” has the meaning given in Schedule 1 [Definitions and Interpretation]; and
- (d) “**privacy course**” means the Province’s online privacy and information sharing training course.

2. Purpose

2.1 The purpose of this Schedule is to:

- (a) enable the Province to comply with the Province’s statutory obligations under FOIPPA with respect to Personal Information; and
- (b) ensure that, as a service provider, the Design-Builder is aware of and complies with the Design-Builder’s statutory obligations under FOIPPA with respect to Personal Information.

3. Collection of Personal Information

3.1 Unless this Agreement otherwise specifies or the Province otherwise directs in writing, the Design-Builder may only collect or create Personal Information that is necessary for the performance of the Design-Builder’s obligations, or the exercise of the Design-Builder’s rights, under this Agreement.

3.2 Unless this Agreement otherwise specifies or the Province otherwise directs in writing, the Design-Builder must collect Personal Information directly from the individual the information is about.

3.3 Unless this Agreement otherwise specifies or the Province otherwise directs in writing, the Design-Builder must tell an individual from whom the Design-Builder collects Personal Information:

- (a) the purpose for collecting it;
- (b) the legal authority for collecting it; and
- (c) the title, business address and business telephone number of the person designated by the Province to answer questions about the Design-Builder’s collection of Personal Information.

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4. Privacy Training

4.1 The Design-Builder must ensure that each person who will provide services under this Agreement that involve the collection or creation of Personal Information will complete, at the Design-Builder's expense, the privacy course prior to that person providing those services.

4.2 The requirement in Section 4.1 will only apply to persons who have not previously completed the privacy course.

5. Accuracy of Personal Information

5.1 The Design-Builder must make every reasonable effort to ensure the accuracy and completeness of any Personal Information to be used by the Design-Builder or the Province to make a decision that directly affects the individual the information is about.

6. Requests for Access to Personal Information

6.1 If the Design-Builder receives a request for access to Personal Information from a person other than the Province, the Design-Builder must promptly advise the person to make the request to the Province unless this Agreement expressly requires the Design-Builder to provide such access, and, if the Province has advised the Design-Builder of the name or title and contact information of an official of the Province to whom such requests are to be made, the Design-Builder must also promptly provide that official's name or title and contact information to the person making the request.

7. Correction of Personal Information

7.1 Within 5 Business Days of receiving a written direction from the Province to correct or annotate any Personal Information, the Design-Builder must annotate or correct the information in accordance with the direction.

7.2 When issuing a written direction under Section 7.1, the Province must advise the Design-Builder of the date the correction request to which the direction relates was received by the Province in order that the Design-Builder may comply with Section 7.3.

7.3 Within 5 Business Days of correcting or annotating any Personal Information under Section 7.1, the Design-Builder must provide the corrected or annotated information to any party to whom, within one year prior to the date the correction request was made to the Province, the Design-Builder disclosed the information being corrected or annotated.

7.4 If the Design-Builder receives a request for correction of Personal Information from a person other than the Province, the Design-Builder must promptly advise the person to make the request to the Province and, if the Province has advised the Design-Builder of the name or title and contact information of an official of the Province to whom such requests are to be made, the Design-Builder must also promptly provide that official's name or title and contact information to the person making the request.

8. Protection of Personal Information

8.1 The Design-Builder must protect Personal Information by making reasonable security arrangements against such risks as unauthorized access, collection, use, disclosure or disposal, including any expressly set out in this Agreement.

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9. Storage and Access to Personal Information

9.1 Unless the Province otherwise directs in writing, the Design-Builder must not store Personal Information outside Canada or permit access to Personal Information from outside Canada.

10. Retention of Personal Information

10.1 Unless this Agreement otherwise specifies, the Design-Builder must retain Personal Information until directed by the Province in writing to dispose of it or deliver it as specified in the direction.

11. Use of Personal Information

11.1 Unless the Province otherwise directs in writing, the Design-Builder may only use Personal Information if that use is for the performance of the Design-Builder's obligations, or the exercise of the Design-Builder's rights, under this Agreement.

12. Disclosure of Personal Information

12.1 Unless the Province otherwise directs in writing, the Design-Builder may only disclose Personal Information inside Canada to any person other than the Province if the disclosure is for the performance of the Design-Builder's obligations, or the exercise of the Design-Builder's rights, under this Agreement.

12.2 Unless this Agreement otherwise specifies or the Province otherwise directs in writing, the Design-Builder must not disclose Personal Information outside Canada.

13. Notice of Foreign Demands for Disclosure

13.1 In addition to any obligation the Design-Builder may have to provide the notification contemplated by section 30.2 of FOIPPA, if in relation to Personal Information in the custody or under the control of the Design-Builder, the Design-Builder:

- (a) receives a foreign demand for disclosure;
- (b) receives a request to disclose, produce or provide access that the Design-Builder knows or has reason to suspect is for the purpose of responding to a foreign demand for disclosure; or
- (c) has reason to suspect that an unauthorized disclosure of Personal Information has occurred in response to a foreign demand for disclosure,

the Design-Builder must immediately notify the Province and, in so doing, provide the information described in section 30.2(3) of FOIPPA. In this Section 13.1, the phrases “foreign demand for disclosure” and “unauthorized disclosure of personal information” will bear the same meanings as in section 30.2 of FOIPPA.

14. Notice of Unauthorized Disclosure

14.1 In addition to any obligation the Design-Builder may have to provide the notification contemplated by section 30.5 of FOIPPA, if the Design-Builder knows that there has been an unauthorized disclosure of Personal Information in the custody or under the control of the Design-Builder, the Design-Builder must immediately notify the Province. In this Section 14.1, the phrase

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“unauthorized disclosure of personal information” will bear the same meaning as in section 30.5 of FOIPPA.

15. Inspection of Personal Information

15.1 In addition to any other rights of inspection the Province may have under this Agreement or under statute, the Province may, at any reasonable time and on reasonable notice to the Design-Builder, enter on the Design-Builder's premises to inspect any Personal Information in the possession of the Design-Builder or any of the Design-Builder's information management policies or practices relevant to the Design-Builder's management of Personal Information or the Design-Builder's compliance with this Schedule and the Design-Builder must permit, and provide reasonable assistance to, any such inspection.

16. Compliance with FOIPPA and Directions

16.1 The Design-Builder must in relation to Personal Information comply with:

- (a) the requirements of FOIPPA applicable to the Design-Builder as a service provider, including any applicable order of the commissioner under FOIPPA; and
- (b) any direction given by the Province under this Schedule.

16.2 The Design-Builder acknowledges that it is familiar with the requirements of FOIPPA governing Personal Information that are applicable to it as a service provider.

17. Notice of Non-Compliance

17.1 If for any reason the Design-Builder does not comply, or anticipates that it will be unable to comply, with a provision in this Schedule in any respect, the Design-Builder must promptly notify the Province of the particulars of the non-compliance or anticipated non-compliance and what steps it proposes to take to address, or prevent recurrence of, the non-compliance or anticipated non-compliance.

18. Interpretation

18.1 In this Schedule, references to sections by number are to sections of this Schedule unless otherwise specified in this Schedule.

18.2 Any reference to the “Design-Builder” in this Schedule includes any subcontractor or agent retained by the Design-Builder to perform obligations under this Agreement and the Design-Builder must ensure that any such subcontractors and agents comply with this Schedule.

18.3 The obligations of the Design-Builder in this Schedule will survive the termination of this Agreement.

18.4 If a provision of this Agreement (including any direction given by the Province under this Schedule) conflicts with a requirement of FOIPPA or an applicable order of the commissioner under FOIPPA, the conflicting provision of this Agreement (or direction) will be inoperative to the extent of the conflict.

18.5 The Design-Builder must comply with the provisions of this Schedule despite any conflicting provision of this Agreement or, subject to Section 18.6, the law of any jurisdiction outside Canada.

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18.6 Nothing in this Schedule requires the Design-Builder to contravene the law of any jurisdiction outside Canada unless such contravention is required to comply with FOIPPA.