

DESIGN-BUILD AGREEMENT

AMONG

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

- and -

BC TRANSPORTATION FINANCING AUTHORITY

- and -

KEA FRASER VALLEY CONNECTORS

July 24, 2024

TABLE OF CONTENTS

PART 1 INTERPRETATION	1
1.1 Definitions and Interpretation	1
1.2 Schedules	1
PART 2 GENERAL PROJECT TERMS	2
2.1 The Project.....	2
2.2 Term.....	2
2.3 Assumption of Risk and Responsibility.....	2
2.4 <i>Financial Administration Act</i>	2
2.5 Use of Project Facilities and Project Marks.....	2
2.6 Title to Infrastructure and Improvements	4
2.7 Transfer of Title	4
2.8 Review, Approval, Inspection and Audit by the Province.....	5
2.9 Site Inspection and Investigations	6
2.10 Disclosed Data	9
2.11 Execution and Delivery of Project Documents.....	10
PART 3 REPRESENTATIVES AND KEY INDIVIDUALS.....	11
3.1 Province’s Representative.....	11
3.2 Design-Builder’s Representative	11
3.3 Key Individuals.....	13
PART 4 GENERAL OBLIGATIONS OF PROVINCE.....	15
4.1 Mitigation By Province.....	15
4.2 Representations and Warranties of the Province and BCTFA.....	16
4.3 Without Prejudice	16
PART 5 GENERAL OBLIGATIONS OF DESIGN-BUILDER	16
5.1 Design-Builder to Carry Out Project Work	16
5.2 Informational Rights	17
5.3 No Adverse Reflection.....	18
5.4 No Conflicts of Interest.....	18
5.5 Prohibited Acts	18
5.6 Mitigation By Design-Builder	19
5.7 Representations and Warranties of Design-Builder.....	20
5.8 Without Prejudice	22
5.9 Design-Builder’s Environmental Obligations.....	22
5.10 Indigenous Requirements.....	22
5.11 ESG Requirements.....	22
PART 6 INSURANCE, DAMAGE AND DESTRUCTION.....	23
6.1 Insurance Coverages	23
6.2 Province’s Right to Insure	23
6.3 Particular Requirements of Policies.....	23
6.4 Deductibles	24
6.5 Design-Builder Insurance Primary.....	24
6.6 Release of the Province for Insured Loss.....	24
6.7 Compliance with Policies	25
6.8 Evidence of Insurance.....	25
6.9 Renewal	25

6.10	Copies of Communications.....	26
6.11	Review of Insurance by Province	26
6.12	Claims	27
6.13	Insurance Not to Prejudice.....	27
6.14	Restoration and Reinstatement of Damage or Destruction.....	27
6.15	Reinstatement Plan.....	27
6.16	Conduct of Reinstatement Work.....	29
6.17	Application of Proceeds of Insurance	29
6.18	Repayment of Insurance Proceeds	33
6.19	Proceeds of Property Insurance if Agreement Terminated	33
6.20	Alternate Risk Financing Measures	33
PART 7 CHANGES.....		33
7.1	Province Changes and Value Engineering Proposals	33
PART 8 SUPERVENING EVENTS.....		33
8.1	Supervening Events	33
8.2	Procedures Upon Occurrence of a Supervening Event.....	35
8.3	Design-Builder’s Entitlements Upon Occurrence of a Compensation Event	37
8.4	Design-Builder’s Entitlements Upon Occurrence of a Relief Event	39
8.5	Parties’ Entitlements Upon Occurrence of a Force Majeure Event	40
8.6	Termination for Force Majeure Event	40
8.7	Termination for Damage or Destruction.....	41
8.8	Responsibility for Participants and Trespassers.....	43
8.9	Allocation of Risks of Participants and Trespassers.....	44
8.10	Sharing of Increased Recoverable Expenditures for Undisclosed Utilities	45
8.11	Effect of Insurance	46
8.12	Delay in Notification.....	47
PART 9 INDEMNITIES AND LIMITATIONS ON LIABILITY		47
9.1	Indemnification by Design-Builder	47
9.2	Exceptions to Indemnification by Design-Builder.....	49
9.3	Effect and Limitation of Design-Builder’s Indemnities and Liabilities.....	51
9.4	Conduct of Claims Indemnified by Design-Builder	53
9.5	Indemnification by the Province	55
9.6	Limited Province Indemnities	56
9.7	Exceptions to Indemnification by the Province	57
9.8	Limitation of Province Liability	57
9.9	Conduct of Claims Indemnified by the Province.....	58
9.10	Costs and Expenses.....	60
9.11	No Liability for Irrecoverable Losses	60
9.12	No Double Compensation.....	60
9.13	No Compensation Where Insured.....	60
PART 10 PAYMENTS		61
10.1	Payments	61
10.2	Taxes on Payments	62
PART 11 PROVINCE’S MONITORING AND STEP-IN RIGHTS.....		63
11.1	Increased Monitoring.....	63
11.2	Province’s Emergency Rights.....	64

11.3	Province's Other Step-In Rights	66
11.4	Availability of Certain Assets on Step-In	67
PART 12 DESIGN-BUILDER DEFAULT AND PROVINCE REMEDIES.....		68
12.1	Design-Builder Default.....	68
12.2	Notice of Default by Design-Builder	70
12.3	Remedies of the Province for Design-Builder Default	70
12.4	Termination for Failure to Remedy According to Program.....	73
12.5	Province Costs	73
12.6	Province Remedies Cumulative	73
12.7	Continued Effect	74
12.8	Compensation on Termination.....	74
PART 13 PROVINCE DEFAULT AND DESIGN-BUILDER REMEDIES.....		74
13.1	Province Default	74
13.2	Notice of Default by Province	75
13.3	Remedies of Design-Builder for Province Default	75
13.4	Design-Builder Costs	76
13.5	Design-Builder Remedies Cumulative	76
13.6	Continued Effect	77
13.7	Compensation on Termination.....	77
PART 14 TERMINATION		77
14.1	Termination for Convenience	77
14.2	No Other Rights of Termination	77
14.3	Continued Performance	77
14.4	Notice of Intention to Terminate and Dispute	78
14.5	Changes after Notice of Termination.....	79
14.6	Effect of Termination or Expiry Generally.....	79
14.7	Province Discretion to Complete	81
14.8	Transfer of Assets	81
14.9	Handover.....	83
PART 15 CONFIDENTIALITY AND INTELLECTUAL PROPERTY		85
15.1	Confidentiality	85
15.2	Freedom of Information, Privacy Protection and Security	86
15.3	Ownership of Intellectual Property and License to Province.....	87
15.4	License of Intellectual Property to Design-Builder	89
PART 16 ASSIGNMENT, CHANGE IN CONTROL AND SUBCONTRACTING		90
16.1	Assignment by Design-Builder	90
16.2	Assignment by the Province and BCTFA.....	90
16.3	Change in Control of Design-Builder	91
16.4	Use of Subcontractors by Design-Builder	91
16.5	Material Subcontracts	91
PART 17 GENERAL		92
17.1	Disputes	92
17.2	Public Communications	92
17.3	Survival.....	92
17.4	Entire Agreement	93
17.5	Amendment.....	94

17.6	Notices	94
17.7	Waiver.....	95
17.8	Further Assurances.....	95
17.9	Relationship of the Parties	95
17.10	Binding Effect.....	95
17.11	Governing Law	95
17.12	Submission to Jurisdiction	96
17.13	No Fettering of Province’s Rights, Powers and Authority	96
17.14	No Agency	96
17.15	Language.....	97
17.16	Counterparts.....	97

SCHEDULES

Schedule 1	Definitions and Interpretation
Schedule 2	Review Procedure and Consent Procedure
Schedule 3	Design and Construction General Requirements
Schedule 4	Design and Construction Technical Requirements
Schedule 5	Insurance Requirements
Schedule 6	Environmental Obligations
Schedule 7	Quality Management
Schedule 8	Lands
Schedule 9	Performance Mechanism
Schedule 10	Payment
Schedule 11	Changes
Schedule 12	Indigenous Requirements
Schedule 13	ESG and Workforce Requirements
Schedule 14	Compensation on Termination
Schedule 15	Communications and Engagement
Schedule 16	Dispute Resolution Procedure
Schedule 17	Records and Reports
Schedule 18	Privacy Protection
Schedule 19	Cloud Security
Schedule 20	Design-Builder Ownership Information
Schedule 21	Key Individuals
Schedule 22	Closing Deliveries
Schedule 23	Bonds
Schedule 24	Letters of Credit
Schedule 25	Proposal Extracts

DESIGN-BUILD AGREEMENT

THIS DESIGN-BUILD AGREEMENT dated as of July 24, 2024 is entered into:

AMONG:

**HIS MAJESTY THE KING 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:

KEA FRASER VALLEY CONNECTORS

(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 will 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 will be interpreted and construed in accordance with the provisions set out in Schedule 1 [Definitions and Interpretation].

1.2 Schedules

The Schedules to this Agreement, and their Appendices and Attachments, 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.

**PART 2
GENERAL PROJECT TERMS**

2.1 The Project

The Design-Builder will:

- (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 (and the Design-Builder acknowledges that the Proposal Extracts will be in addition to and not in substitution for any other terms, conditions, requirements, criteria and specifications set out in this Agreement); and
- (b) perform and observe all other obligations for which it is responsible under this Agreement,

(collectively, the “**Project**”) 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.

2.2 Term

This Agreement will take effect on the Effective Date and, except as expressly provided otherwise in this Agreement, will 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, all risks in relation to the performance by the Design-Builder of its obligations under this Agreement are allocated to, and accepted by, the Design-Builder as its entire and exclusive responsibility.
- (b) As between the parties, the Design-Builder will 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 Use of Project Facilities and Project Marks

- (a) 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.

- (b) 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**”).
- (c) In accordance with Section 15.4(a)(iii) of this Agreement 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) will, in association with the Project and all Project Work performed with respect to the Project, use only the Project Marks and will 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.

2.6 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 2.7(a) of this Agreement, 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] of this Agreement:

- (a) the Design-Builder will 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 will vest in the Province or BCTFA, such other person as the Province may direct, or the owner of the relevant lands, as applicable.

2.7 Transfer of Title

- (a) As between the Province and BCTFA, and the Design-Builder, title to all Plant will 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 will have been completed in accordance with Schedule 7 [Quality Management] prior to such passing of title. The Design-Builder covenants that each of the Material Subcontracts will contain a provision that title to all Plant will pass to the Province or BCTFA (or such other person as the Province may direct, as applicable, under this Section 2.7(a)).

- (b) Title to any property (whether real or personal, tangible or intangible) not referred to in Section 2.7(a) of this Agreement 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 will 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 17.8 [Further Assurances] of this Agreement, the Design-Builder will, 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 will 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 2.7.
- (d) The Design-Builder covenants that all Subcontracts to which the Design-Builder is a party will 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 2.7(c) of this Agreement.

- (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 2.7, the Design-Builder and Subcontractors will 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.

2.8 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, will 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) 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) will 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 at law or in equity, except in the circumstances and to the extent expressly provided in Section 2.8(b) of this Agreement;
 - (B) will 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, except in the circumstances and to the extent expressly provided in Section 2.8(b) of this Agreement;
 - (C) will 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) will 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 will, once all applicable Disputes arising in respect thereof have been resolved in accordance with Schedule 2 [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.
- (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 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, 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 will be relieved of the obligation under this Agreement 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.

2.9 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 will 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 Technical Requirements];

- (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 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, 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 5.1(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), 5.1(b), 5.1(c), 5.1(e) and 5.1(f) of this Agreement; 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, municipalities 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 2.10 [Disclosed Data] of this Agreement that bear on any of the matters referred to in Sections 2.9(a)(i) through (iv) inclusive of this Agreement.
- (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) except as otherwise expressly set out in this Agreement, the Province and BCTFA will 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) Except as otherwise expressly set out in this Agreement, the Design-Builder will 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 2.9 will 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 will prejudice an otherwise valid Claim by the Design-Builder:

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

The provisions of any of paragraphs (a) to (c) of this Section 2.9 do not limit the provisions of any other such paragraph of this Section 2.9.

2.10 Disclosed Data

- (a) Except as otherwise expressly provided in any other provisions of this Agreement, including Section 2.10(d) of this Agreement, or as a result of any breach of any express obligation of the Province under this Agreement, neither the Province nor BCTFA will 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 will 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 will 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
 - (ii) in respect of any breach of any express obligation of the Province under this Agreement.
- (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 2.10(d) of this Agreement:
 - (i) the Design-Builder will 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 will not be entitled to make, and will 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 will not be released from any risks or obligations imposed on or undertaken by it under this Agreement, 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 2.9 [Site Inspection and Investigations] or Section 2.10(c)(i) of this Agreement; 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, the Municipality 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
 - (2) in respect of any breach of any express obligation of the Province or BCTFA under this Agreement.

The provisions of any paragraph of this Section 2.10(c) do not limit the provisions of any other paragraph of this Section 2.10(c).

- (d) Notwithstanding the foregoing provisions of this Section 2.10 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 will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] will apply. For greater certainty, the Design-Builder will not be entitled to relief under this Section 2.10 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.

2.11 Execution and Delivery of Project Documents

On or before the Effective Date:

- (a) the Design-Builder will deliver to the Province and BCTFA the documents described in Part 1 [Documents to be Delivered by the Design-Builder] of Schedule 22, executed and delivered by the signatories specified or contemplated in such Part; and
- (b) the Province and BCTFA will deliver to the Design-Builder the documents described in Part 2 [Documents to be Delivered by the Province and BCTFA] of Schedule 22, executed and delivered by the signatories specified or contemplated in such Part.

**PART 3
REPRESENTATIVES AND KEY INDIVIDUALS**

3.1 Province's Representative

- (a) The Province, by notice to the Design-Builder delivered pursuant to Schedule 22 [Closing Deliveries] will appoint the Province's Representative to act as its agent in relation to the Project, including in relation to all Design and Construction and all other aspects of the Project Work.
- (b) 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 will specify the effective date of such termination or substitution, and the Province will use all reasonable efforts to give reasonable advance notice of any such appointment 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.
- (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 2.8 [Review, Approval, Inspection and Audit by the Province] of this Agreement, are entitled to treat any act of the Province's Representative which is authorized by this Agreement as being expressly authorized by the Province, and will 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 will 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) The Province's Representative will work together with the Design-Builder's Representative in the spirit of partnering and cooperation.

3.2 Design-Builder's Representative

- (a) The Design-Builder will, subject to acceptance by the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld:
 - (i) appoint a competent and qualified person to act as the Design-Builder's Representative and its agent in connection with the Project; and

- 12 -

- (ii) a substitute 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 Design-Builder's Representative will be a Key Individual subject to the applicable requirements of Section 3.3 [Key Individuals] of this Agreement.
- (c) The appointment of the Design-Builder's Representative will 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 will take place as soon as practicable upon the Design-Builder's Representative ceasing to act.
- (d) The Design-Builder's Representative will:
 - (i) have substantial experience in being responsible for and managing multi-disciplinary design and construction teams, on behalf of a Design-Builder, for large-scale design-build projects of comparable scope, scale and complexity 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;
 - (iii) be an employee of, or an independent contractor directly engaged by, the Design-Builder; and
 - (iv) devote all working time, energy and skill to the Project and to carrying out the duties of the Design-Builder's Representative on an exclusive basis.
- (e) The Design-Builder's Representative will be directly responsible for and fully engaged in, and will not, except in accordance with this Section 3.2, 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 all aspects of the Project Work, including:
 - (i) the stewardship of the Design-Builder and of the Project Work; and
 - (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.
- (f) The Design-Builder's Representative will 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:

- 13 -

- (i) are entitled to treat any act of the Design-Builder's Representative in connection with this Agreement as being expressly authorized by the Design-Builder, and will 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 of any employee or representative of the Design-Builder other than the Design-Builder's Representative.
- (g) The Design-Builder's Representative will work together with the Province's Representative in the spirit of partnering and cooperation.

3.3 Key Individuals

- (a) The Design-Builder represents and warrants to the Province that the Key Individuals for the Project as at the Effective Date are as set out in Schedule 21 [Key Individuals].
- (b) [Not Used]
- (c) Each of the Quality Director, the Construction Manager, the Environmental Manager and the Traffic Manager will:
 - (i) be either an employee of, or an independent contractor directly engaged by, the Design-Builder or a Partner;
 - (ii) be specifically designated for the purpose of such role; and
 - (iii) 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 will not, without the prior acceptance of the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld:
 - (iv) change any such Key Individual's job specification or responsibilities;
 - (v) 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;
- (d) Each of the Quality Director, the Design Manager, the Construction Manager, the Environmental Manager and the Indigenous Coordinator will report directly to the Design-Builder's Representative.
- (e) The Design-Builder will not, without the prior acceptance of the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld, permit any Key Individual to be located at any location other than the Lower Mainland.
- (f) The Design-Builder will require the Key Individuals to perform their respective duties as set out in this Agreement. No one individual may act as more than one Key Individual at any one time.

- (g) Each Key Individual must be appointed to the Project as follows:
- (i) The Design-Builder's Representative will be required on a full time and exclusive basis at all times throughout the Term.
 - (ii) The Design Manager will be required on a full time and exclusive basis at all times until the submission of all IFC Drawings in accordance with Section 2.12 [IFC Drawings] of Part 2 of Schedule 4. Thereafter, the Design Manager must be available and responsive as required to meet all obligations of the Design Manager under this Agreement.
 - (iii) The Construction Manager will be required on a full time and exclusive basis at all times until the Total Completion Date. Thereafter, the Construction Manager must be available and responsive as required to meet all obligations of the Construction Manager under this Agreement.
 - (iv) The Quality Director will be required on a full time and exclusive basis at all times until the completion of the development and implementation of the Quality Management Plan. Thereafter, the Quality Director must be available and responsive as required to meet all obligations of the Quality Director under this Agreement.
 - (v) Each of the Environmental Manager and the Traffic Manager will be required on a full time and exclusive basis at all times until the Substantial Completion Date. Thereafter, the Environmental Manager and the Traffic Manager must each be available and responsive as required to meet all of their respective obligations under this Agreement.
 - (vi) The Indigenous Coordinator will be required on a full time and exclusive basis at all times until the completion of the development and implementation of the Indigenous Participation Plan. Thereafter, the Indigenous Coordinator must be available and responsive as required to meet all obligations of the Indigenous Coordinator under this Agreement.

The Design-Builder will 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(g).

- (h) At the Province's written request, acting reasonably, such request to be accompanied by the Province's reasons for such request, the Design-Builder will remove and propose a replacement Key Individual within 45 days of receipt of the written request, subject to acceptance by the Province's Representative pursuant to the Consent Procedure, such acceptance not to be unreasonably withheld.
- (i) If for any reason a Key Individual (other than the Design-Builder's Representative, in which case the provisions of Section 3.2(c) of this Agreement will apply) resigns, becomes unavailable or otherwise needs to be replaced (other than for vacation or other reasonable temporary absence in each case of no longer than three weeks, provided there is reasonable coverage of the Key Individual's duties during such vacation or other reasonable temporary absence) 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 will 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.

- (j) On the replacement of any Key Individual pursuant to this Section 3.3, any replacement individual will, unless the Province otherwise agrees, be subject to a 90-day probationary period, at any time during which the Province, acting reasonably, may reject that individual and require replacement by another individual.
- (k) If the position of any Key Individual is unfilled for more than 5 weeks during the period when such Key Individual is required pursuant to Section 3.3(g) of this Agreement, the Province, at its election, may at any time deem the unfilled position of a Key Individual to be a Province Change that does not affect any requirements to otherwise comply with this Section 3.3 and upon such election the Province will be credited with the remaining portion of the total cost item amount allocated to such Key Individual in Appendix 10A [Form of Statement of Progress] to Schedule 10.
- (l) 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 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.

PART 4 GENERAL OBLIGATIONS OF PROVINCE

4.1 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 14 [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 will 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 will 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;

- 16 -

- (iv) alter the amount of any Province Payments or Performance Incentive Payments determined in accordance with Schedule 9 [Performance Mechanism] and Schedule 10 [Payment]; 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 will 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 4.1(a) of this Agreement.
- (c) The Design-Builder will 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 4.1.

4.2 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.

4.3 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.

PART 5 GENERAL OBLIGATIONS OF DESIGN-BUILDER

5.1 Design-Builder to Carry Out Project Work

The Design-Builder will 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 5.1(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 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.

5.2 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 will 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.

5.3 No Adverse Reflection

Without limiting the Design-Builder's obligations under Section 5.1 [Design-Builder to Carry Out Project Work], in the performance of the Project Work the Design-Builder will 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 5.3, and provided that this Section 5.3 will not prejudice an otherwise valid Claim by the Design-Builder:

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

5.4 No Conflicts of Interest

The Design-Builder will 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.

5.5 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, will 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 neither the Design-Builder nor any Material Subcontractor will 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 a Material Subcontractor or on behalf of the Design-Builder or a Material Subcontractor or to the knowledge of the Design-Builder or a Material Subcontractor, 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 5.5(b) of this Agreement, the Design-Builder covenants that no person for whom the Design-Builder is in law responsible will 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.

5.6 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 14 [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 will 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 will 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 5.6(a) of this Agreement.
- (c) Upon request from the Province, the Design-Builder will 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 5.6(a) of this Agreement.
- (d) The Design-Builder will 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 5.6(a) of this Agreement, *mutatis mutandis*.
- (e) The Province will 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 5.6.

5.7 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, 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) Kiewit Infrastructure BC ULC. 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;
- (c) 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;
- (d) the information set out in Schedule 20 [Design-Builder Ownership Information] is true and correct;
- (e) the execution and delivery by Kiewit Infrastructure BC ULC and Emil Anderson Construction (EAC) Inc., as the Partners of the Design-Builder, of this Agreement and the execution and delivery of any other Project Documents by either or both Kiewit Infrastructure BC ULC and Emil Anderson Construction (EAC) Inc., as a Partner and/or as the managing partner of the Design-Builder, as the case may be, and all other documents, instruments and agreements required to be executed and delivered by such Partner 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 such other Project Document to be executed and delivered on or before the Effective Date, has been duly executed and delivered by each Partner, as applicable, and constitutes a legal, valid and binding obligation of the Design-Builder and each Partner, as applicable, 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;

- (f) the entry into and performance of this Agreement by the Design-Builder do not and will 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 10.2 [Agreements with Governmental Authorities] of Schedule 3 and agreements with Utility Suppliers to be entered into as contemplated by Section 6.10 [New and Amended Utility Agreements] of Schedule 3;
- (h) since the Financial Submittal Date:
 - (i) there has been no material reduction in the collective qualifications and expertise of the Design-Builder and the Material Subcontractors to perform the Project Work; and
 - (ii) there has been no material adverse change in the financial condition of the Design-Builder, any of the Partners or the Guarantor;
- (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 Guarantor 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 or the ability of the Guarantor to fulfil the Guarantor's obligations under the Guarantee;
- (k) neither the Design-Builder nor any of the Partners is a party to or, 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 Guarantor 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 or the ability of the Guarantor to fulfil the Guarantor's obligations under the Guarantee;

- (l) the Partners are the only partners of the Design-Builder;
- (m) the copies of the Material Subcontracts provided by the Design-Builder are true and accurate;
- (n) 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;
- (o) 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;
- (p) neither the Design-Builder nor any of the Partners nor the Guarantor 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 5.4 [No Conflicts of Interest] or Section 5.5 [Prohibited Acts] of this Agreement; and
- (q) 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.

5.8 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.

5.9 Design-Builder's Environmental Obligations

The Design-Builder will carry out the Design-Builder's Environmental Obligations in accordance with Schedule 6 [Environmental Obligations].

5.10 Indigenous Requirements

The Design-Builder will carry out the Indigenous Requirements in accordance with Schedule 12 [Indigenous Requirements].

5.11 ESG Requirements

The Design-Builder will carry out the ESG Requirements in accordance with Schedule 13 [ESG and Workforce Requirements].

**PART 6
INSURANCE, DAMAGE AND DESTRUCTION**

6.1 Insurance Coverages

The Design-Builder will 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 5 [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 will 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 will, 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 will 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 will not be in duplication of any administrative fee charged under Section 12.3(b) of this Agreement in respect of the same costs and expenses.

6.3 Particular Requirements of Policies

In addition to the requirements of Schedule 5 [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] of this Agreement must comply with the following:

- (a) all policies of insurance must comply with Section 6.17 [Application of Proceeds of Insurance] and Schedule 5 [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

If any policies for the Required Insurance or any other insurance required to be taken out by Section 6.1 [Insurance Coverages] of this Agreement provide that the amount payable in the event of any claim, loss or liability will be reduced by a deductible amount or subject to a waiting period, then

- (a) subject to Section 6.4(b) of this Agreement, the Design-Builder will be responsible for any such deductible amount and/or waiting period and, in the event of any claim, loss or liability, the Design-Builder will be responsible for and will pay, and will 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; and
- (b) the Province will be responsible for any such deductible amount and/or waiting period for any claim made as a result of a Province Non-Excusable Event.

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) of this Agreement, 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) of this Agreement will not apply to the extent that both:
 - (i) the Province would, but for Section 6.6(a) of this Agreement, 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 5 [Insurance Requirements] in respect of such property or other loss.

6.7 Compliance with Policies

- (a) The Design-Builder will comply with the terms, conditions and requirements of all policies for the Required Insurance, will 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 will 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 will 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.
- (b) The Design-Builder will 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 5 [Insurance Requirements], the Design-Builder will 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 will 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) of this Agreement, the Design-Builder will 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) of this Agreement, and as revised as required by the Province pursuant to Section 6.9(a) of this Agreement, 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) of this Agreement, the Design-Builder will 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 5 [Insurance Requirements], the Design-Builder will 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 Securities 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 2.8 [Review, Approval, Inspection and Audit by the Province] of this Agreement, 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 5 [Insurance Requirements], will 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 at law or in equity including its obligations to insure as provided in this Part 6 and Schedule 5 [Insurance Requirements]; or
- (c) derogate from, limit or prejudice any rights of the Province under this Agreement.

6.12 Claims

- (a) The Design-Builder will maintain a written register of all claims and incidents which might result in a claim under any of the policies of Required Insurance and will allow the Province to inspect such register at any time on reasonable notice.
- (b) The Design-Builder will 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 will, and will ensure that the relevant insured (other than the Province and BCTFA) will, 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 will 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.

6.13 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 will 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.

6.14 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] of this Agreement), if all or any part of the Project Infrastructure or the Project Site is damaged or destroyed prior to the Substantial Completion Date, the Design-Builder will 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 will 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.

6.15 Reinstatement Plan

If all or any part of the Project Infrastructure or the Project Site is damaged or destroyed prior to the Substantial Completion Date, in addition to the requirements of Section 8.6 [Termination for Force Majeure Event] or Section 8.7 [Termination for Damage or Destruction] of this Agreement, if the Reinstatement Work is reasonably estimated to cost more than \$5,000,000 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 will, 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) of this Agreement 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 will 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 will be dealt with in accordance with the provisions of Part 3 [Project Schedule] of Schedule 3, 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.

6.16 Conduct of Reinstatement Work

The Design-Builder will 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 will be subject to the Design and Certification Procedure.

6.17 Application of Proceeds of Insurance

The Design-Builder will 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 - Construction], 1.3 [Automobile Insurance] and 2.1 [Insurance – Operation and Maintenance] of Schedule 5, the proceeds of insurance will 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 5 [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 will 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 will 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 will 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 6.17(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 6.17(c) or Section 6.17(d) of this Agreement, as applicable, will 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 the Province:

- 30 -

- (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 for consideration in accordance with Section 3.4 [General Grounds for Objection or Rejection] of Schedule 2 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 4.1 [Workers' Compensation Coverage] of Schedule 5 and Section 4.8 [Compliance with *Builders Lien Act* and Payments to Subcontractors] of Schedule 8 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 will, 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 6.17(c)(i)(A) to (D) inclusive of this Agreement; 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:

- 31 -

- (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 4.1 [Workers' Compensation Coverage] of Schedule 5 and Section 4.8 [Compliance with *Builders Lien Act* and Payments to Subcontractors] of Schedule 8 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 will, 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 6.17(c)(ii)(A) to (C) inclusive of this Agreement, 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 2.5 [Design-Builder's Estimate of Change in Costs] of Schedule 11) including documents and information to establish and verify the applicable matters for consideration in accordance with Section 3.4 [General Grounds for Objection or Rejection] of Schedule 2 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 4.1 [Workers' Compensation Coverage] of Schedule 5 and Section 4.8 [Compliance with *Builders Lien Act* and Payments to Subcontractors] of Schedule 8 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

- 32 -

- (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 will, 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 6.17(d)(i)(A) to (D) inclusive of this Agreement, 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 4.1 [Workers' Compensation Coverage] of Schedule 5 and Section 4.8 [Compliance with *Builders Lien Act* and Payments to Subcontractors] of Schedule 8 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 will, 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 6.17(d)(ii)(A) to (C) inclusive of this Agreement, 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 6.17(a) and (b) of this Agreement, proceeds will 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 will be deemed to have been paid to ensure the performance by the Design-Builder of its obligations under this Agreement.

6.18 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 6.17(c) and (d) of this Agreement, 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 will, 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.

6.19 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 5 [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, will be paid to and retained by the Province as its sole property, and for such purposes the Province and the Design-Builder will 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.

6.20 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 [Changes] of this Agreement 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 5 [Insurance Requirements] being obtained in a more cost efficient manner.

PART 7 CHANGES

7.1 Province Changes and Value Engineering Proposals

The Province may, at any time during the Term, require Province Changes and Value Engineering Proposals in accordance with the provisions of Schedule 11 [Changes].

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:
 - (iii) in the case of the Design-Builder:

- 34 -

- (A) interferes adversely with, or causes a failure of, or prevents, the performance of the Project Work; or
- (B) is a Compensation Event and results in Direct Losses; or
- (iv) in the case of the Province, interferes adversely with, or causes a failure of, or prevents, the performance of any obligation under this Agreement,

then, subject to Section 8.1(b) of this Agreement, 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 will 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) of this Agreement 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 five 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) of this Agreement) after four other Supervening Events meeting the requirements of this Part 8, including Section 8.1(b)(i)(A) of this Agreement, 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 (other than in respect of Compensation Event (o));

- 35 -

- (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) of this Agreement no more than 12 months after the date of the occurrence or commencement of such Supervening Event.
- (c) Nothing in this Part 8 will limit the Province's right to request a Province Change pursuant to Section 7.1 [Province Changes and Value Engineering Proposals] 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 2.2 [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 will terminate and the matter will be fully determined in accordance with Part 8 [Changes] and Schedule 11 [Changes], provided that the Supervening Event and its consequences (as such consequences may be affected by the Province Change) will be dealt with as part of the resulting Province Change.

8.2 Procedures Upon Occurrence of a Supervening Event

The following procedures will 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 will 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:
 - (i) as soon as practicable, and in any event within 30 Business Days after the delivery of the Supervening Event Notice, the Applicant will give to the Province, where the Applicant is the Design-Builder, or the Design-Builder, where the Applicant is the Province:
 - (A) a clear account of the basis and substantiation for, and any additional details or information, including available supporting documentation in support of, its claim in respect of the occurrence of the Supervening Event;

- 36 -

- (B) if applicable, a detailed schedule and delay analysis identifying and substantiating the claimed delay to the critical path of the Project Schedule;
 - (C) 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
 - (D) details of the contemporary records which the Design-Builder will thereafter maintain and make available to the Province to substantiate its claim if the Supervening Event will form the basis of a claim for an extension of time; and
- (ii) as soon as practicable, and in any event within three Business Days of the Applicant receiving, or becoming aware of, any supplemental information pertaining to the Supervening Event, the Applicant will give to the other party further particulars based on such supplemental information;
- (c) if a Supervening Event for which a Supervening Event Notice has been delivered ceases, the Applicant will 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 8.2(h)(i)(B) of this Agreement will be the only relief, extensions of time, compensation and/or termination right to which the Applicant will be entitled in respect of such Supervening Event;
- (e) the other party will 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] of this Agreement applies, such Claims will be subject to the provisions of Section 9.9 [Conduct of Claims Indemnified by the Province] of this Agreement and otherwise the claim in respect of such Supervening Event will be subject to the provisions of this Part 8;
- (g) the Applicant will 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) of this Agreement 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 4.1 [Mitigation By Province] or Section 5.6 [Mitigation By Design-Builder] of this Agreement, as applicable; and
- (h) following the delivery of a Supervening Event Notice under Section 8.2(a) of this Agreement:
 - (i) the Province and the Design-Builder will 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 5.6 [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] of this Agreement and to the Design-Builder's obligations under Section 5.6 [Mitigation By Design-Builder] of this Agreement, 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 6.14 [Restoration and Reinstatement of Damage or Destruction] of this Agreement), the Design-Builder will 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] of this Agreement and without limiting the Province's right to terminate this Agreement pursuant to Section 14.1 [Termination for Convenience] of this Agreement) arising from its affected performance, including that:
 - (i) no NCE Points or Default Points will be assigned in respect of any such affected performance; and
 - (ii) no Non-Compliance Event Payments will 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] of this Agreement, 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 (k) of the definition thereof in Section 1.1 [Definitions] of Schedule 1, the Design-Builder will 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 (m) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, such amount will 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; and
 - (ii) in the case of a Compensation Event (or a Force Majeure Event in the circumstances set out in Section 8.6(a)(ii) of this Agreement) that causes damage to or destruction of all or any part of the Project Infrastructure or the Project Site, the Province will 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 6.17(c) and 6.17(d) of this Agreement for the disbursement of Property Damage Insurance Proceeds under Section 6.17(b) of this Agreement;
- (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 will be postponed; or
 - (ii) after the Substantial Completion Date but prior to the Total Completion Target Date, then the Total Completion Target Date will 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 will 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) and 8.12 [Delay in Notification] of this Agreement and to the Design-Builder's obligations under Section 5.6 [Mitigation By Design-Builder] of this Agreement, 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 6.14 [Restoration and Reinstatement of Damage or Destruction] of this Agreement):
 - (i) without limiting the Province's right to terminate this Agreement pursuant to Section 14.1 [Termination for Convenience] of this Agreement, the Province will 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] of this Agreement);
 - (ii) no NCE Points or Default Points will be assigned in respect of any such affected performance; and
 - (iii) no Non-Compliance Event Payments will be applied 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 will be postponed; or
 - (ii) after the Substantial Completion Date but prior to the Total Completion Target Date, then the Total Completion Target Date will be postponed,

in each case by or for, as the case may be, such time as is reasonable in the circumstances to take account of the effect of the delay solely caused, or that will be solely caused, by such Relief Event to the achievement of the relevant date or dates, and in each case the Project Schedule will 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] of this Agreement and to the Applicant's obligations under Section 4.1 [Mitigation By Province] or Section 5.6 [Mitigation By Design-Builder] of this Agreement, 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 (A) those obligations arising as a result of the Force Majeure Event, including the Design-Builder's obligations under Section 6.14 [Restoration and Reinstatement of Damage or Destruction] of this Agreement, and (B) any obligations of the Province under this Agreement to make payment to the Design-Builder):
 - (i) the Applicant will be relieved of performance of such obligations;
 - (ii) without limiting the Province's right to terminate this Agreement pursuant to Section 14.1 [Termination for Convenience] of this Agreement, neither party will 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] of this Agreement); and
 - (iii) if the Applicant is the Design-Builder:
 - (A) no NCE Points or Default Points will be assigned in respect of any such affected performance; and
 - (B) no Non-Compliance Event Payments will be applied 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 will be postponed; or
 - (ii) after the Substantial Completion Date but prior to the Total Completion Target Date, then the Total Completion Target Date will be postponed,

in each case by or for, as the case may be, such time as is reasonable in the circumstances to take account of the effect of the delay solely caused, or that will be solely caused, by the Force Majeure Event to the achievement of the relevant date or dates, and in each case the Project Schedule will 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] of this Agreement, 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] of this Agreement, the Design-Builder will, for so long as the effects of the relevant Force Majeure Event continue, be compensated in accordance with Section 8.3(b) of this Agreement, 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] of this Agreement.
- (b) If this Agreement is terminated by either the Province or the Design-Builder pursuant to Section 8.6(a) of this Agreement, compensation on termination will be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 14.

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 (o) 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 6.15 [Reinstatement Plan] of this Agreement, or as otherwise provided by the Design-Builder to the satisfaction of the Province if there is no Reinstatement Plan required under Section 6.15 [Reinstatement Plan] of this Agreement, 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 5 [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] of this Agreement, in which event compensation on termination will be payable in accordance with Part 2 [Compensation on Termination for the Design-Builder Default] of Schedule 14; or

(iv) in any case where Section 8.7(a)(iii) of this Agreement 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] of this Agreement, in which event compensation on termination will be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 14; or

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

- (i) to compensate the Design-Builder in accordance with Section 8.3(b) of this Agreement, and this Agreement will continue; or
- (ii) subject to Section 14.4 [Notice of Intention to Terminate and Dispute] of this Agreement, to terminate this Agreement, in which event compensation on termination will be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 14,

provided that the Province may not in such case elect to terminate this Agreement pursuant to Section 8.7(b)(ii) of this Agreement if the Design-Builder releases the Province from all obligations under Section 8.7(b)(i) of this Agreement 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 6.15 [Reinstatement Plan] of this Agreement. Such amount will be held and disbursed based on the same criteria as are provided in Sections 6.17(c) and 6.17(d) of this Agreement for the disbursement of Property Damage Insurance Proceeds under Section 6.17 [Application of Proceeds of Insurance] of this

Agreement (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 will 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, but excluding participants in an Indigenous Protest Action, 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, Trespasser or participant in an Indigenous Protest Action and any lawful or unlawful activities of any such person will 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 will be the responsibility of the Design-Builder until the Substantial Completion Date. If at any time prior to the Substantial Completion Date 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 will 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 will 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 will 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 will 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 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 will 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 will 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 will provide such

assistance to the extent it is, in the discretion of the Province, reasonable and appropriate in the circumstances to do so.

8.9 Allocation of Risks of Participants and Trespassers

- (a) In the event of any Protest Action, the Design-Builder will 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 will only be entitled to extensions of time in respect of Protest Actions pursuant to Section 8.3(c) of this Agreement 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 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 will not be obligated to prosecute injunctive or other interim judicial remedies beyond the Court of first instance); and
 - (ii) the Design-Builder will only be entitled to compensation in respect of Protest Actions pursuant to Section 8.3(b) of this Agreement if and, subject to Section 8.11 [Effect of Insurance] of this Agreement, 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] of this Agreement);
 - (B) the increased costs attributable to any extension of time to which the Design-Builder is entitled; and
 - (C) the cost of remedying any damage caused by Protest Actions,which aggregate (excluding amounts referred to in Section 8.11 [Effect of Insurance] of this Agreement) more than \$250,000,
- 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) of this Agreement, will not apply to the extent that such Protest Action arose, directly or indirectly, as a result of any Province Non-Excusable Event.
- (b) Except as expressly provided in Section 8.9(a), and subject to Section 8.3 [Design-Builder's Entitlements Upon Occurrence of a Compensation Event], Section 8.4 [Design-Builder's Entitlements Upon Occurrence of a Relief Event] and Section 8.5 [Parties' Entitlements Upon Occurrence of a Force Majeure Event], as between the Province and the Design-Builder the Design-Builder will bear, without recourse to the Province:

- 45 -

- (i) any Losses suffered by the Design-Builder, its agents and 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 will 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 for Undisclosed Utilities

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 will be entitled, subject to the Design-Builder's obligations under Section 5.6 [Mitigation By Design-Builder] of this Agreement 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 set forth below.

Table 8.10 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 \$500,000			
Applicable to next incremental \$1,000,000			
Applicable to amount over \$1,500,000			

8.11 Effect of Insurance

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

(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 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 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 6.17 [Application of Proceeds of Insurance] of this Agreement; 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) of this Agreement for which the Design-Builder is responsible;

provided that, in the case of a Compensation Event described in paragraph (m) of the definition of Compensation Event in Section 1.1 [Definitions] of Schedule 1, the Province will 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 (m) 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) of this Agreement, then the Applicant will 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] of this Agreement, then the Applicant will 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.

PART 9 INDEMNITIES AND LIMITATIONS ON LIABILITY

9.1 Indemnification by Design-Builder

- (a) The Design-Builder will 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, in respect of:
 - (i) bodily injury, including death, of any person;
 - (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, including the Municipality, or of any Utility Supplier or other third party;

- 48 -

- (C) lands (and improvements thereon) forming part of or adjacent to the Project Site;
 - (D) Plant or Construction Plant; or
 - (E) property or assets of any third party (including Third Party Contractors); or
- (iii) any other loss or damage of any third party (including Third Party Contractors), arising, directly or indirectly, out of, or in consequence of, or involving or relating to, any breach of this Agreement by, or any act or omission of the Design-Builder or any person for whom the Design-Builder is in law responsible.
- (b) The Design-Builder will 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, in respect of Nuisance Claims made by third parties, arising, directly or indirectly, out of, or in consequence of, or involving or relating to, any breach of this Agreement, wilful misconduct, negligent act or omission by the Design Builder or any person for whom the Design-Builder is in law responsible.
- (c) The Design-Builder will indemnify and save harmless the Province and the Province Indemnified Persons from and against any and all Direct Losses which may be suffered, sustained, incurred or brought against them as a result of, in respect of, arising out of, or involving or relating to any breach of a representation or warranty by the Design-Builder herein.
- (d) The Design-Builder will indemnify and save harmless the Province and the Province Indemnified Persons from and against any and all Claims and Direct Losses which may be suffered, sustained, incurred or brought against them as a result of, in respect of, arising out of, or involving or relating to any one or more of the following:
- (i) any Contamination, or any remediation, handling or legal requirement of a Governmental Authority in respect of Contamination;
 - (ii) any repair, correction or warranty obligations of the Design-Builder under this Agreement, including the obligation to correct Project Work Defects under Section 8.4 [Correction of Project Work Defects] of Schedule 3; or
 - (iii) any non-compliance with Law by the Design-Builder or any person for whom the Design-Builder is in law responsible.
- (e) The Design-Builder will indemnify and save harmless the Province and the Province Indemnified Persons from and against any and all Claims and Direct Losses which may be suffered, sustained, incurred or brought against them as a result of, in respect of, arising out of, or involving or relating to any one or more of the following:
- (i) any infringement or misappropriation or alleged infringement or misappropriation of any other person's Intellectual Property Rights; or

- (ii) breach or alleged breach of obligations of confidentiality by the Design-Builder or any person for whom the Design-Builder is in law responsible.
- (f) The Design-Builder will indemnify and save harmless the Province and the Province Indemnified Persons from and against any and all Claims and Direct Losses which may be suffered, sustained, incurred or brought against them as a result of, in respect of, arising out of, or involving or relating to any one or more of the following:
 - (i) 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 2.10(d) of this Agreement;
 - (ii) 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;
 - (iii) any breach of Section 5.5 [Prohibited Acts] or anything done or omitted to be done by or on behalf of the Design-Builder or any Subcontractor or any other person in connection with Sections 12.3(b)(ii) or 12.3(b)(iii) of this Agreement, inclusive;
 - (iv) any wrongful act, wrongful omission, negligent act, negligent omission 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; or
 - (v) in respect of the amount not paid by the insurer as a result of any deductible amount and/or waiting period which is the responsibility of the Design-Builder in accordance with Section 6.4 [Deductibles] of this Agreement.
- (g) The Design-Builder will indemnify and save harmless the Province and the Province Indemnified Persons from and against any and all Claims and Direct Losses in respect of which the Design-Builder has otherwise expressly provided an indemnity to the Province in this Agreement.

9.2 Exceptions to Indemnification by Design-Builder

Subject to Section 9.3(f) of this Agreement, the obligations of the Design-Builder to indemnify under Section 9.1 [Indemnification by Design-Builder] of this Agreement (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) will not apply to any Claims or Direct Losses to the extent:

- (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] of this Agreement;

- (b) caused or contributed to by any breach in the observance or performance of any of the obligations of the Province or BCTFA under this Agreement, by the Province, BCTFA or any person for whom the Province is in law responsible;
- (c) in respect of Sections 9.1(a)(i), 9.1(a)(ii), 9.1(a)(iii) or 9.1(d) of this Agreement, caused or contributed to by any negligent act, negligent omission or wilful misconduct of or by the Province or any Province Indemnified Person;
- (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) of this Agreement 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, Relief Event or a Force Majeure Event (save that this exception will 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) of this Agreement),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 4.2 [Exception to the Design-Builder Responsibilities for Project Lands] 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 for Undisclosed Utilities], to the extent that such Claims or Direct Losses do not arise or result (directly or indirectly) from any Design-Builder Non-Excusable Event; or
- (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.

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

- (a) Subject to Section 9.12 [No Double Compensation] of this Agreement:
 - (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] of this Agreement, if made in tort or for breach of contract rather than for indemnification under Section 9.1 [Indemnification by Design-Builder] of this Agreement, will be subject to the exceptions set out in Section 9.2 [Exceptions to Indemnification by Design-Builde] of this Agreement to the same extent as if the Claim had been made under Section 9.1 [Indemnification by Design-Builder] of this Agreement; and
 - (ii) any obligation of the Design-Builder to indemnify and hold harmless under any provision of this Agreement:
 - (A) 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; and
 - (B) does not limit the duties, obligations and liabilities of the Design-Builder under Section 2.3 [Assumption of Risk and Responsibility] of this Agreement.
- (b) Subject to Sections 9.3(c) and 9.3(d) of this Agreement, but notwithstanding any other provision of this Agreement, the maximum liability of the Design-Builder for Delay Liquidated Damages will not exceed in the aggregate.
- (c) The limitation of liability set out in Section 9.3(b) of this Agreement will 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) of this Agreement, but notwithstanding any other provision of this Agreement:
 - (i) the maximum aggregate liability of the Design-Builder to the Province arising under or relating to this Agreement, including in relation to delay, any indemnity

or as a consequence of termination of this Agreement, will not exceed 50% of the Contract Price in the aggregate; and

- (ii) as a sublimit of the maximum aggregate liability set out in Section 9.3(d)(i) of this Agreement, 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 5.1 [Obligation to make Performance Incentive Payments] of Schedule 10, will not exceed \$20,000,000 in the aggregate.
- (e) The limitations of liability set out in Section 9.3(d) of this Agreement are not intended to limit or otherwise detract from the obligation of the Design-Builder to perform the Project Work for the Contract Price, and will 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) in respect of:
 - (A) damage to or destruction of real property or tangible personal property;
 - (B) bodily injury or death; or
 - (C) infringement of Intellectual Property Rights;
 - (ii) 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;
 - (iii) 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 which results in a fine or statutory penalty to the Province or Province Indemnified Persons;
 - (iv) in respect of any breach by the Design-Builder of Section 15.1 [Confidentiality] of this Agreement;
 - (v) in respect of the indemnity in Section 9.1(d)(ii) of this Agreement;
 - (vi) in respect of any costs or expenses incurred by the Province in enforcing a claim under this Agreement or in relation to any insurance or performance security; 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) The parties acknowledge and agree that any failure by the Province or any Province Indemnified Person to discharge a non-delegable duty of care arising out of, relating to or resulting from or in connection with any negligent act or negligent omission of the Design-Builder or any person for whom the Design-Builder is in law responsible, will not, for the purposes of Sections 9.2(c) and 9.5 of this Agreement, constitute a negligent act or negligent omission of the Province or any Province Indemnified Person.

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 will 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 will 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), 9.4(d), 9.4(e), 9.4(f) and 9.4(g) of this Agreement, on the receipt of a notice delivered by an Indemnified Party pursuant to Section 9.4(a) of this Agreement the Design-Builder will, 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 will 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 will 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) of this Agreement will be undertaken through legal counsel, and will 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) of this Agreement,

then the Indemnified Party will 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) will continue to apply and all reasonable costs and expenses (including reasonable actual legal fees and expenses) of the Indemnified Party doing so will 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 will continue to apply but the fees and disbursements of such separate counsel will be paid by the Indemnified Party. In any case where an Indemnified Party is represented by separate counsel, the Design-Builder and its counsel will (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) of this Agreement and actions taken by such separate counsel in the course of such representation, including attendance at examinations, hearings and trials, will 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) of this Agreement.

- (d) With respect to any Claim which the Design-Builder exercises its discretion to resist in accordance with Section 9.4(b) of this Agreement:
 - (i) the Design-Builder will 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 will be taken pursuant to Section 9.4(b) of this Agreement 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 will 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 will not bring the name of the Indemnified Party into disrepute; and
 - (v) the Design-Builder will 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) of this Agreement the Design-Builder fails to notify the Indemnified Party of its intention to resist a Claim pursuant to Section 9.4(b) of this Agreement; or
 - (ii) the Design-Builder exercises its discretion under Section 9.4(b) of this Agreement not to resist a Claim,

the Indemnified Party will 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 4.1 [Mitigation By Province] and 9.10 [Costs and Expenses] of this Agreement. If the Indemnified Party has conduct of the Claim pursuant to this Section 9.4(e), the Indemnified Party will keep the Design-Builder fully informed and consult with the Design-Builder about the conduct of the Claim.

- (f) The Indemnified Party will 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) of this Agreement or of any incidental negotiations. Upon receipt of such notice the Design-Builder will promptly take all steps necessary to transfer the conduct of such Claim to the Indemnified Party and will 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) of this Agreement, then, except as otherwise expressly provided by this Agreement, the Design-Builder will 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 will 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 will 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], 9.3(f) and 9.7 [Exceptions to Indemnification by the Province] of this Agreement, the Province will indemnify and hold harmless the Design-Builder and 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 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 2.8(a)(ii) or 2.10 [Disclosed Data] of this Agreement;
- (b) any negligent acts or negligent omissions occurring prior to the Effective Date or after the Termination Date;

- (c) 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 will not prejudice the Design-Builder's rights under Section 9.6 [Limited Province Indemnities] of this Agreement; and
- (d) any negligent acts or negligent omissions of the Province or any person for whom the Province is in law responsible in the course of taking action under any of Sections 11.2(a), 11.2(b) and 11.2(a) of this Agreement, provided the Province or any Third Party Contractor engaged by the Province for the purpose of exercising the Province's rights under any of those Sections does so in compliance with all applicable Laws and Permits.

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] of this Agreement, the Province will:

- (a) solely for the purpose of holding the Design-Builder and 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 Design-Builder Indemnified Persons pursuant to such Relevant Third Party claim), indemnify and hold harmless the Design-Builder and 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 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 the Design-Builder or any person for whom the Design-Builder is in law responsible failing to carry out Project Work strictly in accordance with the Design-Builder's obligations under this Agreement after the Design-Builder had knowledge of the Existing Contamination or Province Subsequent Contamination, as the case may be; and
- (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 will 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 will 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 9.6(b)(iii) of this Agreement, the Province will 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 will 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 will be determined on an equitable basis; and
- (iii) notwithstanding the foregoing, all parties will 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 will be subject to the rights of such insurer under the applicable policy of insurance.

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] of this Agreement will 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 [Changes] and Part 8 [Supervening Events] of this Agreement, Schedule 10 [Payment] and Schedule 14 [Compensation on Termination]).

9.8 Limitation of Province Liability

Neither the Province nor BCTFA will 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 will 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] of this Agreement;
- (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 will 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] of this Agreement, the Indemnified Party will 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] of this Agreement, if applicable, provided that, subject to Section 8.12 [Delay in Notification] of this Agreement, a failure by an Indemnified Party to give such notice and particulars of a Claim within such time will 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), 9.9(d), 9.9(e) and 9.9(f) of this Agreement, on the receipt of a notice delivered by an Indemnified Party pursuant to Section 9.9(a) of this Agreement the Province will, 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 will 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 will 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) of this Agreement will be undertaken through legal counsel, and will 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) of this Agreement,

then the Indemnified Party will 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) will continue to apply and all reasonable costs and expenses (including reasonable actual legal fees and expenses) of the Indemnified Party doing so will 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 will continue to apply but the fees and disbursements of such separate counsel will 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 will (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) of this Agreement:
 - (i) the Province will 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 will be taken pursuant to Section 9.9(b) of this Agreement 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 will 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 will not bring the name of the Indemnified Party into disrepute; and
 - (v) the Province will 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) of this Agreement the Province fails to notify the Indemnified Party of its intention to resist a Claim pursuant to Section 9.9(b) of this Agreement; or
 - (ii) the Province exercises its discretion under Section 9.9(b) of this Agreement not to resist a Claim,

the Indemnified Party will 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 5.6 [Mitigation By Design-Builder] and 9.10 [Costs and Expenses] of this Agreement. If the Indemnified Party has conduct of the Claim pursuant to this Section 9.9(e), the Indemnified Party will keep the Province fully informed and consult with the Province about the conduct of the Claim.

- (f) Notwithstanding the foregoing, all parties will 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 will 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 will 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 will 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 will 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 will 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 will 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] of this Agreement (in which case Section

8.11 [Effect of Insurance] of this Agreement applies), and in the case of compensation on termination under Schedule 14 [Compensation on Termination] (in which case Section 3.1 [No Compensation to Extent of Insurance] of Schedule 14 applies), neither the Province nor BCTFA will 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 will 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 6.17 [Application of Proceeds of Insurance] of this Agreement; 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) of this Agreement for which the Design-Builder is responsible.

PART 10 PAYMENTS

10.1 Payments

Payments under this Agreement will be made in accordance with Schedule 9 [Performance Mechanism] and Schedule 10 [Payment].

10.2 Taxes on Payments

- (a) For the purposes of this Section 10.2:
- (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 10.2, 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 will pay the GST to the Supplier and the Supplier will 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 will 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 will, in accordance with a Change Certificate or

Change Directive issued by the Province in respect or such change, 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 will 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 10.2(e) of this Agreement will 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 10.2(e) of this Agreement 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 10.2(e) of this Agreement then the Design-Builder will 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 10.2(e) of this Agreement, or by the Design-Builder to the Province pursuant to Section 10.2(f) of this Agreement, will 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 will not be required to pay any amount to the Design-Builder pursuant to Section 10.2(e) of this Agreement 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 will 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.

PART 11 PROVINCE'S MONITORING AND STEP-IN RIGHTS

11.1 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;
- (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 11.1(a) of this Agreement will 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 11.1(d) of this Agreement, and it is subsequently agreed or finally 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 will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] will apply.
- (d) The Design-Builder will pay to the Province on demand all costs and expenses incurred by the Province in carrying out increased monitoring under this Section 11.1, 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.

11.2 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 will 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 will not be required to be in writing and will 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 will, and will cause any applicable third parties engaged by it for the purposes of exercising the Province's rights under this Section 11.2 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 will 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 11.2(a)(ii) of this Agreement and the Design-Builder either:
 - (i) does not confirm, within the time period specified by the Province in the notice given pursuant to Section 11.2(a)(ii) of this Agreement (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, will stipulate,

then the Province may, in addition to the ability to take the actions set out in Section 11.2(a) of this Agreement, 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 Schedule 8 [Lands] as applicable to the relevant Project Work), provided that any such suspension of the Design-Builder's rights will 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 will cease.

- (c) No action taken by the Province under Section 11.2(a) or 11.2(b) of this Agreement will 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 11.2(d) of this Agreement, the Province will 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 11.2(a) or 11.2(b) of this Agreement.

- (d) Except to the extent that an Emergency has been caused by a Design-Builder Non-Excusable Event, any actions of the Province under this Section 11.2 in respect of such Emergency will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] will apply.
- (e) If the Province carries out actions under this Section 11.2 in the event of an Emergency caused by a Design-Builder Non-Excusable Event, the Design-Builder will pay to the Province on demand all costs and expenses incurred by the Province in carrying out such actions under this Section 11.2, including any costs paid by the Province to the Design-Builder in accordance with Section 11.4 [Availability of Certain Assets on Step-In], together with an administration fee equal to _____ of such costs and expenses, and all without prejudice to any other rights of the Province.
- (f) If the Province takes action under Section 11.2(a) of this Agreement and it is subsequently agreed or finally determined pursuant to the Dispute Resolution Procedure that the Province was not entitled to take such action in accordance with this Section, then the taking of any such action will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] will apply.

11.3 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 Points pursuant to Section 2.4(b) or 2.4(c) of Schedule 9 [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 9.7(b) of Schedule 3 [Design and Construction General Requirements],

then the Province may in its discretion do either or both of the following (but this will 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 Schedule 8 [Lands]), provided that any such suspension of the Design-Builder's rights will cease on the earlier of the date upon which the Province has completed remedying such matter or notifies the Design-Builder that such suspension will 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 will, and will cause any Third Party Contractors engaged by the Province for the purposes of exercising the Province's rights under this Section 11.3 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 11.3(a) of this Agreement will 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 11.3(c) of this Agreement, the Province will 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 11.3 to comply with all applicable Laws and Permits in the course of exercising the Province's rights under Section 11.3(a) of this Agreement.
- (c) If the Province takes action under Section 11.3(a) of this Agreement and it is subsequently agreed or finally determined pursuant to the Dispute Resolution Procedure that the Province was not entitled to take such action in accordance with this Section 11.3, then the taking of any such action will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] will apply.
- (d) Except where the Province carries out actions under this Section 11.3 in the circumstances contemplated in Section 11.3(a)(iii) of this Agreement or where Section 11.3(c) of this Agreement applies, the Design-Builder will 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 11.4 [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.

11.4 Availability of Certain Assets on Step-In

Where the Province exercises its rights under Section 11.2 [Province's Emergency Rights] or Section 11.3 [Province's Other Step-In Rights], for the duration of the exercise of such rights the Design-Builder will, and will 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 will 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, any Partner or the Guarantor 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, any Partner or the Guarantor (except as a result of the exercise by the Province of its rights under Part 11 [Province’s 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) of this Agreement), 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 Control that is not permitted by Section 16.3 [Change in Control of Design-Builder] of this Agreement;
- (e) any breach by the Design-Builder of Section 16.1 [Assignment by Design-Builder] of this Agreement;
- (f) any breach of Section 5.5 [Prohibited Acts] of this Agreement;
- (g) any failure by the Design-Builder to comply with Schedule 18 [Privacy Protection] or Schedule 19 [Cloud Security] in a material respect (and in respect of which, pursuant to Section 21(b) of Schedule 19 [Cloud Security], criminal records checks will only be required to be conducted for such Design-Builder personnel as expressly directed by the Province) 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 will 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] of this Agreement, and such breach would, or might reasonably be expected to, or does, have any of the effects described or referenced in Section 3.4(b) of Schedule 2 [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 or the Guarantor 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 any Partner or the Guarantor, the performance by the Design-Builder of its obligations under this Agreement, or the performance by the Guarantor of its obligations under the Guarantee, 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 5.7 [Representations and Warranties of the Design-Builder] of this Agreement 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, 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] of this Agreement and Schedule 5 [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] of this Agreement and Schedule 5 [Insurance Requirements] is not provided to the Province in accordance with Part 6 [Insurance, Damage and Destruction] of this Agreement and Schedule 5 [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) of this Agreement;
- (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;
- (s) a failure by the Design-Builder to perform or observe any of its material obligations under this Agreement 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; and
- (t) the Guarantee is or becomes unenforceable, invalid, void or otherwise ceases to be in full force and effect through no act or omission of the Province or those for whom the Province is in law responsible (which acts and omissions shall not include acts and omissions of the Province or any person for whom the Province is in law responsible to perform and comply with the express obligations of the Province under this Agreement), and such occurrence is not remedied within 30 Business Days after the date notice of such occurrence 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), 12.1(g), 12.1(h), 12.1(i), 12.1(j), 12.1(m), 12.1(q), 12.1(r), 12.1(s) and 12.1(t) of this Agreement will 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 will 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 will 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 will

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, will determine:

- (a) if the Design-Builder Default is one referred to in any of Sections 12.1(a), 12.1(b), 12.1(c), 12.1(d), 12.1(e), 12.1(g), 12.1(h), 12.1(i), 12.1(j), 12.1(m), 12.1(n), 12.1(o), 12.1(p), 12.1(r) or 12.1(t) of 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] of this Agreement;
- (b) if the Design-Builder Default is one referred to in Section 12.1(f) of this Agreement, 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] of this Agreement;
 - (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 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 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] of this Agreement;
 - (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) of this Agreement, 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 (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] of this Agreement;
- (c) if the Design-Builder Default is one referred to in Section 12.1(k) or Section 12.1(l) of this Agreement:
 - (i) the Province may in its discretion, and without prejudice to its rights under Section 12.3(c)(ii) of this Agreement, 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 will 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 will 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 will 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] of this Agreement;
- (d) if the Design-Builder Default is one referred to in Section 12.1(q) of this Agreement, and provided that the aggregate amount of:
 - (i) the sum that is the subject of that 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(q) of this Agreement;

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] of this Agreement;

- (e) if the Design-Builder Default is one referred to in Section 12.1(s) of this Agreement, 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] of this Agreement will apply; and

- (f) except as otherwise expressly provided in this Agreement, and subject to Schedule 16 [Dispute Resolution Procedure], the Province may exercise any of its other rights and remedies, whether under this Agreement, 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) of this Agreement, 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) of this Agreement and to which the Province has no objection under the Review Procedure; or
- (b) except where Section 12.4(a) of this Agreement applies, before the expiry of the period referred to in Section 12.3(e)(i) of this Agreement,

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 will 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] of this Agreement.

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 will 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 provided in this Agreement, including where inconsistent with the terms of this Agreement:

- (a) all rights and remedies of the Province under this Agreement 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 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 will 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 Sections 12.3(a), 12.3(c)(ii), 12.3(d) or 12.4 [Termination for Failure to Remedy According to Program] of this Agreement, compensation on termination will be payable in accordance with Part 2 [Compensation on Termination for Design-Builder Default] of Schedule 14.

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 will 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] of this Agreement;
- (d) any person to whom the interests of the Province or BCTFA under this Agreement are transferred in accordance with Section 16.2 [Assignment by the Province] of this Agreement 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, 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 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 4.2 [Representations and Warranties of the Province and BCTFA] of this Agreement 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, 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), 13.1(b), 13.1(e), 13.1(f) and 13.1(g) of this Agreement will be given to the Province's Representative, will 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 will 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 will 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 will 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, will 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] of this Agreement, if the Province Default is one referred to in Section 13.1(a) of this Agreement 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 20 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) of this Agreement;

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), 13.1(c), 13.1(d), 13.1(e), 13.1(f) and 13.1(g) of this Agreement, 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] of this Agreement; and
- (c) except as otherwise expressly provided in this Agreement (including in Section 9.8 [Limitation of Province Liability] of this Agreement), and subject to Section 17.13 [No Fettering of Province's Rights, Powers and Authority] of this Agreement and Schedule 16 [Dispute Resolution Procedure], the Design-Builder may exercise any of its other rights and remedies, whether under this Agreement 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 14 [Compensation on Termination], the Province will 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 provided in this Agreement, including where inconsistent with the terms of this Agreement:

- (a) all rights and remedies of the Design-Builder under this Agreement 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 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 will 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 Sections 13.3(a) or 13.3(b) of this Agreement, compensation on termination will be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 14.

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 will terminate.
- (b) In the event of notice being given by the Province in accordance with Section 14.1(a) of this Agreement, from and after the giving of such notice and during the notice period thereunder the Design-Builder will 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) of this Agreement, compensation on termination will be payable in accordance with Part 1 [Compensation on Termination other than for Design-Builder Default] of Schedule 14.

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] of this Agreement, 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 Monitoring and Step-In Rights] of this Agreement and subject to Section 14.1(b) of this Agreement, and unless otherwise directed by the Province with respect to obligations of the Design-Builder, the parties will 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] of this Agreement:

- (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 will be resolved by agreement of the parties or, failing such agreement, through the Dispute Resolution Procedure and such termination will 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 will be resolved by agreement of the parties or, failing such agreement, by the Court, and such termination will 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) of this Agreement, the Terminating Party will have a valid right to terminate this Agreement, and the Terminated Party will have no further right to contest, dispute, challenge or seek recourse in respect of the validity of such right to terminate, and termination pursuant to that right to terminate will 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, of this Agreement.

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 will not, and will 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) of this Agreement;
- (c) do or omit to do any other thing in relation to employees referred to in Section 14.5(a) of this Agreement that would or might reasonably be expected to increase any Design-Builder 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 1.1 [Access to and Responsibility for Project Site] of Schedule 8 will terminate on the Termination Date and the Design-Builder will cease to have any further rights under Schedule 8 [Lands], including Section 1.1 [Access to and Responsibility for Project Site] thereof, 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 will not have any further right to provide, perform or carry out any further Project Work, but this will not relieve or release the Design-Builder from any of its obligations under this Agreement 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 will reconcile between them any amounts due or accruing due under this Agreement 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) of this Agreement 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 will be adjusted in the compensation payable on termination as provided in Sections 3.2 [Adjustment for Net Balance] and 3.3 [Rights of Set Off] of Schedule 14, or paid by the relevant party to the other in the case of expiry;

- (d) subject to Sections 14.6(a), 14.6(b) and 14.6(c) of this Agreement, and Section 3.4 [Full and Final Settlement] of Schedule 14, such termination or expiry will 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 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 will continue following termination or expiry, subject to Sections 14.6(a), 14.6(b) and 14.6(c) of this Agreement, and subject to Section 3.4 [Full and Final Settlement] of Schedule 14; and

- (e) except as provided above in this Section 14.6, all rights and obligations of the parties under this Agreement will 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;

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

14.8 Transfer of Assets

- (a) Without limiting the provisions of Section 17.8 [Further Assurances] of this Agreement, within 30 days after the Termination Date the Design-Builder will, at no cost to the Province and in all cases free from Encumbrances (provided that the Province will have the right, but will not be obligated, to pay off any and all such Encumbrances in which event any amounts so paid will immediately be due and owing by the Design-Builder to the Province and will be payable by the Design-Builder to the Province forthwith on demand or, at the option of the Province, will be adjusted as provided in Section 14.6(c) of this Agreement), 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 2.7 [Transfer of Title] of this Agreement.
 - (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) of this Agreement 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) and 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 will, 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) of this Agreement), 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 will 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 3.3(e) of Schedule 8 [Lands].
- (d) Within 30 days after the Termination Date, the Design-Builder will, and will 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 will 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 finally 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 will ensure in the case of all Permits and Subcontracts to which the Design-Builder is a party, and will 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 will apply in respect of the handover of the Project Site and the Project Infrastructure:

- (a) the Design-Builder will, 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 will 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 2.7 [Transfer of Title] of this Agreement; 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] of this Agreement;

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 will hold any proceeds less all costs incurred to the credit of the Design-Builder;

- (c) the Design-Builder will 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 will reasonably be required for the efficient transfer of responsibility for Operation and Maintenance;
- (d) the Design-Builder will, 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; and
 - (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 will 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 1.1(c) of Schedule 8 [Lands] 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, signaling 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) of this Agreement or as otherwise expressly provided in this Agreement.
- (b) Notwithstanding Section 15.1(a) of this Agreement, 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;
 - (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 Control 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) of this Agreement, to BCTFA, the Ministry or any other Governmental Authority or to 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 licence, including under any Complete Licence; 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) of this Agreement and that each other party will, 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) of this Agreement, 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 will be considered a breach of any obligation under this Agreement.
- (b) The Design-Builder, without limiting its obligation to comply with all Laws, will comply with and cause all of its agents and Subcontractors and the employees of any of them to:

- (i) comply with the provisions of Schedule 18 [Privacy Protection]; and
- (ii) comply with the provisions of Schedule 19 [Cloud Security].

15.3 Ownership of Intellectual Property and License to Province

- (a) Except as expressly set out in this Agreement, including Section 15.3(b) of this Agreement, 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 will 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 will 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 will procure such conveyance, transfer or assignment from any third parties, or for all rights that arise only upon creation agrees that it will 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) will provide to the Province, whether during or after the Term, executed waivers in a form satisfactory to the Province 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;
 - (iii) will provide to the Province upon Substantial Completion and at any other 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 will 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) will 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 will 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) of this Agreement, 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 Licence in and to the Project Intellectual Property and the Background IP; and
 - (ii) will grant, or cause to be granted, to the Province and BCTFA a Complete Licence in and to the Third Party IP.
- (e) For greater certainty, the provisions of Section 15.3(b)(iv) of this Agreement and the license provisions contained in Section 15.3(d)(ii) of this Agreement 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) of this Agreement will 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 Licence Purposes.
- (g) If any Complete Licence granted under in Section 15.3(d) of this Agreement cannot be validly granted without the consent of a third party, the Design-Builder, at the Design-Builder's expense, will use its best efforts to obtain such consent and, without limiting any of its other obligations, will 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, licences or waivers required to be provided under this Agreement, the Design-Builder will, 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, licence 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 licences 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 will 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 will 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 licence (but with no right to grant sub-licences 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 licence, 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 licence, 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 will 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) of this Agreement, nothing in this Agreement will be construed as a permission or authorization for the Design-Builder to, and the Design-Builder will 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.

**PART 16
ASSIGNMENT, CHANGE IN CONTROL AND SUBCONTRACTING**

16.1 Assignment by Design-Builder

Neither the Design-Builder nor any Partner will, and will ensure that no Contracting Affiliate of the Design-Builder will, 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 this Agreement or 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:

- (a) without the prior acceptance of the Province in accordance with the Consent Procedure, which acceptance may be withheld in the Province's discretion;
- (b) 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
- (c) 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) of this Agreement, 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 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 that are being transferred.
- (b) Except as provided in Section 16.2(a) of this Agreement, neither the Province nor BCTFA will, 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.
- (c) Upon any assignment or transfer in accordance with Section 16.2(a) of this Agreement of any or all of the obligations or liabilities of the Province or BCTFA under this Agreement to a Qualified Governmental Entity and the execution and delivery of the agreement

contemplated in Section 16.2(a) of this Agreement, the Province or BCTFA, as the case may be, will be released from the obligations and liabilities under this Agreement 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 will 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 will 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 subcontracting:

- (a) the Design-Builder will not be relieved or excused from any of its obligations and liabilities under this Agreement; and
- (b) the Design-Builder will 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 will 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 the particulars of the relevant document or proposed course of action, including at a minimum the identification of any new Material Subcontractor and any relevant impacted scope of work, 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 will deliver to the Province's Representative a conformed copy of each Material Subcontract, with any such redactions of pricing and other commercial terms as may be acceptable to the Province's Representative, acting reasonably, 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
GENERAL**

17.1 Disputes

- (a) All Disputes arising out of or relating to this Agreement will be resolved in accordance with the Dispute Resolution Procedure set out in Schedule 16 [Dispute Resolution Procedure]. Notwithstanding this or any other provision in this Agreement, the Design-Builder will not seek to revise, vary, overturn, any 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 and no such matter, decision or determination will be raised by the Design-Builder in any Dispute.
- (b) At all times, notwithstanding the existence of any disagreement, claim or Dispute, except as may otherwise be expressly provided in this Agreement, the parties will 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 the generality of the foregoing and any other provision of this Agreement, to the extent that any such disagreement, claim or 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 will abide by the decision of the Province with respect to the subject matter of the disagreement, claim or Dispute and diligently proceed with the Project Work, and will comply with all instructions given by the Province pending the outcome of the disagreement, claim or Dispute, but without prejudice to the rights of the Design-Builder as ultimately determined in accordance with the Dispute Resolution Procedure.

17.2 Public Communications

- (a) The Design-Builder will carry out the Communications and Engagement in accordance with Schedule 15 [Communications and Engagement].
- (b) Unless expressly provided in this Agreement or otherwise required by any Law (but only to that extent), neither party will 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.

17.3 Survival

- (a) 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 will, 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.

- (b) 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 will, 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.
- (c) The provisions of Part 8 [Indemnities and Limitations on Liability] and each other indemnity contained in this Agreement will survive the expiration or termination of this Agreement.
- (d) The provisions of Part 14 [Termination] will survive the expiration or termination of this Agreement.
- (e) Notwithstanding any other provision of this Agreement, the provisions of Part 15 [Confidentiality and Intellectual Property] will survive the expiry or any earlier termination of this Agreement.
- (f) The provisions set out in Section 14.1 [Survival] of Schedule 3 will survive the expiry or any earlier termination of this Agreement.
- (g) The provisions of Section 3.3(e) of Schedule 8 [Lands] will survive the termination of this Agreement.
- (h) The provisions of Schedule 14 [Compensation on Termination] will survive the expiry or any earlier termination of this Agreement.
- (i) Notwithstanding any other provision of this Agreement, the provisions of Schedule 16 [Dispute Resolution Procedure] will survive the expiry or any earlier termination of this Agreement.
- (j) The provisions of Section 1.4 [Retention of Records] and Section 1.5 [Procedure on Termination] of Schedule 17 will survive the expiry or any earlier termination of this Agreement.
- (k) The provisions of Schedule 18 [Privacy Protection] will survive the expiry or any earlier termination of this Agreement.
- (l) Without limiting this Section 17.3, the provisions of this Agreement that by their nature are intended to survive expiry or any earlier termination of this Agreement, and all other provisions necessary for the interpretation and enforcement of such provisions or the provisions described in Sections 17.3(a) through 17.3(k) of this Agreement, will survive the expiry or any earlier termination of this Agreement.

17.4 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.

17.5 Amendment

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

17.6 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 electronic transmission to the address 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
Email: TRANDeputyMinister@gov.bc.ca

- (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
Email: TRANDeputyMinister@gov.bc.ca

- (c) if to the Province's Representative:

Ministry of Transportation and Infrastructure
1500 Woolridge St #310
Coquitlam, British Columbia
V3K 0B8
Attention: Province's Representative, Highway 1 – 264th Street Interchange Project
Email: ProvRep.264interchange@gov.bc.ca

- (d) if to the Design-Builder or the Design-Builder's Representative:

KEA Fraser Valley Connectors
#453 – 4111 Hastings Street
Burnaby, British Columbia
V5C 2J3
Attention: Katie Allan
Email: Katie.allan@kiewit.com

or to such other address 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 will 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; and
- (f) 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.

17.7 Waiver

Except as expressly provided otherwise in this Agreement, any waiver of any provision of this Agreement will 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 will be construed as a waiver of any such provision and will 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 will only apply to the specific matter waived and only in the specific instance and for the specific purpose for which it is given.

17.8 Further Assurances

The parties will do, execute and deliver, or will 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.

17.9 Relationship of the Parties

Nothing contained in this Agreement nor any action taken pursuant hereto or thereto will 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.

17.10 Binding Effect

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

17.11 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.

17.12 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.

17.13 No Fettering of Province's Rights, Powers and Authority

- (a) Nothing in this Agreement fetters or otherwise interferes with or limits, or will 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 17.13(a)(i) to 17.13(a)(iii) inclusive of this Agreement.

17.14 No Agency

- (a) The Design-Builder acknowledges that no provision of this Agreement will 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 licence (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 will not be or be deemed to be or hold itself out as being an agent of the Province or BCTFA and the Design-Builder will 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 will have the benefit of any Crown immunity.

- (d) Subject to Sections 17.14(a), 17.14(b) and 17.14(c) of this Agreement 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.

17.15 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.

17.16 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.

[Execution Pages Follow]

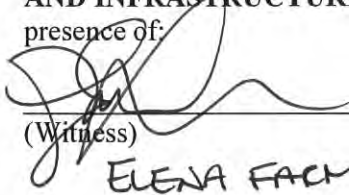
**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**


*Commercial in Confidence
Execution*

- 98 -

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

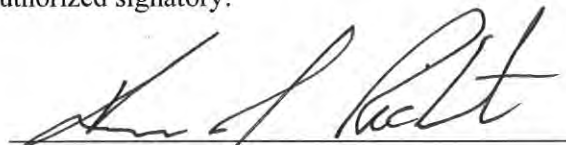
SIGNED on behalf of **HIS MAJESTY
THE KING IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA**
by a duly authorized representative of
the **MINISTER OF TRANSPORTATION
AND INFRASTRUCTURE** in the
presence of:


(Witness)
ELENA FARMER


Name: **KEVIN RICHTER**
Title: **ASSOCIATE DEPUTY MINISTER**

BC TRANSPORTATION FINANCING AUTHORITY
by its authorized signatory:

Per:


Name: **KEVIN RICHTER**
Title: **VICE PRESIDENT**

KEA FRASER VALLEY CONNECTORS

by its partners:

KIEWIT INFRASTRUCTURE BC ULC

by its authorized signatories:

Per:



Name: RYAN TONES

Title: PRESIDENT

Per:

Name:

Title:

EMIL ANDERSON CONSTRUCTION (EAC) INC.

by its authorized signatories:

Per:

Name:

Title:

Per:

Name:

Title:

KEA FRASER VALLEY CONNECTORS

by its partners:

KIEWIT INFRASTRUCTURE BC ULC

by its authorized signatories:

Per:

Name:

Title:

Per:


Name:

Title:

EMIL ANDERSON CONSTRUCTION (EAC) INC.

by its authorized signatories:

Per:



Name: BRIAN ATWELL

Title: CHIEF OPERATING OFFICER

Per:

Name:

Title:

**SCHEDULE 1
DEFINITIONS AND INTERPRETATION**

PART 1 DEFINITIONS	1
1.1 Definitions	1
1.2 Acronym List	57
1.3 Reference Documents	62
PART 2 INTERPRETATION	62
2.1 Waiver of <i>Contra Proferentum</i>	62
2.2 Headings	62
2.3 Cross References	63
2.4 Internal References	63
2.5 Reference to Statutes	63
2.6 Reference to Statutory or Public Duties or Functions	63
2.7 Reference to Right or Duty of a Governmental Body	63
2.8 Time	63
2.9 Time of the Essence	64
2.10 Number	64
2.11 Gender	64
2.12 Reference to Office of a Governmental Body	64
2.13 Reference to Public Organizations	64
2.14 Persons for Whom the Design-Builder is Responsible	64
2.15 Persons for Whom the Province is Responsible	64
2.16 Reference to Legal Entity	65
2.17 Currency	65
2.18 Costs	65
2.19 Knowledge of the Province	65
2.20 Knowledge of the Design-Builder	65
2.21 Performance to Standards	65
2.22 Words of Inclusion; Mandatory Provisions	66
2.23 General Meanings Not Restricted	66
2.24 Trade Meanings	66
2.25 Decisions of the Province	66
2.26 All Reasonable Efforts	66
2.27 Accounting Terms	67
2.28 Severability	67
2.29 No Derogation from Laws	67
2.30 Principles for Resolving Conflicts within Documents	68
2.31 No Additional Payments or Time	68
2.32 Joint and Several	69
Appendix 1A Factual Geotechnical Data	
Appendix 1B Background IP and Third Party IP	
Appendix 1C Reference Documents	

**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:

“216th to 264th Widening Project” has the meaning given in Section 4.2(a)(i) of Schedule 3 [Design and Construction General Requirements].

“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 2.3 [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 3.5 [Termination of Access to Project Site] of Schedule 8.

“Access Period Expiry Date” means the Substantial Completion Date, or such other date as may be specified as the “Access Period Expiry Date” in the Property Lands Drawings relating to such part.

“Active Work” means that workers and equipment are present on the Project Site.

“Adverse Claims” has the meaning given in Section 4.7(a) of Schedule 8 [Lands].

“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 12.4(b)(ii) of Schedule 3 [Design and Construction General Requirements].

“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.

“Agricultural Zones” means Land Rights within the ALR acquired for the Project, including fee simple interests, SRWs and TLCAs.

“ALC Application” means ALC Application ID 69585 submitted pursuant to Section 6 of the *Agricultural Land Reserve Use, Subdivision and Procedure Regulation* (British Columbia) on January 15, 2024.

- 2 -

“**ALC Resolution**” means the reasons for decision of the Executive Committee of the British Columbia Agricultural Land Commission Resolution in regards to the ALC Application.

“**Alternate Referees**” has the meaning given in Section 4.2(a) of Schedule 16 [Dispute Resolution Procedure].

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

“**Apprenticeship Incentive Payment**” has the meaning given in Section 3.1(c) of Schedule 13 [ESG and Workforce Requirements].

“**Appropriately Qualified Professional**” means:

- (a) an applied scientist or technologist specializing in a relevant applied science or technology including, but not necessarily limited to, archaeology, agrology, forestry, biology, engineering, erosion and sediment control, geomorphology, geology, hydrology, hydrogeology or landscape architecture;
- (b) recognized in British Columbia with the appropriate professional organization, registered and in good standing, and acting under that organization’s code of ethics and subject to disciplinary action by that organization; and
- (c) who, through demonstrated suitable education, experience, accreditation and knowledge directly related and relevant to the level and responsibilities of the particular matter, may be reasonably relied on to provide advice within his or her area of expertise and experience.

“**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, or all or any transportation projects in British Columbia procured or to be procured by the Province or any other Governmental Authority.

“**Arbitration Notice**” has the meaning given in Section 5.1(a) of Schedule 16 [Dispute Resolution Procedure].

“**Background IP**” means the Intellectual Property specifically identified as Background IP in Appendix 1B [Background IP and Third Party IP] to this Schedule, or written notice of which is provided by the Design-Builder to the Province following the Effective Date, 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.

“**BC Hydro**” means British Columbia Hydro and Power Authority.

“**BCTFA**” has the meaning given in the Recitals.

“**BC Transit**” means BC Transit Corporation.

“**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.

- 3 -

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

- (a) in the form attached as Appendix 23A [Specimen Bonds] to Schedule 23 or in substantially equivalent form acceptable to the Province;
- (b) in the amount of \$143,080,500; 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 consisting of the following essential parts:

- (a) the Substructure consisting of its abutments and pier or piers supporting the Superstructure;
- (b) the Superstructure slab, girder, truss, arch or other span or spans supporting the highway loads and transferring to them the Substructure; and
- (c) the highway and its incidental parts functioning to receive and transmit traffic loads.

“**Bridge Deck**” means the structural element under the Deck Wearing Surface System that transfers loads from the Deck surface to the Bridge’s Superstructure or Substructure components.

“**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.

“**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.

“**Bus-on-Shoulder**” means those areas of the Highway 1 shoulder where buses are permitted to operate and which other vehicles are not permitted to use unless in case of emergency.

“**Category II**” means Structures and Geotechnical Systems that meet any of the criteria set out in Section 3.3(c) of Part 2 [Design and Certification Procedure] of Schedule 4.

“**Category III**” means Structures and Geotechnical Systems that meet any of the criteria set out in Section 3.3(d) of Part 2 [Design and Certification Procedure] of Schedule 4.

“**CCIP Eligible Period**” has the meaning given in Section 2.7(a)(i)(A) of Schedule 10 [Payment].

“**CCIP Non-Eligible Period**” has the meaning given in Section 2.7(a)(i)(B) of Schedule 10 [Payment].

“**Certificate**” means any certificate in the form of one of the certificates set out in Appendix 3B [Form of Certificates for Substantial Completion and Total Completion] to Schedule 3 or Appendix 4A [Form of Design and Construction Certificates] to Schedule 4.

- 4 -

“Certificate of Substantial Completion” means the Certificate issued in accordance with Part 12 [Certification of Substantial Completion and Total Completion] of Schedule 3 confirming the achievement of Substantial Completion.

“Certificate of Total Completion” means the Certificate issued in accordance with Part 12 [Certification of Substantial Completion and Total Completion] of Schedule 3 confirming the achievement of Total Completion.

“Changeable Message Sign” means an electronically programmable sign that is used to display traffic information to travellers.

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

“Change Directive” has the meaning given in Section 2.11 [Change Directive] 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, the net amount (calculated in accordance with Sections 2.4 [Preparation of Change Report] and 2.5 [Design-Builder’s Estimate 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; 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.

“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;
- (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:

- 5 -

- (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 2.4 [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.

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

“Claim Submission” has the meaning given in Section 4.5 [Written Submissions] of Schedule 16.

“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
- (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

- 6 -

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).

“**Communications and Engagement Obligations**” has the meaning given in Section 1.1 [Communications and Engagement Obligations] of Schedule 15.

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

- (a) a breach by the Province of Section 1.1(a)(i) of Schedule 8 [Lands] or the circumstances referred to in Section 3.1 [Postponement of Specified Access Date] of Schedule 8 as constituting a Compensation Event;
- (b) the circumstances referred to in Section 2.10(d) of this Agreement as constituting a Compensation Event;
- (c) the existence as at the Financial Submittal Date of any Project Site Agreement, Encumbrance or Utility Agreement, agreement with any railway or municipality or any Third Party Contractor, or any amendment to any thereof, affecting any Project Lands or any Infrastructure on any Project Lands, that:
 - (i) in the case of:
 - (A) a Project Site Agreement or Encumbrance, is not described in or referred to in either of Appendix 8A [Project Lands] or Appendix 8B [Certain Project Site Encumbrances] to Schedule 8; or
 - (B) an agreement with any municipality, is not expressly described in this Agreement,
 - (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 will 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), including an Indigenous Protest Action;
- (e) the circumstances referred to in Section 4.2(a) of Schedule 6 [Environmental Obligations] as constituting a Compensation Event;

- 7 -

- (f) the circumstances referred to in Section 11.4(c) of Schedule 3 [Design and Construction General Requirements] as constituting a Compensation Event;
- (g) the circumstances referred to in Section 11.1(c) of this Agreement as constituting a Compensation Event;
- (h) the circumstances referred to in Section 11.2(d) or Section 11.2(f) of this Agreement as constituting a Compensation Event;
- (i) the circumstances referred to in Section 11.3(c) of this Agreement as constituting a Compensation Event;
- (j) the circumstances referred to in Section 8.5(b)(iv) of Schedule 3 [Design and Construction General Requirements] as constituting a Compensation Event;
- (k) 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;
- (l) the circumstances referred to in Section 2.1(f)(i) of Schedule 2 [Review Procedure and Consent Procedure] as constituting a Compensation Event;
- (m) subject to Section 8.9(a) of this Agreement, a Protest Action;
- (n) a Discriminatory Change in Law;
- (o) damage to or destruction of the Project Infrastructure or part thereof caused by a Seismic Event or Flood;
- (p) 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;
- (q) the existence of a Nonconformity caused solely by a Province Non-Excusable Event;
- (r) it has been determined by a court of competent jurisdiction, without any further rights of appeal, that:
 - (i) a part of the Project Site 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;

- 8 -

- (s) 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, including by providing each relevant Utility Supplier with look-ahead schedules on a regular basis and by scheduling regularly occurring meetings with the relevant Utility Supplier;
- (t) the existence of any Non-Foreseeable Contamination or ground water, surface water, soil or other materials that in any such case is or contains Non-Foreseeable Contamination;
- (u) the discovery at the Project Site of a Non-Foreseeable Species at Risk; and
- (v) the renegotiation, prior to the Substantial Completion Target Date, of a Standard Provincial Agreement, as defined in the Project Labour Agreement, that results in an increase in the Total Monetary Package, or similar, as set out in such Standard Provincial Agreement.

“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 Licence” 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 Licence 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 Licence 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 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).

- 9 -

“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).

“Concrete Median Barrier” means a safety and protective barrier made primarily of concrete with a height of 810 mm designed and installed in median areas along roadways, or other designated areas to mitigate potential vehicular collisions with bridge piers, light standard bases, and other immovable objects, and with a higher level of safety being provided by the height of the barrier for redirecting errant vehicles back onto the roadway to mitigate potential for severe injury collisions.

“Concrete Roadside Barrier” means a safety and protective barrier made primarily of concrete with a height of 690 mm designed and installed along roadways, highways, or designated areas to prevent vehicles from veering off the roadway or to divide lanes of traffic, thereby enhancing road safety and mitigating potential vehicular collisions.

“Conditions of Access” has the meaning given in Section 2.1 [Project Site Access Subject to Other Rights] of Schedule 8.

“Confidential Information” means all confidential or proprietary information of a party (including confidential or proprietary information of a third party that is provided to or otherwise prepared for or obtained by 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.

“Consent Procedure” means the procedure defined in Section 2.1 [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.

“Construction” means:

- (a) the performance of all construction, alteration, augmenting, upgrading, installation, configuration, integration, completion, testing, commissioning and other services and activities, including site preparation, decommissioning and demolition, 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;

- 10 -

- (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 Camera” means CCTVs installed at strategic points to document ongoing Project Work and monitor progress.

“Construction Certificate” means a Certificate in respect of the Construction as provided by the Design-Builder pursuant to Section 6.1 [Construction Certificates] of Part 2 to Schedule 4.

“Construction Communications and Engagement Plan” has the meaning given in Section 1.4 [Construction Communications and Engagement Plan] of Schedule 15.

“Construction Costs” has the meaning given in Section 2.5(a)(ii) of Schedule 11 [Changes].

“Construction Costs Mark-up” has the meaning given in Section 2.5(a)(ii) of Schedule 11 [Changes].

“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 Schedule 21 [Key Individuals], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of this Agreement.

“Construction Management Plan” has the meaning given in Section 3.9 [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 7C [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, 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 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.

- 11 -

“**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 such as, for example, Hazardous Substances resulting from acid-generating rock), 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 Compliance Incentive Payment**” has the meaning given in Section 2.7(a) of Schedule 10 [Payment].

“**Contracting Affiliate**” means any Affiliate of the Design-Builder that performs any Project Work or is a party to any Project Document.

“**Contract Price**” has the meaning given in Section 1.1(a) of Schedule 10 [Payment].

“**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 will be the period from the Effective Date to the next following December 31; and
- (b) the last Contract Year will 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 one half or more of the subscribed value (taking into account contributions to be made) of all equity or ownership interests in that person; or
 - (ii) carrying one half or more 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**” and “**Controlling**” have the corresponding meanings.

- 12 -

“Coordinating Professional Engineer” means the Professional Engineer responsible for coordinating the work of other Professional Engineers and any other professionals, including architects and scientists, in connection with the Design.

“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.

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

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

“Correction Target Date” has the meaning given in Section 6.1(d) of Schedule 7 [Quality Management].

“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 10B [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 10B [Progress Measurement Principles] to Schedule 10.

“Cost Item Progress Amount” has the meaning given in Section 3.1(b) of Schedule 10 [Payment].

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

“Critical Path Schedule” means the sequence of activities that represents the longest path through the Project Work which determines the shortest possible duration to complete the Project Work, as derived from the Works Schedule.

“CVSE Pullout” means a specifically designated and constructed area adjacent to the highway, designed to facilitate the safe execution of CVSE activities, including vehicle inspections, compliance monitoring, and enforcement actions predominantly related to commercial vehicles, in accordance with safety and transportation Laws and Reference Documents.

“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 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.

“Deck” means the portion of a Bridge that supports the highway, from the top of the major structural members to the Wearing Surface, and designed to distribute loads evenly across the Bridge.

- 13 -

“Deck Wearing Surface System” means the replaceable surface and waterproofing elements that protect the Bridge Deck from abrasion and the ingress of water and chlorides.

“Decision Sight Distance” means the distance at which drivers can detect a hazard or a signal in a cluttered roadway environment, recognize it or its potential threat, select an appropriate speed and path, and perform the required action safely and efficiently.

“Default Points” means those points assigned to the Design-Builder in accordance with Section 2.4 [Assignment of Default Points] of Schedule 9.

“Default Points Balance” has the meaning given in Section 2.4(e)(ii) of Schedule 9 [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 will automatically change by the same amount at the same time.

“Deficiency Holdback” has the meaning given in Section 4.1(a) of Schedule 10 [Payment].

“Delay Liquidated Damages” has the meaning given in Section 5.2(a) of Schedule 10 [Payment].

“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 for the carrying out of the foregoing;
- (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 2 [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

- 14 -

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.

“**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 exclusively 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;
- (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 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 14.

- 15 -

“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 Guarantor or the directors of the Design-Builder or any Partner or the Guarantor is passed for the dissolution, liquidation or winding-up of the Design-Builder or any Partner or the Guarantor, or for the suspension of operations of the Design-Builder or any Partner or the Guarantor, 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 or the Guarantor bankrupt or insolvent, or ordering the winding-up or liquidation of the Design-Builder or any Partner or the Guarantor, or approving any reorganization, arrangement, compromise, composition, compounding, extension of time, moratorium or adjustment of liabilities of the Design-Builder or any Partner or the Guarantor 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 or the Guarantor for any of the foregoing and such action or proceeding against the Design-Builder or any Partner or the Guarantor 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 or the Guarantor 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 the Guarantor or against all or a substantial part of the property or assets of the Design-Builder or any Partner or the Guarantor 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 or the performance by the Guarantor of its obligations under the Guarantee;
- (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 the Guarantor or in respect of all or a substantial portion of the property and assets of the Design-Builder or any Partner or the Guarantor, or any creditor takes control of the Design-Builder or any Partner or the Guarantor or of all or a substantial portion of the property and assets of the

- 16 -

Design-Builder or any Partner or the Guarantor or any action or proceeding is commenced or instituted against the Design-Builder or any Partner or the Guarantor for any of the foregoing and such action or proceeding against the Design-Builder or any Partner or the Guarantor 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 or the Guarantor for any of the foregoing;

- (e) the Design-Builder or any Partner or the Guarantor 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 or the Guarantor 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 the Guarantor or in respect of all or a substantial portion of the property or assets of the Design-Builder or any Partner or the Guarantor; or
- (f) the Design-Builder or any Partner or the Guarantor 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 any of the following losses or damages claimed, suffered or allegedly suffered by the Design-Builder or any Design-Builder Indemnified Person or Subcontractor:

- (a) any loss of revenue and loss of profits;
- (b) any loss of business opportunity or other loss of opportunity, loss of contract, loss of production, or loss of goodwill; and
- (c) any consequential or indirect loss or damage of any nature.

“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’s Environmental Obligations” means:

- 17 -

- (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 Schedule 21 [Key Individuals], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of this Agreement.

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

“Design Costs” has the meaning given in Section 2.5(a)(i) of Schedule 11 [Changes].

“Design Costs Mark-up” has the meaning given in Section 2.5(a)(i)(B) of Schedule 11 [Changes].

“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 Value Engineering Proposal accepted by the Province in accordance with Schedule 11 [Changes].

“Design Earthquake Events” has the meaning given in Section 4.2(a) of Part 1 [Design and Construction Requirements] of Schedule 4.

“Designer” means Kiewit Engineering Group Canada ULC 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 2 of Schedule 4.

“Design Manager” means the Key Individual identified by such title in Schedule 21 [Key Individuals], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of this Agreement.

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

- 18 -

“Detour Route” means a route 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.

“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, 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 Project Lands Drawings and the information contained thereon.

“Discriminatory Change in Law” means a Change in Law consisting of the bringing into force, amendment or repeal of a Law the effect of which is to discriminate directly against, and which specifically applies to:

- (a) the Project or other similar highway projects whose design and construction are procured on a basis similar to the Project;

- 19 -

- (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” has the meaning given in Section 2.1(a) of Schedule 16 [Dispute Resolution Procedure].

“Dispute Notice” has the meaning given in Section 2.1(a) of Schedule 16 [Dispute Resolution Procedure].

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

“Diverging Diamond Interchange” has the meaning given in Section 1.4.2(a) of Part 1 [Design and Construction Requirements] of Schedule 4.

“Documented Checking” has the meaning given in Section 3.2 [Documented Checking] of Part 2 of Schedule 4.

“Drainage Design Report” has the meaning given in Section 7.3.5 [Drainage Design Report] of Part 1 of Schedule 4.

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

“Dynamic Message Sign” means a sign which displays words, numbers, and/or symbols that can be changed on demand to communicate real-time roadway, traffic, or traveller information, and including permanently-mounted overhead signs and portable messaging systems.

“Early Construction Commencement Incentive Payment” has the meaning given in Section 2.5(a) of Schedule 10 [Payment].

“Early Substantial Completion Incentive Payment” has the meaning given in Section 2.9(a) of Schedule 10 [Payment].

“Effective Date” means the date of this Agreement.

“Electric Vehicle” means any vehicle propelled wholly or in part by an electric motor drawing current from rechargeable storage batteries, from another source of electrical current, or any combination thereof, and which operates on roadways, and including fully electric vehicles, plug-in hybrid vehicles, and extended-range electric vehicles designed primarily for the transportation of persons or goods over public roads and highway.

“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

- 20 -

- (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.

“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 4.1 of Schedule 15 [Communications and Engagement].

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

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

“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, concessions, grants, franchises, licences, permits, approvals, plans, authorizations, agreements 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), the *Migratory Birds Convention Act* (Canada), the *Water Sustainability Act* (British Columbia), the *Wildlife Act* (British Columbia) and the *Environmental Management Act* (British Columbia).

- 21 -

“Environmental Manager” means the Key Individual identified by such title in Schedule 21 [Key Individuals], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of this Agreement.

“Environmental Reference Documents” means the references, codes, standards, specifications, guidelines, policies, reports, publications, manuals, bulletins and other such documents listed in Part B [Environmental Reference Documents] of Appendix 1C to this Schedule, in each case as amended, supplemented or replaced from time to time in accordance with Section 1.3 [Reference Documents] of this Schedule.

“Equity Incentive Payment” has the meaning given in Section 3.2(c) of Schedule 13 [ESG and Workforce Requirements].

“ESG Requirements” has the meaning given in Section 2.1 [ESG Requirements] of Schedule 13.

“EV Charging Infrastructure” has the meaning given in Section 11.4.5(a) of Part 1 [Design and Construction Requirements] of Schedule 4.

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

- (a) directly attributable to a Province Non-Excusable Event;
- (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 a Flood, but only during the period while the Project Site or portion thereof is submerged as a result of such Flood; or
- (j) directly attributable to a failure of the Winter Maintenance Contractor to carry out routine winter maintenance within the footprint of the Original Project Infrastructure in accordance with the applicable specifications referenced in Section 7.2(a) of Schedule 3 [Design and Construction General Requirements].

- 22 -

“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.

“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 1A [Factual Geotechnical Data] to this Schedule.

“Federal Government” means His Majesty the King in right of Canada.

“Final Deficiency List” has the meaning given in Section 12.4(b) of Schedule 3 [Design and Construction General Requirements].

“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.

“Final Quality Report” means the report described in Section 4.10 [Final Quality Report] of Schedule 7.

“Financial Submittal Date” means June 18, 2024.

“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.

“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.

“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;

- 23 -

- (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 1.1(a)(i) or Section 1.1(c) of Schedule 8 [Lands] to this Agreement.

“Foundation” means the structure required to transfer load from a pier or abutment into the supporting soils, including pile caps, caissons and drilled shafts.

“Four Week Lookahead Schedule” means the detailed schedule for investigation, construction, testing, commissioning, demolition and related activities within the Project Work during the period commencing one week prior from the cutoff date (illustrating the completed activities during that week) and ending four weeks after the cutoff date.

“Full Closure” means a Closure affecting all of the lanes in one or both travelling directions within Highway 1, an Interchange Ramp or an Other Specified Road.

“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.

“GBA Plus” means the analytical process that provides a rigorous method for the assessment of systemic inequalities, as well as a means to assess how diverse groups of women, men, and gender diverse people may experience policies, programs and initiatives.

“GBA Plus Course” means the Federal Government’s online GBA Plus course or another course approved by the Province.

“GBA Plus Requirements” has the meaning given in Section 13.1 [GBA Plus Requirements] of Schedule 3.

“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 will 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 8.2 [Project Work Defect Warranty] of Schedule 3, such that the General Project Work Defect Warranty Period for any such item of remedial work will extend for an additional year after such Project Work Defect is corrected.

“General Purpose Lanes” means the traffic lanes on a roadway or highway intended for regular vehicular traffic, excluding specialized lanes such as HOV/EV lanes, bus-on-shoulder lanes, or dedicated exit and entrance ramps.

- 24 -

“Geotechnical System” means a group of interrelated elements designed to transmit loads to the ground or to retain the ground.

“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 Structures, Geotechnical Systems, 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 Canadian:
 - (i) federal, provincial, territorial, regional, municipal or local governmental authority, quasi-governmental authority, court, government organization, commission, board or tribunal;
 - (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.

“Guarantee” means the guarantee of even date herewith provided by the Guarantor in accordance with Schedule 22 [Closing Documents].

“Guarantor” means Kiewit Canada Group Inc.

“Guardrail” means a barrier fastened to the edge of a Bridge Deck to prevent vehicles from running over the side of the Bridge.

“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 2.3 [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:

- 25 -

- (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.

“**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 9.3 [Health and Safety Program] of Schedule 3.

“**High Occupancy Vehicle**” means a Motor Vehicle that is entitled to use a high occupancy vehicle lane as defined in the *Motor Vehicle Act* (British Columbia).

“**Identified Indigenous Groups**” means Kwantlen First Nation.

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

“**Implementation Plan**” means the sub-plan of the Traffic Management Plan described in Section 6.2.4 [Implementation Plan] of Part 3 of Schedule 4.

“**Incident**” means any motor vehicle collision, motor vehicle breakdown or parking, flooding, forest fire, 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 6.2.2 [Incident Management Plan] of Part 3 of Schedule 4.

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

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

- 26 -

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

“Independent Review” has the meaning given in Section 3.1(a) of Part 2 [Design and Certification Procedure] of Schedule 4.

“Indigenous Coordinator” means the Key Individual identified by such title in Schedule 21 [Key Individuals], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of this Agreement.

“Indigenous Participation Plan” has the meaning given in Section 1.2(a) of Schedule 12 [Indigenous Requirements].

“Indigenous Protest Action” means any protest action or blockade arising from or in connection with any Indigenous group(s) asserting infringement of Indigenous rights, Indigenous treaty rights, or Indigenous title.

“Indigenous Requirements” has the meaning given in Section 1.1 [General Requirements] of Schedule 12.

“Infrastructure” means all road and highway infrastructure including Structures, roadways, hard shoulders, slip roads, side roads, access roads, pavement, bridges, tunnels 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, erosion protection, footways, road markings, road traffic signs, road traffic signals, road lighting, communications installations, cameras, 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 2.1(a) of Schedule 16 [Dispute Resolution Procedure].

“Inspection and Test Plan” means a detailed spreadsheet of all major on and off Project Site inspection and test activities for Project Work performed by the Design-Builder and that of its Subcontractors.

“Insurance and Bonding Costs” has the meaning given in Section 2.5(a)(v) of Schedule 11 [Changes].

“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.

- 27 -

“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
- (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.

“Interchange Ramp” has the meaning given in Section 3.1(a) of Part 3 [Traffic Management] of Schedule 4.

“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.

“Interface Committee” has the meaning given in Section 4.5(a) of Schedule 3 [Design and Construction General Requirements].

“Interface Committee Liaison” has the meaning given in Section 4.5(b)(ii) of Schedule 3 [Design and Construction General Requirements].

“Interface Committee Members” has the meaning given in Section 4.5(b)(i) of Schedule 3 [Design and Construction General Requirements].

“Interfacing Issue” has the meaning given in Section 4.3(a) of Schedule 3 [Design and Construction General Requirements].

“Interfacing Works” has the meaning given in Section 4.2(a) of Schedule 3 [Design and Construction General Requirements].

“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 2 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.

- 28 -

“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, Design-Builder Irrecoverable Losses.

“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, American Society for Quality or Exemplar Global.

“ISO 9004:2018 Standard” means the ISO 9004:2018 International Standard, Managing for the sustained success of an organization — A quality management approach, 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 10005:2018 Standard” means the ISO 10005:2018 Quality Management – Guidelines for Quality Plans, 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, 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.

“ISO 45001:2018 Standard” means the ISO 45001:2018 International Standard, Guidelines for occupational health and safety management systems, 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/IEC 17025:2017 Standard” means the ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories, 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.

- 29 -

“**ITS Equipment**” has the meaning given in Section 12.2(a) of Part 1 [Design and Construction Requirements] of Schedule 4.

“**ITS Hybrid Sign**” means a specialized signage system integrated within the ITS Equipment that combines features of traditional static signs with dynamic message signs using LED matrix displays, and which can showcase varying information such as travel times across specific highway corridors, border crossing wait times, or other pertinent traffic details.

“**Key Individuals**” means the individuals identified in Schedule 21 [Key Individuals], as changed from time to time in accordance with Section 3.3 [Key Individuals] of this Agreement.

“**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 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 licence, rights under a crossing agreement, including a railway crossing agreement, or a permit.

“**Lane Closure**” means any Closure affecting a lane or lanes within Highway 1, an Interchange Ramp or an Other Specified Road, but excludes a Full Closure.

“**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.

“**Latent Defect**” means any defect in any Original Project Infrastructure (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 will 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.

“**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.

“**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.

- 30 -

“**Legal Referees**” has the meaning given in Section 4.2(a) of Schedule 16 [Dispute Resolution Procedure].

“**Letter of Credit**” means an irrevocable letter of credit in the form attached as Appendix 24A [Form of Letter of Credit] to Schedule 24, modified as indicated therein and meeting the requirements set out therein

“**Licensed Property**” means any Intellectual Property or other property to which the Complete Licence applies.

“**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 4.1 [Mitigation by Province] of this Agreement or the Design-Builder in complying with its obligations pursuant to Section 5.6 [Mitigation by the Design-Builder] of this Agreement, 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.

“**Lower Mainland**” means the southwestern region of British Columbia, consisting of Vancouver, its surrounding municipalities including Burnaby, Richmond, Surrey and Langley, and extending eastward into the Fraser Valley, including Abbotsford and Chilliwack.

“**Lower Tier Subcontractor**” means any Subcontractor (other than any Subcontractor engaged directly by the Design-Builder) 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 Subcontractor engaged directly by the Design-Builder.

“**Mainline West Contractor**” means the Program Contractor carrying out the Mainline West Project.

“**Mainline West Project**” has the meaning given in Section 4.2(a)(ii) of Schedule 3 [Design and Construction General Requirements].

“**Major Culverts**” means structures 3 metres or more in diameter or span constructed of various materials (typically corrugated iron) and required to convey watercourses under the highway.

“**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.

- 31 -

“Material Subcontractor” means the Designer, any supplier and installer of piles, any supplier of bridge girders, any supplier of MSE walls, any supplier and installer of reinforcing steel, any supplier and installer of electrical (including street lights, intersection signals, ITS, but excluding laydown yard and office facility electrical), any supplier and installer of guide sign structures, and any other Subcontractors carrying out more than \$10 million worth of Project Work, and any substitute Subcontractor for any such Material Subcontractor, in each case engaged directly by the Design-Builder or any Partner as may be permitted by this Agreement.

“Minimum Indigenous Contracts Requirement” has the meaning given in Section 1.1(a) of Schedule 12 [Indigenous Requirements].

“Minimum Traffic Performance Criteria” has the meaning given in Section 1.5.1(a) of Part 1 [Design and Construction Requirements] of Schedule 4.

“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 Technical Requirements] 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.

“Ministry Technical Bulletins and Circulars” means all technical bulletins and technical circulars issued by the Ministry.

“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.

“Motor Vehicle” means a motor vehicle as defined in the *Motor Vehicle Act* (British Columbia).

“Mount Lehman Interchange Project” has the meaning given in Section 4.2(a)(iii) of Schedule 3 [Design and Construction General Requirements].

“Multi-Use Path” means a path with multiple users of different types (such as pedestrians, bicycles and similar user types), which may be shared (all users share the same pathway space, with or without a marked centre line) or separated (for example, the pathway is separated into parallel travelled ways, one exclusively for pedestrians and one exclusively for bicycles, skateboards, and other active transportation users).

“Municipal Agreement” means the agreement to be entered by the Municipality and the Province in connection with the Project, as amended, supplemented or replaced from time to time.

- 32 -

“**Municipality**” means the Township of Langley.

“**Narrative Report**” means detailed narrative of the revised Work Schedule, including a summary of the Project Work, the plan for Construction, compliance to milestones, the critical path and potential issues or concerns that could delay the Project Work.

“**NCE (Cash) Payment**” means a payment paid or payable pursuant to Section 1.3 [Calculation of Non-Compliance Event Payments] of Schedule 9 in respect of the occurrence of one or more Non-Compliance Events as described in Section 1.3(b) of Schedule 9 [Performance Mechanism].

“**NCE Points**” means those points assigned to the Design-Builder in accordance with Section 2.1 [Assignment of NCE Points] of Schedule 9.

“**NCE Points Balance**” has the meaning given in Section 2.2(c)(ii) of Schedule 9 [Performance Mechanism].

“**NCE Points (Default) Balance**” has the meaning given in Section 2.3(b) of Schedule 9 [Performance Mechanism].

“**NCE (Points) Payment**” means a payment paid or payable pursuant to Section 1.3 [Calculation of Non-Compliance Event Payments] of Schedule 9 in respect of NCE Points assigned to the Design-Builder pursuant to Part 2 [NCE Points and Default Points] of Schedule 9 in respect of the occurrence of one or more Non-Compliance Events.

“**Negotiation Period**” has the meaning given in Section 3.2(a) of Schedule 16 [Dispute Resolution Procedure].

“**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 No Default Interest Rate will automatically change by the same amount at the same time.

“**Non-Compliance Event**” means:

- (a) a failure by the Design-Builder to meet a specific performance measure described in Appendix 9A [Assignment of NCE Points] to Schedule 9; and
- (b) a failure by the Design-Builder described in Section 1.3(b) of Schedule 9 [Performance Mechanism],

“**Non-Compliance Event Payments**” means the payments paid or payable by the Design-Builder to the Province pursuant to Section 1.3 [Calculation of Non-Compliance Event Payments] of Schedule 9.

“**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-

- 33 -

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;
- (k) failure to meet the Design-Builder's reporting obligations under this Agreement;
- (l) failure to submit document deliverables, including any updates to such document deliverables, within the applicable timelines stated in this Agreement;
- (m) failure to provide training that the Design-Builder is required to provide in accordance with this Agreement within the applicable timelines stated in this Agreement;
- (n) failure to maintain general site safety, worker health safety, or the health and safety of the public;
- (o) failure to comply with the traffic management requirements in this Agreement; and
- (p) failure to submit complete deliverables that are required to be submitted under:
 - (i) the Review Procedure, resulting in the Province repeatedly endorsing the deliverable "comments" on the resubmitted document deliverable; or
 - (ii) the Consent Procedure, resulting in the Province repeatedly endorsing the deliverable "rejected" (other than a "deemed" rejection under Section 2.1(g) of Schedule 2 [Review Procedure and Consent Procedure] or a rejection on the merits of a submission).

- 34 -

“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.

“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 14.

“Non-Foreseeable Contamination” means all Existing Contamination other than 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 ENV Technical Guidance 10;
- (c) a Stage 2 Preliminary Site Investigation and Detailed Site Investigation in accordance with ENV Technical Guidance 11;
- (d) any hazardous materials assessments and surveys for buildings; and/or
- (e) any other field test data, or investigations, studies and/or reports associated with such data, disclosed in the Data Room.

“Non-Foreseeable Species at Risk” means a “species at risk” as defined in the *Species At Risk Act* (Canada) that was not disclosed by, or could not reasonably have been foreseen from an analysis of or interpreting, any studies and/or reports contained in the Disclosed Data as at the Financial Submittal Date.

“Non-Permitted Traffic Disruption Event” means a Traffic Disruption Event described in any of in any of Sections 2.6 [Non-Permitted Traffic Disruption Events on Highway 1], 3.6 [Non-Permitted Traffic Disruption Events on Interchange Ramps] or 4.6 [Non-Permitted Traffic Disruption Events on Other Specified Road] of Part 3 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, an Interchange Ramp or an Other Specified Road.

“No Threshold Compensation Event” means each of the Compensation Events referred to in paragraphs (a), (b), (f), (g), (h), (i), (k), (l) or (n) 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) of this Agreement.

- 35 -

“**Notice to Arbitrate**” means Schedule A – Notice to Arbitrate of the VanIAC Rules.

“**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.

“**180-Day Lookahead Schedule**” means a schedule fully detailing all of the Project Work activities to be completed in the first 180 calendar days after the Effective Date, including the activities set out in Section 3.5(a) of Schedule 3 [Design and Construction General Requirements].

“**Operation and Maintenance**” has the meaning given in Section 7.1 [Responsibility for Operation and Maintenance – General] of Schedule 3.

“**Operation and Maintenance Plan**” has the meaning given in Section 7.6 [Operation and Maintenance Plan] of Schedule 3.

“**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 Lands**” means those lands which are not Project Lands and are proposed to be used by the Design-Builder in connection with or to facilitate the delivery of all or any part of the Project Work.

“**Other Specified Road**” has the meaning given in Section 4.1(a) of Part 3 [Traffic Management] of Schedule 4.

“**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 the entity or entities appointed by the Province for such role from time to time.

“**Partial Interchange Lighting**” means a strategically positioned lighting system with luminaires optimally located to illuminate through lanes as well as speed change lanes during diverging and merging driving scenarios and providing illumination of decision-making areas of roadways, including:

- (a) acceleration and deceleration lanes;
- (b) ramp terminals;
- (c) crossroads at frontage road or ramp intersections; and
- (d) other areas of nighttime hazard.

- 36 -

“**Participants**” has the meaning given in Section 8.8(a) of this Agreement.

“**parties**” means the parties to this Agreement unless reference is made specifically to another agreement or document.

“**Partners**” means Kiewit Infrastructure BC ULC 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 10C [Forms] to Schedule 10, and includes a Draw Request.

“**Payment Period**” means each calendar month, provided that:

- (a) the first Payment Period will 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 will end on the last day of the calendar month in which the Total Completion Date occurs.

“**Peak Hour**” means the highest hour of a specified time period, usually a day or a portion of a day, such as the AM Peak Hour or PM Peak Hour, as defined in the Traffic Operations Requirements.

“**Performance Based Connection**” means an intersection, roundabout or interchange in respect of which the traffic engineering design criteria set out in Section 1.5.3 [Performance Criteria] of Part 1 of Schedule 4 are required to be met.

“**Performance Incentive Payments**” means, collectively, the payments paid or payable by the Design-Builder to the Province pursuant to Section 1.1 [Calculation of Performance Incentive Payments] of Schedule 9.

“**Periods of Inactivity**” means periods when no Active Work is taking place, including between shifts, Special Events and Seasonal Shutdowns.

“**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.

“**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.

- 37 -

“Personal Information” means recorded information about an identifiable individual, other than contact information, collected, created or accessible by the Design-Builder as a result of this Agreement.

“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 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, an Interchange Ramp or an Other Specified Road.

“Ponding” means large puddles of water trapped on a Travelled Lane or Shoulder.

“Portable Dynamic Message System” means a mobile electronic traffic signage system capable of displaying a wide range of customizable messages, from safety warnings to traffic updates, which can be updated remotely or on-site, depending on the system's design.

“Preliminary Estimate” has the meaning given in Section 2.3 [Preparation of Preliminary Estimate] of Schedule 11.

“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.

- 38 -

“**Privacy Course**” means the Province’s online privacy and information sharing training course or another course approved by the Province.

“**Professional Engineer**” means a person who is registered as a professional engineer with the EGBC.

“**Profit and Overhead Costs**” has the meaning given in Section 2.5(a)(iv) of Schedule 11 [Changes].

“**Program**” means the Fraser Valley Highway 1 Corridor Improvement Program.

“**Program Contractors**” has the meaning given in Section 4.5(a)(i) of Schedule 3 [Design and Construction General Requirements].

“**Progress Amount**” has the meaning given in Section 3.1(a)(i) of Schedule 10 [Payment].

“**Progress Payment**” has the meaning given in Section 2.1(a) of Schedule 10 [Payment].

“**Progress Payment Holdback**” has the meaning given in Section 3.1(a)(iv) of Schedule 10 [Payment].

“**Project**” has the meaning given in Section 2.1 [The Project] of this Agreement.

“**Project Documents**” means:

- (a) this Agreement;
- (b) the Bonds;
- (c) the Material Subcontracts; and
- (d) the Guarantee,

and all other documents executed and delivered by or on behalf of the parties pursuant to Section 2.11 [Execution and Delivery of Project Documents] of this Agreement and Schedule 22 [Closing Deliveries].

“**Project Facilities**” at any time means:

- (a) the lands and interests in land described in Appendix 8A [Project Lands] to Schedule 8 that, before that time, have been made available to the Design-Builder as provided in Section 2.3 [Commencement of Access to Project Site] of Schedule 8, and excluding any Land Rights (other than fee simple interests) that have been terminated or, in the case of Temporary Lands, expired before that time; 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, and Design Data that is prepared by or on behalf

- 39 -

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 Labour Agreement" means the project labour agreement for the Fraser Valley Highway 1 Corridor Improvement Program entered into effective April 4, 2024 between the Construction Labour Relations Association of BC and The Bargaining Council of British Columbia Building Trade Unions, as amended, supplemented or replaced from time to time.

"Project Lands" means those lands and interests in lands identified as "Project Lands" on the Project Lands Drawings.

"Project Lands Drawings" means the drawings attached as Appendix 8C [Project Lands Drawings] to Schedule 8.

"Project Marks" has the meaning given in Section 2.5(c)(ii) of this Agreement.

"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 as set out in Appendix 3A [Project Schedule] to Schedule 3 as of the Effective Date, and as subsequently amended from time to time in accordance with Section 3.2 [Project Schedule] of Schedule 3.

"Project Site" at any time means any part of the Project Lands and Temporary 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 or Temporary 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.

"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 8A [Project Lands] or Appendix 8B [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;

- 40 -

- (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” means 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 8.1 [Representation, Warranty and Covenant as to Project Work] of Schedule 3).

“Property Damage Insurance Proceeds” has the meaning given in Section 6.17(b) of this Agreement.

“Proposal” means:

- (a) the technical submittal dated April 9, 2024; 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 25 [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:

- (a) Indigenous Protest Action;
- (b) Labour Dispute; or
- (c) other strike, lockout, industrial relations dispute or job action by, of or against workers carrying out any part of the Project Work.

- 41 -

“**Province**” has the meaning given in the Recitals.

“**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, including the Project Work, or in the Construction of the New Project Infrastructure;
- (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 Part 2 [Province Changes] of Schedule 11 are stated to be applicable.

“**Province Change Notice**” has the meaning given in Section 2.1 [Province Change Notice] of Schedule 11.

“**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) Infrastructure BC;
- (d) 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
- (e) 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 or loss of profit, including loss of revenue from the Project Facilities;
- (b) any loss of business opportunity or other loss of opportunity, loss of contract, loss of production or loss of goodwill; and
- (c) any consequential or indirect loss or damage of any nature.

“**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,

- 42 -

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 2 [Payment Obligations of Province] of Schedule 10.

“Province Permits” means the following Permits:

- (a) the ALC Resolution;
- (b) Change Approval 2010221 issued on October 4, 2023 under Section 11 of the *Water Sustainability Act* (British Columbia); and
- (c) Authorization No. 22-HPAC-01474 issued on March 28, 2024 under Paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act* (Canada).

“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 3.1(a) of this Agreement, or such replacement or substitute as may be appointed by the Province pursuant to Section 3.1 [Province’s Representative] of this Agreement.

“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.

“PST” means the sales tax that is imposed pursuant to the *Provincial Sales Tax Act* (British Columbia), and any successor or replacement tax therefor.

“Public Information Plan” means the sub-plan of the Traffic Management Plan described in Section 6.2.3 [Public Information Plan] of Part 3 of Schedule 4.

“Qualified Coordinator” has the meaning given in Section 9.2(b)(i) of Schedule 3 [Design and Construction General Requirements].

“Qualified Environmental Professional” means a person who is registered in good standing with a professional organization enabled under a Law of an appropriate field such as biology, ecology, geography, engineering, or natural resources management, and is required to follow a code of ethics issued by that professional organization.

“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

- 43 -

Agreement, 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
- (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, the duties, obligations and liabilities of which are guaranteed by the Federal Government or any ministry or department of the Federal Government.

“Qualified Indigenous Resources” has the meaning given in Section 1.1(a) of Schedule 12 [Indigenous Requirements].

“Qualified Insurer” means a reputable and duly qualified insurer of good standing in the worldwide insurance market, licensed to transact insurance business in Canada (or, in the case only of the Marine Liability including Protection and Indemnity insurance referenced in Section 1.1(b) of Section 1.1 [Third Party Liability Insurance – Construction] of Schedule 5 [Insurance Requirements], a member of the International Group of Protection and Indemnity Associations), 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
- (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.

“Qualified Professional Agrologist” means a registered professional agrologist in the Province of British Columbia with qualifications approved by the Agricultural Land Commission.

“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 will 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 Schedule 21 [Key Individuals], or such replacement as may be designated by the Design-Builder pursuant to Section 3.3 [Key Individuals] of this Agreement.

- 44 -

“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 will 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 and the Construction Quality Management Plan.

“Quality Management System” 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 7A [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 will 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.

“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:

- 45 -

- (i) has a physical existence; and
- (ii) will generate benefits to be received in future years; and
- (b) are not recurring or routine.

“Referee” means any one of the Legal Referees or Alternate Referees.

“Referee Panel” has the meaning given in Section 4.2(a) of Schedule 16 [Dispute Resolution Procedure].

“Referee Panel Dispute Notice” has the meaning given in Section 4.1 [Commencement of Referee Panel Procedure] of Schedule 16.

“Referee Panel Member Agreement” has the meaning given in Section 4.2(f) of Schedule 16 [Dispute Resolution Procedure].

“Referee Panel Procedure” has the meaning given in Section 4.1 [Commencement of Referee Panel Procedure] of Schedule 16.

“Reference Concept” means the Reference Concept(s) as provided in the Data Room.

“Reference Documents” means:

- (a) the references, codes, standards, specifications, guidelines, policies, reports, publications, manuals, bulletins and other such documents listed in Part A [General Reference Documents] and Part B [Environmental Reference Documents] of Appendix 1C to this Schedule; and
- (b) all Ministry Technical Bulletins and Circulars,

in each case as amended, supplemented or replaced from time to time in accordance with Section 1.3 [Reference Documents] of this Schedule, except “Reference Documents” does not include any document that is a Law, notwithstanding that the document may be listed in Appendix 1C [Reference Documents].

“Reinstatement Funds Deficiency” has the meaning given in Section 8.7 [Termination for Damage or Destruction] of this Agreement.

“Reinstatement Plan” has the meaning given in Section 6.15 [Reinstatement Plan] of this Agreement.

“Reinstatement Work” has the meaning given in Section 6.14 [Restoration and Reinstatement of Damage or Destruction] of this Agreement.

“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.

- 46 -

“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 3.1(b) of Schedule 10 [Payment].

“Relevant Obligation” has the meaning given in Section 2.2 [Design-Builder Objection] of Schedule 11.

“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; or
 - (ii) any Project Infrastructure; or
- (b) by any migration or leaching of Existing Contamination or Province Subsequent Contamination from:
 - (i) any Project Lands; or
 - (ii) any Project Infrastructure.

“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; or
 - (B) any Project Infrastructure; or
 - (ii) migration or leaching of any Existing Contamination or Province Subsequent Contamination into or onto the Relevant Property from:
 - (A) any Project Lands; or
 - (B) any Project Infrastructure; and
- (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:

- 47 -

- (i) any Project Lands; or
- (ii) any Project Infrastructure,

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 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 occurring at the Project Site and directly affecting the Project Site or the Project Infrastructure;
- (d) a Labour Dispute;
- (e) blockade or embargo of the Project Site falling short of a Protest Action or a Force Majeure Event;
- (f) the discovery of any Undisclosed Utilities;
- (g) the failure by the Municipality to comply with its obligations under the Municipal 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 Municipality to comply; and
- (h) a delay by BC Hydro in the installation of the civil components of the EV Charging Infrastructure that extends more than six months beyond the allotted timeline agreed with BC Hydro, provided that the Design-Builder has made all reasonable efforts to coordinate with BC Hydro in connection with such installation in accordance with the requirements of this Agreement.

“**Repair**” means an action that makes a detected Nonconformity acceptable for its intended purpose.

“**Repeat Nonconformity**” has the meaning given in Section 2.1(d) of Schedule 9 [Performance Mechanism].

“**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 15, 2023, together with all amendments, supplements and addenda thereto.

- 48 -

“Request for Qualifications” means the Request for Qualifications in respect of the Project issued by the Province on August 8, 2023, 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] of this Agreement and Schedule 5 [Insurance Requirements].

“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 as at the Financial Submittal Date; 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.

“Respect in the Workplace Plan” has the meaning given in Section 4.6 [Respect in the Workplace] of Schedule 13.

“Responding Party” has the meaning given in Section 4.5 [Written Submissions] of Schedule 16.

“Response Submission” has the meaning given in Section 4.6 [Response to the Written Submissions] of Schedule 16.

“Restricted Periods” means those periods of time, as set out in Part 3 [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 vertical Structure designed to resist the horizontal earth pressures of a fill or other material.

“Review Procedure” means the procedure defined in Section 1.1 [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 and Contingency Costs” has the meaning given in Section 2.5(a)(vii) of Schedule 11 [Changes].

“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 1 of Schedule 4.

“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.

- 49 -

“**Road Safety Audit Certificate**” has the meaning given in Section 4.3 [Road Safety Audit Certificates] of Part 2 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.

“**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.

“**Safety Incentive Payment**” has the meaning given in Section 2.6(a) of Schedule 10 [Payment].

“**SCR Points**” has the meaning given in Section 4.8(g) of Schedule 7 [Quality Management].

“**SD Points**” has the meaning given in Appendix 3E [Safety Demerit Point System] to Schedule 3.

“**SD Points Balance**” has the meaning given in Appendix 3E [Safety Demerit Point System] to Schedule 3.

“**Seasonal Shutdown**” has the meaning given in Section 1.8 [Seasonal Shutdown] of Part 3 of Schedule 4.

“**Seismic Design Strategy Memorandum**” has the meaning given in Section 4.6 [Seismic Design Strategy Memorandum] of Part 1 of Schedule 4.

“**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:

- (a) a Flood; or
- (b) more than one earthquake shock occurring within any 168 consecutive hours, which for the purposes of this Agreement will be deemed to be a single earthquake.

“**Senior Management Executives**” has the meaning given in Section 3.1 [Negotiations by Senior Management Executives] of Schedule 16.

“**Service Life**” has the meaning given to that term in CSA S6-19.

“**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 and Project Management Costs**” has the meaning given in Section 2.5(a)(iii) of Schedule 11 [Changes].

- 50 -

“**Site Condition Rating**” has the meaning given in Section 4.8(g) of Schedule 7 [Quality Management].

“**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 Requirements**” means:

- (a) the Conditions of Access;
- (b) the Project Site Agreements; and
- (c) the Project Site Encumbrances,

and any amendments to any of the Site Requirements referred to in any of paragraphs (a) to (c) of this definition.

“**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 1.6 [Special Events] of Part 3 of Schedule 4.

“**Special Event Restricted Periods**” has the meaning given in Section 1.6(a) of Part 3 [Traffic Management] of Schedule 4.

“**Specified Access Date**” in respect of a parcel of Project Lands means the date specified as the “Specified Access Date” for the parcel in Appendix 8A [Project Lands] to Schedule 8.

“**Specified Cost Item**” means a Cost Item identified in Appendix 10B [Progress Measurement Principles] to Schedule 10 as one in respect of which a Cost Item Progress Amount is payable only upon 100% completion thereof.

“**Speed Reader Board**” means an electronic changeable speed display sign, either as trailer mounted units or pole mounted units, capable of detecting and displaying the speed of approaching vehicles in realtime via radar speed detection.

“**Statement of Progress**” has the meaning given in Section 6.1(a) of Schedule 10 [Payment].

“**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.

“**Stoppage**” means an occasional, temporary interruption of traffic flow on Highway 1, an Interchange Ramp or an Other Specified Road caused or directed by the Design-Builder for the purpose of facilitating Construction.

“**Stopping Sight Distance**” means the minimum sight distance available on a highway at any spot, providing sufficient length to enable a driver to safely stop a vehicle travelling at design speed without colliding with any other obstruction.

- 51 -

“**Structures**” means any structure to be designed, constructed, installed, altered, upgraded or augmented by the Design-Builder as part of the Project Work.

“**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) 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
- (b) any subcontractor of any tier of the Design-Builder.

“**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;
- (b) completion of all Structures and drainage systems;
- (c) full operation of all traffic lighting and signalization;
- (d) all layout for permanent 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 3 [Traffic Management] 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.

- 52 -

“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, 2027.

“Substructure” means abutments, piers, their Foundations and protective works which form the Bridge Substructure supporting the Superstructure above.

“Successful Defence” means, with respect to a Nuisance Claim, a final judgment of dismissal in favour of the Design-Builder, which dismissal will, in the case of a claim for public nuisance or private nuisance only, be based on Statutory Authority. In no event will 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 will, 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 entire Structure of a Bridge resting on the piers and abutments, consisting of stringers, decking, trusses, sidewalks, Wearing Surface and railing.

“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) of this Agreement.

“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 6A [Table of Commitments] to Schedule 6.

“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, 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.

- 53 -

“Technical Appraisal Form” means a technical appraisal form substantially in the format attached as Appendix 4B [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.

“Temporary Lands” means those lands with an Access Period Expiry Date before the Substantial Completion Date, and identified as “Temporary Lands” on the Project Lands 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 General Project Work Defect Warranty Period; and
- (b) the completion of any work performed by the Design-Builder to correct any Project Work Defects.

“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 9.6(a) of Schedule 3 [Design and Construction General Requirements], the Winter Maintenance Contractor and the other Program Contractors.

“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 1B [Background IP and Third Party IP] to this Schedule, or written notice of which is provided by the Design-Builder to the Province following the Effective Date, 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.

“TMIP Eligible Period” has the meaning given in Section 2.8(a)(i)(A) of Schedule 10 [Payment].

“TMIP Non-Eligible Period” has the meaning given in Section 2.8(a)(i)(B) of Schedule 10 [Payment].

“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 **“Totally Completed”**, **“Totally Completing”** and **“Totally Complete”** have corresponding meanings.

- 54 -

“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 the date that is 180 days after the Substantial Completion Date, as such first mentioned date may be extended pursuant to this Agreement.

“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 and **“Traffic Controlled”** has a corresponding meaning.

“Traffic Control Plan” means the sub-plan or sub-plans of the Traffic Management Plan prepared by the Design-Builder in accordance with Section 6.2.1 [Traffic Control Plans] of Part 3 of Schedule 4.

“Traffic Control Supervisor” means a person appointed by the Design-Builder in accordance with Section 7.4 [Traffic Control Supervisors] of Part 3 of Schedule 4.

“Traffic Disruption Event” means a Closure or Stoppage on Highway 1, an Interchange Ramp or an Other Specified Road.

“Traffic Engineer” means the person appointed by the Design-Builder in accordance with Section 7.3 [Traffic Engineer] of Part 3 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(c) of Schedule 7 [Quality Management].

“Traffic Management Criteria” has the meaning given in Section 4.8(e) of Schedule 7 [Quality Management].

“Traffic Management Incentive Payment” has the meaning given in Section 2.8(a) of Schedule 10 [Payment].

“Traffic Management Payments” means the payments to be made by the Design-Builder to the Province pursuant to Section 1.2 [Calculation of Traffic Management Payments] of Schedule 9.

“Traffic Management Plan” means the plan prepared by the Design-Builder in accordance with Article 6 [Traffic Management Plan] of Part 3 of Schedule 4.

“Traffic Manager” means the person appointed by the Design-Builder in accordance with Section 7.2 [Traffic Manager] of Part 3 of Schedule 4.

“Traffic Operations Requirements” has the meaning given in Section 1.5.1(a)(ii) of Part 1 [Design and Construction Specifications] of Schedule 4.

“Transit Mobility Hub” has the meaning given in Section 1.4.8(a) of Part 1 [Design and Construction Requirements] of Schedule 4.

- 55 -

“**TransLink**” means South Coast British Columbia Transportation Authority.

“**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 Bus-on-Shoulder lanes, 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) of this Agreement.

“**Truck Parking Facility**” has the meaning given in Section 15.4.1 [Truck Parking Facility] of Part 1 of Schedule 4.

“**Tunnels**” means any buried structure intended to convey pedestrian, wild life, farm animals or vehicular traffic, with a minimum dimension of 3 meters and including snowsheds with respect to inspection and performance requirements.

“**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 and the Project Infrastructure (and, for greater certainty, not visible on or above ground), the existence of which:

- (a) was either not disclosed, or is discovered more than two metres 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,

and excluding:

- (c) any Utilities of which any component (including any associated lines, wires, poles, catch basins, or related or ancillary infrastructure) was visible as at the Financial Submittal Date;
- (d) any Utilities that have been abandoned; and
- (e) any Utilities the size, composition, materials or other features of which are different from that shown or described in the Disclosed Data or other information available to the Design-

- 56 -

Builder as at the Financial Submittal Date, provided that such Utilities are discovered to be two metres horizontally or less from the locations provided in the Disclosed Data.

“**Use As Is**” means that no action to eliminate a detected Nonconformity is needed.

“**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, but excluding the EV Charging Infrastructure.

“**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.

“**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 3.1 [Notice of Value Engineering Proposal] of Schedule 11.

“**VanIAC**” means the Vancouver International Arbitration Centre.

“**VanIAC Rules**” means VanIAC’s applicable Arbitration rules.

“**Warranty Costs**” has the meaning given in Section 2.5(a)(vi) of Schedule 11 [Changes].

“**Warranty Holdback**” has the meaning given in Section 4.2(a) of Schedule 10 [Payment].

“**Website**” has the meaning given in Section 3.1.2(a) of Schedule 15 [Communications and Engagement].

- 57 -

“Wearing Surface” means the surface portion of a Bridge Deck directly in contact with the wheels of vehicles.

“Winter Maintenance Contractor” has the meaning given in Section 7.2(a) of Schedule 3 [Design and Construction General Requirements].

“Workers’ Compensation Board” means the Board defined in and continued under the WCA.

“Work Method Statements” 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 will be performed, inspected or tested and will 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 3.3 [Works Schedule] of Schedule 3, and includes:

- (a) the Critical Path Schedule;
- (b) the Narrative Report; and
- (c) a detailed time-distance schedule,

all as set out in Appendix 3D [Works Schedule Requirements] to Schedule 3.

“Zone of Intrusion” means the area above and beyond the face of a rigid barrier system in which components of commercial vehicles, pickup trucks or sport utility vehicles may enter during a crash with the system.

1.2 Acronym List

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

“AADT” means annual average daily traffic.

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

“ABC” means asphalt base course.

“ACP” means asphalt concrete pavement.

“ALC” means Agricultural Land Commission.

“ALR” means Agricultural Land Reserve.

“ANSI” means the American National Standards Institute.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION**

***Commercial in Confidence
Execution***

- 58 -

“**AQP**” means Appropriately Qualified Professional.

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

“**ATMS**” means advanced traffic management system.

“**BCATG**” means the BC Active Transportation Guide.

“**BMIS**” means Bridge Management Information System.

“**BMP**” means Best Management Practices.

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

“**CCTV**” means closed-circuit television.

“**CEMP**” means Construction Environmental Management Plan.

“**CHRIS**” means Corporate Highway & Resource Information System.

“**CMB**” means Concrete Median Barrier.

“**CMS**” means Changeable Message Sign.

“**CPTED**” means Crime Prevention Through Environmental Design.

“**CRB**” means Concrete Roadside Barrier.

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

“**CSPI**” means Corrugated Steel Pipe Institute.

“**CSR**” means Contaminated Sites Regulation.

“**CVSE**” means Commercial Vehicle Safety and Enforcement.

“**DDI**” means Diverging Diamond Interchange.

“**DFO**” means the former Department of Fisheries and Oceans of the Federal Government, subsequently renamed Fisheries and Oceans Canada, but still commonly referenced and recognized by its former acronym.

“**DMS**” means Dynamic Message Sign.

“**DOC**” means diesel oxidation catalyst.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION**

***Commercial in Confidence
Execution***

- 59 -

“**DSD**” means Decision Sight Distance.

“**DVT**” means Design Validation Testing.

“**EGBC**” means the Association of Professional Engineers and Geoscientists of British Columbia, also known as Engineers and Geoscientists BC.

“**EMA**” means the *Environmental Management Act* (British Columbia).

“**EMP**” means Environmental Management Plan.

“**EPS**” means Expanded Polystyrene.

“**ERP**” means Environmental Response Plan.

“**ESAL**” means equivalent single axle load.

“**ESG**” means environmental, social and governance.

“**EV**” means Electric Vehicle.

“**FAT**” means Factory Acceptance Testing.

“**FHWA**” means the Federal Highways Administration of the U.S. Department of Transportation.

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

“**FWD**” means falling weight deflectometer.

“**GBA**” means gender-based analysis.

“**GPS**” means global positioning system.

“**HCM**” means Highway Capacity Manual.

“**HOV**” means High Occupancy Vehicle.

“**IES**” means Illuminating Engineering Society.

“**IFC**” means issued for construction.

“**IP**” means Intellectual Property.

“**IR**” means infra-red.

“**IRI**” means International Roughness Index.

“**IT**” means information technology.

“**ITE**” means Institute of Transportation Engineers.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION**

***Commercial in Confidence
Execution***

- 60 -

“**ITP**” means Inspection and Test Plan.

“**ITS**” means intelligent transportation system.

“**LED**” means light emitting diode.

“**MMA**” means methyl methacrylate.

“**MMP**” means Mitigation and Monitoring Plan.

“**MOECCS**” means the Ministry of Environment and Climate Change Strategy of the Province.

“**MSE**” means Mechanically Stabilized Earth.

“**MUP**” means Multi-Use Path.

“**NCE**” means Non-Compliance Event.

“**NEMA**” means National Electric Manufacturer’s Association.

“**OEM**” means original equipment manufacturer.

“**OEMP**” means Operational Environmental Management Plan.

“**OGFC**” means Open Graded Friction Course.

“**OHS**” means occupational health and safety.

“**PDA**” means pile driving analyzer.

“**PDI**” means Pavement Surface Distress Index.

“**PDMS**” means Portable Dynamic Message System.

“**PID**” means land parcel identification number.

“**PM**” means particulate matter.

“**PTFE**” means Polytetrafluoroethylene.

“**PVC**” means polyvinyl chloride.

“**PWS**” means Pacific water shrew.

“**QA**” means quality assurance.

“**QC**” means quality control.

“**QMS**” means Quality Management System.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION**

***Commercial in Confidence
Execution***

- 61 -

“**RFD**” means Rural Freeway Divided.

“**RI/RO**” means right in right out.

“**ROW**” means right of way.

“**RPMS**” means Roadway Pavement Management System.

“**RPVC**” means rigid polyvinyl chloride.

“**RSA**” means Road Safety Audit.

“**RWIS**” means the Road Weather Information System that provides real time reporting of pavement and weather information.

“**SCR**” means Site Condition Rating.

“**SGSB**” means Select Granular Sub-base, as defined in DBSS.

“**SRB**” means Speed Reader Boards.

“**SRW**” means statutory right of way.

“**SSD**” means Stopping Sight Distance.

“**TAC**” means Transportation Association of Canada.

“**TAF**” means Technical Appraisal Form.

“**TCP**” means Traffic Control Plan.

“**TLCA**” means temporary license to construct access.

“**TMP**” means Traffic Management Plan.

“**ToL**” means Township of Langley.

“**UAD**” means Urban Arterial Divided.

“**UPS**” means uninterruptible power supply.

“**USB**” means universal serial bus.

“**VHT**” means vehicle hours travelled.

“**WCA**” means the *Workers Compensation Act* (British Columbia).

“**WGB**” means Well Graded Base, as defined in DBSS.

“**WMS**” means Work Method Statement.

- 62 -

“ZOI” means Zone of Intrusion.

1.3 Reference Documents

- (a) The Reference Documents set out in paragraph (a) of the definition thereof in Section 1.1 [Definitions] of this Schedule are referenced in this Agreement by the “Short Form” identified on Appendix 1C [Reference Documents] to this Schedule.
- (b) Subject to Section 1.3(c) of this Schedule, if a provision of this Agreement refers to a particular edition of a Reference Document or a Reference Document with a specified date, the specified edition of the Reference Document or the Reference Document with the specified date (as applicable) will apply. If a provision of this Agreement refers to a Reference Document without specifying a particular edition or date, the latest edition of that Reference Document as at the Financial Submittal Date will apply.
- (c) If a Reference Document is amended, supplemented or replaced after the Financial Submittal Date, then the Design-Builder will give written notice to the Province of such change and, if after receiving such notice, the Province decides:
 - (i) that it requires compliance with the amended, supplemented or replaced Reference Document (as applicable) rather than the edition specified in this Agreement at the Financial Submittal Date, then, to the extent such compliance impacts the Project Work and would not have otherwise been taken into account by compliance with Good Industry Practice, the Province will 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 Value Engineering Proposals] of this Agreement will apply accordingly; or
 - (ii) that it does not require compliance with the amended, supplemented or replaced Reference Document (as applicable), the Design-Builder will continue to comply with the edition applicable at the Financial Submittal Date.

PART 2 INTERPRETATION

This Agreement will be interpreted according to the following provisions, except to the extent 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 (whether or not with specific reference to “this Agreement”) 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 or the context otherwise requires.

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

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.

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.

- 64 -

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, including “they”, “them” and “their”, which may import the plural, include the singular and vice versa.

2.11 Gender

Words which may import gender are interpreted as gender neutral.

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 will 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.

2.14 Persons for Whom the 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; the Design-Builder’s Contracting Affiliates; 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.

2.15 Persons for Whom the 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, 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;

- 65 -

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] of this Agreement, 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
- (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 the 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 the 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.

- 66 -

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” will 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 2.25, 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, will 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

- 67 -

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 will not require the Province or BCTFA to:
- (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 will 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

- 68 -

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 Principles for Resolving Conflicts within Documents

In the case of any conflict, ambiguity or inconsistency between or among any of the provisions within this Agreement (excluding the Schedules) or any of the Schedules hereto, including any conflict, ambiguity or inconsistency between or among any of the provisions within Schedule 4 [Design and Construction Technical Requirements] or any of the Project 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, and to the extent such conflict, ambiguity or inconsistency is not resolved in accordance with an order of priority specified in this Agreement, the Design-Builder will promptly provide the Province's Representative with written notice including full particulars of the conflict, ambiguity or inconsistency and the conflict, ambiguity or inconsistency will be resolved in accordance with a written direction given by the Province to the Design-Builder, which will 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 will prevail unless in the discretion of the Province and by written direction given by the Province to the Design-Builder (which direction will 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 will prevail; and
- (d) in the case of any Dispute regarding any other conflict, ambiguity or inconsistency, the Dispute will be resolved in accordance with the Dispute Resolution Procedure applying accepted rules of contract interpretation.

2.31 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 2.30 [Principles for Resolving Conflicts within Documents] of this Schedule or as a result of giving effect to any resolution of any such conflict, ambiguity

- 69 -

or inconsistency pursuant to Section 2.30 [Principles for Resolving Conflicts within Documents] of this Schedule (whether by the terms of Section 2.30 [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).

2.32 Joint and Several

The obligations and liabilities of the Design-Builder under this Agreement will be the obligations and liabilities of the Design-Builder and each of the Partners, jointly and severally with each other.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION

Commercial in Confidence
Execution

APPENDIX 1A
FACTUAL GEOTECHNICAL DATA

Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
0940	Thurber	Fraser Valley Highway 1 Corridor Improvement Project – Highway 1 264th Street to Whatcom Road – Segment 1 264th Street Interchange – Geotechnical Factual Data Report (September 2023)	<p>Report Includes: Piezometers Summary Table, Except for:</p> <ul style="list-style-type: none"> Column entitled “Notes”. <p>Figures – None.</p> <p>Attachment - Plan and Profile, Except for the following on “Plan and Profile 1” to “Plan and Profile 7”:</p> <ul style="list-style-type: none"> Plotted soil classification plotted on “Profiles 1” to “Profiles 6”. <p>Attachment: Interpreted Groundwater Elevation and Depth.</p> <p>Attachment: Summary Tables (Summary of Completed Investigation Locations; Summary of Completed Soil Testing; Durability Testing of Soil/Water Samples).</p> <p>Appendix A: Function and Detailed Design Test Hole Logs, Except for:</p> <ul style="list-style-type: none"> Columns entitled: “Soil Description”, “Commenting Testing”, “classification”, “soil Symbol”. <p>Appendix A: Lab Testing Results</p> <ul style="list-style-type: none"> Plasticity Charts, Except for column entitled “USCS Classification”. One-Dimensional Consolidation Test Results, Except for: <ul style="list-style-type: none"> All rows and columns or information “Soil Description”, “Preconsol Pressure”, “Spec. Quality (SQD)”, “Logarithm of Time Method”, “Square Root of Time Method”, “Compression Index (Cc or Cr)”, and “Secondary Compression Index (Ca)”. CPT Test Report: ConTec Presentation of Site Investigation Results, Except for: <ul style="list-style-type: none"> Column entitled “Assumed Phreatic Surface (m)” in “Cone Penetration Test Summary” table, under “Cone Penetration Test Summary and Standard Cone Penetration Test Plots”. All soil descriptions in all plots under “Cone Penetration Test Summary and Standard Cone Penetration Test Plots” and “Standard Cone Penetration Test Plots with Expanded Range, under “Soil Behaviour Type (SBT Qtn) Plots”. Entire Section entitled “Advanced Cone Penetration Plots with Ic, Su(Nkt), and N1(60)Ic”. Entire Section entitled: “Soil Behaviour Type (SBT) Scatter Plots”. All columns entitled to the ride side of the column “Estimated Equilibrium Pore Pressure Ueq (m)”. Section for Standard Penetration Test Energy, Except for: <ul style="list-style-type: none"> Columns to the right side of “Average Max Energy (KN-m)”.

SCHEDULE 1: DEFINITIONS AND INTERPRETATION

Appendix 1A: Factual Geotechnical Data

- 2 -

Data Room Category Number	Author	Report Title and Date	Factual Geotechnical Data
			<ul style="list-style-type: none"> • Cone Penetration Test Report, “Soil Behavior Type SBTn” Plot with soil description. • ON TRACK Cone Penetration Test Report (2023), <u>Except for:</u> <ul style="list-style-type: none"> • “Soil Behavior Type SBTn” Plot with soil description • Preliminary Design Test Hole Logs, <u>Except for:</u> <ul style="list-style-type: none"> • Columns entitled: “Soil Description”, “Comments Testing”, “Classification”, “Soil Symbol”. • 2021 Thurber Test Hole Logs, <u>Except for:</u> <ul style="list-style-type: none"> • Columns entitled: “Soil Description”, “Comments Testing”, “Classification”, “Soil Symbol”. <p>Appendix B: Historical Investigation Results</p> <ul style="list-style-type: none"> • All “Existing Investigation Location Plan” drawings • 2020 Thurber Test Pits, <u>Except for</u> columns entitled: “Soil Description”, “Classification”, “Soil Symbol”. • 2019 Thurber Test Pit Logs, <u>Except for</u> columns entitled: “Soil Description”, “Classification”, “Soil Symbol”. • 2012 Thurber CPT Logs, <u>Except for</u> column “Soil Behaviour Type”. • 2012 Thurber Test Hole Logs, <u>Except for</u> “Soil Behavior Type Robertson et al. 1986” Plot with soil description. • 2012 Thurber Test Pit Logs, <u>Except for</u> columns entitled: “Classification” and “Description”. • 2011 BC MoTI Test Hole Logs, <u>Except for</u> columns entitled: “Classification” and “Description”.
0940	Schwartz Soil Tech	Two DHS Surveys TC – FV Segment 1 Abbotsford - Langley, BC (June 12, 2021)	<p>Down-hole shear wave testing survey at following locations (Vs profile versus depth and data table):</p> <ul style="list-style-type: none"> • Appendix A – DHS21-01 at TH21-01 • Appendix B – DHS21-08 at TH21-08

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION

Commercial in Confidence
Execution

APPENDIX 1B
BACKGROUND IP AND THIRD PARTY IP

Nil

APPENDIX 1C
REFERENCE DOCUMENTS

Part 1: General Reference Documents

Short Form	Document Name
AASHTO Culvert and Storm Drain System Inspection Guide	AASHTO <i>Culvert and Storm Drain System Inspection Guide</i> , First Edition, 2020.
AASHTO Guide Specifications for LRFD Seismic Bridge Design	AASHTO <i>Guide Specifications for LRFD Seismic Bridge Design</i> , 3 rd Edition, 2023.
AASHTO LRFD Bridge Construction Specifications	AASHTO <i>LRFD Bridge Construction Specifications</i> , 4 th Edition, 2017
AASHTO LRFD Bridge Design Specifications	AASHTO <i>LRFD Bridge Design Specifications</i> , 9 th Edition, 2020.
AASHTO MASH	AASHTO <i>Manual for Assessing Safety Hardware</i> , Second Edition, 2016.
AASHTO Roadside Design Guide	AASHTO <i>Roadside Design Guide</i> , 2011.
Aggregate Operators Best Management Practices Handbook for BC	BC Ministry of Energy and Mines <i>Aggregate Operators Best Management Practices Handbook for British Columbia</i> , April 2002.
Alberta Roadside Design Guide	Alberta Infrastructure and Transportation <i>Roadside Design Guide</i> , 2019.
ANSI C136.31	American National Standards Institute, Inc. <i>American National Standard for Roadway and Area Lighting Equipment-Luminaire Vibration</i> , 2010.
ANSI/IES RP-8-22	American National Standards Institute, Inc. <i>Recommended Practice: Lighting Roadway and Parking Facilities</i> , 2022.
Asphalt Institute MS-17	Asphalt Institute <i>Asphalt Overlays and Pavement Rehabilitation</i> 1st Edition No.17 (MS 17), 1969.
ASTM A252	ASTM A252-19, <i>Standard Specification for Welded and Seamless Steel Pipe Piles</i> , 2019.
ASTM D1143	ASTM D1143, <i>Standard Test Methods for Deep Foundation Elements Under Static Axial Compressive Load</i> , 2020.
ASTM D3689	ASTM D3689, <i>Standard Test Methods for Deep Foundation Elements Under Static Axial Tensile Load</i> , 2022.
ASTM D4694	ASTM D4694-15, <i>Standard Test Method for Deflections with a Falling-Weight-Type Impulse Load Device</i> , September 2015.
ASTM D4945	ASTM D4945-17, <i>Standard Test Method for High-Strain Dynamic Testing of Deep Foundations</i> , 2017.
ASTM D6359	ASTM D6359, <i>Standard Specification for Minimum Retro-reflectance of Newly Applied Pavement Marking Using Portable Hand-Operated Instruments</i> , 1999.
ASTM D7949	ASTM D7949, <i>Standard Test Methods for Thermal Integrity Profiling of Concrete Deep Foundations</i> , 2014.
BC Active Transportation Design Guide	BC Ministry of Transportation and Infrastructure <i>British Columbia Active Transportation Design Guide</i> , 2019 Edition.
BC Building Code	<i>BC Building Code</i> , 2018.
BC Stormwater Planning Guidebook	BC Ministry of Water, Land and Air Protection <i>Stormwater Planning: A Guidebook for British Columbia</i> , May 2002.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION
Appendix 1C: Reference Documents

Commercial in Confidence
Execution

- 2 -

Short Form	Document Name
BC Supplement to CSA S6:19	BC Ministry of Transportation and Infrastructure <i>Bridge Standards and Procedures Manual – Volume 1 – Supplement to CHBDC S6:19</i> , July 2022.
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.
Bicycle Traffic Control Guidelines	Transportation Association of Canada <i>Bikeway Traffic Control Guidelines for Canada</i> , 2012.
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.
Caltrans Seismic Design Criteria	State of California Department of Transportation <i>Caltrans Seismic Design Criteria</i> , Version 2.0, April 2019.
Catalogue of Standard Traffic Signs	BC Ministry of Transportation <i>Catalogue of Standard Traffic Signs</i> .
CSA A283	Canadian Standards Association <i>CSA A283 Qualification Code for Concrete Testing Laboratories</i> , 2019.
CSA S6:19	Canadian Standards Association <i>CSA S6:19 Canadian Highway Bridge Design Code</i> , 2019.
CSA W47.1	Canadian Standards Association <i>CSA W47.1 Certification of Companies for Fusion Welding of Steel</i> , 2009, Reaffirmed in 2014.
CSA W59	Canadian Standards Association <i>CSA W59 Welded Steel Construction (Metal Arc Welding)</i> , 2018.
CSA W178.1	Canadian Standards Association <i>CSA W178.1 Certification of Welding Inspection Organizations</i> , 2018.
CSA W178.2	Canadian Standards Association <i>CSA W178.2 Certification of Welding Inspectors</i> , 2018.
CSPI Handbook of Steel Drainage and Highway Construction Products	Corrugated Steel Pipe Institute <i>Handbook of Steel Drainage and Highway Construction Products</i> , Canadian Edition, November 2007.
DBSS	BC Ministry of Transportation and Infrastructure <i>2018 Design-Build Standard Specifications for Highway Construction</i> , Adopted November 1, 2018 (including Errata #3).
Earthquake Scenario Spectra and Acceleration Time Histories	<i>Earthquake Scenario Spectra and Acceleration Time Histories for 1/475, 1/975, and 1/2475 Annual Exceedance Probabilities for Trans Canada – Fraser Valley Project, Abbotsford, British Columbia, Canada. Reference No. 21498748-001-TM-Rev0.</i>
Econolite Cobalt Controller Unit Programming Guide	BC Ministry of Transportation and Infrastructure <i>Econolite Cobalt Controller Unit Programming Guide</i> , July 2016.
EGBC Authentication of Documents Guidelines	EGBC <i>Quality Management Guides - Guide to the Standard for the Authentication of Documents</i> , Version 4.0, June 15, 2023.
EGBC Bylaws	<i>EGBC Bylaws of the Association</i> , Amended October 2018.
EGBC Climate Change – Resilient Design	<i>EGBC Professional Practice Guidelines, Developing Climate Change – Resilient Designs for Highway Infrastructure in British Columbia</i> Version 2.0, July 9, 2020.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION
Appendix 1C: Reference Documents

Commercial in Confidence
Execution

- 3 -

Short Form	Document Name
EGBC Documented Checks Guidelines	EGBC <i>Quality Management Guides – Guide to the Standard for Documented Independent Review of High-Risk Professional Activities or Work</i> , Version 2.0, June 15, 2023.
EGBC Independent Review Guidelines	EGBC <i>Quality Management Guides – Guide to the Standard for Documented Independent Review of Structural Designs</i> , Version 3.0, June 15, 2023.
EGBC Landslide Guidelines	EGBC <i>Professional Practice Guidelines – Landslide Assessments in British Columbia</i> , Version 4.1, March 1, 2023.
EGBC Onsite Sewerage Systems Guidelines	EGBC <i>Professional Practice Guidelines – Onsite Sewerage Systems</i> , Version 1.3, May 24, 2018.
EGBC Seismic Design Guidelines	EGBC <i>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</i> (Draft), 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.
ENV Technical Guidance 10	BC Ministry of Environment and Climate Change Strategy <i>Technical Guidance No. 10 Guidance for a Stage 1 Preliminary Site Investigation</i> , August 2016.
ENV Technical Guidance 11	BC Ministry of Environment and Climate Change Strategy <i>Technical Guidance No. 11 Guidance for a Stage 2 Preliminary Site Investigation and Detailed Site Investigation</i> , August 2016.
EV Fast Charge Guidelines	BC Hydro <i>EV Fast Charging Design & Operational Guidelines</i> , March 2021.
FHWA Circular No. 7	U.S. Department of Transportation Federal Highway Administration <i>Geotechnical Engineering Circular No. 7: Soil Nail Walls - Reference Manual</i> , 7 th Edition 2015.
FHWA 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</i> , 2010.
FHWA Systems Engineering Process for Intelligent Transportation Systems	U.S. Department of Transportation Federal Highway Administration <i>Systems Engineering Process for Intelligent Transportation Systems</i> , Version 3.0, November 2009.
Fibre Reference Guidelines	BC Ministry of Transportation and Infrastructure <i>Fibre Reference Guidelines</i> , First Edition January 2019.
Health, Safety and Reclamation Code	BC Ministry of Energy, Mines and Low Carbon Innovation <i>Health, Safety and Reclamation Code for Mines in British Columbia</i> , Revised November 2022.
Highway Capacity Manual	Transportation Research Board <i>Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis</i> , 2016.
ISO/IEC 17025	International Organization for Standardization <i>ISO/IEC 17025 Testing and Calibration Laboratories</i> , 2017.
ITE Temporary Traffic Control Guidelines	Institute of Transportation Engineers <i>Guidelines for In-Service Road Safety Operational Review of Temporary Traffic Control</i> , 2004.
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.
Landscape Policy and Design Standards	BC Ministry of Transportation <i>Landscape Policy and Design Standards</i> , 1991.
Manitoba Standard Guardrail Drawings	Manitoba Transportation and Infrastructure <i>Standard Guardrail Drawings</i> .

SCHEDULE 1: DEFINITIONS AND INTERPRETATION

Appendix 1C: Reference Documents

- 4 -

Short Form	Document Name
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 Electrical Maintenance Specifications	BC Ministry of Transportation and Infrastructure, <i>Electrical Maintenance Service Agreement – Specifications and Local Area Specifications, Lower Mainland East and Lower Mainland West</i> , 2021.
Ministry Jurisdictional Atlas	BC Ministry of Transportation and Infrastructure <i>Lower Mainland – Howe Sound District Jurisdictional Atlas, City of Abbotsford and the Township of Langley</i> .
Ministry Maintenance Specifications	BC Ministry of Transportation and Infrastructure <i>Highway Maintenance Agreement – Specifications and Local Area Specifications, Service Area 6 and Service Area 7</i> , 2019.
Ministry Record Management Protocol	BC Ministry of Transportation and Infrastructure <i>Project Records Management</i> .
MMCD	Master Municipal Construction Documents Association <i>MMCD Platinum Volume II – General Condition, Specifications, and Standard Detail Drawings</i> , 2019.
National Building Code	Canadian Commission on Building and Fire Codes <i>National Building Code of Canada 2020</i> .
Nursery Stock Standards	Canadian Nursery Landscape Association <i>Canadian Standards for Nursery Stock</i> , 9th Edition, February 28, 2017.
Pedestrian Crossing Control Manual	BC Ministry of Transportation <i>Pedestrian Crossing Control Manual for British Columbia</i> , 1994.
Program Document Management Plan	BC Ministry of Transportation and Infrastructure <i>Fraser Valley Highway 1 Corridor Improvements Program Document Management Plan</i> , October 8, 2023.
PTI DC35.1-14	Post-Tensioning Institute <i>PTI DC35.1-14 Recommendations for Prestressed Rock and Soil Anchors</i> , November 2014.
Recognized Products List	BC Ministry of Transportation <i>Recognized Products List</i> , March 10, 2022 Edition.
Road Safety Audit Guidelines	BC Ministry of Transportation <i>Road Safety Audit Guidelines</i> , April 1, 2004.
Sewerage System Standard Practice Manual	Health Protection Branch, BC Ministry of Health <i>Sewerage System Standard Practice Manual</i> , Version 3, September 2014.
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.
Standard Specifications for Highway Construction	BC Ministry of Transportation and Infrastructure <i>2020 Standard Specifications for Highway Construction</i> , November 1, 2020.
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 18, 2018.
TAC Bikeway Traffic Control Guidelines	Transportation Association of Canada <i>Bikeway Traffic Control Guidelines for Canada</i> , 2012.
TAC Geometric Design Guide	Transportation Association of Canada <i>Geometric Design Guide for Canadian Roads</i> , 2019.

SCHEDULE 1: DEFINITIONS AND INTERPRETATION

Appendix 1C: Reference Documents

- 5 -

Short Form	Document Name
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.
Technical Bulletin TE-2002-07	BC Ministry of Transportation <i>Interim Bicycle Guidelines for Traffic Signals Technical Bulletin</i> , Technical Bulletin TE-2002-07.
Technical Bulletin TE-2005-05	BC Ministry of Transportation <i>Lane Use Signs and Pavement Markings at Multi-Lane Roundabouts</i> , Technical Bulletin TE-2005-05.
Technical Bulletin TE-2020-01	BC Ministry of Transportation and Infrastructure <i>Interim ITS Field Network Switches Procurement</i> , November 23, 2020.
Technical Bulletin TE-2021-01	BC Ministry of Transportation and Infrastructure <i>Onboarding ITS Projects to the Ministry Fibre Network</i> , April 12, 2021.
Technical Circular T-01/15	BC Ministry of Transportation and Infrastructure <i>Pavement Structure Design Guidelines</i> , January 26, 2015.
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-04/17	BC Ministry of Transportation and Infrastructure <i>Geotechnical Design Criteria</i> , March 22, 2017.
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-04/21	BC Ministry of Transportation and Infrastructure <i>Notification of WorkSafeBC's amendments to Occupational Health and Safety Regulation (OHSR) Part 18 Traffic Control</i> , November 24, 2021.
Technical Circular T-07/09	BC Ministry of Transportation <i>Record Drawings</i> , Amended April 21, 2010.
Traffic Management Guidelines for Work on Roadways	BC Ministry of Transportation and Infrastructure <i>Traffic Management Guidelines for Work on Roadways</i> , 2011.
Traffic Management Manual	BC Ministry of Transportation <i>Traffic Management Manual for Work on Roadways</i> , 2015 Office Edition, Interim.
TransLink Bus Infrastructure Design Guidelines	TransLink <i>Bus Infrastructure Design Guidelines</i> , September 2018.
TS2 Traffic Controller Assembly Manual	BC Ministry of Transportation and Infrastructure, <i>TS2 Traffic Controller Assembly Manual</i> , July 2016.
Utility Policy Manual	BC Ministry of Transportation <i>Utility Policy Manual</i> , 2019.

Part 2: Environmental Reference Documents

Short Form	Document Name
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 BMPs	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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION
Appendix 1C: Reference Documents

Commercial in Confidence
Execution

- 6 -

Short Form	Document Name
Archaeological Chance Find Procedure	Stantec, <i>Chance Find Protocol for Archaeological Sites, 264th St – Fraser Valley Highway 1 Corridor Improvement Program</i> , October 2023.
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.
BC Ambient Air Quality Objectives	Province of British Columbia <i>British Columbia Ambient Air Quality Objectives</i> Updated May 9, 2018.
BC Approved Water Quality Guidelines	BC Ministry of Environment and Climate Change Strategy <i>British Columbia Approved Water Quality Guidelines</i> , August 2023 https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/water-quality-guidelines/approved-water-quality-guidelines
BC Field Sampling Manual	Province of British Columbia <i>Field Sampling Manual</i> , 2013.
BC Guidelines for Designing and Implementing a Water Quality Monitoring Program	Province of British Columbia <i>Guidelines for Designing and Implementing a Water Quality Monitoring Program in British Columbia</i> , 1997
BC Water Quality Guidelines	BC Ministry of Environment and Climate Change Strategy <i>British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture</i> , 2021.
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.
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 Water Quality Guidelines for the Protection of Aquatic Life	Canadian Council of Ministers of the Environment <i>Canadian Water Quality Guidelines for the Protection of Aquatic Life Protocol</i> ; 2017 Update.
CCME Water Quality Guidelines	Canadian Council of Ministers of the Environment <i>Canadian Water Quality Guidelines for the Protection of Aquatic Life</i> , 2019.
CMT Handbook	BC Ministry of Small Business, Tourism and Culture, Archaeology Branch <i>Culturally Modified Trees of British Columbia - A Handbook for the Identification and Recording of Culturally Modified Trees</i> , March 2001.
Culverts and Fish Passage	BC Ministry of Transportation and Infrastructure <i>Culverts and Fish Passage</i> , May 2013.
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.
DFO Fisheries Protection Policy Statement	Department of Fisheries and Oceans, Canada <i>Fisheries Protection Policy Statement</i> , October 2013.
DFO Freshwater Intake End-of-Pipe Fish Screen Guideline	Department of Fisheries and Oceans, Canada <i>Freshwater Intake End-of-Pipe Fish Screen Guideline</i> , March 1995.
DFO Measures to Avoid Causing Harm to Fish and Fish Habitat	Department of Fisheries and Oceans, Canada <i>Measures to Avoid Causing Harm to Fish and Fish Habitat</i> , November 2013. (modified: Dec.14,2018)
Environmental Best Practices for Highway Maintenance Activities	BC Ministry of Transportation and Infrastructure <i>Environmental Best Practices for Highway Maintenance Activities</i> , January 2018.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 1: DEFINITIONS AND INTERPRETATION
Appendix 1C: Reference Documents

Commercial in Confidence
Execution

- 7 -

Short Form	Document Name
Environmental Impact Assessment – Highway 1 Tender 1: 264 Street to Lefevre Road	McElhanney and Associated Environmental Consultants Inc. <i>Environmental Impact Assessment – Highway 1 Tender 1: 264 Street to Lefevre Road</i> , October 2023.
Erosion and Sediment Control Manual	BC Ministry of Transportation and Infrastructure <i>Erosion and Sediment Control Manual</i> , Version 1.0, November 2022.
Finalized Habitat Offsetting Memo	Hatch Ltd. <i>Finalized Habitat Offsetting Memo</i> , March 2024.
Fish-Stream Crossing Guidebook	BC Ministry of Forests, Lands and Natural Resource Operations and Ministry of Environment <i>Fish-Stream Crossing Guidebook</i> , September 2012.
Instream Works – Standards and Best Practices	BC Ministry of Water, Land and Air <i>Standards and Best Practices for Instream Works</i> , March 2004.
Instream Work Windows	BC Ministry of Environment, Lower Mainland Region <i>Guidelines for Reduced Risk Instream Work Windows</i> , March 2006.
Land Development Guidelines	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.
Metro Vancouver Ambient Air Quality Objectives	Metro Vancouver <i>Metro Vancouver Ambient Air Quality Objectives</i> , updated June 2018.
Metro Vancouver Stormwater Design Guidelines	Metro Vancouver <i>Stormwater Source Control Design Guidelines</i> 2012.
Noise Policy	BC Ministry of Transportation and Infrastructure <i>Policy for Assessing and Mitigating Noise Impacts from New and Upgraded Numbered Highways</i> , Revised October 27, 2016.
Pile Driving BMPs	Department of Fisheries and Oceans Canada and BC Marine and Pile Driving Contractors Association <i>Best Management Practices for Pile Driving</i> , March 2003.
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.
Raptor Conservation BMPs	Ministry of Forests, Lands and Natural Resource Operations and Ministry of Environment <i>Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia</i> , 2013.
Riparian Revegetation Guidelines	Ministry of Environment, Lands and Parks <i>Planting Criteria and Recommended Native Tree and Shrub Species for Restoration and Enhancement of Fish and Wildlife Habitat</i> , 1998.
Technical Circular T-03/20	BC Ministry of Transportation and Infrastructure <i>Identification and Characterization of Potentially Contaminated Soil</i> , August 4, 2020.
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.
Tree Replacement Criteria	Ministry of Environment, Lands and Parks, Lower Mainland Region, <i>Tree Replacement Criteria</i> , 1996.
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.

**SCHEDULE 2
REVIEW PROCEDURE AND CONSENT PROCEDURE**

PART 1 REVIEW PROCEDURE.....	1
1.1 Review Procedure.....	1
1.2 Early Commencement of Project Work.....	3
PART 2 CONSENT PROCEDURE	3
2.1 Consent Procedure	3
2.2 No Early Commencement of Project Work	5
PART 3 GENERAL PROVISIONS	5
3.1 Referral by Province’s Representative.....	5
3.2 Incomplete Information	6
3.3 Objection or Rejection in Province’s Discretion	6
3.4 General Grounds for Objection or Rejection	6
3.5 Optional Standards.....	7
3.6 Design-Builder Submittals.....	7

PART 1
REVIEW PROCEDURE

1.1 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, 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 3 [Design and Construction General Requirements], Schedule 4 [Design and Construction Technical Requirements], 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,will 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**") will 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 will also apply).
- (b) The Province's Representative will as soon as practicable and, subject to Section 3.2 [Incomplete Information] of this Schedule, in any event within 15 Business Days of actual receipt thereof (or such other period as may be specified in this Agreement for any particular case, and provided that, in the event receipt is after 12:00 p.m. Pacific time on any Business Day, such time period will 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 3.3 [Objection or Rejection in Province's Discretion] and 3.4 [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 will 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" will 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 1.1(i) of this Schedule) and once so amended the Design-Builder will proceed to implementation subject to Section 1.2 [Early Commencement of Project Work] of this Schedule unless the Design-Builder disputes that any such comment is on grounds permitted by Section 3.4 [General Grounds for Objection or Rejection] of this Schedule if applicable to such submission document, in which case the Design-Builder may refer the

SCHEDULE 2: REVIEW PROCEDURE AND CONSENT PROCEDURE

- 2 -

matter to the Dispute Resolution Procedure within 7 Business 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 will thereupon be revised and implemented by the Design-Builder pursuant to this Section 1.1. If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 7 Business Day period, the Design-Builder will be deemed to have accepted the comments of the Province's Representative and such submission document will thereupon be revised and implemented by the Design-Builder pursuant to this Section 1.1.

- (e) The documents or proposed course of action accompanying a submission document returned endorsed "comments" will be revised by the Design-Builder and re-submitted to the Province's Representative pursuant to this Section 1.1 within 15 Business 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 3.4 [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 7 Business 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 will thereupon be revised and re-submitted by the Design-Builder pursuant to this Section 1.1. If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 7 Business Day period, the Design-Builder will be deemed to have accepted the comments of the Province's Representative and such submission document will thereupon be revised and re-submitted by the Design-Builder pursuant to this Section 1.1.
- (f) If, subject to Section 3.2 [Incomplete Information] of this Schedule, the Province's Representative fails to return any such submission document (including any re-submitted submission document) duly endorsed within 15 Business Days of actual receipt thereof (or such other period as may be specified in this Agreement for any particular case), then it will be deemed to have returned such submission document to the Design-Builder marked "received".
- (g) A reference in this Agreement 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 1.1 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 1.1 and returned (or deemed returned) endorsed:
 - (i) "received" will be adhered to; or
 - (ii) "received with comments" will, once amended in accordance with the comments, be adhered to,

SCHEDULE 2: REVIEW PROCEDURE AND CONSENT PROCEDURE

- 3 -

except to the extent that there has been no objection to any subsequent change or amendment thereto submitted in accordance with this Section 1.1.

- (i) The Design-Builder will 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 1.2 [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 1.1, such decision will, subject only to Section 2.8(a)(iii) of this Agreement, be final.

1.2 Early Commencement of Project Work

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 1.1 [Review Procedure] of this Schedule, provided that:

- (a) in the case of any Construction, the requirements set out in Section 2.13 [No Construction] of Part 2 of Schedule 4 will have been satisfied in respect of such component of the Project Work; and
- (b) in all cases, any such action will be taken at the sole risk of the Design-Builder and the Design-Builder will in any event remain responsible for complying with the outcome of the Review Procedure, once it is completed in accordance with Section 1.1 [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.

**PART 2
CONSENT PROCEDURE**

2.1 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, 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, will 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**") will apply.
- (b) The Province's Representative will as soon as practicable and, subject to Section 3.2 [Incomplete Information] of this Schedule, in any event within 20 Business Days of actual receipt thereof (or such other period as may be specified in this Agreement for any particular case, and provided that, in the event receipt is after 12:00 p.m. Pacific time on any Business Day, such time period will be calculated as if receipt had been on the next

SCHEDULE 2: REVIEW PROCEDURE AND CONSENT PROCEDURE

- 4 -

following Business Day) return one copy of the relevant submission document endorsed “accepted” or (subject to Sections 3.3 [Objection or Rejection in Province’s Discretion] or 3.4 [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 will also provide with such returned document the grounds for such rejection.

- (c) The Province’s Representative will have the right at its option to impose conditions to the acceptance of a submission document pursuant to Section 2.1(b) of this Schedule, which conditions will be required to be reasonable having regard to the relevant circumstances save in the case of an acceptance to which Section 3.3 [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 2.1(c) of this Schedule. If the Design-Builder disputes the reasonableness of any such condition, the Design-Builder may refer the matter to the Dispute Resolution Procedure within 7 Business Days of the Design-Builder’s receipt of such acceptance with conditions but not thereafter, and will comply with such condition pending resolution of the Dispute in accordance with Section 17.1(b) of this Agreement. If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 7 Business Day period, the Design-Builder will be deemed to have accepted the conditions of the Province’s Representative.
- (e) Unless otherwise specified in this Agreement for any particular case, the documents or proposed course of action accompanying a submission document endorsed “rejected” will 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 2.1 within 10 Business 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 2.1(g) of this Schedule) is on grounds permitted by Section 3.4 [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 7 Business 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 will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] will apply; or
 - (ii) was on such permitted grounds, then such submission document will 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 2.1 and subsequently returned endorsed “accepted”.

SCHEDULE 2: REVIEW PROCEDURE AND CONSENT PROCEDURE

- 5 -

If the matter is not referred by the Design-Builder to the Dispute Resolution Procedure within such 7 Business Day period, the Design-Builder will be deemed to have accepted the rejection and such submission document will 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 2.1 and subsequently returned endorsed "accepted".

- (g) If, subject to Section 3.2 [Incomplete Information] of this Schedule, the Province's Representative fails to return any such submission document (including any re-submitted submission document) duly endorsed within 20 Business Days of actual receipt thereof (or such other period as may be specified in this Agreement for any particular case), then it will be deemed to have returned such submission document to the Design-Builder marked "rejected", and such rejection will be deemed to have been made by the Province's Representative in reliance upon grounds set out in Sections 3.3 [Objection or Rejection in Province's Discretion] and 3.4 [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 2.1 and returned (or deemed returned) endorsed "accepted", including any conditions imposed by the Province's Representative under Section 2.1(c) of this Schedule, will 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 2.1.
- (i) The Design-Builder will 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 2.1, such decision will, subject only to Section 2.8(a)(iii) of this Agreement, be final.

2.2 No Early Commencement of Project Work

In no circumstances will 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 2.1 [Consent Procedure] of this Schedule.

**PART 3
GENERAL PROVISIONS**

3.1 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

SCHEDULE 2: REVIEW PROCEDURE AND CONSENT PROCEDURE

- 6 -

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 will 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 designation, will 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.

3.2 Incomplete Information

- (a) The Province's Representative, acting reasonably and without unreasonable delay, may request in writing, and if so requested the Design-Builder will promptly and in any event no later than 15 Business 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 1.1 [Review Procedure] or Section 2.1 [Consent Procedure] of this Schedule and its implications, and will 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 and is appropriate.
- (b) If the Province's Representative makes a written request for further or other information, data or documents under this Section 3.2, then the time periods referred to in Section 1.1 [Review Procedure] or Section 2.1 [Consent Procedure] of this Schedule, as the case may be, will 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.

3.3 Objection or Rejection in Province's Discretion

Subject to Section 3.4 [General Grounds for Objection or Rejection] of this Schedule, or as may otherwise be expressly provided in this Agreement, the Province's Representative may make comments in relation to or reject, as applicable, any Review Procedure or Consent Procedure submission in its discretion.

3.4 General Grounds for Objection or Rejection

If any provision of this Agreement 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 3.2 [Incomplete 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;

SCHEDULE 2: REVIEW PROCEDURE AND CONSENT PROCEDURE

- 7 -

- (ii) give rise to a breach, or be in breach, of any Laws;
 - (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 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) if, in accordance with this Agreement, the Design-Builder is required to deliver a submission which is to be substantially in accordance with or consistent with any template or table of contents provided by the Province in the Data Room or otherwise, and the Design-Builder's submission is not substantially in accordance with or consistent with the document so provided;
- (d) any other grounds applicable to the submission that are expressly set out in this Agreement; or
- (e) any other reasonable grounds,

and the Province's Representative will 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.

3.5 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 will satisfy the Project Requirements in that regard, and the Province's Representative will 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 3.5(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 will request a Province Change under Section 7.1 [Province Changes and Value Engineering Proposals] of this Agreement.

3.6 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

SCHEDULE 2: REVIEW PROCEDURE AND CONSENT PROCEDURE

- 8 -

Project Requirements, or any other obligations of the Design-Builder under this Agreement, the Design-Builder will 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 will, 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.

**SCHEDULE 3
DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS**

PART 1 PROVINCE DESIGN	1
1.1 Province Design	1
PART 2 DESIGN AND CONSTRUCTION	1
2.1 Responsibility for Design and Construction	1
2.2 Design and Construction Standards	1
2.3 Design and Construction Key Individuals	1
2.4 Province Site Office	2
PART 3 PROJECT SCHEDULE	2
3.1 Diligent Performance of Project Work	2
3.2 Project Schedule	3
3.3 Works Schedule	3
3.4 Four Week Lookahead Schedule	4
3.5 180-Day Lookahead Schedule	4
3.6 Acceleration and Recovery of Project Schedule	5
3.7 Conflict between Project Schedule and Works Schedule	6
3.8 Works Schedule Review Meetings	6
3.9 Construction Management Plan	7
PART 4 INTERFACE REQUIREMENTS	8
4.1 Interface Obligations	8
4.2 Interfacing Works	9
4.3 Coordination Obligations with Interfacing Works	10
4.4 Amendment and Updating of Works Schedule	10
4.5 Interface Committee	10
PART 5 MUNICIPAL REQUIREMENTS	12
5.1 Scope	12
5.2 Hours of Work	12
5.3 Utilities Owned by the Municipality	13
5.4 Infrastructure Owned by the Municipality	13
5.5 Permits and Fees	13
5.6 Cooperation, Schedule and Work Priority	14
5.7 Surveys, Inspections, Plans Drawings and Other Information	14
5.8 Damage to Municipal Infrastructure	15
PART 6 UTILITIES	15
6.1 Design-Builder Responsibility	15
6.2 Protection of Utilities	15
6.3 Location	15
6.4 Utility Policy Manual	16
6.5 Utility Work	16
6.6 Design-Builder Responsible for Utility Costs	18
6.7 Province Assistance with Utility Matters	18
6.8 Utility Agreements	19
6.9 Rights under Utility Agreements	19
6.10 New and Amended Utility Agreements	19
6.11 Indemnity by Design-Builder	20
6.12 Highway 1 Protection from Utility Breaks	20

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- ii -

PART 7 OPERATION AND MAINTENANCE	20
7.1 Responsibility for Operation and Maintenance - General.....	20
7.2 Operation and Maintenance – Clarifications	20
7.3 Operation and Maintenance - Specifications	21
7.4 Operation and Maintenance – Electrical Specifications	25
7.5 Operation and Maintenance Manager.....	27
7.6 Operation and Maintenance Plan	28
PART 8 PROJECT WORK DEFECTS AND WARRANTIES	28
8.1 Representation, Warranty and Covenant as to Project Work.....	28
8.2 Project Work Defect Warranty	29
8.3 Risks of Defects	29
8.4 Correction of Project Work Defects	30
8.5 Reporting and Rectification of Latent Defects	32
8.6 Traffic Management and Public Safety with Defects	33
8.7 Terms of Subcontractor Warranties	33
8.8 Assignment of Warranties to Province	34
PART 9 HEALTH AND SAFETY	35
9.1 Site Safety and Security	35
9.2 Design-Builder as Prime Contractor.....	36
9.3 Health and Safety Program	36
9.4 Design-Builder’s Occupational Health and Safety Obligations.....	37
9.5 Refusal to Recognize Design-Builder as Prime Contractor.....	39
9.6 Appointment of other Prime Contractors by Province.....	40
9.7 Notice of Failure to Comply with Health and Safety Requirements	41
PART 10 REGULATORY REQUIREMENTS	42
10.1 Permits	42
10.2 Agreements with Governmental Authorities	44
PART 11 USE, ACCESS AND UNCOVERING OF WORK	44
11.1 Public Use and Access.....	44
11.2 Access to Project Site and Project Infrastructure by Others	45
11.3 Province Access.....	46
11.4 Uncovering of Work	47
PART 12 CERTIFICATION OF SUBSTANTIAL COMPLETION AND TOTAL COMPLETION	48
12.1 Deliverables for Substantial Completion	48
12.2 Deliverables for Total Completion	48
12.3 Requirements for Substantial Completion	48
12.4 Notice of Substantial Completion.....	48
12.5 Inspection for Substantial Completion.....	49
12.6 Issuance of Certificate of Substantial Completion and Signing of Final Deficiency List	49
12.7 Refusal to Issue Certificate of Substantial Completion or Sign Final Deficiency List.....	50
12.8 Completion of Further Work for Substantial Completion	50
12.9 Outstanding Work for Total Completion	51
12.10 Requirements for Total Completion	51
12.11 Notice of Total Completion	51

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- iii -

12.12	Inspection for Total Completion.....	52
12.13	Issuance of Certificate of Total Completion.....	52
12.14	Refusal to Issue Certificate of Total Completion.....	52
12.15	Completion of Further Work for Total Completion.....	52
12.16	Submissions by Province	52
12.17	No Limitation.....	53
12.18	Disputed Certificate	53
12.19	Certificate Effective Pending Dispute.....	53

PART 13 GBA PLUS REQUIREMENTS..... 53

13.1	GBA Plus Requirements	53
------	-----------------------------	----

PART 14 SURVIVAL..... 54

14.1	Survival.....	54
------	---------------	----

Appendix 3A	Project Schedule
Appendix 3B	Form of Certificates for Substantial Completion and Total Completion
Appendix 3C	Deliverables for Substantial Completion and Total Completion
Appendix 3D	Works Schedule Requirements
Appendix 3E	Safety Demerit Point System

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

**PART 1
PROVINCE DESIGN**

1.1 Province 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 (including the Reference Concept) 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 will be entirely at the Design-Builder's own risk.

**PART 2
DESIGN AND CONSTRUCTION**

2.1 Responsibility for Design and Construction

The Design-Builder will be responsible for the Design and the Construction, all of which will 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 Design and Construction Standards

- (a) Without limiting any other provision in the Agreement, the Design-Builder will undertake the Design and Construction in compliance with all applicable standards, including the standards listed in Appendix 1C [Reference Documents] to Schedule 1.
- (b) The Project Work will be carried out in accordance with the DBSS and with the following amendments to the DBSS:
 - (i) Section 125 [Value Engineering - Proposal Guidelines] will not apply;
 - (ii) any and all reference to "approval by the Ministry Representative" in the DBSS, in terms of acceptance of materials, work methodology or end product, will be construed as meaning "approval by the Designer";
 - (iii) 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
 - (iv) 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 will submit such samples to the Province's Representative in accordance with the Review Procedure.

2.3 Design and Construction Key Individuals

The following Key Individuals will be subject to the applicable requirements of Section 3.3 [Key Individuals] of this Agreement, and will have the experience and qualifications as set out below:

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 2 -

- (a) The Design Manager will be a Professional Engineer with extensive experience leading multi-disciplinary design teams on large transportation projects of comparable scope, scale and complexity to the Project. The Design Manager will be responsible for managing all aspects of the Design and will act as the Coordinating Professional Engineer.
- (b) The Construction Manager will have extensive experience leading multi-disciplinary construction teams on transportation projects of comparable scope, scale and complexity to the Project. The Construction Manager will be responsible for managing all aspects of the Construction.

2.4 Province Site Office

- (a) The Design-Builder will 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, one 12 foot x 60 foot furnished office trailer located on the Project Site in close proximity to the Design-Builder's Construction Manager, providing the Province with secure, unrestricted access and including the following:
 - (i) one enclosed boardroom with a table and seating for eight;
 - (ii) an enclosed office with three work stations;
 - (iii) an open office area with eight work stations;
 - (iv) a room or closet that can be secured to house network equipment;
 - (v) dedicated washroom(s);
 - (vi) eight secure parking stalls; and
 - (vii) access to kitchen facilities.
- (b) The trailer provided by the Design-Builder will be developed in consultation with the Province and to the satisfaction of the Province, acting reasonably, will be climate controlled, and will include sufficient office furnishings and equipment for use by the Province, including both hard wired and wireless data connections, but excluding computer equipment and telephone network systems.

**PART 3
PROJECT SCHEDULE**

3.1 Diligent Performance of Project Work

The Design-Builder will:

- (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

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 3 -

amended from time to time in accordance with Section 3.2 [Project Schedule] of this Schedule, is achieved at or before the milestone date specified therefor in the Project Schedule; and

- (c) perform the Project Work in material conformity with the Works Schedule, as amended from time to time in accordance with Section 3.3 [Works Schedule] of this Schedule, and with the Construction Management Plan, as amended from time to time in accordance with Section 3.9 [Construction Management Plan] of this Schedule.

3.2 Project Schedule

- (a) The Project Schedule sets out the dates for the milestones which the Design-Builder is to achieve in the performance of the Project Work provided for in the Project Requirements.
- (b) The Design-Builder will 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 [Changes] or Part 8 [Supervening Events] of this Agreement, or any proposed amendments to the Project Schedule contemplated by Section 6.15(e) of this Agreement. No other revision of the Project Schedule is permitted unless the Province, in its discretion, consents.

3.3 Works Schedule

- (a) The Design-Builder will prepare and submit to the Province's Representative for review in accordance with the Review Procedure:
 - (i) within 45 days of the Effective Date, a revision of the Works Schedule provided pursuant to Schedule 22 [Closing Deliveries] reflecting the actual progress of the Project Work to the date of submission and the expected progress of the Project Work thereafter, up to and including the achievement of Substantial Completion by the Substantial Completion Target Date and Total Completion by the Total Completion Target Date, which will be in all respects compliant with the Project Schedule;
 - (ii) at any time a revised Project Schedule is submitted in accordance with Section 3.2(b) of this Schedule, a revised Works Schedule which will be in all respects compliant with such revised Project Schedule; and
 - (iii) on the fifth Business Day of each month, a revised Works Schedule reflecting the actual progress of the Project Work to the last calendar day of the previous month and the expected progress of the Project Work thereafter, up to and including the achievement of Substantial Completion by the Substantial Completion Target Date and Total Completion by the Total Completion Target Date.
- (b) The initial Works Schedule and any revised Works Schedule submitted in accordance with this Section 3.3 will:
 - (i) meet the requirements set out in Appendix 3D [Works Schedule Requirements]

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 4 -

- (ii) be in accordance with Good Industry Practice;
 - (iii) satisfy the Design and Construction Requirements;
 - (iv) 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;
 - (v) be in all respects compliant with the Project Schedule; and
 - (vi) include all additional information reasonably requested by the Province so as to enable the Province to monitor the progress of the Project Work.
- (c) If the actual progress of the Project Work does not comply with the Project Schedule, then the Design-Builder will, at the same time the Design-Builder submits its revised Works Schedule under Section 3.3(a) of this Schedule, submit to the Province's Representative a detailed recovery plan showing how any delay to the Project Work can be recovered to be in compliance with the Project Schedule.
- (d) The Design-Builder will provide the Province with any further information reasonably requested by the Province following receipt of the revised Works Schedule and or the recovery plan required under Section 3.3(c) of this Schedule within five Business Days of receiving a request for same from the Province.

3.4 Four Week Lookahead Schedule

- (a) The Design-Builder will provide, for information and not under the Review Procedure, the Four Week Lookahead Schedule on a weekly basis until the Substantial Completion Date. The reporting period for the first Four Week Lookahead Schedule will be the first full week following the Effective Date and the following four weeks.
- (b) The Design-Builder will develop the Four Week Lookahead Schedule based on the detailed work plans prepared by field personnel of the Design-Builder and its Subcontractors, and will present the Four Week Lookahead Schedule in Microsoft Excel format or in an alternate format as approved by the Province, acting reasonably.
- (c) The Design-Builder will ensure the Four Week Lookahead Schedule is a true and comprehensive reflection of the Project Work to be performed during the relevant reporting period.

3.5 180-Day Lookahead Schedule

- (a) On the Effective Date, the Design-Builder will provide, for information and not under the Review Procedure, the 180-Day Lookahead Schedule. The 180-Day Lookahead Schedule will include:
 - (i) resource ramp up to support mobilization and the start of construction;
 - (ii) pre-construction studies and investigations;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 5 -

- (iii) development and submission of the Construction Management Plan, preconstruction management plans and other plans required by this Agreement to be submitted within the first 180 calendar days after the Effective Date;
 - (iv) permitting activities and design deliverables;
 - (v) pre-construction procurement to support mobilization and start of construction; and
 - (vi) any additional information reasonably requested by the Province so as to enable the Province to monitor the progress of the Project Work.
- (b) The Design-Builder will provide a revised 180-Day Lookahead Schedule on the fifth Business Day of each month during the 180 calendar days following the Effective Date, updating completed and forecasted Project Work activities.
- (c) The format and software for the 180-Day Lookahead Schedule will be either Primavera P6 or Microsoft Excel. If the Design-Builder uses Primavera P6, the 180-Day Lookahead Schedule must be a separate source from the Works Schedule and contain significantly more detail than the Works Schedule.

3.6 Acceleration and Recovery of Project Schedule

- (a) In addition to the Province's rights under Section 8.1(c) of this Agreement, the Province may, at any time, deliver to the Design-Builder a Province Change Notice contemplating the acceleration of the performance of the Project Work or any component thereof at the Province's convenience, and the terms of Schedule 11 [Changes] will apply. Notwithstanding the delivery of such Province Change Notice, the Province may at any time issue a Change Directive to accelerate the performance of the Project Work or any component thereof at the Province's convenience.
- (b) In the event of any delay to the Project Work by an act, error or omission of the Design-Builder or any party for which the Design-Builder is responsible, including any Subcontractors, or by an event for which the Design-Builder is not expressly given relief under this Agreement (in either case, a "**Design-Builder Delay**"), then the Design-Builder will not be entitled to, nor will the Design-Builder make any claim for compensation or an extension of the time for the performance of the Project Work, in either case as a result of a Design-Builder Delay.
- (c) Each recovery plan submitted by the Design-Builder under this Part will:
- (i) be in report format;
 - (ii) provide a detailed description of the delay to the progress of the Project Work, and the impact to the last Works Schedule to which there has been no objection in accordance with the Review Procedure;
 - (iii) include a revised Critical Path Schedule;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 6 -

- (iv) describe the measures the Design-Builder proposes for the Project Work delay to be recovered to be in compliance with the Project Schedule;
 - (v) include a time impact analysis, or similar analysis technique using Primavera P6 as approved by the Province acting reasonably, to determine the true impact of the delay, together with detailed narrative of the analysis to substantiate the results; and
 - (vi) if requested by the Province, include any alternative recovery options and the estimated costs of those options.
- (d) If at any time the Province, acting reasonably, determines that the Project Schedule will not be met due to a Design-Builder Delay, the Province may deliver written notice to the Design-Builder directing the Design-Builder to recover the Project Work, at no extra cost or expense to the Province, so as to bring the performance of the Project Work back into compliance with the Project Schedule and the Design-Builder will promptly comply with such direction notwithstanding any disagreement or dispute with respect to whether the delay is a Design-Builder Delay.
- (e) The Design-Builder acknowledges that in the event of any dispute or disagreement over the cause of a delay to the Project Work that results in a non-compliance with the Project Schedule, including with respect to any claim of the Design-Builder to entitlement to relief under this Agreement, the Design-Builder will be required to produce a recovery plan in accordance with Section 3.6(c) of this Schedule and comply with any notification from the Province pursuant to Section 3.6(d) of this Schedule or Section 8.1(c) of this Agreement, and to the extent the Design-Builder is required to recover or accelerate the Project Work pursuant to either Section 3.6(d) of this Schedule or Section 8.1(c) of this Agreement, the costs associated with such recovery or acceleration will be resolved in accordance with Schedule 16 [Dispute Resolution Procedure].

3.7 Conflict between Project Schedule and Works Schedule

In the event of any conflict between the Project Schedule and the milestones in the Works Schedule, the Project Schedule will prevail.

3.8 Works Schedule Review Meetings

- (a) Within five Business Days following the submission of any revised Works Schedule, the Design-Builder and the Province will meet to discuss, at a minimum:
 - (i) planned progress versus actual progress achieved during the past reporting period;
 - (ii) any revisions made by the Design-Builder in the revised Works Schedule to the logic, activities, or durations within the last Works Schedule to which there has been no objection in accordance with the Review Procedure;
 - (iii) any changes to the critical path of the Project Work, including addition or removal of activities;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 7 -

- (iv) any issues that may have a potential impact on the ability of the Design-Builder to achieve the Project Schedule; and
- (v) any other matter raised by the Province.
- (b) Within five Business Days following each Works Schedule review meeting, the Design-Builder will prepare and submit to the Province's Representative for review in accordance with the Review Procedure meeting minutes of the Works Schedule review meeting.

3.9 Construction Management Plan

- (a) The Design-Builder will 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**"). At a minimum the initial Construction Management Plan will cover the first year of Construction activities following the Effective Date.
- (b) The Construction Management Plan will 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 each the following:
 - (A) Highway 1:
 - (1) highway widening;
 - (2) MUP construction, including retaining walls if required;
 - (3) drainage infrastructure; and
 - (4) utility construction, protection, and relocation.
 - (B) Highway 13/264th Street:
 - (1) widening and modification along Highway 13/264th Street;
 - (2) construction of embankments, drainage infrastructure, and Structures;
 - (3) habitat compensation and landscaping;
 - (4) noise mitigation; and
 - (5) access management; and
 - (ii) for each of the components set out in paragraph (i) above, include details to describe each of the following:

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 8 -

- (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, 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 archaeology sites that may be encountered during construction;
 - (D) proposed construction and erection strategy for all Structures including associated roadway traffic management requirements;
 - (E) list of all relevant permits required;
 - (F) utility relocation, protection, installation and co-ordination;
 - (G) description of the construction controls to be used to comply with the requirements of Schedule 6 [Environmental Obligations], including noise and vibration mitigation during Construction (including pile installation), hours of work and limits on vibrations caused by Construction operations; and
 - (H) monitoring programs for adjacent existing facilities such as buildings, utilities and other facilities.
- (c) If the Design-Builder wishes to make any amendment to the Construction Management Plan, the Design-Builder will:
- (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.

**PART 4
INTERFACE REQUIREMENTS**

4.1 Interface Obligations

The Design-Builder acknowledges that the provisions of this Part are complementary to all other rights and obligations stipulated elsewhere in this Agreement, including terms regarding Changes and Supervening Events, and any other requirements affecting the Project Work, and that compliance with the provisions of this Part is crucial to the objectives of the Program and is an integral part of the Project Work.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 9 -

4.2 Interfacing Works

- (a) The Design-Builder acknowledges that, pursuant to the Program, the Province will be procuring other construction contractors for improvements to Highway 1 prior to and concurrent with the Project, including the following anticipated improvements (collectively, the “**Interfacing Works**”):
 - (i) The work (the “**216th to 264th Widening Project**”) that encompasses the replacement of the existing overpasses at Glover Road and the adjacent railway, and at 232nd Street, all as described in the Hwy 1 – 216 to 264 Widening Drawings located in the Data Room as of the Financial Submittal Date (the “**216th to 264th Widening Project Drawings**”). Additionally, the 216th to 264th Widening Project involves the widening of Highway 1 to incorporate HOV/EV lanes, starting from 216th Street and extending to approximately 264th Street. The eastern limits of the 216th to 264th Widening Project terminate at and are adjacent to the western limit of the Project.
 - (ii) The work (the “**Mainline West Project**”) that encompasses the construction of a new underpass at Bradner Road, the widening of Highway 1, starting from the eastern terminus of the Project at approximately Lefevre Road and extending easterly to Ross Road, with new HOV/EV lanes, bus-on-shoulder lanes, and the establishment of a multi-use pathway along the north side of Highway 1, all as described in the Mainline West - Draft IFT Drawings located in the Data Room as of the Financial Submittal Date (the “**Mainline West Project Drawings**”) The western limits of the Mainline West Project commence and are directly adjacent to the eastern limits of the Project.
 - (iii) The work (the “**Mount Lehman Interchange Project**”) that encompasses the continuation of the Highway 1 widening from Ross Road to Townline Road and including improvements to the Mount Lehman Interchange.
 - (iv) Other Program initiatives consisting of further improvements to Highway 1 to the east, the commencement of which projects overlap with the timeline of the Project.

In the event of any changes to the 216th to 264th Widening Project Drawings or the Mainline West Project Drawings after the Financial Submittal Date, the provisions of Part 7 [Province Changes and Supervening Events] of this Agreement will apply accordingly.

- (b) The Design-Builder further acknowledges the potential for interface challenges and coordination requirements with these Interfacing Works. The Design-Builder will Design and execute the Project Work in coordination with the Interfacing Works, pursuant to this Part. The Design-Builder will plan and execute its work in a manner that minimizes interference, disruption, or delay to both the Project and the Interfacing Works, meets all specific requirements set out in Schedule 4 [Design and Construction Technical Requirements] and ensures minimal disruptions to traffic flow.
- (c) The Design-Builder further acknowledges that contractors on the Interfacing Works and other projects may concurrently be utilizing Strong Pit, posing potential additional coordination and scheduling considerations for the Design-Builder in connection with any

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 10 -

use of Strong Pit by the Design-Builder in accordance with Section 14.3 [Strong Pit Disposal Site] of Part 1 of Schedule 4.

4.3 Coordination Obligations with Interfacing Works

- (a) The Design-Builder will coordinate with the contractors of the Interfacing Works and with the Province to ensure seamless integration and avoid any foreseeable conflicts, issues, or potential disruption or adverse impact arising from or otherwise associated with coordination between the Project and the Interfacing Works (each, an “**Interfacing Issue**”).
- (b) In the event the Design-Builder becomes aware of any Interfacing Issue, the Design-Builder will notify the Province’s Representative of such Interfacing Issue in writing no later than two Business Days following the date the Design-Builder became aware or ought to have become aware of the Interfacing Issue.
- (c) The Design-Builder will work with the Province’s Representative and provide any information requested by the Province’s Representative to assist in evaluating Interfacing Issues or any impact thereof to the satisfaction of the Province’s Representative.
- (d) The Design-Builder will take into account the progress and timelines of the Interfacing Works in planning the Project Work, to ensure there are no hindrances to the overall Highway 1 improvements initiative.

4.4 Amendment and Updating of Works Schedule

Each revised Works Schedule submitted by the Design-Builder in accordance with Section 3.3 [Works Schedule] of this Schedule will recognize the progress of and any changes to the timelines of the Interfacing Works and will coordinate with and accommodate the Interfacing Works in an effective and collaborative manner.

4.5 Interface Committee

- (a) The Province will establish and maintain a committee (the “**Interface Committee**”) for the Program with the goals of:
 - (i) minimizing interference and disruption among all contractors from time to time carrying out the Program, including the Design-Builder (together, the “**Program Contractors**”) in carrying out their respective obligations in relation to the Program;
 - (ii) supporting the cooperation between and amongst the Program Contractors as required for each of the Program Contractors to carry out its respective obligations in respect of the Program; and
 - (iii) informally addressing, and attempting to resolve, any potential disputes arising between or amongst the Province and the Program Contractors from time to time,

all with the ultimate goal of minimizing disruption to the travelling public as a result of the Program, and coordinating traffic and public safety efforts in respect of the Program.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 11 -

- (b) The Interface Committee will be established as follows:
- (i) The members of the Interface Committee (together, the “**Interface Committee Members**”) will consist of the Province, the Design-Builder and such other Program Contractors as determined by the Province in its discretion.
 - (ii) The Interface Committee will be comprised of one liaison (each, an “**Interface Committee Liaison**”) from each Interface Committee Member. Each Interface Committee Member will appoint a primary Interface Committee Liaison, as well as an alternate Interface Committee Liaison who will serve on the Interface Committee if the primary Interface Committee Liaison is unavailable.
 - (iii) The Design-Builder will designate the Design-Builder’s Representative as its primary Interface Committee Liaison and the Construction Manager as its alternate Interface Committee Liaison. If the Design-Builder wishes to designate an individual other than the Design-Builder’s Representative or the Construction Manager as its Interface Committee Liaison, then the Design-Builder will propose the individual to the Province’s Representative pursuant to the Consent Procedure, in advance of the first instance of an Interface Committee meeting.
 - (iv) Any subsequent replacements of primary or alternate Interface Committee Liaisons will be proposed by the Design-Builder to the Province’s Representative, pursuant to the Consent Procedure, in advance of any Interface Committee meeting in which the Design-Builder wishes to replace either its primary or alternate Interface Committee Liaison.
 - (v) Both the primary and the alternate Interface Committee Liaison of each Interface Committee Member may, but will not be required to, attend any meeting of the Interface Committee, provided that, for the purposes of any actions or decisions to be taken at such meeting, if both the primary and the alternate Interface Committee Liaison attend a particular meeting only the primary Interface Committee Liaison will be deemed to be present.
 - (vi) An Interface Committee Liaison of the Province will act as the chairperson (the “**Chairperson**”) for all meetings of the Interface Committee, with such duties and responsibilities as determined by the Province from time to time .
 - (vii) The Design-Builder will make reasonable efforts to have its Interface Committee Liaison attend all meetings of the Interface Committee. If the Interface Committee Liaison of the Design-Builder is routinely absent, it will be replaced by the Design-Builder upon the request of the other Interface Committee Liaison.
 - (viii) The Interface Committee will meet monthly in person to discuss the progress of the Program and any other matters raised by any of the Interface Committee Members, resorting to a virtual meeting if an in-person meeting is impractical, and to a telephone conference only as a final option.
 - (ix) Additional meetings of the Interface Committee may be held at the request of any Interface Committee Liaison, provided that at least two business days’ prior notice

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 12 -

in writing of such meeting will be given to each other Interface Committee Liaison unless the requirement for such notice is expressly waived in writing by such other Interface Committee Liaison or such other Interface Committee Liaison attend the meeting and do not object to the absence of such required notice. Unless otherwise agreed to by the Interface Committee Liaison, each such notice will 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.

- (x) Except as otherwise provided for in the Contract or as determined by the Province in accordance with Section 4.5(b)(vi) of this Schedule, the Interface Committee will have the authority, by consensus approval of all Interface Committee Liaisons, to establish its own reasonable procedures for meetings, notices, minutes, and all other matters necessary for the efficient operation of the Interface Committee.
 - (xi) Minutes will be kept of all meetings of the Interface Committee, which will be approved by the Chairperson and circulated to all Interface Committee Liaisons within five business days of each meeting.
 - (xii) A quorum for a meeting of the Interface Committee will be one Interface Committee Liaison from the Province and one Interface Committee Liaison from at least two Program Contractors. If a meeting is called and a quorum is not present, the meeting will be adjourned for not less than 24 hours.
- (c) The Design-Builder's obligations pursuant to Section 5.6 [Mitigation By Design-Builder] of this Agreement will include the obligation to raise for consideration by the Interface Committee any concerns regarding any actual or potential acts and omissions of another Program Contractor prior to making any claim of a Compensation Event referred to in paragraph (p) of the definition of Compensation Event in Section 1.1 of Schedule 1 in respect of such other Program Contractor.

**PART 5
MUNICIPAL REQUIREMENTS**

5.1 Scope

The Design-Builder will perform the Design and Construction of the Project in accordance with the requirements in this Part and this Agreement. Except where specifically provided otherwise in this Agreement, the bylaws, codes, processes and policies of the Municipality do not apply to the Design and Construction of the Project Work.

5.2 Hours of Work

- (a) The Design-Builder will establish the hours of work when the Project Work will be performed in order to complete the Project Work in accordance with the Project Schedule.
- (b) The Design-Builder will notify the Province of the hours of work established for the Project and any changes the Design-Builder makes to those hours of work. The Design-Builder will consider any recommendations or comments which the Province may have in relation to the Project's hours of work.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 13 -

5.3 Utilities Owned by the Municipality

- (a) For greater certainty, the Municipality is to be construed as a Utility Supplier for the purposes of this Agreement.
- (b) Without limiting or derogating from any other requirement of this Agreement, the Design-Builder will ensure that all Utility Work in relation to Utilities that are owned by the Municipality complies with applicable standards of the Municipality
- (c) At the same time as the submission of any Design in relation to Utility Work by the Design-Builder to the Municipality, such Design will also be submitted to the Province's Representative in accordance with the Review Procedure.
- (d) In advance of any permanent interconnections of Utilities owned by the Municipality to Project Infrastructure, the Design-Builder will provide the Province with documents confirming code compliance to the relevant design and construction codes and standards in relation the Project Work.

5.4 Infrastructure Owned by the Municipality

- (a) All Infrastructure and Utilities owned by the Municipality that requires new construction relocation or replacement by the Design-Builder will be replaced with systems, fixtures and facilities which comply with the applicable standards of the Municipality and are of equal capacity, except where a higher standard and/or capacity is specified elsewhere in this Schedule and/or Schedule 4 [Design and Construction Technical Requirements].
- (b) Where the Design-Builder has decommissioned, abandoned or closed any Infrastructure or Utilities owned by the Municipality on the Project Lands referred to in clause (a) above, the Design-Builder will offer the Municipality the opportunity to accept such removable Infrastructure and Utilities, and the Design-Builder will deliver such Infrastructure and Utilities to the Municipality's public work yard unless otherwise agreed with the Municipality.

5.5 Permits and Fees

- (a) The Design-Builder is not required to obtain any development, building, trade, occupancy or other Permits, preliminary or other plan approvals, or other types of construction or similar permits or approvals from the Municipality in connection with the Project, including in respect of the Design, Construction, Operation and Maintenance, inspection, repair, alteration, renovation, modification, Utility services or interconnections, rehabilitation, reconstruction or removal of all or any component of the Project Work, except to obtain a Highway Use Permit for the use of roads within the Municipality.
- (b) Notwithstanding Section 5.5(a) of this Schedule, the Design-Builder will make available to the Municipality information and drawings developed for the Project by the Design-Builder which can be made publicly available.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 14 -

- (c) The Design-Builder is not required to pay any Permit fees, development charges or other municipal fees or charges to the Municipality in connection with the Project Work except for costs associated with:
 - (i) use of fire hydrants and water fill stations;
 - (ii) repairs and/or fieldwork undertaken by the Municipality in dealing with an emergency caused or contributed to by the performance of the Project Work; and
 - (iii) work related to disconnections and interconnections between the Project Work and Utilities owned by the Municipality.

5.6 Cooperation, Schedule and Work Priority

- (a) As soon as practical after the Effective Date, the Design-Builder will develop and integrate a dedicated section within the Works Schedule, detailing elements pertinent to the Municipality, and submit this alongside the Works Schedule to the Province's Representative for review in accordance with the Review Procedure.
- (b) As required by the Province, the Design-Builder's Representative, or other designated representative of the Design-Builder, will attend any meeting between the Province and the Municipality, or their respective representatives, on matters which relate to the development and construction of the Project Work and other matters of concern in relation thereto, with the expectation that such meetings will be scheduled to occur at least monthly and will occur more frequently when appropriate.
- (c) The Design-Builder acknowledges that the Municipality will continue to perform its development application approval function and obligation for lands in and around the Project Lands during the Design and Construction and, as such, where municipal utility work or roadworks resulting from any municipal development approval is required on the Project Lands, the Design-Builder will:
 - (iii) co-operate reasonably with the Municipality and the landowner of the development, as applicable, to accommodate such municipal utility work or roadworks; and
 - (iv) be responsible for coordinating such municipal utility work or roadworks with the Municipality and landowner of the development, as applicable, where these works are either in conflict with the Design and Construction of the Project, or where these works fall within any part of the Project Site where Construction activities are being carried out.

5.7 Surveys, Inspections, Plans Drawings and Other Information

- (a) The Design-Builder will conduct pre-construction and post-construction condition surveys of Infrastructure and Utilities owned by the Municipality, which are in the vicinity of Project Work and which the Design-Builder determines may be affected by the Project Work, to establish the location and condition thereof prior to commencement of any Project

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 15 -

Work. The Design-Builder will provide the Province copies of the pre-construction and post-construction condition surveys as they become available.

- (b) The Design-Builder will provide all information, documentation and other assistance, including cooperation, reasonably requested by the Province to resolve any dispute between the Municipality and the Province, as applicable relating to the Project Work.

5.8 Damage to Municipal Infrastructure

If it is determined, whether pursuant to a post-construction condition survey in accordance with Section 5.7(a) of this Schedule, or otherwise, that the Design-Builder has damaged any Infrastructure that is owned by the Municipality in the performance of the Project Work, then such damage will constitute a Project Work Defect and the Design-Builder will remedy such Project Work Defect in accordance with Section 8.4 [Correction of Project Work Defects] of this Schedule to the extent necessary to restore the damaged Infrastructure to its pre-construction condition.

**PART 6
UTILITIES**

6.1 Design-Builder Responsibility

The Design-Builder will 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 will 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 Section 6.5 [Utility Work] of this Schedule and any other relevant provisions of this Agreement. Without limiting the generality of the foregoing, at no time will 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).

6.2 Protection of Utilities

Except for Utility Work carried out in compliance with Section 6.5 [Utility Work] of this Schedule and any other relevant provisions of this Agreement, and except as may otherwise be agreed in writing by the relevant Utility Supplier in its discretion, 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.

6.3 Location

The Design-Builder will 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 will not rely on location plans, as-built drawings supplied by Utility Suppliers or other similar documents for confirming locations of Utilities.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 16 -

6.4 Utility Policy Manual

- (a) The Design-Builder will adhere to and ensure compliance with Sections: 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27 of the Utility Policy Manual, including any relevant appendices, and will ensure that its Subcontractors and their respective employees also comply with these Sections.
- (b) The Design-Builder will ensure full adherence to and will be responsible for implementing modifications to the Utility Policy Manual as specified herein:
 - (i) Within Section 14.3.1 [Ministry Responsibilities] of the Utility Policy Manual, the Design-Builder will replace the phrase “Such information may include” found in item b) with the phrase “Such information will include”.
 - (ii) The Design-Builder will delete Section 14.3.1. d) of the Utility Policy Manual.
 - (iii) The Design-Builder will delete Section 14.5.1 of the Utility Policy Manual.
 - (iv) In Subsection 18.5 [Protective Measures] of Section 18 [Water and Sewer Lines Policies and Standards] in the Utility Policy Manual, the Design-Builder will incorporate the following text: “Bell and spigot (jointed) water and sewer pipe crossing the highway and/or within 10 m of a retaining wall footing will be steel encased for the length of the area of concern (for retaining walls) and across the full width of the highway right-of-way for pipes crossing the highway. Casings will be designed to have a lifespan greater than or equal to that of the carrier pipe.”

6.5 Utility Work

- (a) The Design-Builder will 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) All Utility Work undertaken by the Design-Builder will be designed by, and all relevant plans in relation thereto sealed by, a Professional Engineer specializing in the particular sector of engineering associated with the relevant Utility Work.
- (c) Subject to the rights of Utility Suppliers under the Utility Agreements, and except as expressly provided otherwise in this Agreement, as between the Province and the Design-Builder, all Utility Work will be carried out by or under the supervision of and at the risk, cost and expense of the Design-Builder, including schedule risk of the Design-Builder, whether or not, as between the Design-Builder and a Utility Supplier, such Utility Work is to be performed by or under the supervision of or at the risk, cost and expense of a Utility Supplier, and without limiting the generality of the foregoing, the Design-Builder will 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;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 17 -

- (ii) identifying all requirements in respect of the Utility Work, including determining with the Utility Supplier the most effective strategies for undertaking the Utility Work;
- (iii) liaising, arranging, coordinating 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;
- (iv) ensuring that all Permits required by Applicable Laws 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;
- (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, prior to commencing such Utility Work and in accordance with any notice requirements provided under the relevant Utility Agreements, giving 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;
- (viii) performing any warranty work required in respect of Utility Work;
- (ix) ensuring that any Utility Work to be performed by a Utility Supplier is performed so as not to impair or delay performance by the Design-Builder of any other element of the Project Work;
- (x) giving written notice as required by the relevant Utility Supplier when any Project Work affecting a Utility or Utility Work is to be carried out, before commencing such Project Work or Utility Work, and when such work has been completed, calling for inspections and, where applicable, tie-ins;
- (xi) ensuring that there is no disruption of any existing Utility caused by the Project Work unless approved in writing by the relevant Utility Supplier, and any such permitted disruption will be subject to any terms or conditions imposed by such Utility Supplier; and
- (xii) all electrical distribution or transmission and all telecommunication crossings whether underground or overhead.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 18 -

6.6 Design-Builder Responsible for Utility Costs

- (a) The Design-Builder will:
 - (i) contract directly with the relevant Utility Suppliers for all electricity, gas, water, sewer, telephone and communications services and other Utilities and services supplied to the Project Site and which are used or consumed in the performance of the Project Work, and the Design-Builder will pay for all costs and expenses of such Utilities and services until Total Completion;
 - (ii) 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, save to the extent expressly otherwise provided in Section 6.7 [Province Assistance with Utility Matters] of this Schedule; and
 - (iii) pay for all Utility Work related to utilities owned by the Municipality, regardless of the terms of any Utility Agreement.
- (b) If the Province or BCTFA are invoiced for any such costs or expenses in relation to Utilities or Utility Work which are the responsibility of the Design-Builder or, if such costs and expenses are otherwise charged directly to the Province or BCTFA, the Province or BCTFA may pay such costs and expenses and, upon demand, the Design-Builder will forthwith reimburse the Province or BCTFA, as applicable, for any amount so paid or, if the Province so elects, the Province may deduct any amount so paid or to be paid by the Province from any payments owing by the Province to the Design-Builder in accordance with this Agreement.

6.7 Province Assistance with Utility Matters

- (a) Without prejudice to Section 6.10 [New and Amended Utility Agreements] of this Schedule, 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, Interested Parties, 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, will 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, will 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.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 19 -

- (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 6.7 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.
- (d) Notwithstanding Sections 6.7(a) through 6.7(c) of this Schedule, and without prejudice to the Province's rights to dispute what is reasonable on any other grounds, the Province may, in its discretion, determine that it is not reasonable for any assistance requested by the Design-Builder pursuant to Sections 6.7(a) through 6.7(c) of this Schedule to involve the Province initiating or participating in formal legal proceedings with any Utility Supplier, Relevant Authorities, Interested Party and/or any private owner or other person.

6.8 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 Financial Submittal Date or entered into or amended thereafter in accordance with Section 6.10 [New and Amended Utility Agreements] of this Schedule). The Design-Builder will 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.

6.9 Rights under Utility Agreements

Unless otherwise expressly set out in this Agreement, the Design-Builder will 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.

6.10 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 will:

- (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

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 20 -

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, or as part of or for the purposes of the acquisition of Province Lands pursuant to Schedule 8 [Lands], issue in respect of such new Utility Agreement a Province Change and the provisions of Part 7 [Changes] of this Agreement will apply accordingly.

6.11 Indemnity by Design-Builder

The Design-Builder will 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 6.7(a) or Section 6.7(b) of this Schedule, 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.

6.12 Highway 1 Protection from Utility Breaks

Notwithstanding any other requirement in this Agreement, the Design-Builder will encase all pressurized gas and liquids pipelines beneath Highway 1 with steel casings extending minimum 1.5m beyond the pavement edge. Casing pipes for existing pipelines may mimic the geometry of the existing utility. New casing pipes, including extensions to existing casings, shall be designed for a Service Life of 75 years or 10 years longer than the Service Life of the utility being encased, whichever is longer.

**PART 7
OPERATION AND MAINTENANCE**

7.1 Responsibility for Operation and Maintenance - General

The Design-Builder will 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, commencing for the entire Project Site at the time of the commencement of Construction work on the Project Site and continuing to the Substantial Completion Date or, if earlier, the Termination Date.

7.2 Operation and Maintenance – Clarifications

- (a) The Design-Builder will not be responsible for routine winter maintenance on Highway 1 and 264th Street within the footprint of the Original Project Infrastructure, as specified in the Ministry Maintenance Specifications, which will be carried out by the Province’s maintenance contractor (the “**Winter Maintenance Contractor**”).
- (b) The Design-Builder will be responsible for the full operational control of traffic control devices commencing upon the Design-Builder’s first entry into the traffic controller cabinet, and continuing to a date to be agreed by the Design-Builder and the Province, such

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 21 -

that responsibility for the signal cabinet control remains with the Design-Builder until such time as no further signal cabinet access is required by the Design-Builder for the Project.

- (c) The Design-Builder will be responsible for routine winter maintenance, as specified in the Ministry Maintenance Specifications, of newly constructed roads (temporary and permanent) situated beyond the footprint of the Original Project Infrastructure for the period commencing when such roads are open to the public and continuing until the Substantial Completion Date.
- (d) The Design-Builder will be responsible for snow removal in the Construction work zone, behind temporary barriers or other devices, including removal of snow or ice placed within the Design-Builder's Construction work zones as a result of winter maintenance activities by the Province.
- (e) For all New Project Infrastructure that has a surface condition that will cost more to maintain than the surface as it existed at the Effective Date, the Design-Builder will be responsible for the routine winter maintenance services in accordance with the Ministry Maintenance Specifications or, with consent of the Province's Representative, for any additional cost of maintenance, as determined by the Province's Representative, resulting from the actual surface conditions.
- (f) The Design-Builder will be responsible for the maintenance of temporary and permanent Pavement Markings in accordance with Article 8 [Signing and Pavement Marking Design Criteria] of Part 1, and Part 3 [Traffic Management] of Schedule 4.

7.3 Operation and Maintenance - Specifications

The Design-Builder will carry out Operation and Maintenance in accordance with the Ministry Maintenance Specifications with the following amendments:

- (a) Any and all references to "Contractor" are to be construed as the Design-Builder.
- (b) Schedule 1, Section 1.2, Services, b) Quantified Maintenance Services is revised to 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) In reference to Schedule 1, Specifications, the following will not apply:
 - (i) Section 1.2 Services, c) Additional Maintenance Services;
 - (ii) Section 2 Routine Maintenance Services Cap; and
 - (iii) Section 3 Warranty.
- (d) Schedule 1, Section 1.4, Specification Format, the 6th bullet, Routine Maintenance Service Cap and the 7th bullet, Warranty, will not apply.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 22 -

- (e) Schedule 1, Section 1.5, Interpretation, e) is revised to 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) The Section 6, General Specifications, that will apply (Included) and will not apply (Excluded) are set out in Table 7.3a as follows:

Table 7.3a

Schedule 1 Specifications Section 6 General Specifications	Routine Maintenance Services	Quantified Maintenance Services
1 Surface Maintenance		
1.01 Asphalt Pavement Maintenance	Included	Included
1.02 Surface Treatment	Not Specified	Excluded
1.03 Highway and Shoulder Grading and Re-Shaping	Not Specified	Excluded
1.04 Dust Control and Base Stabilization	Not Specified	Excluded
1.05 Surface and Shoulder Gravelling	Not Specified	Excluded
1.06 Road Base Maintenance	Not Specified	Excluded
1.07 Surface Cleaning	Included	Included
1.08 Debris Removal	Included	Not Specified
1.09 Cattle Guard System Maintenance	Excluded	Excluded
1.10 Raised Hard Surfaced Infrastructure and Safety Device Maintenance	Included	Included
1.11 Railway Crossing Approach Maintenance	Excluded	Not Specified
2 Drainage Maintenance		
2.01 Ditch Maintenance	Included	Included
2.02 Drainage Appliance Maintenance	Included	Included
2.03 Shore, Bank and Watercourse Maintenance	Included	Included
3 Winter Maintenance		
3.01 Highway Snow Removal	Excluded	Excluded
3.02 Snow and Ice Bonding Prevention and Control	Excluded	Excluded
3.03 Other Snow Removal and Ice Control ⁽¹⁾	Excluded	Excluded
3.04 Snow Avalanche Response	Excluded	Excluded
4 Roadside Maintenance		
4.01 Vegetation Control	Not Specified	Included
4.02 Brush, Tree and Danger Tree Removal	Not Specified	Included

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 23 -

Schedule 1 Specifications Section 6 General Specifications	Routine Maintenance Services	Quantified Maintenance Services
4.03 Litter Collection and Graffiti Removal Maintenance	Included	Not Specified
4.04 Rest Area Facility Maintenance	Excluded	Excluded
4.05 Fence Maintenance	Excluded	Excluded
4.06 Roadside Catchment Appurtenances Maintenance	Not Specified	Included
5 Traffic Maintenance		
5.01 Sign System Maintenance	Included	Included
5.02 Temporary Pavement Markings and Eradication	Included	Included
5.03 Traffic Management	Excluded	Not Specified
6 Structures Maintenance		
6.01 Bridge Deck Maintenance	Included	Included
6.02 Structures Cleaning Maintenance	Included	Not Specified
6.03 Structures Drainage Maintenance	Included	Not Specified
6.04 Bridge Joint Maintenance	Included	Included
6.05 Bridge Bearing Maintenance	Included	Included
6.06 Bailey and Acrow Bridge Maintenance	Excluded	Not Specified
6.07 Structure Minor Coating	Not Specified	Excluded
6.08 Concrete Structure Maintenance	Included	Included
6.09 Steel, Aluminum and Multi-plate Structure Maintenance	Included	Not Specified
6.10 Bridge Piling Maintenance	Included	Included
6.11 Retaining Wall Maintenance	Not Specified	Included
6.12 Bridge Railing Maintenance	Included	Not Specified
6.13 Timber Truss Bridge Maintenance	Excluded	Excluded
6.14 Timber and Log Bridge Maintenance	Excluded	Excluded
7 Network Management		
7.01 Highway Incident Response	Included	Not Specified
7.02 Major Event Response	Included	Not Specified
7.03 Highway Inspection	Included	Not Specified
7.04 Highway Safety Patrol	Included	Not Specified
7.05 Communications	Included	Not Specified

Notes:

(1) Unless otherwise stated in Section 7.2 [Operation and Maintenance – Clarifications] of this Schedule.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 24 -

- (g) The Section 7, Highway Maintenance Specifications, that will apply (Included) and will not apply (Excluded) are set out in Table 7.3b as follows:

Table 7.3b

Schedule 1 Specifications Section 7 Local Area Specifications	Routine Maintenance Services	Quantified Maintenance Services
1 LOWER MAINLAND		
1.01 Definitions		
1.02 Tunnel Traffic Monitoring / Control – George Massey Tunnel	Excluded	Not Specified
1.03 Bridge and Tunnel System Maintenance – George Massey Tunnel and Mary Hill Bypass Pump Station	Excluded	Not Specified
1.04 Bridge Hard Surfaced Apron / Revetment Cleaning	Excluded	Not Specified
1.05 Bridge Traveller Maintenance – Alex Fraser Bridge and Port Mann Bridge	Excluded	Not Specified
1.06 Bridge Cable Stay Snow and Ice Control – Alex Fraser Bridge	Excluded	Not Specified
1.07 Bridge Cable Stay Snow and Ice Control – Port Mann Bridge	Excluded	Not Specified
1.08 Highway Crossing Infrastructure	Excluded	Excluded
1.09 Invasive Plants Management	Included	Included
1.10 Lane Closures	Excluded	Not Specified
1.11 Movable Barrier Transfer System Operations and Maintenance – Alex Fraser Bridge	Excluded	Not Specified
1.12 Movable Bridge Operations and Maintenance – Middle Arm South and Annacis Channel Swing Bridges	Excluded	Not Specified
1.13 Pavement Surface Reflectors	Not Specified	Excluded
1.14 Salt Containment Infrastructure Maintenance	Excluded	Not Specified
1.15 Sound Wall Maintenance	Not Specified	Excluded
1.16 George Massey Tunnel, Oak Street Bridge, Alex Fraser Bridge, Queensborough Bridge, Highway #91 and #91A from the Queensborough Bridge to 72nd Avenue, Pitt River Bridge and Port Mann Bridge	Excluded	Not Specified
1.17 Traffic Patrol – Port Mann Highway 1	Excluded	Not Specified
1.18 Traffic Management – Pacific Highway Truck Crossing	Excluded	Not Specified
1.19 Traffic Management and Support – Port Mann Highway 1 Structures Inspections	Excluded	Not Specified

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 25 -

Schedule 1 Specifications Section 7 Local Area Specifications	Routine Maintenance Services	Quantified Maintenance Services
1.20 Vehicle Inspection Station Maintenance	Excluded	Excluded

- (h) The following Schedules will not apply:
3. Additional Maintenance Services;
 4. Cost Plus Rates;
 5. Maintenance Services Fee;
 6. Annual Adjustment Process;
 7. Rates for Changes to Infrastructure;
 8. Infrastructure;
 9. Service Area;
 10. Automated Weather Stations;
 13. Gravel License;
 14. Repeater System;
 15. Dispute Resolution Protocol;
 16. Prime Contractor Designation;
 17. Bonds;
 18. Insurance Requirements;
 19. Insurance & Securities (Renewal Term);
 20. Privacy Protection; and
 21. Contractor Detail.

- (i) The Summer Classification will be “1” and the Winter Classification will be “A”.

7.4 Operation and Maintenance – Electrical Specifications

The Design-Builder will carry out Operation and Maintenance of electrical infrastructure in accordance with the Ministry Electrical Maintenance Specifications with the following amendments:

- (a) Any and all reference to “Contractor” is to be construed as the Design-Builder.
- (b) Any and all reference to “Ministry Representative” is to be construed as Province’s Representative.
- (c) Schedule 1, Section 3, Materials, Clause 3.2 will not apply.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 26 -

- (d) The electrical specifications as listed in the Schedule 1 “Electrical Maintenance Specifications Listing” that will apply (Included) and will not apply (Excluded) are set out in Table 7.4a as follows:

Table 7.4a

Electrical Maintenance Specifications Listing	Maintenance Services
E-110 Traffic and Pedestrian Signal Maintenance	Included
E-120 Illuminated Pedestrian Crossing Signs and Special Crosswalk Signs Maintenance	Included
E-130 Flashing Beacon Maintenance	Included
E-140 Actuated Railway Warning Sign Maintenance	Excluded
E-160 One Way Bridge Signal Maintenance	Excluded
E-180 Fire Signal Maintenance	Excluded
E-190 Uninterruptible Power Supply (UPS) Maintenance	Included
E-210 Post Mounted Flasher Maintenance	Included
E-220 Warning Signs with Flashers Maintenance	Included
E-230 Aviation, Navigational and Pier Lighting Maintenance	Excluded
E-310 Street, Roadway, Area and Sign Lighting Maintenance	Included
E-320 Highmast Lighting Maintenance	Excluded
E-330 Tunnel and Snowshed Lighting Maintenance	Excluded
E-340 Pedestrian and Cyclist Tunnel Lighting Maintenance	Excluded
E-350 Architectural and Ornamental Lighting Maintenance	Excluded
E-410 Short Duration Traffic Counter Station Maintenance	Excluded
E-420 Permanent Traffic Counter Station Maintenance	Included
E-510 Open / Closed Sign Maintenance	Excluded
E-520 Electronic Message Sign Maintenance	Included
E-530 Overheight Detection System Maintenance	Excluded
E-610 Web Camera Maintenance	Excluded
E-700 Highway Electrical Infrastructure Incident and Vandalism Response	Included
E-710 Traffic Controller Equipment Disposal	Included
E-800 Electrical Patrol	Included
E-900 Weigh Scales	Excluded

- (e) The following Schedules in the Ministry Electrical Maintenance Specifications will not apply:

2. Local Area Specifications;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 27 -

3. Electrical Service Area (Map Reference);
4. Inventory;
5. Fee;
6. Cost for Changes to Inventory;
7. Annual Adjustment Process;
8. Additional Services;
9. Prime Contractor Designation Highway Construction Projects;
10. Dispute Resolution Protocol;
12. Repeater System;
13. Provincial Material List;
14. Bonds;
15. Insurance;
16. Insurance Securities (Renewal Term);
17. Privacy Protection; and
18. Contractor Details.

7.5 Operation and Maintenance Manager

- (a) The Design-Builder will designate an Operation and Maintenance Manager (the “**Operation and Maintenance Manager**”), who will be responsible for:
 - (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 will 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.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 28 -

7.6 Operation and Maintenance Plan

The Design-Builder will 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 will be submitted to the Province’s Representative no later than 60 days from the Effective Date in accordance with the Review Procedure, and will include at a minimum:

- (a) detailed description of the roads and Detours including road name, length;
- (b) mapping or drawings 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;
- (f) organizational structures, including Subcontractors, for achieving the Operation and Maintenance work; and
- (g) format of Operation and Maintenance Records.

**PART 8
PROJECT WORK DEFECTS AND WARRANTIES**

8.1 Representation, Warranty and Covenant as to Project Work

The Design-Builder represents and warrants to and covenants with the Province that:

- (a) all Design, Construction and other 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 will 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 will be free of defects;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 29 -

- (c) all materials furnished under this Agreement will be of good quality and, with the exception only of any materials expressly prescribed by the Province in this Agreement, fit for the intended purpose;
- (d) each item of equipment will, under normal use and maintenance:
 - (i) conform to and perform in accordance with the specifications, requirements and standards set out therefor in the Design and Construction Requirements, in accordance with this Agreement; and
 - (ii) be free from defects in manufacturing, materials and workmanship;
- (e) all installation and repair workmanship performed by the Design-Builder or any Subcontractor as part of the Project Work and any corrective action will be performed diligently and will meet the specifications, requirements and standards set out therefor in the Design and Construction Requirements; and
- (f) all equipment (including spare parts) which has been manufactured by suppliers other than the Design-Builder has been obtained through authorized commercial distribution channels for use in Canada and the Design-Builder has the right to incorporate such equipment in the Project Work and transfer such equipment to the Province on the terms and conditions set out in this Agreement.

8.2 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 4.1(d) of Schedule 10 [Payment]), will correct to the satisfaction of the Province, acting reasonably, as required by and in accordance with Section 8.4 [Correction of Project Work Defects] of this Schedule, all Project Work Defects arising during the General Project Work Defect Warranty Period and of which the Province notifies the Design-Builder within thirty days following the end of the General Project Work Defect Warranty Period (or, with respect to defects in manufacturing, materials or workmanship of equipment, within 25 Business Days after the defects are discovered by the Province, unless the Design-Builder is already aware or ought reasonably to be aware of such defects).

8.3 Risks of Defects

- (a) The Design-Builder will carry out in accordance with this Article, as part of the Project Work, any remedial or other works required as a result of any Project Work Defect and, except as otherwise expressly provided elsewhere in this Agreement, in respect of any Project Work Defect:
 - (i) any such defect comprising a Nonconformity will 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 will be borne by the Design-Builder; and

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 30 -

- (iii) neither the Province nor BCTFA will 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.
- (b) Any Latent Defects will be remedied in accordance with Section 8.5 [Reporting and Rectification of Latent Defects] of this Schedule.

8.4 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 8.2 [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 will deliver a proposal for correction of such Project Work Defect, which proposal will be to the satisfaction of the Province, acting reasonably, provided that, in case of an Emergency requiring immediate corrective action, the provisions of Section 11.2 [Province's Emergency Rights] of this Agreement will apply. Such proposal will include a:
 - (i) description of the Project Work Defect;
 - (ii) description of the root cause of the Project Work Defect;
 - (iii) description of the proposed solution to correct the Project Work Defect;
 - (iv) proposed implementation plan for the solution to resolve the Project Work Defect to the satisfaction of the Province, acting reasonably; and
 - (v) timeline to correct the Project Work Defect.

As soon as reasonably practicable and in any event within five Business Days after delivery of a proposal to the Province, the Province will provide the Design-Builder with any comments it may have on the proposal. As soon as reasonably practicable and in any event within five Business Days after receipt of the Province's comments, the Design-Builder will deliver to the Province a revised proposal that incorporates the comments received from the Province and is satisfactory to the Province, acting reasonably. The Design-Builder will promptly implement and comply with such proposal. Notwithstanding anything in this Section 8.4, in case of an Emergency requiring immediate corrective action, the Province may exercise its rights under the provisions of Section 11.2 [Province's Emergency Rights] of this Agreement.

- (b) The Design-Builder will initiate an on-site investigation into a Project Work Defect within 24 hours after the earlier to occur of the Design-Builder becoming aware of a Project Work Defect and receipt by the Design-Builder of written notice from the Province specifying

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 31 -

such Project Work Defect. As soon as reasonably practicable thereafter, the Design-Builder will submit to the Province's Representative a report describing the workaround that the Design-Builder proposes to implement as a temporary solution until the Design-Builder finally corrects the Project Work Defect. If the Province's Representative accepts such workaround by written notice to the Design-Builder, then the Design-Builder will promptly implement such workaround.

- (c) If the Design-Builder becomes aware of a Project Work Defect of which it has not previously been notified by the Province, the Design-Builder will notify the Province thereof in writing within five Business Days.
- (d) If the Design-Builder does not correct a Project Work Defect in accordance with Section 8.4(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 8.4(a) of this Schedule or fail to provide a proposal satisfactory to the Province in accordance with Section 8.4(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 Monitoring and Step-In Rights] of this Agreement and Sections 11.3 [Province Access] and 11.4 [Uncovering of Work] of this Schedule, 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 will 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 [Indemnification by Design-Builder] of this Agreement (including Section 9.1(d)(vii) thereof) in respect of a Project Work Defect, the Province will 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] or taken into account in the calculation of any termination sum in accordance with Schedule 14 [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, will only be discharged to the extent of the amount so applied and/or demanded by the Province.
- (e) Between 30 to 60 days prior to the expiry of the General Project Work Defect Warranty Period, the Design-Builder will organize and jointly complete together with the Province an on-site inspection of the Project Work. Following the completion of such inspection, the Design-Builder will prepare and submit to the Province's Representative in accordance with the Consent Procedure a list of outstanding Project Work Defects identified by such inspection, together with the proposed timeframe for the rectification of each such Project

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 32 -

Work Defect in accordance with this Section 8.4. The Design-Builder will correct each such identified Project Work Defect within the timeframe so established, but in any case not more than 10 Business Days beyond the expiration of the General Project Work Defect Warranty Period, or as otherwise agreed by the Province.

- (f) If, at the expiry of the General Project Work Defect Warranty Period, any Project Work Defect that has been identified by the Province or included in the list prepared in accordance with Section 8.4(e) of this Schedule has not been corrected by the Design-Builder in accordance with this Section 8.4 (other than any Project Work Defect in respect of which the Province has applied an amount from the Warranty Holdback in accordance with Section 8.4(d) of this Schedule), then the Province will 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 14 [Compensation on Termination]) up to an amount in aggregate equal to 200% of the Province's estimate of the costs for remedying each such Project Work Defect, provided that, following the correction of any such Project Work Defect by the Province, the Province will 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.

8.5 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 will 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 will 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 and Value Engineering Proposals] of this Agreement, 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] of this Agreement if such Latent Defect had constituted a Compensation Event under Section 8.5(b)(iv) of this Schedule, including relief from delays and Direct Losses resulting from the Design-Builder's compliance with its obligations under Section 8.6 [Traffic Management and Public Safety with Defects] of this

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 33 -

Schedule in respect of such Latent Defect will 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 8.6 [Traffic Management and Public Safety with Defects] of this Schedule, 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 will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] will apply, except only that, for the purposes of Section 8.1(b)(v) of this Agreement in the case of any Latent Defect, the time period referred to therein will not apply in respect of any such Compensation Event in respect of such Latent Defect.

8.6 Traffic Management and Public Safety with Defects

For greater certainty, the Design-Builder will 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.

8.7 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 otherwise agreed by the Province, in its discretion, the Design-Builder will:

- (a) ensure that all Subcontracts contain provisions which:
 - (i) impose on the relevant Subcontractor the same warranties as are contained in this Agreement in relation to all Design, Construction and other Project Work provided, performed or carried out and materials supplied by such 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 Subcontractor that is the beneficiary of any warranties contained in the relevant 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 which exceed the requirements of this Section 8.7 (including in respect of the term of such warranties) and which are customarily available at no additional cost,, including against defects in materials and workmanship from each Subcontractor in respect of Design, Construction and other Project Work provided, performed or carried out and materials and Equipment supplied by that Subcontractor under its Subcontract; and

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 34 -

- (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.

8.8 Assignment of Warranties to Province

- (a) The Design-Builder:
 - (i) hereby absolutely assigns, on the terms set out in Section 8.8(b) of this Schedule, to the Province all warranties contained in any Subcontract to which the Design-Builder is a party; and
 - (ii) will 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 8.8(b) of this Schedule.
- (b) Notwithstanding the provisions of Sections 8.8(a)(i) and 8.8(a)(ii) of this Schedule, the Design-Builder or the Subcontractor that is the beneficiary of any warranties contained in the relevant Subcontract will be permitted to enjoy the benefit of and enforce the warranties referred to in, respectively, Sections 8.8(a)(i) and 8.8(a)(ii) of this Schedule as if the assignment made in Section 8.8(a)(i) of this Schedule and any assignments made pursuant to Section 8.8(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, as the case may be, 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) Prior to, and as a condition of the release of, the Warranty Holdback, the Design-Builder will deliver to the Province a list, description and copy of all Subcontracts pursuant to which the benefit of any warranty has been assigned to the Province as required by this Section 8.8.
- (d) Without limiting the provisions of Section 17.8 [Further Assurances] of this Agreement, the Design-Builder will:
 - (v) 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 8.8(a)(i) of this Schedule and an acknowledgment of such notice from the relevant Subcontractor; and
 - (vi) 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

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 35 -

assignment made pursuant to Section 8.8(a)(ii) of this Schedule and an acknowledgment of such notice from the Subcontractor that is the provider of such warranties.

**PART 9
HEALTH AND SAFETY**

9.1 Site Safety and Security

- (a) The Design-Builder will:
 - (i) at all times throughout the Term have full regard for the safety of all persons:
 - (A) on the Project Site (whether lawfully or not), including users of the Project Facilities; and
 - (B) at all other locations where Project Work is being performed; and
 - (ii) during the Access Period (and any period during which access to any other area is made available to the Design-Builder pursuant to Section 1.1(c) of Schedule 8 [Lands]) 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] of this Agreement or any other provision of this Agreement, the Design-Builder will, in respect of any part of the Project Site, 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 such part of the Project Site of any persons not entitled to be there or of any creatures.
- (c) The Design-Builder will:
 - (i) take action in accordance with Laws to remove forthwith from the Project Site any person for whom the Design-Builder is responsible at law, including any Subcontractor and any employees of any of them 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; and
 - (ii) without limiting the authority and control of the Design-Builder and its Subcontractors over their respective employees, upon receipt by the Design-Builder of notice from the Province of the Province's determination, acting reasonably, that any person employed by the Design-Builder or any of its Subcontractors in the execution of any of the Project Work has engaged in misconduct, is incompetent or negligent, or has committed a breach of any provision of this Agreement, immediately remove or cause to be removed such person from the Project Site (if applicable), cause such person to cease performing the Project Work, and promptly replace or cause to be replaced such person by a person with appropriate qualifications at no extra cost or expense to the Province.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 36 -

9.2 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 will 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 will 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 will, 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 will 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;
 - (ii) deliver to the Province's Representative:
 - (A) written notice of the designation of the Qualified Coordinator under Section 9.2(b)(i) of this Schedule;
 - (B) a copy of the "notice of project" for the Project required and described in the WCA and the OHS Regulation and to be delivered by the Design-Builder 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; and
 - (iii) provide, post and maintain at least two "Prime Contractor" signs at the Project Site in form, content, and at locations, satisfactory to the Province's Representative.

9.3 Health and Safety Program

Notwithstanding any limitation in the OHS Regulation regarding the number of workers in any work force, the Design-Builder will prepare and submit to the Province's Representative for review in accordance with the Review Procedure, within 60 days after the Effective Date, a formal written health and safety program including any site-specific plans which may be required by Health and Safety Laws or this Agreement (together, the "**Health and Safety Program**") in respect of the Project Site that:

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 37 -

- (a) complies with Good Industry Practice;
- (b) complies with all Health and Safety Laws;
- (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 relating to the Project Work and hazards at 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 Access Period for the relevant portion of the Project Site; and
- (f) satisfies and addresses all health and safety requirements contained in the Conditions of Access and this Part.

The Design-Builder will prepare and submit to the Province's Representative in accordance with the Review Procedure updates to 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.

9.4 Design-Builder's Occupational Health and Safety Obligations

- (a) The Design-Builder will at all times until the Substantial Completion Date:
 - (i) implement and maintain the Health and Safety Program, including any site-specific safety requirements;
 - (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, and maintain:
 - (A) records, including minutes of safety meetings and tailgate meetings relating to the performance of the Project Work; and
 - (B) evidence that health and safety orientation and training for workers within the Project Site is being conducted in accordance with Health and Safety Laws;
 - (iii) continue to assess, mitigate and disclose potential hazards;
 - (iv) provide first aid services, equipment and supplies and provision of personal protective equipment and supplies required under Health and Safety Laws;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 38 -

- (v) develop and maintain a site drawing showing the boundaries of the Project Site with project layout, first aid locations, emergency transportation provisions (including distance to, location of and directions to the closest medical facility) and the evacuation procedures and muster points relating to the Project Site;
 - (vi) 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;
 - (vii) 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
 - (viii) establish and maintain a joint health and safety committee and ensure that such committee fulfills its functions under Health and Safety Laws.
- (b) The Design-Builder will submit to the Province's Representative, by the fifth day of each month until the Total Completion Date, a monthly site safety statistical report setting out leading indicators and lagging indicators for the previous month's activities, in form and content satisfactory to the Province, and including the Design-Builder's calculation of the total number of SD Points assigned to the Design-Builder in the previous month in accordance with Appendix 3E [Safety Demerit Point System]. At all times during the period from the Effective Date until the Total Completion Date, the Province will maintain the record of the SD Points Balance determined in accordance with Appendix 3E [Safety Demerit Point System] for the period from the Effective Date.
- (c) At the request of the Province from time to time, the Design-Builder will:
 - (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 9.3 [Health and Safety Program] of this Schedule 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 and the Quality Management System.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 39 -

- (d) 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 will ensure that a copy of the initial and any subsequent notifications are 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 as they become available, up to and including a final Corrective Action close-out report, on the progress of any investigation resulting from such notification, accident or incident.
- (e) Without limiting any of the Province's other rights and remedies under this Agreement, including any other review and audit rights specified in this Agreement, the Province may conduct any inspections, reviews, and audits, including External Quality Audits, in accordance with Schedule 7 [Quality Management] with respect to any of the Design-Builder's obligations in this Part.
- (f) Within 72 hours of such a request, make available to the Province's Representative access to and copies of any Records maintained by the Design-Builder as contemplated this Section.

9.5 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 for the Project Site, including by making a declaration or determination to that effect, then:

- (a) the Design-Builder will not be relieved of any obligations, duties and liabilities as Prime Contractor but will 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 will 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;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 40 -

- (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 9.5 (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 will 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 9.2(a) of this Schedule.

9.6 Appointment of other Prime Contractors by Province

- (a) Notwithstanding Section 9.2(a) of this Schedule, 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 9.6, 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 9.6, the lands and/or premises upon which the relevant parts of the Project Work are to be performed, the "**Separate Site**"). The Province will provide prior written notice of any such circumstances, and will 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 9.6(a) of this Schedule, the Design-Builder will cease to be the Prime Contractor in respect of such Separate Site for the specified period and will 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;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 41 -

- (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 9.6(a) of this Schedule, the Design-Builder will reassume and thereafter fulfil the responsibilities of the Prime Contractor as otherwise set out in this Agreement at the Separate Site.

9.7 Notice of Failure to Comply with Health and Safety Requirements

- (a) In this Section 9.7, the terms “**employer**” and “**workers**” do not include the Design-Builder, or any Subcontractor, or the employees of any of them.
- (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 9.7, 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 will 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 9.7(b) of this Schedule, 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 will 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 9.7(b) of this Schedule, the Province may take whatever action in accordance with

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 42 -

Section 11.3 [Province's Other Step-In Rights] of this Agreement 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 will withdraw such Notice of Failure to Comply by endorsing on a copy thereof confirmation of the rectification, and the Design-Builder will 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 9.7(c) of this Schedule, the Design-Builder will resume such Project Work.
- (f) The Province will 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 will 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.

**PART 10
REGULATORY REQUIREMENTS**

10.1 Permits

- (a) The Design-Builder will, or will 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) 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 10.1(a) of this Schedule 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 will, 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 2.1(f)(i) of Schedule 2 [Review Procedure and Consent Procedure], neither the Province nor

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 43 -

BCTFA will 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 10.1 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 will 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, will 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 will 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, will 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 10.1(a) of this Schedule) renew, amend or extend, and comply with and demonstrate compliance with requirements and obligations under, Province Permits.
- (e) The Design-Builder will 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 10.1(b) of this Schedule 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 10.1(c) of this Schedule 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 breach of this Agreement by, or any negligent 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

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 44 -

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.

10.2 Agreements with Governmental Authorities

- (a) The Design-Builder, subject to Section 10.2(b) of this Schedule but without limiting any other provision of this Agreement, will 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 will submit a request for consent to the terms of such agreement to the Province's Representative 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 10.2(a) of this Schedule, the Design-Builder will assist the Province and/or BCTFA (as the case may be) in entering into such agreement; provided, however, that the Design-Builder will not be relieved of any of its obligations under Section 10.2(a) of this Schedule 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 will incur any liability or obligation under any such agreement, the form and substance of the agreement will 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 will discharge such liabilities and perform such obligations and will 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.

PART 11

USE, ACCESS AND UNCOVERING OF WORK

11.1 Public Use and Access

- (a) Subject to Section 11.1(d) of this Schedule, the Design-Builder will 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 2.3 [Commencement of Access to Project Site] of Schedule 8 until the expiry of the Access Period in respect of the part of the Project Site upon which they are situated, 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 2.3 [Commencement of Access to Project Site] of Schedule 8, except for temporary or permanent lane closures or diversions of traffic flow instituted:

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 45 -

- (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 Technical Requirements];
- (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 will 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 11.1(a)(i) to 11.1(a)(iii) of this Schedule, the Design-Builder will 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.
- (d) Notwithstanding Section 11.1(a) of this Schedule, the Design-Builder may close the existing CVSE pullout on the north side of 56th Avenue North and the informal ride-share vehicle parking on the west side of Highway 13 (264th Street) north of Highway 1 as necessary to facilitate Construction.

11.2 Access to Project Site and Project Infrastructure by Others

The Design-Builder will, subject to and in accordance with the health and safety procedures established by the Design-Builder pursuant to Sections 9.3 [Health and Safety Program] and 9.4 [Design-Builder's Occupational Health and Safety Obligations] of this Schedule 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, 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 11.3 [Province Access] of this Schedule;
- (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;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 46 -

- (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 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 or the Utility Agreements, subject to reasonable notice being given by such Relevant Authority or Utility Supplier to the Design-Builder, and provided that, subject to the applicable requirements of the Relevant Authority, 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 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.

11.3 Province Access

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

- (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:

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 47 -

- (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 11.3 will be exercised in accordance with any health and safety procedures established by the Design-Builder pursuant to Sections 9.3 [Health and Safety Program] and 9.4 [Design-Builder's Occupational Health and Safety Obligations] of this Schedule for the time being in force in relation to the areas to which such access is granted, provided that nothing in this Section 11.3 will 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.

11.4 Uncovering of Work

- (a) The Design-Builder will ensure that the Province's Representative is afforded advance notice of and a full opportunity to witness inspection and test activity in accordance with the Inspection and Test Plan and other relevant provisions of this Agreement. If the Design-Builder does not provide such notice and opportunity, the Design-Builder will 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 will 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 will 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 will comply with such request. If the Province exercises such right, it will 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.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 48 -

- (c) If the Province requires an uncovering of the Project Work pursuant to Section 11.4(b) of this Schedule 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 will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] of this Agreement will apply.

PART 12

CERTIFICATION OF SUBSTANTIAL COMPLETION AND TOTAL COMPLETION

12.1 Deliverables for Substantial Completion

Without limiting the Design-Builder's obligations under this Agreement, the Design-Builder will deliver the applicable deliverables set out in this Part and the deliverables set out in Part I [Deliverables for Substantial Completion] of Appendix 3C to this Schedule prior to Substantial Completion.

12.2 Deliverables for Total Completion

Without limiting the Design-Builder's obligations under this Agreement, the Design-Builder will deliver the deliverables set out in Part II [Deliverables for Total Completion] of Appendix 3C to this Schedule prior to Total Completion.

12.3 Requirements for Substantial Completion

Substantial Completion will only be achieved after:

- (a) any and all Construction Certificates have been issued in respect of the New Project Infrastructure in accordance with Section 6.1 [Construction Certificates] of Part 2 of Schedule 4;
- (b) a Stage 4 Road Safety Audit Certificate in respect of the New Project Infrastructure has been issued in accordance with Section 13.4.5 [Stage 4: Post Construction Road Safety Audit] of Part 1 of Schedule 4; and
- (c) all relevant 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.

12.4 Notice of Substantial Completion

- (a) The Design-Builder will 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 will be delayed or achieved earlier by more than five Business Days, it will issue a fresh notice informing the Owner's Engineer and the Province's Representative of the new date expected for Substantial Completion.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 49 -

- (b) At the same time that the Design-Builder delivers a notice under Section 12.4(a) of this Schedule, the Design-Builder will 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 will:
 - (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 will include any failure by the Design-Builder to deliver a deliverable required by Section 12.1 [Deliverables for Substantial Completion] of this Schedule prior to Substantial Completion;
 - (ii) include the Design-Builder's estimate of the cost to remedy each such 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 such defect or deficiency, which date will be no later than the Total Completion Target Date.

12.5 Inspection for Substantial Completion

Upon the Design-Builder issuing a notice contemplated in Section 12.4 [Notice of Substantial Completion] of this Schedule, 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 will 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.

12.6 Issuance of Certificate of Substantial Completion and Signing of Final Deficiency List

- (a) The Province will cause the Owner's Engineer, within 25 Business Days of the commencement of the inspection under Section 12.5 [Inspection for Substantial Completion] of this Schedule, 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.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 50 -

- (b) The Province will cause the Owner's Engineer, within 15 Business Days after the commencement of the inspection under Section 12.5 [Inspection for Substantial Completion] of this Schedule, 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.

12.7 Refusal to Issue Certificate of Substantial Completion or Sign Final Deficiency List

- (a) The Owner's Engineer will 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 will 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.

12.8 Completion of Further Work for Substantial Completion

- (a) In the event of service of a notice by the Owner's Engineer under Section 12.6(a)(ii) of this Schedule, the Design-Builder will 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 12.6(a)(ii) of this Schedule, the Design-Builder will 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 will be no later than the Total Completion Target Date.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 51 -

- (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 12.8(b) of this Schedule, the Province will 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 12.4 [Notice of Substantial Completion] of this Schedule through to this Section 12.8, inclusive, will apply *mutatis mutandis*.

12.9 Outstanding Work for Total Completion

- (a) The Province will be entitled to hold back from the Progress Payments the amount permitted by Section 4.1 [Deficiency Holdback] of Schedule 10 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 12.6(b)(i) of this Schedule.
- (b) Notwithstanding the issue of a Certificate of Substantial Completion, the Design-Builder will promptly complete all outstanding Project Work required to achieve Total Completion as soon as practicable.

12.10 Requirements for Total Completion

Total Completion will only be achieved after:

- (a) the completion of the remedy of all Final Deficiency List Deficiencies;
- (b) the Design-Builder has provided to the Province's Representative all required deliverables in accordance with Section 12.2 [Deliverables for Total Completion] of this Schedule;
- (c) all relevant quality inspections and audits, including inspections and audits respecting impacts to the Project, 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 Total Completion has been completed in accordance with all applicable Project Requirements and other requirements of this Agreement; and
- (d) all demolition, removal and disposal of Infrastructure will have been completed in accordance with Article 14 [Demolition, Removals and Disposal] of Part 1 of Schedule 4.

12.11 Notice of Total Completion

The Design-Builder will 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 will be delayed or achieved earlier by more than five Business Days, it will issue a fresh notice informing the Owner's Engineer and the Province's Representative of the new date expected for Total Completion.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 52 -

12.12 Inspection for Total Completion

Upon the Design-Builder issuing a notice contemplated in Section 12.11 [Notice of Total Completion] of this Schedule 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 Province will 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.

12.13 Issuance of Certificate of Total Completion

The Province will cause the Owner's Engineer, within 20 Business Days of the commencement of the inspection pursuant to Section 12.12 [Inspection for Total Completion] of this Schedule, 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.

12.14 Refusal to Issue Certificate of Total Completion

The Owner's Engineer will 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.

12.15 Completion of Further Work for Total Completion

In the event of service of a notice by the Owner's Engineer under Section 12.13(b) of this Schedule, the Design-Builder will 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 will 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 12.11 [Notice of Total Completion] of this Schedule through to this Section 12.15, inclusive, will apply *mutatis mutandis*.

12.16 Submissions by Province

The Province may, at any time, following receipt of notice given by the Design-Builder pursuant to either of Section 12.4 [Notice of Substantial Completion] or Section 12.11 [Notice of Total Completion] of this Schedule, 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,

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 53 -

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 will consider such submissions in determining whether to issue such Certificate of Substantial Completion or Certificate of Total Completion, as the case may be.

12.17 No Limitation

The issuance of the Certificate of Substantial Completion or the Certificate of Total Completion will be without prejudice to and will not in any way limit the rights and obligations of the parties under and in accordance with this Agreement.

12.18 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 Schedule, then either the Province or the Design-Builder may refer such dispute for resolution under the Dispute Resolution Procedure.

12.19 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 12.18 [Disputed Certificate] of this Schedule, then for all purposes of this Agreement such Certificate of Substantial Completion or such Certificate of Total Completion, as the case may be, will 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 13
GBA PLUS REQUIREMENTS**

13.1 GBA Plus Requirements

The Design-Builder will comply with, observe, satisfy and perform all of the obligations and requirements as set out in this Part (the "**GBA Plus Requirements**") in accordance with the Government of Canada's GBA Plus objectives, process, and guidelines, including the following:

- (a) In compliance with Schedule 4 [Design and Construction Technical Requirements], the Design-Builder will, as a minimum, assess and implement GBA Plus considerations into the Design of cycling and pedestrian facilities, transit infrastructure, landscaping and site restoration, signing and pavement marking, architecture, and lighting. The Design-Builder will submit to the Province's Representative, in accordance with the Consent Procedure, any GBA Plus options being considered for implementation into the Design.
- (b) The Design-Builder will organize GBA Plus workshops with the Province for the purpose of reviewing and assessing the implementation of GBA Plus considerations in the Design.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

- 54 -

- (c) The Design-Builder will develop, maintain, and submit, as part of the Interim Design and Final Design submissions, a register (the “**GBA Plus Register**”) to identify issues, develop Design consideration options, and document recommended solutions and assessed options. As part of the Final Design submission and in accordance with Section 1.5 [TAF Form and Content] of Part 2 of Schedule 4, the Design-Builder will include GBA Plus considerations implemented in the Design as part of each relevant TAF.
- (d) The Design-Builder will designate a GBA Plus lead who will as a minimum:
 - (i) represent the Design-Builder in all matters related to GBA Plus and liaise with the Province’s Representative as required; and
 - (ii) oversee the compliance of all GBA Plus Requirements as set out in this Agreement.
- (e) The Design-Builder will comply with the GBA Plus requirements of the Design Management Plan as contemplated in Section 1.1(h) of Part 2 [Design and Certification Procedure] of Schedule 4.

**PART 14
SURVIVAL**

14.1 Survival

Notwithstanding any other provision of this Agreement, the provisions of Section 6.11 [Indemnity by Design-Builder], Section 8.1 [Representation, Warranty and Covenant as to Project Work], Section 8.2 [Project Work Defect Warranty], Section 8.4 [Correction of Project Work Defects], Section 8.6 [Traffic Management and Public Safety with Defects], Section 8.7 [Terms of Subcontractor Warranties], Section 8.8 [Assignment of Warranties to Province], Section 8.4(b)(iv), Section 9.7(f), Section 10.1(e) and Section 10.2(b) of this Schedule will survive the expiry or any earlier termination of this Agreement.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

**APPENDIX 3A
PROJECT SCHEDULE**

Milestone	Date
Effective Date	July 24, 2024
Substantial Completion Date	November 30, 2027
Total Completion Date	May 28, 2028

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

**APPENDIX 3B
FORM OF CERTIFICATES FOR SUBSTANTIAL COMPLETION AND TOTAL
COMPLETION**

1. Certificate of Substantial Completion
2. Certificate of Total Completion

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3B: Form of Certificates for Substantial Completion and Total Completion

- 2 -

Certificate Form 1

Certificate Ref. No. []

CERTIFICATE OF SUBSTANTIAL COMPLETION

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 Section 12.6 of Schedule 3 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 4) was issued on [date].
3. Construction Certificates for the Substantial Completion of the New Project Infrastructure were issued on [dates].
4. This document will 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 will be [date].

Signed.....
Owner’s Engineer
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3B: Form of Certificates for Substantial Completion and Total Completion

- 3 -

Certificate Form 2

Certificate Ref. No. []

CERTIFICATE OF TOTAL COMPLETION

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 Section 12.13 of Schedule 3 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 will serve as the Certificate of Total Completion.
4. The Total Completion Date will be [date].

Signed:

Owner’s Engineer

Name:

Title.....

Date.....

Professional Registration Number:

Affix Professional Seal

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

APPENDIX 3C

DELIVERABLES FOR SUBSTANTIAL COMPLETION AND TOTAL COMPLETION

PART I DELIVERABLES FOR SUBSTANTIAL COMPLETION

1. Evidence of Assignments and Transfers of Property and Warranties

The Design-Builder will 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 8.8 [Assignment of Warranties to Province] of this Schedule; and
 - (ii) where not previously provided pursuant to Section 2.7(c) of this Agreement, 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.

2. Operations and Maintenance Manuals

Prior to Substantial Completion, the Design-Builder will provide the Province any and all operation and maintenance manuals required in accordance with this Schedule and Schedule 4 [Design and Construction Technical Requirements], such manuals having been reviewed in advance in accordance with the Review Procedure.

3. Training and Orientation

Prior to Substantial Completion, the Design-Builder will provide to the Province any and all training and orientation required to operate or maintain any special equipment or special Infrastructure implemented as part of the Project Facilities.

4. Spare Parts

Prior to Substantial Completion, the Design-Builder will 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.

5. Cleaning

The Design-Builder will:

- (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;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3C: Deliverables for Substantial Completion and Total Completion

- 2 -

- (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.

6. Keys, Codes and Passwords

The Design-Builder will:

- (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. Records Documentation

- (a) Prior to Total Completion, the Design-Builder will 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, prepared in accordance with the drafting instructions in Technical Circular T-07/09, will be provided in both PDF and DWG format, and may include the declaration in Section 3.2.3.8.9 of the EGBC Authentication of Documents Guidelines.
- (c) All Construction Records and Quality Records compiled by the Design-Builder will be available to the Province and the Owner's Engineer upon request.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3C: Deliverables for Substantial Completion and Total Completion

- 3 -

- (d) The Design-Builder will ensure that all changes to drawings are properly and completely identified for record purposes. The drawing numbers will remain the same as the originals. All Construction Records will be stand-alone documents drafted in the format and to the standards of the original Design drawings.

2. Asset Inventory Data

- (a) Prior to Total Completion, the Design-Builder will collect and provide asset inventory data for the Province's electronic asset inventory records for all New Project Infrastructure. Such asset inventory data will 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.
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 HRPMS; andOther inventory – including but not limited to walls, fences, gates, guardrails and reflectors, and linear safety features.

- (b) Inventory data collected will be in the format prescribed in the applicable Province manual for the relevant provincial system.
- (c) The Design-Builder will 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) will be compatible with the software used by the Province for managing the asset inventory.
- (d) For BMIS, the Design-Builder will provide inventory data to the Province's Representative to enter into the BMIS electronic program. The information supplied will be generated in accordance with the definitions utilized within the BMIS. Clearance data, general arrangement data and Structure location information will be provided to the Province's

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3C: Deliverables for Substantial Completion and Total Completion

- 4 -

Representative to be input into BMIS 30 days prior to opening the Structure to public vehicle use. 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 will provide the Province with a complete list of all electrical inventory in electronic form.
- (f) Unless specified otherwise, electronic files will be compatible with the most recent version of either Microsoft Office or Adobe Acrobat Reader, and all supplied electronic files will 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.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

**APPENDIX 3D
WORKS SCHEDULE REQUIREMENTS**

1. GENERAL REQUIREMENTS

- (a) The Design-Builder will develop the Works Schedule using Oracle Primavera P6 scheduling software.
 - (i) The initial Works Schedule and any revised Works Schedule will be exported from the Primavera P6 data file and submitted in both .XER file format and PDF format.
 - (ii) The Design-Builder will use the same source data file for producing the Works Schedule (including the Critical Path Schedule) and any revised Works Schedule submitted in accordance with this Agreement.
- (b) The Design-Builder will apply critical path methodology that uses the sequence of activities that represents the longest path through the Works to determine the shortest possible duration to complete the Project Work.
- (c) The Narrative Report in the Works Schedule provided pursuant to Schedule 22 [Closing Deliveries] will include the following at a minimum:
 - (i) the basis of determination of durations of Project Work activities, in the form of a table listing the production rates and quantities for each of the Project Work activities related to the construction, erection, or installation of the Project Work elements described in Section 2(f)(v) of this Appendix;
 - (ii) assumptions made in the Works Schedule development;
 - (iii) naming or coding convention for activity IDs with, at a minimum, activity IDs including identification of Project phase, discipline, and work areas/zones;
 - (iv) identification of each of the working calendars used including the working days, non-working days, and hours of work; and
 - (v) Critical Path Schedule analysis that identifies general schedule risks, concerns, and potential mitigation measures to address risks, and processes to manage risks.
- (d) Each Narrative Report in a revised Works Schedule will at a minimum:
 - (i) identify the progress of the Project Work relative to the Project Schedule and, if the actual progress of the Project Work is forecasted to result in a non-compliance with the Project Schedule, the Design-Builder will identify the activities responsible for the delay;
 - (ii) describe the Project Work completed during the reporting period, including the submittals provided to the Province's Representative and status of review under the Review Procedure or Consent Procedure (as applicable), the delivery of materials and their quantities, and the Project Work elements completed or in progress compared to the planned work forecasted in the previous Work Schedule;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3D: Works Schedule Requirements

- 2 -

- (iii) identify current and upcoming potential issues or concerns that, if not addressed in a timely manner, may delay the Project Work;
 - (iv) identify changes to the revised Works Schedule, including the addition or deletion of activities, the addition or deletion of constraints, changes to the working calendar or hours of work, and changes to the original durations of activities that have not started;
 - (v) critical path analysis identifying any changes made to the previous Critical Path Schedule, including the addition or removal of activities; and
 - (vi) if applicable, a recovery plan in accordance with Section 3.3(c) of Schedule 3.
- (e) For each Project Work activity, the Design-Builder will:
- (i) provide a unique activity ID that will be alpha-numeric and follow a systematic naming convention to align with the work breakdown structure. Activity IDs in a revised Works Schedule will not be changed without the approval of the Province, acting reasonably; and
 - (ii) provide a unique name or description using consistent and intuitive terminology comprehensible to the Province. All revisions to the name or description of an existing activity in a revised Work Schedule must be noted in the Narrative Report together with a rationale.
- (f) The Design-Builder will identify the dependency of each activity on other activities. Additionally, the Design-Builder will:
- (i) use closed-sequence logic for each milestone. For clarity, each milestone will have at least one predecessor except for the first milestone denoting the Effective Date and have at least one successor except for the last milestone denoting the Total Completion date, and each milestone except for the first and last will have a start and a finish relationship;
 - (ii) not use a negative lag between any Project Work activities and/or milestones;
 - (iii) no positive lag should be used between Project Work activities and/or milestones on a finish-to-start (FS) relationship type;
 - (iv) for any two Project Work activities or milestones with a start-to-start (SS) relations define a lag no longer than the duration of the predecessor duration;
 - (v) use unconstrained sequencing logic for all Project Work activities and/or milestones, except for those listed in Appendix 3B [Project Schedule]; and
 - (vi) for every imposed date constraint used the Design-Builder will provide a narrative detailing the reason for using the imposed date constraint.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3D: Works Schedule Requirements

- 3 -

2. WORKS SCHEDULE DETAILED REQUIREMENTS

Each Works Schedule submitted under Section 3.3 of Schedule 3 will:

- (a) have the data date of the initial Works Schedule equal to the Effective Date;
- (b) have the last calendar day of the month as the cut-off date of the reporting period, unless otherwise agreed in writing by the Province and the Design-Builder;
- (c) have the data date hours set to 23:59;
- (d) include the current progress of the Project Work as of the data date of the revised Works Schedule, including:
 - (i) the actual start date for all in progress activities;
 - (ii) the actual start and end date for all completed activities;
 - (iii) the actual completion date for each milestone achieved;
 - (iv) the current forecast duration, start date and end date for all incomplete activities; and
 - (v) the current forecast date to achieve each of the remaining milestones;
- (e) not change the actual as-built information described in Section 2(d)(i) through (iii) of this Appendix unless agreed in writing by the Province and the Design-Builder;
- (f) provide a detailed breakdown of the Project Work into details of Design, procurement, and Construction indicating:
 - (i) the sequencing of Project Work activities;
 - (ii) key dates for design submissions;
 - (iii) a breakdown of the design components including the following:
 - (A) geotechnical investigations and design;
 - (B) highway design, MUP design, and traffic engineering, including signing and pavement markings;
 - (C) each Bridge;
 - (D) walls;
 - (E) guide sign structures;
 - (F) each culvert and utility crossing of Highway 1;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3D: Works Schedule Requirements

- 4 -

- (G) lighting, electrical and signalization;
- (H) Construction staging;
- (I) environmental works, including design of habitat offsetting and landscaping; and
- (J) Utility Work.
- (iv) a breakdown of the Works Schedule into the main procurement components, including the following:
 - (A) Subcontractors and vendors;
 - (B) structural steel fabrication and delivery;
 - (C) precast girders; and
 - (D) formwork, rebar, concrete;
- (v) a breakdown of the Works Schedule into the main Construction components including the following:
 - (A) construction mobilization;
 - (B) each road alignment and each element of road construction including clearing, grubbing, site preparation, ground improvement, embankment construction to subgrade, graveling, paving, barriers, line painting and signing;
 - (C) each Bridge separately;
 - (D) each wall separately;
 - (E) each guide sign structure separately;
 - (F) Utility Work;
 - (G) environmental Permits and works;
 - (H) establishment of pre-cast facilities and other production and support facilities;
 - (I) construction demobilization; and
 - (J) other significant Project Work functions on the critical path;
- (vi) the early and late start completion date for each activity;

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3D: Works Schedule Requirements

- 5 -

- (vii) the proposed duration in working days for each activity;
- (viii) free float and total float time for each activity, including reasonable allowances for the occurrence of events that may delay the Project Work; and
- (ix) the Critical Path Schedule;
- (g) be resource loaded, and provide the total labour for each trade and job classification;
- (h) 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;
- (i) include a schedule of Permits, detailing when each Permit will be required, when application will be made for each Permit, and when approval is forecasted to be received;
- (j) include the crewing and equipment assumptions for the activities and the dependency logic that is governed by or represents crewing or equipment availability;
- (k) include each of the milestones;
- (l) not include open-ended, open-start, or open-finish activities (including activities having no predecessor or successor) except for the first and last activities in the Work Schedule;
- (m) be logic-driven and calculated using the retained-logic scheduling methodology in Primavera P6. Progress override or actual dates methodology in Primavera P6 is not permitted.

3. CRITICAL PATH SCHEDULE

The Critical Path Schedule provided pursuant to Schedule 22 [Closing Deliveries] and any revised Critical Path Schedule will:

- (n) clearly indicate the critical path to the milestones;
- (o) demonstrate that all activities on the critical path are task-dependent; and
- (p) be the result of an unmodified software calculation of the critical path using the critical path method. The Design-Builder will not employ any additional filters or any other manual manipulation whatsoever to calculate the critical path.

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

**APPENDIX 3E
SAFETY DEMERIT POINT SYSTEM**

1. Safety demerit points (“**SD Points**”) will be assigned to the Design-Builder in connection with both safety culture and safety results as set out in this Appendix, and the total aggregate number of SD Points from the Effective Date to the Total Completion Date (the “**SD Points Balance**”) will be the total number of SD Points so assigned, subject to adjustment in accordance with this Appendix.
2. For safety culture, SD Points will be assigned, and the SD Points Balance will be calculated, for each one-month period starting the first day of the month in which the Design-Builder mobilizes to the Project Site and ending on the last day of the month in which the Substantial Completion Date occurs, as follows:
 - (a) Safety culture will be assessed each month by a health and safety specialist assigned by the Province’s Representative utilizing the metrics listed in Table 3E, with each metric being rated as "satisfactory" or "unsatisfactory" and with one SD Point being assigned for each metric rated as “unsatisfactory”:

Table 3E:

Safety Metrics	Verification Method*
<i>Daily Toolbox/Tailgate Meetings</i>	
1. Are all planned activities outlined with identified hazards, associated levels of risk and appropriate mitigation plans?	Document review and site observations
2. Is the document reviewed orally with all affected?	Site observations
3. Is the document signed by all attendees?	Document review and site observations
4. Are all other requirements outlined in the Health and Safety Program being met?	Document review and site observations
<i>Other Health & Safety Meetings</i>	
5. Are the requirements outlined in the Health and Safety Program being met for health & safety meetings other than the daily toolbox/tailgate meetings?	Document review and site observations
<i>Daily Field Level Risk Assessment/Field Level Hazard Assessment</i>	
6. Do they clearly specify the tasks/associated hazard/level of risks before mitigation/attached mitigation and residual risk?	Document review and site observations
7. Are they being reviewed daily and signed by the site supervisor?	Document review and site observations
8. Are all other requirements outlined in the Health and Safety Program being met?	Document review and site observations
<i>Inspections-Site</i>	
9. Are they conducted by the supervisor and accompanied by at least one worker?	Document review and site observations
10. Are hazards listed on the inspection report and, where practicable, are they eliminated immediately?	Document review and site observations
11. Where elimination is not practicable, are corrective actions assigned to the appropriate person and being implemented within a reasonable timeframe?	Document review and site observations
12. Are the findings discussed with all affected?	Document review and site observations

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3E: Safety Demerit Point System

- 2 -

Safety Metrics	Verification Method*
<i>Inspections-Heavy Equipment</i>	
13. Are all required certificate training and competency evaluations being met?	Document review and site observations
14. Are all scheduled equipment inspection requirements outlined in the Health and Safety Program being followed?	Document review and site observations
<i>Safe Work Plans</i>	
15. Are the safe work plans referenced in the Health and Safety Program being reviewed by all affected workers?	Document review and site observations
<i>Safe Job Procedures</i>	
16. Have reasonable efforts been taken in planning the work to avoid workers having to carry out high risk activities?	Document review and site observations
17. Are all safe job procedures reviewed with all affected before the task begins?	Document review and site observations
<i>Training</i>	
18. Is the required health & safety training up to date for all staff?	Document review and site observations
<i>Supervision & Equipment</i>	
19. Is the minimum level of first aid being provided, as outlined in Part 3: Rights and Responsibilities, Schedule 3A Minimum Level of First Aid of the <i>Occupational Health and Safety Regulation</i> ?	Document review and site observations
20. Are all worksites properly equipped with the necessary first aid equipment?	Document review and site observations
21. Is adequate and task-specific personal protective equipment provided for all workers?	Document review and site observations
<i>Incident / Near Miss Reporting</i>	
22. Are the requirements for incident and near miss reporting being followed?	Document review and site observations
23. Are all WorkSafe BC reportable requirements being completed in a timely matter?	Document review
<i>Monthly Health & Safety Statistics</i>	
24. Are the requirements for monthly reporting being met, including providing leading and lagging indicators?	Document review
25. Are the findings being reviewed by management and where applicable, are pro-active plans being developed to prevent incidents from occurring?	Document review
<i>Miscellaneous Other Health & Safety Requirements</i>	
26. Were all other requirements outlined in the Health and Safety Program being met?	Document review and site observations

*Note: Site observations may include interviews and/or discussions with workers and management.

- (b) The SD Points Balance will be reduced by two SD Points (to a minimum of zero) for each successive three-month period with zero SD Points assigned in connection with safety culture (and, for certainty, six continuous months with zero SD Points assigned in connection with safety culture will therefore reduce the SD Points Balance by four SD Points).

SCHEDULE 3: DESIGN AND CONSTRUCTION GENERAL REQUIREMENTS

Appendix 3E: Safety Demerit Point System

- 3 -

3. For safety results, SD Points will be assigned to lagging safety indicators from the Effective Date through to the Total Completion Date, as follows:
 - (a) SD Points will be assigned to lagging safety indicators involving workers at the Project Site, as follows:
 - (i) one SD Point will be assigned for each incident involving workers at the Project Site requiring medical aid at a hospital or clinic that does not result in lost time beyond the day of the incident;
 - (ii) two SD Points will be assigned for each lost-time incident involving workers at the Project Site up to two weeks' duration;
 - (iii) five SD Points will be assigned for each lost-time incident involving workers at the Project Site longer than two weeks' duration;
 - (iv) 20 SD Points will be assigned for each life and/or career altering incident or fatality to workers at the Project Site; and
 - (v) two SD Points will be assigned for any other incident that requires notification to WorkSafe BC.
 - (b) Additional SD Points will be assigned to safety incidents involving the public or private property, as follows:
 - (i) two SD Points will be assigned for each incident causing property damage to private property up to \$100,000;
 - (ii) five SD Points will be assigned for each incident causing injury to the public or property damage to private property above \$100,000; and
 - (iii) 20 SD Points will be assigned for each life and/or career altering incident or fatality to the public.

**SCHEDULE 4
DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS**

PART 1 DESIGN AND CONSTRUCTION REQUIREMENTS	6
ARTICLE 1 LANING AND GEOMETRICS DESIGN CRITERIA	6
1.1 Order of Precedence.....	6
1.2 General Requirements.....	6
1.3 Geometric Design Criteria	10
1.4 Specific Design Requirements by Project Section.....	13
1.5 Traffic Engineering.....	18
ARTICLE 2 PAVEMENTS	23
2.1 Pavement Design Criteria	23
2.2 Order of Precedence.....	23
2.3 General Requirements.....	23
2.4 Design ESALs.....	24
2.5 Prescribed Pavement Areas.....	26
2.6 Asphalt Pavements.....	26
2.7 Concrete Pavements.....	28
2.8 Roughness	28
2.9 Pavement Structural Capacity.....	29
2.10 Pavement Acceptance at End of General Project Work Defect Warranty Period	29
2.11 Pavement Design Report.....	30
ARTICLE 3 STRUCTURAL DESIGN CRITERIA.....	30
3.1 Order of Precedence.....	30
3.2 General Requirements.....	30
3.3 New Structures – General	32
3.4 Existing Bridges and Retaining Walls	38
3.5 New Retaining Walls	40
3.6 Sign, Traffic Signal, Lighting, and ATMS	42
ARTICLE 4 SEISMIC DESIGN CRITERIA	42
4.1 General Requirements and Order of Precedence	42
4.2 Seismic Inputs.....	42
4.3 System Level Seismic Performance Criteria	44
4.4 Component Level Design Criteria	44
4.5 Seismic Analyses	46
4.6 Seismic Design Strategy Memorandum.....	46
4.7 Seismic Performance Drawing	47
ARTICLE 5 GEOTECHNICAL DESIGN CRITERIA	47
5.1 Order of Precedence.....	47
5.2 General.....	47
5.3 Slope Stability.....	47
5.4 Settlement and Deformation	48
5.5 Lightweight Fills.....	49
5.6 Use of Timber Piles for Ground Improvement	49
5.7 Geotechnical Design and Construction Reporting.....	50
5.8 Geotechnical Investigation.....	50
5.9 Foundations.....	50
5.10 Instrumentation	51
5.11 Surcharge / Preload (and Ground Improvements)	52

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

- ii -

ARTICLE 6 ELECTRICAL, SIGNALS AND LIGHTING DESIGN CRITERIA	52
6.1 Order of Precedence.....	52
6.2 Materials – General Requirements.....	53
6.3 New 264th Street Underpass Bridge Structure(s).....	53
6.4 Electrical Servicing Power Distribution	53
6.5 Roadway Lighting.....	54
6.6 MUP and Pedestrian Lighting.....	55
6.7 Lighting for Transit Mobility Hub	56
6.8 Lighting for Truck Parking Facility	56
6.9 Traffic Signals.....	57
6.10 Electrical Cabinet and Kiosks	58
6.11 Temporary Lighting During Construction	58
6.12 Truck Parking Facility Access Control Gate	59
6.13 Construction Cameras.....	59
ARTICLE 7 DRAINAGE DESIGN CRITERIA	59
7.1 Order of Precedence.....	59
7.2 General Design Basis.....	60
7.3 Project Specific Requirements	60
ARTICLE 8 SIGNING AND PAVEMENT MARKING DESIGN CRITERIA	64
8.1 Order of Precedence.....	64
8.2 Materials	64
8.3 Guide Signing	65
8.4 Regulatory and Other Signing	66
8.5 Pavement Markings	67
8.6 HOV/EV Lanes and Bus-on-Shoulder Operation.....	68
8.7 Transit-Only Lanes	68
8.8 Active Transportation Facilities.....	68
8.9 CVSE Pullouts	69
ARTICLE 9 LANDSCAPE AND SITE RESTORATION DESIGN CRITERIA.....	69
9.1 Order of Precedence.....	69
9.2 General.....	69
9.3 Landscaping Requirements.....	70
ARTICLE 10 CYCLING AND PEDESTRIAN FACILITIES	74
10.1 Order of Precedence.....	74
10.2 General Requirements.....	75
10.3 Design Requirements	76
10.4 Specific Requirements	79
ARTICLE 11 TRANSIT MOBILITY HUB	81
11.1 Order of Precedence.....	81
11.2 General Requirements.....	82
11.3 Geometric Design	82
11.4 Specific Requirements	83
ARTICLE 12 INTELLIGENT TRANSPORTATION SYSTEMS (ITS)	85
12.1 Order of Precedence.....	85
12.2 ITS Equipment.....	86

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

- iii -

12.3	ITS Design and Implementation	87
12.4	ITS Communication System	89
ARTICLE 13 ROAD SAFETY AUDIT		93
13.1	Order of Precedence.....	93
13.2	Road Safety Audit Team.....	94
13.3	Design-Builder's Responsibility	94
13.4	Road Safety Audit Process.....	94
13.5	Temporary Traffic Control (Design) Road Safety Audit.....	97
13.6	Temporary Traffic Control (On-site) Road Safety Audit	97
13.7	Certificates	98
ARTICLE 14 DEMOLITION, REMOVALS AND DISPOSAL.....		98
14.1	Demolition	98
14.2	Waste Removal	99
14.3	Strong Pit Disposal Site	99
14.4	Removal of Existing Electrical Equipment.....	101
14.5	Removal of Existing Utilities.....	102
14.6	Fort Langley Sign Salvage.....	102
ARTICLE 15 TRUCK PARKING FACILITY.....		102
15.1	Order of Precedence.....	102
15.2	General Requirements.....	103
15.3	Geometric Design	103
15.4	Specific Requirements	104
ARTICLE 16 CLIMATE CHANGE ADAPTATION		106
16.1	General Requirements.....	106
16.2	Climate Data	106
16.3	Climate Vulnerability Risk Assessment & Analysis	107
16.4	Climate Change Adaptation Report	107
PART 2 DESIGN AND CERTIFICATION PROCEDURE		108
ARTICLE 1 DESIGN MANAGEMENT PLAN AND TECHNICAL APPRAISAL FORMS		108
1.1	Submission of Design Management Plan	108
1.2	Compliance with Design Management Plan.....	109
1.3	Review Meetings	109
1.4	TAF Submission Requirements	109
1.5	TAF Form and Content.....	109
1.6	TAF Variation.....	110
ARTICLE 2 DESIGN SUBMISSIONS, REVIEW AND REPORTS.....		110
2.1	Design and Certification Procedure	110
2.2	Design and Certification Procedure in Emergency.....	110
2.3	No Limitation.....	110
2.4	Format of Design Submissions	110
2.5	Preparation of Design Data.....	111
2.6	Interim Design Review	111
2.7	Final Design Review.....	111
2.8	Final Design Submissions.....	112

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

- iv -

2.9	Road Safety Audit Design Data.....	117
2.10	Objection to Design Data.....	117
2.11	Adherence to Design Data	117
2.12	IFC Drawings.....	117
2.13	No Construction.....	117
2.14	Designer Review During Construction.....	118
2.15	Temporary Works.....	118
2.16	Documentation for Ministry Jurisdictional Atlas.....	119

**ARTICLE 3 INDEPENDENT REVIEW AND CHECKING OF STRUCTURES AND
GEOTECHNICAL SYSTEMS..... 119**

3.1	Independent Review.....	119
3.2	Documented Checking.....	119
3.3	Categories of Structures and Geotechnical Systems.....	119
3.4	Existing Structures	120
3.5	Category Proposal.....	121
3.6	Structure Checking Procedure	121
3.7	Checking Team	121
3.8	Structure and Geotechnical System Design Checking Responsibility.....	122
3.9	Independence	122

ARTICLE 4 DESIGN CERTIFICATION 123

4.1	Design Certificates.....	123
4.2	Submission of Design Certificates.....	123
4.3	Road Safety Audit Certificates	123
4.4	Coordinating Professional Engineer Certificate	123

ARTICLE 5 TESTING..... 124

5.1	Conduct of Testing.....	124
5.2	Test Recording and Reporting	124

ARTICLE 6 CONSTRUCTION CERTIFICATES..... 124

6.1	Construction Certificates	124
-----	---------------------------------	-----

PART 3 TRAFFIC MANAGEMENT..... 125

ARTICLE 1 GENERAL TRAFFIC MANAGEMENT REQUIREMENTS..... 125

1.1	Order of Precedence.....	125
1.2	Recognized Products List	125
1.3	General Requirements.....	126
1.4	Location and Storage of Materials and Equipment.....	128
1.5	Incident Management.....	128
1.6	Special Events.....	128
1.7	Detour Route and Lane Shift Requirements	129
1.8	Seasonal Shutdown.....	134
1.9	Existing Traffic Signals	135
1.10	Temporary Traffic Signals and Lighting	136
1.11	Accommodation of Pedestrians and Cyclists.....	136
1.12	Accommodation of Transit	137
1.13	Property Access	137
1.14	Consequences of Occurrence of Non-Permitted Traffic Disruption Events.....	137

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

- v -

ARTICLE 2	HIGHWAY 1.....	137
2.1	General Requirements.....	137
2.2	Restricted Periods for Highway 1	138
2.3	Lane Closures on Highway 1	138
2.4	Stoppages on Highway 1	138
2.5	Full Closures on Highway 1	138
2.6	Non-Permitted Traffic Disruption Events on Highway 1	138
2.7	Detour Route and Lane Shift Design Criteria for Highway 1.....	139
2.8	Specific Highway 1 Requirements.....	140
ARTICLE 3	INTERCHANGE RAMPs.....	142
3.1	General Requirements.....	142
3.2	Restricted Periods for Interchange Ramps.....	143
3.3	Lane Closures on Interchange Ramps.....	143
3.4	Stoppages on Interchange Ramps	143
3.5	Full Closures on Interchange Ramps	143
3.6	Non-Permitted Traffic Disruption Events on Interchange Ramps	144
3.7	Detour Route and Lane Shift Design Criteria for Interchange Ramps	144
ARTICLE 4	OTHER SPECIFIED ROADS.....	145
4.1	General Requirements.....	145
4.2	Restricted Periods for Other Specified Roads.....	146
4.3	Lane Closures on Other Specified Roads	146
4.4	Stoppages on Other Specified Roads	146
4.5	Full Closures on Other Specified Roads	146
4.6	Non-Permitted Traffic Disruption Events on Other Specified Roads.....	146
4.7	Detour Route and Lane Shift Design Criteria for Other Specified Roads	147
ARTICLE 5	TRAFFIC MANAGEMENT COMMUNICATIONS.....	148
5.1	Performance Measures.....	148
5.2	Traffic Management Communications	148
ARTICLE 6	TRAFFIC MANAGEMENT PLAN.....	151
6.1	General Requirements.....	151
6.2	Traffic Management Sub-Plans	153
ARTICLE 7	RESPONSIBILITIES FOR TRAFFIC MANAGEMENT PLAN.....	156
7.1	Design-Builder Responsibilities	156
7.2	Traffic Manager	156
7.3	Traffic Engineer	157
7.4	Traffic Control Supervisors	157
7.5	Traffic Control Personnel	158
7.6	Temporary Traffic Control On-site Road Safety Audits	158
	Appendix 4A Form of Design and Construction Certificates	
	Appendix 4B Sample Contents for a Structural TAF	

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

**PART 1
DESIGN AND CONSTRUCTION REQUIREMENTS**

ARTICLE 1 LANING AND GEOMETRICS DESIGN CRITERIA

1.1 Order of Precedence

The Design for the laning and geometrics will be in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards, and if there is any conflict between criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) the applicable Ministry Technical Bulletins and Circulars;
- (d) BC Supplement to TAC;
- (e) TAC Geometric Design Guide;
- (f) BC Active Transportation Design Guide;
- (g) TransLink Bus Infrastructure Design Guidelines;
- (h) the DBSS;
- (i) Manitoba Standard Guardrail Drawings; and
- (j) the applicable documented standards of the Municipality.

1.2 General Requirements

- (a) The Design-Builder's Design for the Project Infrastructure will be based foremost on good engineering practices, with the traffic performance of the Design verified in accordance with the requirements of Section 1.5 [Traffic Engineering] of this Part.
- (b) The laning and geometrics design criteria for the Project Infrastructure are set out in this Article.

1.2.1 TAC Design Domain Parameters

The BC Supplement to TAC and the TAC Geometric Design Guide give a range of design domain parameters that will be used for various components of the Design of the New Project Infrastructure. The TAC design domain value ranges for the various design parameters were established based on assumed variable operating speeds of the New Project Infrastructure. For the purposes of the Design of the New Project Infrastructure, operating speeds for the various roadways will be deemed to be no less than the design speed stated in the Design Criteria tables shown in Section 1.3[Geometric Design Criteria] of this Part. Consequently, unless specified otherwise, the design of the New Project Infrastructure will be based on the upper limit of the design domain values indicated in the BC Supplement to TAC and TAC Geometric

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 7 -

Design Guide, whenever either guide is applicable and subject to the order of precedence under Section 1.1 [Order of Precedence] of this Part.

1.2.2 General Laning

- (a) As a minimum, the number, location and configuration of lanes for Highway 1, 264th Street (Highway 13), Interchange Ramps and Other Specified Roads will be in accordance with the requirements of Section 1.3 [Geometric Design Criteria] of this Part.
- (b) Transitions and interfaces with municipal roadways will be, at a minimum, consistent with ambient conditions.

1.2.3 Interchanges

- (a) All movements will be free flow, provided in Section 1.4 [Specific Design Requirements by Project Section] of this Part.
- (b) All interchange layouts will incorporate single-exit configurations, except as noted otherwise in this Article.
- (c) The use of left side exit and entrance ramps will not be permitted.
- (d) All exit ramps will be designed as parallel exit ramps in accordance with the TAC Geometric Design Guide.
- (e) All entrance ramps will be designed as parallel entrance ramps in accordance with the TAC Geometric Design Guide.
- (f) Access to and egress from interchange ramps will be permitted for a maintenance access road as noted in Appendix 8D [Design-Builder Property Obligations] to Schedule 8.

1.2.4 Intersections

- (a) All intersections will be Performance Based Connections unless noted otherwise in this Article.
- (b) Intersections will be designed in accordance with Chapter 700 of the BC Supplement to TAC unless otherwise provided in this Article.
- (c) Intersections on 264th Street will be located such that the grades on 264th Street will not exceed 4.0% to avoid steep adverse grades for any left turn movements turning against (uphill) the grade.
- (d) Intersection configurations which incorporate left and/or right turn movements of more than two lanes (per movement) will not be permitted.
- (e) Signalized intersection designs will be in accordance with Article 6 [Electrical, Signals and Lighting Design Criteria] of this Part.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 8 -

- (f) Double lane channelized right turn movements at signalized intersections will be signal controlled.
- (g) to the requirements specified elsewhere in this Article, the Design will provide an intersection spacing meeting the following criteria:
 - (i) intersection spacing will be adequate for the intersections within the interchange area to operate as a network and accommodate the traffic volumes and queues without queue spillback to adjacent intersections, Transit Mobility Hub access, ramps or highway mainlines; and
 - (ii) distance between intersections will be adequate to accommodate merging and weaving movements between intersections and interchange ramps and meet the performance criteria specified in this Article.

1.2.5 Access to Properties

- (a) Existing accesses to and egresses from affected properties from and to the road network will be maintained, except as noted otherwise in Appendix 8D [Design-Builder Property Obligations] to Schedule 8.
- (b) Accesses to and from Highway 1 will not be permitted.
- (c) Accesses to existing Utilities will be provided in the Design.
- (d) All property accesses to municipal roads are not Performance Based Connections.

1.2.6 Weaving Sections

- (a) The capacity analysis of weaving sections will be determined using procedures in the Highway Capacity Manual and as specified in this Article.
- (b) Weaving sections on the mainline of Highway 1 will be designed to maintain the principles of “lane balance” as per the TAC Geometric Design Guide, unless otherwise specified in this Article.

1.2.7 Horizontal Curves

- (a) The minimum horizontal curve radius shown in the design criteria for the Highway 1 mainline is 5,000 m which does not require Superelevation.
- (b) The minimum horizontal curve radii shown in the design criteria for interchange ramps are based on a maximum 6% Superelevation. Minimum horizontal curve radii for municipal arterial and collector roadways are based on a maximum Superelevation rate of 6% in accordance with Township of Langley requirements.

1.2.8 Vertical Curves

Low points in the design profiles will not occur on Bridges and will be located a minimum of 5 m beyond any abutments.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 9 -

1.2.9 Stopping Sight Distance

The minimum stopping sight distances will be those shown on the design criteria tables based on TAC Geometric Design Guide Table 2.5.2. The increased stopping sight distance values as shown in TAC Geometric Design Guide Table 2.5.3 will be used where appropriate.

1.2.10 Decision Sight Distance

Decision sight distance based on TAC Geometric Design Guide Table 2.5.6 will be used and will be applied as noted in Section 1.3 [Geometric Design Criteria] of this Part.

1.2.11 Clear Zone Requirements

- (a) Clear Zone distances and side slope treatments on roads within Provincial jurisdiction will be established in accordance with Section 620.06 of the BC Supplement to TAC.
- (b) Requirements for Zones of Intrusion in accordance with the TAC Geometric Design Guide will be incorporated in the Design. The Design will meet the requirements of Section H5.4.4 of the Alberta Roadside Guide for Zones of Intrusion, including Table H5.5 for obstacle setbacks, except for vertical clearance under Bridges, where vertical clearance requirements of Article 3 [Structural Design Criteria] of this Part will apply.

1.2.12 Detours and Temporary Roadways

The design criteria for detours and other temporary roads will be in accordance with the requirements of Part 3 [Traffic Management] of this Schedule.

1.2.13 Emergency Turnarounds

Existing emergency turnarounds on Highway 1 will be maintained or relocated during Construction, in accordance with Table 1.2.13. The existing turnaround at Station 1066+30 is to be of a geometric design standard to accommodate the movements of a Tipper and Attenuator Trailer 2 design vehicle or similar vehicle acceptable to the Province, turning within the areas of the HOV lanes. The existing turnaround that is to be relocated to Station 1020+40 will be designed to accommodate the movements of a Tipper and Attenuator Trailer 2 design vehicle or similar vehicle acceptable to the Province, turning within the areas of the highway shoulders.

Table 1.2.13

Existing Station	Final Station
1028+15	Within 50m of 1020+40
1066+30	Within 50m of 1066+30

1.2.14 Traffic Barriers

- (a) Traffic barriers will be placed in accordance with the BC Supplement to TAC, the TAC Geometric Design Guide and the AASHTO Roadside Design Guide.
- (b) The Manitoba Tall Wall (Manitoba Standard Guardrail Drawings, Part Number TSGM99e) concrete barrier, incorporating a minimum TL-4 vehicle configuration with truck cab and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 10 -

cargo box zones, will be used at all fixed hazards within the Highway 1 – 264th Street Interchange where protection for Zone of Intrusion is required.

- (c) Traffic barriers with ends protected by terminals, flares, or impact attenuators, will be in accordance with the AASHTO MASH, Test Level 3.
- (d) Bicycle railing requirements will be considered for the 264th Street Bridge crossing and in accordance with Article 3 [Structural Design Criteria] of this Part.
- (e) On Roads within Provincial jurisdiction roadside barrier will be used where it is not practical to provide Clear Zone. The Ministry's standard 810mm median barrier will be used for all roadside applications within the Highway 1 – 264th Street Interchange.
- (f) On Township of Langley roads, roadside barrier warrants will be in accordance with the "Barrier Index Warrant", Section 610 of the BC Supplement to TAC.
- (g) Barriers adjacent to the _____ on the 264th Street Structure over Highway 1 will be provided in accordance with the requirements of the BC Active Transportation Guide, the TAC Geometric Design Guide and the BC Supplement to TAC.
- (h) Concrete drainage barriers and median drainage barriers will have a minimum spacing of 40 m.
- (i) Barriers between the MUP and Highway 1, including its interchange ramps, will be installed in accordance with the following:
 - (i) If the MUP maintains a minimum separation of 6.5 m from the adjacent Bus-on-Shoulder's Travelled Lane, then the Ministry's standard 810 mm Concrete Median Barrier will be used.
 - (ii) If the MUP's separation from the Bus-on-Shoulder's Travelled Lane is less than 6.5 m, then a 1420 mm high-strength, narrow-profile concrete barrier, with an integrated glare screen, and meeting AASHTO MASH, Test Level 5 barrier testing requirements, will be installed.

1.3 Geometric Design Criteria

1.3.1 General – Roadway Cross Slopes

- (a) The Design will prevent standing water within the travelled lanes. A 3% crossfall may be considered.
- (b) Where more than 3 lanes are sloped in the same direction, the Design will consider the risk of hydroplaning at the 1 in 10 year storm design frequency.

1.3.2 Highway 1

Table 1.3.2 provides the highway geometric design criteria that are to be applied for the Design and Construction of Highway 1. Site specific additional requirements and/or exceptions (if any) to these requirements are addressed in Section 1.4 [Specific Design Requirements by Project Section] of this Part.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 11 -

Table 1.3.2

Geometric Design Criteria: Highway 1	
Design Classification	RFD
Posted Speed	100 km/h
Design Speed	100 km/h
Basic # of Lanes	6 ⁽¹⁾
Minimum Radius	5,000 m
Minimum K Factor Sag Vertical Curve	45
Minimum K Factor Crest Vertical Curve	52
Maximum Grade	3.0%
Minimum Grade	0.5% ⁽²⁾
Maximum Superelevation	Normal Crown
Minimum SSD	185 m
Minimum DSD	230 m ⁽³⁾
Lane Width	3.65 m ⁽⁴⁾
Shoulder Width Outside	3.0/4.5 m ⁽⁵⁾
Shoulder Width Inside	2.5 m
Clear Zone – Offset Width Recovery Slope (x:1)	11.0 m 4:1 or 2:1 with CRB
Median Width	Varies
Design Vehicle	WB-20

Notes:

- (1) Six basic lanes include two eastbound and two westbound General Purpose Lanes and one HOV/EV lane in the eastbound and westbound directions.
- (2) The minimum gradient on vertical tangents is 0.5% for all new and reconstructed highway sections. Where existing highway sections are retained with a minimum longitudinal gradient less than 0.5%, the existing gradient may be retained provided that positive drainage is achieved (e.g. with increased roadway cross slopes). Within vertical curves the cross slope will be greater than 0.50% wherever the longitudinal gradient is in a transition zone and less than 0.50%.
- (3) DSD reflects the avoidance maneuver C for speed/path/direction change rural roadway in accordance with Section 2.5.5 of the TAC Geometric Design Guide.
- (4) A lane width of 3.65 m matches the existing lane width in the Highway 1 corridor.
- (5) The highway shoulder will be in accordance with requirements of Section 1.4.1(a)(iii) of this Part.

1.3.3 Interchange Ramps

Table 1.3.3 provides the highway geometric design criteria that are to be applied for the Design and Construction of the Interchange Ramps. Site specific additional requirements and/or exceptions to these requirements (if any) are addressed in Section 1.4 [Specific Design Requirements by Project Section] of this Part.

Table 1.3.3

Geometric Design Criteria: Interchange Ramps			
	1 or 2 Lane Loop Ramps 40 km/h Design Speed	1 or 2 Lane Ramps 50 km/h Design Speed	1 or 2 Lane Ramps 60 km/h Design Speed
Design Classification	RFD	RFD	RFD

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 12 -

Geometric Design Criteria: Interchange Ramps			
	1 or 2 Lane Loop Ramps 40 km/h Design Speed	1 or 2 Lane Ramps 50 km/h Design Speed	1 or 2 Lane Ramps 60 km/h Design Speed
Posted Speed	40 km/h	50 km/h	60 km/h
Design Speed	40 km/h	50 km/h	60 km/h
Minimum Radius	55 m	90 m	130 m
Minimum K Factor Sag	4 ⁽¹⁾	6 ⁽¹⁾	9 ⁽¹⁾
Minimum K Factor Crest	4 ⁽²⁾	7 ⁽²⁾	13 ⁽²⁾
Maximum Grade	6.0%	6.0%	6.0%
Minimum Grade	0.5% ⁽³⁾	0.5% ⁽³⁾	0.5% ⁽³⁾
Maximum Superelevation	6%	6%	6%
Minimum SSD.	50 m	65 m	85 m
Minimum DSD.	N/A	145 m ⁽⁵⁾	175 m ⁽⁵⁾
Lane Width	3.60/4.80 m ⁽⁴⁾	3.60/4.80 m ⁽⁴⁾	3.60/4.80 m ⁽⁴⁾
Shoulder Width Outside	2.50 m	2.50 m	2.50 m
Shoulder Width Inside	1.00 m	1.00 m ⁽⁶⁾	1.00 m ⁽⁶⁾
Design Vehicle	WB-20	WB-20	WB-20

Notes:

- (1) The minimum k value for sag curves is based on comfort control.
- (2) The minimum k value for crest curves is based on taillight control.
- (3) The minimum gradient on vertical tangents is 0.5% for all new and reconstructed roadway sections. Where existing roadway sections are retained with a minimum longitudinal gradient less than 0.5%, the existing gradient may be retained provided that positive drainage is achieved (e.g. with increased roadway cross slopes). Within vertical curves the cross slope will be greater than 0.50% wherever the longitudinal gradient is in a transition zone and less than 0.50%.
- (4) 3.60 m lane width for two lane ramps. 4.80 m lane width for single lane ramps
- (5) DSD is for speed/path/direction change on rural roadway.
- (6) Where SSD is restricted by horizontal curvature and the CMB, the inside shoulder width will be increased to improve the minimum SSD up to a maximum inside shoulder width of 1.80 metres using an asymmetrical median treatment as described in Section 630.02(6) of the BC Supplement to TAC. The 1.80 metres inside shoulder width will provide 3.30 metres between the CMB and an object on the road as shown in Figure 630, a Modified Median, in the BC Supplement to TAC. The outside shoulder width may be decreased by the same amount the inside shoulder width is increased, such that the total width of the ramp remains constant.

1.3.4 264th Street (Highway 13)

Table 1.3.4 provides the roadway geometric design criteria that are to be applied for the Design and Construction of 264th Street at the Highway 1 – 264th Street Interchange. Site specific additional requirements and/or exceptions (if any) to these requirements are addressed in Section 1.4 [Specific Design Requirements by Project Section] of this Part.

Table 1.3.4

Geometric Design Criteria: 264th Street	
Design Classification	UAD
Posted Speed	60 km/h
Design Speed	60 km/h

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 13 -

Geometric Design Criteria: 264th Street	
Basic Lanes	4
Minimum Radius	130 m
Minimum K Factor Sag Vertical Curve	18
Minimum K Factor Crest Vertical Curve	11
Maximum Grade	6.0%
Minimum Grade	0.5% ⁽¹⁾
Maximum Superelevation	6.0%
Minimum SSD	85 m
Lane Width	3.6 m
Shoulder Width Outside	1.5 m/1.8 m ⁽²⁾
Shoulder Width Inside	1.0 m
Clear Zone – Offset Width	2.0 m ⁽³⁾
Median Width	2.1 m ⁽⁴⁾
Design Vehicle	WB-20

Notes:

- (1) The minimum gradient on vertical tangents is 0.5% for all new and reconstructed roadway sections. Where existing roadway sections are retained with a minimum longitudinal gradient less than 0.5%, the existing gradient may be retained provided that positive drainage is achieved (e.g. with increased roadway cross slopes). Within vertical curves the cross slope will be greater than 0.50% wherever the longitudinal gradient is in a transition zone and less than 0.50%.
- (2) Outside shoulder will be 1.8 m (measured to face of curb) for 264th Street north of 56 Avenue North.
- (3) Urban context with curb and gutter or CRB approaching the structure.
- (4) Consists of 1.3 m raised median plus 0.4 m paint line offsets.

1.4 Specific Design Requirements by Project Section

- (a) In this Section, it has been assumed for description purposes that Highway 1 follows an east/west alignment.
- (b) All interchanges and intersections described herein will be Performance Based Connections unless otherwise identified.
- (c) The following provides the minimum requirements for the Design of Highway 1, the Highway 1 – 264th Street Interchange, 264th Street (Highway 13), Other Specified Roads, the Transit Mobility Hub, the Truck Parking Facility, signalized intersections and CVSE Pullouts.

1.4.1 Highway 1

- (a) The requirements that will be incorporated into the Design of this section of Highway 1 include the following:
 - (i) The existing number of General Purpose Lanes will be maintained and one HOV/EV lane will be provided in each direction for the length of the Project.
 - (ii) The Design-Builder will undertake a sufficient level of design to space proof for the future widening of Highway 1 to accommodate a third General Purpose Lane in each direction at all bridge The allocation for the future General

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 14 -

Purpose be consistent with the design standards and requirements set forth in this Article.

- (iii) The highway Shoulder will be 4.5 metres in width where Bus-on-Shoulder lanes are designated as a transit priority measure for use by authorized buses only. The Bus-on-Shoulder lane will extend on both sides of the highway from the Highway 1 – 264th Street Interchange to the east Project limit.
- (b) The cross section, alignment, and profile of the two Highway 1 carriageways at the Project limits will tie-in to the Interfacing Works in accordance with Part 4 [Interface Requirements] of Schedule 3:
 - (i) at the eastern Project limit of the 216th to 264th Widening Project; and
 - (ii) at the western Project limit of the Mainline West Project.
- (c) The Design-Builder will relocate the existing General Purpose Lanes of Highway 1 to their new location and alignment at the eastern Project limit concurrently with the relocation of the same General Purpose Lanes by the Mainline West Contractor in accordance with the requirements of Section 2.8 [Specific Highway 1 Requirements] of Part 3 of this Schedule and Part 4 [Interface Requirements] of Schedule 3.

1.4.2 Highway 1 – 264th Street Interchange

In addition to the requirements of Section 1.2.4 [Interchanges] of this Part, the requirements that will be incorporated into the Design of the Highway 1 – 264th Street Interchange include the following:

the Highway 1 – 264th Street Interchange will consist of a

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 15 -

- (b) a Transit Mobility Hub with separate bus loop and park and ride lot located in the northwest quadrant; and
- (c) a Truck Parking Facility located in the southwest quadrant.

1.4.3 264th Street (Highway 13)

- (a) The requirements that will be incorporated into the Design of this section of 264th Street (L73000) include the following:
 - (i) The existing two-lane cross section of 264th Street, starting from the boundary of the Project Lands south of 52 Avenue, will transition into a four-lane cross section north of 52 Avenue, incorporating two southbound lanes extending a minimum of 175 metres south of the 52 Avenue centerline and curb and gutter on both sides up to the south end of 5181 264th Street (PID 006-783-040).
- (b) The east side of 264th Street north of 56 Avenue North and adjacent to the 5670 264th Street property, will not require any road widening or reconstruction. The existing edge of pavement will be retained.

1.4.4 56 Avenue North

The requirements that will be incorporated into the Design of this section of 56 Avenue North (L73100) include the following:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 16 -

1.4.5 56 Avenue South

The requirements that will be incorporated into the Design of the 56 Avenue South intersection include the following:

- (a) a widening of the existing 56 Avenue South two-lane cross section will include a separate eastbound left turn lane into the Truck Parking Facility in the southwest quadrant of the Highway 1 – 264th Street Interchange, and a raised centre median from the Truck Parking Facility access easterly to the west approach to the 264th Street intersection; and
- (b) a the west approach to the 264th Street intersection on 56 Avenue South.

1.4.6 52 Avenue

The requirements that will be incorporated into the Design of 52 Avenue include widening of the westbound approach to the 264th Street intersection to include a single lane eastbound and separate westbound left and right turning lanes at the 264th Street intersection.

1.4.7 48 Avenue

The requirements that will be incorporated into the Design of 48 Avenue between 272 Street and Townshipline Road to separate the proposed MUP from 48 Avenue include widening of the existing 48 Avenue two-lane cross section to achieve a 1.6m shoulder and CMB for the eastbound lane.

1.4.8 Transit Mobility Hub

- (b) Design requirements for the Transit Mobility Hub are provided in Article 11 [Transit Mobility Hub] of this Part.

1.4.9 Truck Parking Facility

- (a) The Design-Builder will design and construct a Truck Parking Facility with direct access to 56 Avenue South, west of 264th Street in the southwest quadrant of the Highway 1 – 264th Street Interchange.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 17 -

- (c) Design requirements for the Truck Parking Facility are provided in Article 15 [Truck Parking Facility] of this Part.

1.4.10 Signalized Intersections

- (a) Traffic signal infrastructure and control will only be provided at the following intersections on 264th Street (Highway 13):
 - (i) 56 Avenue North intersection;
 - (ii) 56 Avenue South intersection; and
- (b) The Design-Builder will assess and analyze the traffic signal operations within the Project limits as well as adjacent municipal signals to arrive at a design that provides the best efficiency of operation of the interchange and adjacent intersections.
- (c) The Design-Builder will review the operation of the existing traffic signal at the 56 Avenue North / Gloucester Way intersection and identify and carry out, with the consent of the Municipality and the Province, any improvements required to the signal infrastructure or control to achieve the Traffic Operations Requirements.
- (d) The Design-Builder will provide for future traffic signalization at the 264th Street and 52 Avenue intersection in accordance with Article 6 [Electrical, Signals and Lighting Design Criteria] of this Part.
- (e) Traffic signal and lighting infrastructure will be in accordance with Article 6 [Electrical, Signal and Lighting Design Criteria] of this Part.

1.4.11 CVSE Pullouts

- (a) The Design-Builder will provide new CVSE Pullouts:
 - (i) of length 50.0 m by 6.0 m width adjacent to the northbound traffic lanes on the east side of 264th Street north of 52 Avenue; and
 - (ii) of length 100.0 m by 8.0 m width adjacent to the westbound lanes on the north side of 56 Avenue North.
- (b) The Design-Builder will remove and close the existing CSVE Pullout on 56 Avenue prior to Substantial Completion.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 18 -

1.4.12 Accesses

- (a) The Design-Builder will maintain or reinstate all existing accesses within the Project limits unless otherwise specified in this Schedule or in Appendix 8D [Design-Builder Property Obligations] to Schedule 8.
- (b) All existing public access points fronting the 56 Avenue North / L74400 westbound entrance ramp to Highway 1, including the current access to Lot 28 (PID 001-854-828), will be permanently closed, and a new vehicle maintenance access road will be established, complete with a lockable steel gate, connecting to either Lot 27 (PID 012-817-431) or Lot 28 (PID 001-854-828), to ensure interconnectivity between the two lots for the primary purpose of habitat compensation maintenance, in accordance with Schedule 6 [Environmental Obligations] and Appendix 8D [Design-Builder Property Obligations] to Schedule 8.

1.4.13 Other Capacity Improvements

The Design-Builder will consider including capacity improvements to Other Specified Roads early in the Construction staging plan where these improvements are also required as part of the final improvement Design plan. These improvements may include:

- (a) extension of storage capacity for the westbound left turn lane at the 264th Street – 56 Avenue North intersection;
- (b) reducing the length of the existing traffic signals cycle at the 56 Avenue North – Gloucester Way intersection;
- (c) providing two westbound through lanes on 56 Avenue North west of the 264th Street intersection; and
- (d) widening 264th Street to the west south of 56 Avenue North to provide a northbound left turn lane for temporary general purpose traffic use at the 56 Avenue North intersection.

1.5 Traffic Engineering

1.5.1 General Requirements

- (a) Except where otherwise previously approved in writing by the Province's Representative in accordance with the Consent Procedure, the Design-Builder's Design will meet the traffic performance criteria (together, the "**Minimum Traffic Performance Criteria**") set out in:
 - (i) this Article; and
 - (ii) the Highway 1 / 264th Street Interchange 50% Detailed Design Traffic Analysis Draft Report dated June 2023 (the "**50% Detailed Design Traffic Analysis Draft Report**") and prior Traffic Analysis Reports prepared during the preliminary and functional design stages of the Project (together with the 50% Detailed Design Traffic Analysis Draft Report, the "**Traffic Operations Requirements**"), each as provided in the Data Room,

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 19 -

provided that, where a conflict arises between any of the Traffic Operations Requirements, the requirements set out in the 50% Detailed Design Traffic Analysis Draft Report will apply.

- (b) In accordance with Section 1.2(a) of this Part, the Design-Builder's Design will conform to the following basic principles for the key traffic performance metrics as verified in accordance with the Traffic Operations Requirements for the opening day and 2050 design horizon:
 - (i) highway mainline performance – the average speed along the Highway 1 mainlines will remain at or above 80% of the posted speed, as measured during the relevant Peak Hour;
 - (ii) Interchange Ramp performance – queues should not be detected within the critical deceleration distance along any Interchange Ramp during the Peak Hour; and
 - (iii) intersection level of service – the individual approach Stoppage will be less than 55 seconds for signalized intersections during the Peak Hour.
- (c) The Design-Builder will demonstrate that the interchange configurations in its Design, including Interchange Ramps and adjacent intersections, achieve the Minimum Traffic Performance Criteria. Such performance will be reported as specified in the Traffic Operations Requirements along with a traffic operations model replicating such performance, both of which will be submitted to the Province's Representative under the Consent Procedure.
- (d) The Design-Builder will use the VISSIM micro-simulation software (V10.0 or newer) and Highway Capacity Manual (HCS7) software to demonstrate that the Minimum Traffic Performance Criteria are met in its Design. The Design-Builder's model output for the Design will provide values for Section 1.5.3 [Performance Criteria] of this Part that equal or exceed the Minimum Traffic Performance Criteria.

1.5.2 Base Data

1.5.2.1 Modelled Network

- (a) Models of the Reference Concept for the AM and the PM Peak Hours are referenced in the Traffic Operations Requirements. The Design-Builder will use these Reference Concept models with alterations to represent the Design-Builder's Design. The modelled network outside the scope of the Project will not be altered by the Design-Builder.
- (b) The traffic performance criteria described in Section 1.5.3 [Performance Criteria] of this Part have been established from the Reference Concept models.

1.5.2.2 Travel Demand

The travel demand matrices referenced in the Traffic Operations Requirements represent the existing base year horizon and 2050 design horizon. These travel demand matrices for all vehicle types and for both the AM and PM Peak Hours will not be altered by the Design-Builder.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 20 -

1.5.2.3 Design Hourly Volumes

The travel demand matrices, demand and the demand profile referenced in the Traffic Operations Requirements will solely dictate the design traffic performance for the Project. Design hourly volumes in other documentation have been provided for reference only and are not to be used for traffic performance analysis.

1.5.3 Performance Criteria

1.5.3.1 General

The data to be used for the analysis of any modified modelled network will be calculated as specified in the Traffic Operations Requirements.

1.5.3.2 System Wide Performance Metrics

1.5.3.3 Component Performance Metrics

- (a) The following component performance metrics related to interchanges have been established to determine whether the Design-Builder's model performs in a similar manner as the Reference Concept model:
 - (i) mainline travel speed;
 - (ii) serviced traffic volumes;
 - (iii) Stoppages;
 - (iv) off-ramp queues; and
 - (v) intersection Stoppage.
- (b) Values for these performance metrics will be calculated for the Design-Builder's Design as specified in the Traffic Operations Requirements and will meet or exceed the Minimum Traffic Performance Criteria.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 21 -

- (c) Ramp metering will not be permitted in the Design-Builder's model.

1.5.3.4 Traffic Engineering Design

In addition to the Traffic Operations Requirements, traffic engineering design analyses will be conducted in accordance with the following performance criteria:

- (a) The Design-Builder will undertake the necessary traffic engineering analysis to demonstrate that the geometric design and configuration of highway segments, weave sections, merges and diverges will accommodate the AM and PM design hour traffic volumes with respect to the following minimum traffic performance criteria as defined in and determined using the methodology prescribed in the Highway Capacity Manual (or VISSIM model in the case of on-ramp 'lane additions'):
 - (i) LOS D.
- (b) Permitted exceptions will only apply to the following locations, where a LOS E will apply:
 - (i) Highway 1 Westbound On-Ramp merge during the PM Peak Hour; and
 - (ii) Highway 1 Eastbound On-Ramp merge during the PM Peak Hour.
- (c) The Design-Builder will undertake the necessary traffic engineering analysis to demonstrate that the geometric design and configuration of signalized intersections, including storage lengths of all left and right turn movements, will accommodate the AM and PM design hour traffic volumes with respect to the following minimum traffic performance criteria as defined in and determined using the methodology prescribed in the Highway Capacity Manual:
 - (i) overall intersection LOS D (average vehicle Stoppage less than 55 seconds);
 - (ii) no movement will exceed LOS D (average vehicle Stoppage less than 55 seconds); and
 - (iii) no movement will exceed a v/c of 0.90.
- (d) The Design-Builder will undertake the necessary traffic engineering analysis to demonstrate that the geometric design and configuration of unsignalized intersections, including storage lengths of all left and right turn movements, will accommodate the AM and PM design hour traffic volumes with respect to the following minimum traffic performance criteria as defined in and determined using the methodology prescribed in the Highway Capacity Manual:
 - (i) overall intersection LOS D (average vehicle Stoppage less than 35 seconds);
 - (ii) no movement will exceed LOS D (average vehicle Stoppage less than 35 seconds); and
 - (iii) no movement will exceed a v/c of 0.90.
- (e) For adjacent intersections with less than 200 m separation, analysis by the Design-Builder will demonstrate that the intersections can operate as a network with regard to queue lengths and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 22 -

signal coordination if applicable, and that queues will not spill back into upstream intersections, roundabouts or interchanges. These requirements will apply to the Transit Mobility Hub, the signalized 264th Street – 56 Avenue North intersection, and the 264th Street – 56 Avenue South intersection.

1.5.4 Non Performance Intersection Requirements

Section 1.5.3 [Performance Criteria] of this Part will not apply to the following locations/movements:

- (a) northbound right-turn movement at the 264th Street and 56 Avenue North signalized intersection during the AM Peak Hour; and
- (b) westbound left-turn movement at the 264th Street and 52 Avenue future signalized intersection during the PM Peak Hour.

1.5.5 Traffic Signals

- (a) Traffic signal coordination will be implemented on all roadways where signalized intersection spacing is less than 200 metres. Traffic signals will be designed to include actuation by vehicle and pedestrian/cyclist movements.
- (b) municipal traffic signals are to be included in the traffic signal coordination scheme the Design-Builder will define the coordination scheme and seek approvals from the Municipality.
- (c) The Design-Builder will coordinate with the Municipality with regard to any modifications that may be required at municipal traffic signals during construction and post-construction. Proposed modifications will be supported by traffic engineering analysis.
- (d) Traffic engineering checklists and signal timing sheets for the Design of all signalized intersections within the New Project Infrastructure within Provincial jurisdiction will be developed in accordance with the Electrical and Traffic Engineering Manual and submitted to the Province's Representative pursuant to the Consent Procedure.
- (e) The Design-Builder will design and install all temporary signal timings that may be required during Construction. For temporary signal timings for traffic signals within Provincial jurisdiction, traffic engineering checklists and signal timing sheets will be submitted to the Province's Representative in accordance with the Consent Procedure.
- (f) The Design-Builder will design and implement new signal timing plans to accommodate opening day traffic at all intersections within the New Project Infrastructure. The design of signal timing plans will meet the performance criteria in Section 1.5.3.4(c)(iii) of this Part. At a minimum four signal timing plans (AM, PM, Midday, and off peak) will be designed and implemented for each signalized intersection. The Design-Builder will be responsible for estimating opening day traffic volumes. Estimated traffic volumes, traffic engineering checklists and signal timing sheets for signals within Provincial jurisdiction will be submitted to the Province's Representative in accordance with the Consent Procedure.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 23 -

- (g) After opening of the Project to general traffic, the Design-Builder will review the traffic signal operations at all intersections within Provincial jurisdiction one week, one month, six months and annually thereafter during the warranty period. As part of each review, the Design-Builder will undertake traffic counts and develop and implement new signal timing plans to meet the performance criteria in Section 1.5.3.4(c) of this Part. Updated signal timing sheets and supporting analysis will be submitted to the Province's Representative in accordance with the Consent Procedure whenever signal timings are to be adjusted.
- (h) All traffic engineering checklists and signal timing sheets will be signed and sealed by the responsible engineer, who will be a Professional Engineer of the appropriate discipline.
- (i) The Design-Builder will be responsible for obtaining all traffic data that may be required for analysis and signal timing design purposes.

ARTICLE 2 PAVEMENTS

2.1 Pavement Design Criteria

Pavement Design will be in accordance with Technical Circular T-01/15, except that where Technical Circular T-01/15 refers to the Ministry's Standard Specifications for Highway Construction, the corresponding sections of the DBSS will apply. Pavement structural design will be carried out in accordance with Technical Circular T-01/15 for a "Pavement Structure Type A", except for the locations specified in Sections 2.6(e) and 2.6(f) of this Part.

2.2 Order of Precedence

Pavement Design and Construction will in accordance with the criteria contained in this Article, the other requirements of this Agreement and the Reference Documents, and if there is any conflict between criteria contained in this Article, the other requirements of this Agreement and any Reference Document, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) Technical Circular T-01/15;
- (d) the DBSS; and
- (e) the Township of Langley's pavement design standards.

2.3 General Requirements

- (a) The construction of pavements will be in accordance with the DBSS.
- (b) Short sections of highway with varying pavement types (for example asphalt and concrete) are not permitted unless otherwise specified.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 24 -

- (c) The running surface of all roadways and MUPs within the Project Lands and under the Province's jurisdiction, will be new asphalt for the full width and the asphalt pavement structure will meet the requirements of this Article, except as follows:
- (i) where specified otherwise in this Schedule;
 - (ii) the northbound lane of 264th Street, north of the intersection with 56th Avenue North;
 - (iii) 56th Avenue North, east of the CVSE pullout; and
 - (iv) beyond the limits of any Project-related roadworks at the south end of Highway 13, north end of 264th Street, west end of 56th Avenue South and east end of 52 Avenue.
- (d) Within the Project Lands under the Township of Langley's jurisdiction, individual lanes impacted by construction will be repaved across their full width.

2.4 Design ESALs

- (a) Design ESALs will assume the following lane distribution factors:
- (i) HOV/EV lane: 10%;
 - (ii) inside lane: 75%;
 - (iii) outside lane: 75%; and
 - (iv) Bus-on-Shoulder lane: 100% of transit bus traffic.
- (b) 20 year design ESALs that will be used for pavement design of the mainline roadways, ramps and side roads are provided in Table 2.4.1 and Table 2.4.2.

Table 2.4.1

20-Year Design ESALs for Mainline				
Direction	Section Limits		20-Year Design ESALs for Mainline (Million)	20-Year Design ESALs for Transit (Million)
	From (Station)	To (Station)		
Eastbound	West Paving Limit (1020+30.000)	On Ramp from 264th Street (1029+000)	87	3.4
	On Ramp from 264th Street (1029+000)	East Paving Limit (1073+000)	95	3.4
Westbound	West Paving Limit (1520+30.000)	Off Ramp from Highway 1 to 264th Street (1544+000)	95	3.4
	Off Ramp from Highway 1 to 264th	East Paving Limit (1573+000)	97	3.4

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 25 -

20-Year Design ESALs for Mainline				
Direction	Section Limits		20-Year Design ESALs for Mainline (Million)	20-Year Design ESALs for Transit (Million)
	From (Station)	To (Station)		
	Street (1544+000)			

Table 2.4.2

20-Year Design ESALs for Ramps and Side Roads			
Roadway Segment	Lane	Description	20 Years Design ESALs (Million)
Highway 13 (264th Street) and Highway 1 Interchange Ramps	Eastbound Off Ramp from Highway 1	Eastbound off ramp from Highway 1 to Highway 13	16
	Eastbound Off Ramp from Highway 13	Eastbound off ramp from Highway 13 to Highway 1	16
	Westbound Off Ramp from Highway 1	Westbound off ramp from Highway 1 to Highway 13	11
	Westbound Off Ramp from Highway 13	Westbound off ramp from Highway 13 to Highway 1	16
Highway 13 (264th Street)	Northbound Lane (N of 56 Avenue North) – L73000	56 Avenue North of Highway 1 to Access Road (North of 56 Avenue)	N/A ¹
	Southbound Lane (N of 56 Avenue North) – L73000	Northern limit of roadwork to 56 Avenue North of Highway 1	3
	Northbound Lane (S of 56 Avenue North) – L73200 & L75000	Southern limit of roadwork (south of 52 Avenue) to 56 Avenue North of Highway 1 (including intersection)	16
	Southbound (S of 56 Avenue North) – L73100 & L75000	56 Avenue North of Highway 1 (including intersection) to southern limit of roadwork (south of 52 Avenue)	20
56 Avenue (north of Highway 1) (L73300)²	Eastbound Lane	Highway 13 to Eastern project limit	20
	Westbound Lane	Eastern project limit to Highway 13	18
56 Avenue (South of Highway 1) (L74000)²	Eastbound Lane	Western project limit to Highway 13	12
	Westbound Lane	Highway 13 to Western project limit	5
52 Street²	Eastbound and Westbound Lanes	Highway 13 to Eastern project limit	N/A ³

Notes:

- (1) Resurfacing not required north of the crosswalk at the intersection. Reinstate existing pavement where impacted by construction.
- (2) Design will also meet or exceed the Township of Langley pavement design standards.
- (3) Design to be based on “a 2 lane collector <=60km/h rural road (TLR12)” in the Township of Langley Subdivision and Development Servicing Bylaw 2019 (No. 5382).

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 26 -

2.5 Prescribed Pavement Areas

- (a) The minimum pavement structure for road and parking areas not included by Section 2.4 will be selected based on Table 2.5.

Table 2.5

Pavement Structure				
Lanes/Alignment	Asphalt (mm)	WGB (mm)	SGSB (mm)	Total (mm)
L75100, L75500, L75700 northbound, & L75900 – Transit Bus Loop, Transit Bus Off-Ramps from Highway 1 and 264th Street, and Transit Bus Access to 56th Ave North	170	300	300	770
Truck Parking Facility L75300 – Truck Parking Access Road	140	300	300	740
Transit Mobility Hub Park and Ride – L75700 southbound & L75800	75	150	300	525
56 Avenue South – L74000 – Shoulder widening for a Concrete Barrier	125	100	300	525
MUPs: M41000, M42000, M43000	75	150	250	475

- (b) The pavement structure for the bus shelters, bicycle parkade (bike racks/lockers) and the cultural artwork described in Article 10 [Transit Mobility Hub] of this Part and shown on the Reference Concept will consist of concrete slabs designed in accordance with the requirements set out in the TransLink Bus Infrastructure Design Guidelines.
- (c) Separate bike paths and sidewalk within the Project will be surfaced with a minimum 65 mm thick 16 mm Class 1 Medium Mix asphalt layer underlain by compacted WGB course of crushed granular of not less than 150 mm thickness, underlain by 250 mm of SGSB material. All gravel surfaces to be asphalt surfaced will have an emulsified asphalt primer. If any vehicle use is anticipated, appropriate adjustments to the pavement structure will be made.

2.6 Asphalt Pavements

- (a) For asphalt paving, the payment adjustments given in DBSS Section 502 will not apply.
- (b) Pavement structure of the Highway 1 General Purpose Lanes will be designed with a minimum of 200 mm Asphalt Concrete Pavement where the bottom 100 mm may be comprised of 25 mm Asphalt Base Course. Asphalt Base Course will be designed based on Marshall Mix Design criteria with optimum asphalt content selected to maximize durability, while also maintaining the stability required to support the intended traffic loads for the Design Life of the pavement, in accordance with the design properties in Table 2.6. Traffic is not permitted on Asphalt Base Course.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 27 -

Table 2.6

Asphalt Base Course Design Properties	
Number of blows each face of test specimens	75
Minimum Marshall Load N @ 60°C for 80 – 100 Pen. and 120 – 150 Pen	10000
Flow index units of 0.25 mm	8 to 16
Minimum % Voids in Asphalt Mix Aggregate	11.5
% air voids in laboratory compacted mixture	3.5 to 4.0
Minimum Asphalt Film Thickness	7.0 µm
Minimum Index of Retained Stability after immersion in water at 60°C for 24 hours	85%
Structural Layer Coefficient	0.34
Resilient Modulus	2350 MPa

- (c) Highway HOV/EV lanes and Bus-on-Shoulder transit lanes total thickness will be designed with a minimum of 175 mm and 135 mm of Asphalt Concrete Pavement, respectively.
- (d) Only asphalt pavements will be accepted. Final Travelled Lanes and Shoulders will be paved with new asphalt.
- (e) All new roadways will be designed to “Pavement Structure Type A”, except for the following, which will be designed to pavement design standards as defined by the Township of Langley:
 - (i) MUPs; and
 - (ii) municipal roads including 52 Avenue, 56th Avenue southwest of Truck Parking Area, and 56th Avenue northeast of CVSE Pullout.
- (f) All widened areas of existing roadway will be designed to “Pavement Structure Type A” except that 52 Avenue will be designed to Municipal standards as defined by the Township of Langley.
- (g) Pavement utilizing Class 1 Medium Mix or Superpave is permitted.
- (h) Asphalt overlays will have a minimum thickness of 50 mm.
- (i) The asphalt overlay at the Project limit will transition to the asphalt surface at the limit of the 216th to 264th Widening Project using a 1V:200H grade transition taper. This transition taper will be constructed within the Project limits. The minimum total pavement structure thicknesses specified in this Section 2.6 will not apply to this transition taper. The bottom and surface lifts of this transition taper pavement structure will have constant thickness.
- (j) For new construction on Structures, asphalt will have a minimum thickness of 100 mm with the exception of epoxy asphalt pavement used for orthotropic steel bridge decks.
- (k) Graded aggregate seal coat is not permitted.
- (l) Sulphur asphalt is not permitted.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 28 -

- (m) In areas of new roadway construction, river sand will not be used within 1.0 m of the underside of the asphalt, unless otherwise accepted by the Province, acting reasonably, in accordance with the Consent Procedure.
- (n) Asphalt cement will adhere to the following:
 - (i) an asphalt binder with a performance grade of PG 70-22 polymer modified will be used for the surface lift of HOV/EV lanes, Bus-on-Shoulder, and General Purpose Lanes of Highway 1, and ramps; and
 - (ii) for all other instances, Group A asphalt with a penetration grade of 80–100, conforming to the requirements of DBSS Section 952, will be used.
- (o) An antistrip additive, from the Recognized Products List, will be added to all asphalt mixes.
- (p) Prior to asphalt overlay or new asphalt pavement placement, any obvious defects in the roadway will be repaired. At the interface of new and old pavement structures or at the intersection with Township of Langley new and old roads, the pavement structure will be designed in a way that the pavement structure will provide adequate drainage capacity both transversely and longitudinally. Further drainage requirements are described in Article 7 [Drainage Design Criteria] of this Part.

2.7 Concrete Pavements

- (a) Predicted noise levels generated by traffic on concrete surfaces will be of the same level or less than those generated by traffic on conventional asphalt surfaces.
- (b) The surface skid resistance of concrete surfaces will be of the same level or greater than that of conventional asphalt surfaces.
- (c) Roller compacted concrete is not permitted.

2.8 Roughness

- (a) The roughness criteria in this Section will take precedence over the DBSS.
- (b) Roughness testing using the IRI will be conducted at the end of Construction in accordance with DBSS Section 502, however contrary to DBSS Section 502 the Design-Builder will be responsible for conducting the testing.
- (c) The roughness for all Travelled Lanes, except the surfaces noted in Section 2.8(d) of this Part, will have an IRI measured in accordance with the DBSS of:
 - (i) less than or equal to 1.6 m/km in 71%; and
 - (ii) less than or equal to 2.1 m/km in 100%.
- (d) Roughness testing for IRI is not required to be evaluated in the following locations:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 29 -

- (i) 56 Avenue North, 56 Avenue South, 52 Avenue, and 264th Street north of 56 Avenue North;
 - (ii) Transit Mobility Hub access road, bus-only lanes, and parking area;
 - (iii) Truck Parking Facility area and access;
 - (iv) interchange ramps; and
 - (v) within 10 m of a bridge expansion joint.
- (e) All pavements must be smooth, free of bumps, and obvious defects. All areas outlined in Section 2.8(d) of this Part are not exempt from the requirements of DBSS Section 502.57.09.
- (f) Acceptance criteria for roughness testing will apply for both asphalt and concrete pavements.

2.9 Pavement Structural Capacity

In addition to the requirements outlined in DBSS Section 502, the following will apply to all new and existing pavements:

- (a) A pavement surface deflection survey will be carried out using a FWD at a frequency of 50 m along each Travelled Lane. The test points will be staggered by 25 m along adjacent lanes.
- (b) FWD testing will be carried out according to ASTM D4694, with a series of four load applications being applied to the pavement surface. The first application is a “seating” load to confirm the FWD load plate is firmly resting on the pavement surface. The next three loads will be approximately 26, 40, and 53 kN. The representative rebound deflection calculated as per the Asphalt Institute MS-17, Chapter 6 will not exceed 0.5 mm.

2.10 Pavement Acceptance at End of General Project Work Defect Warranty Period

- (a) The Design-Builder will 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 will 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 will be conducted and reported in accordance with the Pavement Surface Condition Rating Manual. The PDI as described in the Pavement Surface Condition Rating Manual will be calculated using the current Ministry PDI model. Within each 50 m section, the PDI will 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 will rectify, in accordance with the remedial Project Work outlined in DBSS Section 502, any pavement within the sections which do not meet or exceed a PDI of 8.5.
- (c) Rut depth measurements will 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 will rectify the Project Work in accordance with DBSS Section 502.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 30 -

- (d) If the as-built noise levels of concrete pavements do not meet the predictions, the Design-Builder will undertake corrective measures as required.

2.11 Pavement Design Report

A design report will be submitted to the Province's Representative in accordance with the Review Procedure prior to the Interim Design submission and will contain, without limitation, the following:

- (a) results of field investigations, soil sampling, and laboratory testing;
- (b) rationale for the design parameters selected in developing the pavement design methodology as set out in this Article;
- (c) assumptions used in the Design; and
- (d) Design details at the interface between new roads and road infrastructure including bridge deck drainage, bridge expansion joints, catch basins, barriers and curb and gutters.

ARTICLE 3 STRUCTURAL DESIGN CRITERIA

3.1 Order of Precedence

The Design and Construction of Structures will be in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards, and if there is any conflict between the criteria contained in this Article, the other requirements of this Agreement and any Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) the Bridge Standards and Procedures Manual, including the BC Supplement to CSA S6:19;
- (d) the DBSS;
- (e) CSA S6:19;
- (f) AASHTO LRFD Bridge Design Specifications;
- (g) AASHTO LRFD Bridge Construction Specifications; and
- (h) FHWA Guidelines.

3.2 General Requirements

The following general requirements apply to all Structures.

3.2.1 Acceptable Products

All products used on the Project will meet the applicable Project Requirements and will be in

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 31 -

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. Acceptance will be at the discretion of the Province subject to the Design-Builder demonstrating sufficient experience with the proposed product and acceptable performance for the proposed product under conditions and applications similar to those for this Project.

3.2.2 Unacceptable Materials and Systems

In addition to the requirements of Clause 1.4.1 of the BC Supplement to CSA S6:19, the following are not permitted to be used on the Project:

- (a) stay-in-place metal formwork, including steel decking;
- (b) exposed steel sheet pile walls;
- (c) asphaltic plug bridge deck joints;
- (d) concrete stacking block wall systems are not permitted in the embankment Bridge interface zone;
- (e) extended steel piles (pile extensions above grade);
- (f) unbonded post-tensioning tendons;
- (g) metal bin walls;
- (h) hog fuel (wood waste);
- (i) shredded rubber tires as fill;
- (j) previously used materials;
- (k) mechanically stabilized earth walls with dry cast concrete block facings; and
- (l) walls with wire facings, in areas that are visible to pedestrians, cyclists or road traffic or that are subject to spray or surface runoff containing de-icing chemicals.

3.2.3 Structure Identification Numbers

Structure identification numbers, as assigned by the Province's Representative, will be incorporated into the Structures in accordance with Ministry standard practices. The Design-Builder will supply numeral forms and imprint identification numbers on Structures that are in accordance with Ministry standard practice.

3.2.4 Structure Parameters Data

As part of the Final Design submission, the Design-Builder will submit a spreadsheet including all structure parameters data for Structures as identified in Structure Parameters for Delivery by Engineers-of-Record on Ministry Projects.

Part 1: Design and Construction Requirements

- 32 -

3.3 New Structures – General

This section includes the requirements for all new Structures required for the Project.

3.3.1 Design Loads

Design loads for new Structures will be in accordance with CSA S6:19 and the BC Supplement to CSA S6:19. For fatigue design, the greater of site-specific traffic forecasts over the Design Life of the Structure and Class A Highway AADT will be used.

3.3.2 Durability and Maintenance

- (a) Design for durability and maintenance will meet the requirements of BC Supplement to CSA S6:19 and CSA S6:19. Bridge deck corrosion protection will be in accordance with Table 8.11.2.5.2 of the BC Supplement to CSA S6:19 for Main Roads.
- (b) All concrete will be inspected to identify and document any cracks including their location, width, and density. The results of the inspection will be reported to the Province's Representative. Cracks will be inspected and monitored up to the Total Completion Date. Cracks greater than 0.15mm and 0.25mm for prestressed and non-prestressed concrete, respectively, will be repaired. The limits of areas requiring repair or replacement will be identified and submitted to the Province's Representative pursuant to the Consent Procedure along with a plan for remedial action to be taken. No repairs will proceed until the plan has been accepted by the Province's Representative pursuant to the Consent Procedure.

3.3.3 Clearances

- (a) , the minimum vertical clearance to bridge Structures will be 5.2m over all paved highway surfaces, including any on- and off-ramp(s) that pass underneath. The minimum vertical clearance to pedestrian underpasses, sign bridges, and other lightweight structures spanning the highway will be 5.5m. Long-term settlement of supports, and superstructure deflection and future pavement will be accounted for in the vertical clearances.
- (b) Horizontal and vertical clearances will be determined with due regard to requirements for other considerations, including life safety, highway design, ventilation, fire, signage and illumination. Horizontal and vertical clearances will be determined taking account of future highway widening and a future MUP running under the south side of the Highway 13 bridge structure in accordance with Section 1.4.1(a)(ii) of this Part.

3.3.4 Aesthetics

- (a) Structures will be designed in accordance with the guidelines in the Manual of Aesthetic Design Practice as well as CSA S6:19, using a “Baseline” classification.
- (b) Structural steel and concrete interfaces will be detailed or protected such that no rust staining of the concrete occurs.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 33 -

3.3.5 Foundations

- (a) Structures will be designed such that all Foundation deformations, clearances and other performance requirements in this Agreement are met over the Design Life of the Structures. The Design will ensure that the required vertical and horizontal clearances are met over the Design Life of the Structures without additional intervention such as jacking and highway regrading.
- (b) The Design-Builder will, as part of the Interim Design and Final Design submissions, provide predictions of Foundation deformations for new Structures at two years, five years, 10 years, 20 years, 40 years, 75 years, and 100 years after the Substantial Completion Date.
- (c) The following requirements apply if drilled shafts are used:
 - (i) The Design of these piles will be based on a ‘High Degree of Understanding’, which encompasses the guidelines outlined in subsection 6.5.3.2 of CSA S6:19 and tables 6.2a, 6.2b, and 6.2c of the BC Supplement to CSA S6:19.
 - (ii) The Design-Builder will clean out the shafts in accordance with the AASHTO LRFD Bridge Construction Specifications.
 - (iii) The base at all drilled shaft locations will be inspected by a Professional Engineer with geotechnical specialization using a shaft quantitative inspection device (SQUID) to verify that actual ground or bedrock conditions satisfy the geotechnical design requirements, prior to concrete placement.
 - (iv) The Design-Builder will conduct thermal integrity profiling (TIP) on all drilled shafts in accordance with ASTM D7949 to ensure the consistency, quality, and integrity of the concrete throughout their entire length, and to identify any potential defects or anomalies.
- (d) When pile Foundations are less than or equal to 20 m in length, driven piles will require at least one dynamic load test per driven pile type, per pile group, per pier, and per abutment element to demonstrate that the ultimate pile carrying capacity has been achieved. When pile Foundations are more than 20 m in length, driven piles will require at least two dynamic load tests per driven pile type, per pile group, per pier, and per abutment element, to demonstrate that the ultimate pile carrying capacity has been achieved. Dynamic load tests will be carried out in accordance with ASTM D4945.
- (e) Pile driving, PDA records, including raw data in digital format, will be submitted with the Construction Records, using Ministry Form H0053.
- (f) Piles installed using vibratory techniques will be completed by top driving and will require dynamic load testing as per the requirements for driven piles.
- (g) Where static load testing of piles is carried out, testing will be in conformance with ASTM D1143 for compressive load or ASTM D3689 for tensile load requirements.
- (h) Pile splices will be made such that the finished piles are straight from end to end.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 34 -

- (i) For steel piles, the following are required:
 - (A) Pipe pile material will conform to ASTM A252 Grade 3 or API 5L Grade X52. The boron content of steel piling will not exceed 0.0008%.
 - (B) All welding, including shop and field welding, will conform in quality and workmanship to CAN/CSA W59.
 - (C) All welding, including shop and field welding, will be undertaken by a company approved by the Canadian Welding Bureau to the requirements of CAN/CSA W47.1, Division 2 or better.
 - (D) Sufficient lengths of pile above cut-off will be allowed so that no part of the pile damaged during installation is used in the permanent Infrastructure.

3.3.6 Piers, Abutments, Wing Walls and Return Walls

- (a) Water ingress into or onto the Substructures or abutment wall backfill from the Superstructure above will be prevented. Joints between the Superstructure or end diaphragm and the Substructure will be waterproofed.
- (b) The requirements provided in this Schedule for retaining walls also apply to abutments and wing walls.
- (c) All exposed portions of piers, abutments, wing walls and return walls will be reinforced concrete construction and as specified in Clause 8.11.2.3.6 of the BC Supplement to CSA S6:19.

3.3.7 Bridge Deck Joints

- (a) Bridge Decks will be designed to minimize the occurrence of joints, and no joints over piers will be allowed.
- (b) Bridge Deck joints will 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 will make provision for movement at the interface between the approach slab and the approach roadway pavement structure.
- (d) All deck joints will provide for safe passage of cyclists, motorcyclists and pedestrians.
- (e) Expansion joints will be tested and proven watertight.
- (f) Expansion joints will be designed, detailed and installed to achieve the expected service life recommended by the joint manufacturer, considering the expected joint movement range over the life cycle of the joint, traffic patterns, and loading and maintenance frequency.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 35 -

3.3.8 Deck Drainage

- (a) Bridge deck drainage will meet the requirements of Clause 1.8.2.3 in the BC Supplement to CSA S6:19.
- (b) Runoff water from all Bridges will be discharged in accordance with the drainage and environmental requirements of this Agreement. Direct discharge over water channels, within 5.5 m of MUPs or roadways is not permitted.
- (c) The diameter of drainpipe to be installed will not be less than 200 mm.
- (d) Box girders and other members with internal voids will be detailed to ensure no standing water accumulates.
- (e) Deck drainage pipes will not be run through the voids of hollow structural members.
- (f) Drainage water from any Structure will not be discharged to a drainage layer behind a Substructure or Foundation.
- (g) The drainage system will be sufficiently robust to resist damage during cleaning and will resist commonly occurring chemical spillages.

3.3.9 Approach Slabs

Approach slabs will be provided at all abutments and be designed to meet the requirements of Clause 1.7.2 in the BC Supplement to CSA S6:19.

3.3.10 Jump Slabs

- (a) Bridges with short slab type end spans (“**jump slabs**”) to abutments supported on mechanically stabilized earth walls will be detailed and constructed such that all concrete components and bearings will have a minimum 750mm access in all directions for inspection, and will have separate approach slabs as required in Section 3.3.9 [Approach Slabs] of this Part. Jump slabs will be designed and detailed to prevent excessive cracking of the slabs or ponding at the serviceability limit state. The deflection of jump slabs will not exceed 15mm during construction.
- (b) The end span must be supported by an abutment and procedures for jacking and repair of jump slabs and approach slabs in case of settlements will be developed and included in submissions. Acceptance of this Bridge type will be contingent on the Province accepting that inspection access and proposed repair procedures are adequate. A minimum of 6m of horizontal clearance will be provided between the pier face and the adjacent mechanically stabilized earth wall face.

3.3.11 Slope Protection

Concrete slope protection will be provided for sloped fills under end spans of bridges.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 36 -

3.3.12 Combination Barriers

- (a) All structural parapets on Bridges and approach slabs will be designed in accordance with CSA S6:19 and the BC Supplement to CSA S6:19.
- (b) All Bridges will have combination barriers in accordance with Section 12.4.6 of the BC Supplement to CSA S6:19 on the outsides of the roadway.
- (c) All Bridges will be in accordance with Section 10.3.7 [Railings and Fencing] of this Part.
- (d) All Bridges will have a debris fence on the exterior edge of all sidewalks and MUPs.
- (e) All Bridges without sidewalks or MUPs will have a combination barrier height of 1090 mm above the roadway surface as a minimum.
- (f) A maximum 2 – 50 mm conduits will be permitted to be installed within cast-in-place barriers/parapets.

3.3.13 Bearings

- (a) Enough space and strength will be provided for bearings to be inspected, maintained and replaced without modification to the Structure(s). Replacement of bearings will be possible without significant interruption to traffic flow.
- (b) Bearings will be restrained from “walking” (unintended incremental movement of a bearing from its original position).
- (c) Bearing seats will be designed to drain and prevent Ponding.
- (d) Bearings comprised of stainless-steel sliding surfaces, PTFE or mechanical components will be protected by means that can be easily removed for inspection.
- (e) Steel reinforced elastomeric bearings will be tested for concentric compression in accordance with paragraph (i) below. Steel reinforced elastomeric bearings used to resist seismic forces will be tested for concentric compression and combined compression and shear in accordance with paragraphs (i) and (ii) below:

(i) Concentric Compression Tests:

Each bearing will be tested as follows using a concentric compression load:

- (A) The testing machine used will have platens at least 20 mm greater in both plan dimensions than the bearing under test.
- (B) At least two dial gauge micrometers will be positioned at the centres of opposite sides of the bearing to measure deformation. When bearings are tested in single vertical stacks, a steel plate will separate the bearings and a set of dial gauge micrometers will be installed for each bearing.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 37 -

- (C) The load will be applied at the rate of 1.5 MPa/minute to a load of 7.5 MPa multiplied by the gross plan area. The deformations will be recorded.
 - (D) The load will be reduced at the same rate until the pressure on the bearing is 1.5 MPa, and the deformations will be recorded.
 - (E) The load on the bearing will be maintained at 1.5 MPa for fifteen minutes and the deformations will be recorded.
 - (F) The bearing will be reloaded as in step (C), and steps (D) and (E) will be repeated.
 - (G) The bearing will be reloaded to 10 MPa with deformations being recorded after each 1 MPa increment.
 - (H) The compressive stress of 10 MPa will be maintained for one hour. The deformations will be recorded at 10-minute intervals within this one-hour period.
 - (I) A graph of the pressure versus average deformation with data recorded will be constructed.
 - (J) The rates of loading specified in steps (C) and (D) also apply to steps (G) and (H).
- (ii) Combined Compression and Shear Tests:
- (A) After completion of the compression tests, all bearings used to resist seismic forces will be tested in combined compression and shear deflection. Each sample will be loaded in compression to the applicable combined “Dead Load Other Than Wearing Surface” plus “Dead Load Due to Wearing Surface” in addition to “Vertical Seismic Load”.
 - (B) The compression load will be maintained while the bearing is subjected to five complete reversed cycles of loading from 0 to + 100% shear strain to 0 to – 100% shear strain. Shearing in both longitudinal and transverse directions at the same time is not required.
 - (C) A continuous plot of the shear load and shear deflection will be recorded to permit an evaluation of bearing shear stiffness.
- (iii) A bearing will be rejected if any of the following deficiencies is shown:
- (A) if the bearing displays bulging patterns under compression load which indicate laminate placement which does not satisfy design criteria and manufacturing tolerances or poor laminate bond;
 - (B) if the bearing has more than three surface cracks which are greater than 2 mm long and 2 mm deep;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 38 -

- (C) if the compressive deformation exceeds 7% of the total elastomeric thickness of the bearing due to the application of the sum of the vertical serviceability loads shown on the drawings; or
 - (D) if lack of rubber to steel bond occurs under combined compression and shear tests.
- (f) Seismic isolation systems will be tested in accordance with Clause 4.10.9 in CSA S6:19.

3.4 Existing Bridges and Retaining Walls

Requirements for existing Bridges and retaining walls that are to be retained or modified are addressed in this Section.

3.4.1 Existing Bridges

- (a) The Design-Builder will be required to demolish the existing County Line Rd. Underpass (No. 01616) after the new Highway 1 – 264th Street Interchange Bridge Structure(s) have been constructed and all traffic has been transferred over to the new Bridge(s).
- (b) The Design-Builder will maintain the existing County Line Rd. Underpass in safe operation and in full capacity at all times until all traffic is transferred to the new Bridge(s) (the “**Transfer Date**”). The Design and Construction of the new Bridge(s) will be carried out in such a manner so as to not adversely affect the existing County Line Rd. Underpass while it remains in operation. All Design and Construction methods, including excavation and ground improvement, will be chosen and executed such that no damage of any kind is caused to the existing County Line Rd. Underpass.
- (c) Prior to commencing any excavation, ground improvement, piling, or any other Construction activity that could potentially affect the existing County Line Rd. Underpass (the “**Relevant Project Work**”), the Design-Builder and the Province will conduct a joint field assessment of the existing County Line Rd. Underpass to establish the condition of the piers, abutments, bearings, and seating of the girders on the bearings of the existing County Line Rd. Underpass (the “**Existing Condition**”). The Existing Condition will be thoroughly documented in a report, signed and sealed by a duly experienced Professional Engineer, to be submitted to the Province’s Representative in accordance with the Consent Procedure a minimum of 40 Business Days in advance of the proposed commencement of any Relevant Project Work, and the Design-Builder will not commence or permit the commencement of any Relevant Project Work until such report has been accepted by the Province in accordance with the Consent Procedure.
- (d) The Design-Builder will monitor the condition of the existing County Line Rd. Underpass from the Effective Date until the Transfer Date. The Design-Builder will prepare and submit a monitoring plan (the “**Monitoring Plan**”), signed and sealed by a duly experienced Professional Engineer, to the Province’s Representative in accordance with the Consent Procedure, a minimum of 30 business days in advance of the proposed commencement of any Relevant Project Work, and the Design-Builder will not commence or permit the commencement of any Relevant Project Work until the Monitoring Plan has been accepted by the Province in accordance with the Consent Procedure. The Monitoring Plan will take account of the Existing Condition and include, at a minimum:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 39 -

- (i) provisions for monitoring the movement of the existing County Line Rd. Underpass including displacements and rotations of the piers, and including a commitment to obtain repeatable baseline readings prior to commencing any activity that could potentially affect the structure;
 - (ii) provisions for monitoring the condition of the pier concrete for signs of distress including cracking;
 - (iii) provisions for monitoring the condition of the bearings and the seating of the girders on the bearings;
 - (iv) definition of hold points, defined as conditions that, if reached, necessitate the Design-Builder stop any Construction activities that caused the hold point to be reached and to address the condition prior to continuing these Construction activities;
 - (v) any engineering calculations required to establish hold points or justify any aspect of the Monitoring Plan;
 - (vi) definitions of the actions the Design-Builder will take to ensure that the existing County Line Rd. Underpass remains in safe operation and in full capacity at all times should these hold points be reached;
 - (vii) the proposed frequency of all monitoring activities, which must be sufficient to ensure timely detection and response to conditions constituting the identified hold points; and
 - (viii) proposed submission protocols for all monitoring data, including the frequency and format of reporting to the Province's Representative, to ensure that the Province's Representative is provided with concise, clear, and informative monitoring data that effectively summarizes the condition of the existing County Line Underpass and identifies any significant changes detected.
- (e) The Design-Builder will take any and all necessary action to ensure the existing County Line Rd. Underpass remains in safe operation and in full capacity until the Transfer Date.

3.4.2 Existing Retaining Walls

- (a) Existing retaining walls within the Project Lands that are not to be modified as part of the Project Work are not required to be upgraded to meet the requirements herein for new retaining walls.
- (b) For existing retaining walls that are lengthened, but not increased in height, the existing portion of the retaining walls are not required to be upgraded to new retaining wall requirements, and new portions of the retaining wall will be designed to meet the requirements for new retaining walls herein.
- (c) Existing retaining walls that are increased in height will be upgraded to meet the requirements herein for new retaining walls.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 40 -

- (d) If ground conditions in front of an existing retaining wall are changed, then the existing retaining wall will be retrofitted to meet the design criteria for new retaining walls.
- (e) If there is an increase in loading behind the retaining wall, then the existing retaining wall will be retrofitted to meet all design criteria for new retaining walls.
- (f) Existing retaining walls with substandard drainage will be retrofitted to provide proper drainage.

3.5 New Retaining Walls

In addition to the requirements for new Structures, the following apply to new retaining walls:

- (a) Reinforced soil slopes steeper than 70 degrees will also be considered as Retaining Structures.
- (b) Walls required to retain Bridge embankments adjacent to Bridge Foundations will be considered abutment walls.
- (c) Extensible Reinforcement is not permitted in abutment walls or wing walls where the wall supports bridge or other structural loads. Subject to acceptance by the Province under the Consent Procedure, Extensible Reinforcement is permitted for mechanically stabilized walls that do not support any structural loads, including abutment walls and wing walls where the abutments are supported by pile foundations. Mechanically stabilized earth walls with Extensible Reinforcement will only be permitted if all the performance requirements of the retaining wall system, the retained fill, and adjacent structures are demonstrated to be met over the Design Life, including deformation under load, long-term creep behaviour, and durability.
- (d) Geotextiles are not permitted for use as soil reinforcement.
- (e) Steel used in wire facing or soil reinforcing components of all mechanically stabilized earth walls will be galvanized and will have a minimum thickness accounting for corrosion.
- (f) For mechanically stabilized earth walls, items not covered by the AASHTO LRFD Bridge Design Specifications will meet the requirements of the FHWA Guidelines.
- (g) For mechanically stabilized earth abutment walls and wing walls, precast concrete facing panels will be used and a precast concrete coping will be used along the top of the walls. Subject to acceptance by the Province under the Consent Procedure, wire-facing walls may be used in lieu of precast concrete facing panels for stand-alone longitudinal walls provided all the requirements of this Article are met. The minimum soil reinforcement length for walls influenced by the abutment footings will be the greater of 60% of the distance from the top of the levelling pad to the road surface plus two metres 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 will be considered as influenced by the footing.
- (h) The tops of the retaining walls will be finished in straight-line segments.
- (i) Adequate drainage will be provided for all retaining walls.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 41 -

- (j) For soil nail walls, the Design will be in accordance with FHWA Circular No. 7 and shotcrete will be in accordance with Section 209 of the DBSS. The final surface of soil nail walls will be cast in place concrete with a formed surface.
- (k) Rigid traffic and combination barriers at or above retaining walls will be considered to be a structural component of the wall and will meet the requirements for Structures under this Article.
- (l) The aesthetics of retaining walls will be in accordance with the general guidelines in the Manual of Aesthetic Design Practice (for a “Baseline” classification) and in accordance with Section 3.3.4 [Aesthetics] and Article 9 [Landscape and Site Restoration Design Criteria] of this Part.
- (m) The retaining wall systems and abutment wall types in the Recognized Products List will be used for the Project Work subject to the exclusions listed in Section 3.2.2 [Unacceptable Materials and Systems] of this Part.
- (n) Two-stage mechanically stabilized earth walls may be permitted subject to the following conditions:
 - (i) total settlement at the end of Stages 1 and 2 will be limited to 150 mm and 40 mm, respectively;
 - (ii) differential settlements after Stage 1 and 2 will be limited to 75 mm per 15 m wall length and 37 mm per 30 m wall length, respectively;
 - (iii) total and differential settlements will be tolerated by all geotechnical and structural components, including facings and connectors;
 - (iv) a detailed settlement monitoring program will be implemented during Construction to calibrate the Design-Builder's design and analysis with field observations, and the Design-Builder will adjust the Construction schedule as necessary to ensure all performance requirements are met for the two-stage walls;
 - (v) the gap between the Stage 1 and Stage 2 walls will be backfilled with engineered fill;
 - (vi) the supplier of the two-stage wall will demonstrate a proven track record, having successfully implemented a minimum of three two-stage wall systems, each with a longevity of no less than five years; and
 - (vii) the Design of the wall will include extractable corrosion test strips, embedded in the first stage fill, for future corrosion monitoring. For each two-stage wall, a minimum of four percent of the second stage facing panels will have a minimum of four test strips each. The number, location and distribution of the corrosion test strips will be submitted to the Province's Representative in accordance with the Review Procedure.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 42 -

3.6 Sign, Traffic Signal, Lighting, and ATMS

- (a) The Design-Builder will design, fabricate and install Structures for Signs, traffic signals, lighting and ITS Equipment in accordance with the BC Supplement to CSA S6:19, CSA S6:19 and the Electrical and Signing Materials Standards. Levelling nuts below the base plates will not be permitted.
- (b) Existing Sign Structures may be re-used provided the structural components have been inspected and certified by a structural Professional Engineer as meeting the Project Requirements for ongoing use and provided all clearance requirements are met as per new Sign Structures. All equipment to be re-used will be power washed clean prior to re-use.
- (c) Undamaged aluminium sign extrusions may be re-used with new sign faces applied.
- (d) Sign Structures will be designed and constructed as “Other Bridges” for seismic design in accordance with the BC Supplement to CSA S6:19 and CSA S6:19.
- (e) The Design-Builder will provide electrical conduits in Bridges in accordance with Section 6.3 [New 264th Street Underpass Bridge Structure(s)] of this Part.

ARTICLE 4 SEISMIC DESIGN CRITERIA

4.1 General Requirements and Order of Precedence

The Design-Builder will comply with the seismic requirements of this Article, the other requirements of this Agreement and the following codes and standards and if there is any conflict between criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) Earthquake Scenario Spectra and Acceleration Time Histories;
- (d) BC Supplement to CSA S6:19;
- (e) CSA S6:19;
- (f) Caltrans Seismic Design Criteria; and
- (g) AASHTO Guide Specifications for LRFD Seismic Bridge Design.

4.2 Seismic Inputs

- (a) For the purposes of this Article, “Firm Ground” is defined as either Site Class C soils with an average shear wave velocity of 450 m/s or Site Class B with an average shear wave velocity of 760 m/s as specified in the Earthquake Scenario Spectra and Acceleration Time Histories.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 43 -

- (b) Ground motion time-histories for the applicable Firm Ground condition at the site as provided in the Earthquake Scenario Spectra and Acceleration Time Histories will be used for the Design. This data includes fifteen sets of Firm Ground time-history records and the associated uniform hazard response spectrum for each of the following two design earthquake events (the “**Design Earthquake Events**”):
 - (i) 10% in 50 years; and
 - (ii) 2% in 50 years.
- (c) For the purposes of this Article, a set of records is comprised of two orthogonal horizontal records.
- (d) The fifteen sets of time-history records are subdivided into three input source categories, representing shallow crustal earthquake motion (crustal), deep inslab earthquake motion (inslab), and Cascadia subduction interface earthquake motion (interface), respectively, with each category containing five sets of records. All fifteen sets of time-history records will be used in analyses for the Design.
- (e) The Firm Ground motion time-history records for a given Design Earthquake Event will be uniformly scaled using the ratios of peak Firm Ground accelerations for the location of the Structure(s) to the corresponding peak Firm Ground accelerations provided in the Earthquake Scenario Spectra and Acceleration Time Histories.
- (f) The peak Firm Ground horizontal accelerations for the location of the Structure(s) will be the 6th generation seismic hazard values as published in the National Building Code of Canada and available on the Natural Resources Canada website (<https://earthquakescanada.nrcan.gc.ca/hazard-alea/interpolat/nbc2020-cnb2020-en.php>).
- (g) Site specific ground motions will be developed using generally accepted ground response analysis methods for sites where no Firm Ground exists at the surface. The horizontal Firm Ground records uniformly scaled for the location of the Structure(s) will be used as seed records.
- (h) To develop site-specific response spectra, the following steps will be taken:
 - (i) For a given Design Earthquake Event, assemble the results of site response analysis separately for each of the three seismic input sources (i.e. crustal, inslab and interface). Then calculate the mean of each of the five sets of responses.
 - (ii) The maximum response of the mean (acceleration) at a given period from the three seismic input sources will be used for the Design.
 - (iii) Repeat the above two steps for each of the Design Earthquake Events described in Section 4.2 [Seismic Inputs] of this Part.
 - (iv) Site specific response spectra for each of the Design Earthquake Events will not be less than 80% of the code-based spectra for the applicable site class using non-liquefied soil properties.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 44 -

4.3 System Level Seismic Performance Criteria

- (a) The Structure(s) will be designed in accordance with the performance-based design requirements of the BC Supplement to CSA S6:19 and CSA S6:19 for Major-Route Bridges.
- (b) All Geotechnical Systems, new and existing, including retaining walls, slopes, and embankments upon which the Major-Route Bridge performance of the Structure(s) is dependent, and Geotechnical Systems within the Embankment Bridge Interface Zone will comply with the seismic performance requirements for Major-Route Geotechnical Systems as specified in the BC Supplement to CSA S6:19.
- (c) All other Geotechnical Systems, new and existing, will comply with the seismic performance requirements for Other Geotechnical Systems and seismic performance requirements for Geotechnical Systems outside the Embankment Bridge Interface Zone as specified in the BC Supplement to CSA S6:19, unless otherwise consented to by the Province.
- (d) The EGBC Seismic Design Guidelines will apply to this Project. The "Engineer of Record - Bridge Seismic Design Assurance Statement" included in Appendix A thereof will be required for all of the bridge Structure(s) and Geotechnical Systems.

4.4 Component Level Design Criteria

4.4.1 Foundations

- (a) The design of Foundations and corresponding effects on the Structure(s) will address the effects of inertial loading from the Structure(s) and the kinematic loading from ground displacements due to seismic shaking, soil liquefaction, and cyclic mobility for the Design Earthquake Events. Direction of ground displacements will be determined by geotechnical analysis.
- (b) Foundations in soils susceptible to liquefaction will be designed to have sufficient capacity to resist the forces generated by the soils. Strategies adopted to limit deformation will be identified. The use of seismic drains is prohibited.
- (c) Pile shaft design will meet the requirements of Caltrans Seismic Design Criteria for Type I and Type II Pile Shafts in addition to the requirements of the BC Supplement to CSA S6:19 and CSA S6:19.
- (d) Deep in-ground plastic hinging of extended pile bents, including Type I and Type II Pile Shafts, below the reasonably accessible depth as defined in the BC Supplement to CSA S6:19, is only permitted for liquefaction-induced load cases and when consented to by the Province. If deep in-ground plastic hinges are expected the piles will be instrumented to enable the post-earthquake assessment of the piles to the approval of the Province. Material and construction specifications for deep Foundation elements, including testing requirements and acceptable criteria, will be developed and included in the geotechnical Design submissions and will be subject to an Independent Review in accordance with Article 3 [Independent Review and Checking of Structures and Geotechnical Systems] of Part 2 of this Schedule.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 45 -

4.4.2 Liquefaction

- (a) Liquefaction effects will be assessed and accounted for in the Design of Structure(s) and Geotechnical Systems including ground movements such as settlements and lateral displacements due to flow liquefaction or cyclic mobility, cyclic degradation effects and flow slide potential, seismic soil-structure interaction including kinematic and interactions where appropriate, down drag forces on deep Foundations, seismic induced earth pressures on retaining walls, and seismic induced pore pressure build up and pore pressure redistribution.
- (b) For Structure(s) and Geotechnical Systems in the Embankment Bridge Interface Zone or outside the Embankment Bridge Interface Zone, the method of analysis will be in accordance with the BC Supplement to CSA S6:19.
- (c) Where liquefaction can occur around Foundations and Geotechnical Systems, the analysis and design will consider both the non-liquefied and liquefied states as specified in CSA S6:19 and the BC Supplement to CSA S6:19.
- (d) Effects of increased spectral accelerations at periods longer than one second due to soil liquefaction will be evaluated during Design using a Rigorous Method of ground response analysis.
- (e) For all Structure(s) and Geotechnical Systems, the effects of kinematic loading from ground displacements will be combined with the effects from inertial loading as specified in the BC Supplement to CSA S6:19.
- (f) In cases where soil softening does not reduce the inertial effects, then a Rigorous Method of soil-structure interaction analysis acceptable to the Province will be undertaken to develop an appropriate combination of inertial plus kinematic effects. As a minimum, the effects of kinematic loading from ground displacements will be evaluated and combined with the inertial loading effects using the combination of 50% kinematic demands \pm 100% inertial demands.
- (g) The input ground motion time-histories, as described in this Article, will be used in the seismic deformation analysis when performing a Rigorous Method of analysis, taking into consideration the anticipated reductions in shear strength and stiffness of the soil due to strong shaking. These analyses will be performed using a computational tool that is capable of taking into consideration the nonlinear soil behaviour, pre- and post-liquefaction stress-strain strength behaviour of soils, soil-structure interaction effects, and time domain base input excitations.

4.4.3 Slopes, Embankments and New Retaining Walls

- (a) Existing adjacent and dependent slopes and embankments will not be negatively impacted by new embankment construction with respect to the existing static design condition of the existing adjacent and dependent embankments. In the event of any damage to the existing adjacent and dependent embankments, the Design-Builder will restore such embankments to their pre-construction condition.
- (b) The requirements of the BC Building Code and the EGBC Landslide Guidelines will be met for slopes and embankments in the proximity of residential and commercial structures.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 46 -

- (c) Where existing slopes and embankments are modified, all functional and performance requirements specified in this Article will be met.
- (d) All new or modified existing slopes and embankments will be provided adequate protection against erosion and shallow slope movement. Except in the case of slopes under the end spans of overpass and underpass Bridge(s), design of such protection will be in accordance with the Manual of Control of Erosion and Shallow Slope Movement.
- (e) Analysis requirements for Geotechnical Systems will be in accordance with the BC Supplement to CSA S6:19.

4.5 Seismic Analyses

- (a) In all cases, analyses will be focused on determining the expected seismic deformations and the performance of the Structure(s). Seismic analysis will meet the requirements of this Article and the minimum analysis requirements of the BC Supplement to CSA S6:19 for Structures and Geotechnical Systems.
- (b) Damping levels will be consistent with the deformations and inelastic behaviour expected in the relevant Foundations and Structures and will be supported by relevant analyses and experimental evidence.
- (c) The maximum Rayleigh damping for nonlinear time-history analysis for Foundations will not exceed 8% and for other elements will not exceed 5%.
- (d) Effects of soil liquefaction that may occur during seismic shaking will be considered in the modeling, analyses, proportioning and seismic detailing of Structure(s).
- (e) Sensitivity studies using appropriate bounds on soil, foundation, and structure parameters will be carried out during Design to exclude unacceptable failure modes or unacceptable performance of the Foundation(s) or Structure(s).
- (f) In addition to the analysis requirements of the BC Supplement to CSA S6:19 for the Structure(s) in the non-liquefied condition, the Structure(s) will be analyzed for the liquefied condition using resistance parameters such as p-y curves, modulus of subgrade reaction, and/or t-z curves appropriate for liquefiable or cyclically mobile soil conditions.
- (g) Where in-ground pile hinges are expected, explicit piles foundation modelling will be utilized with individual piles modelled using distributed soil springs over the entire length of the pile.

4.6 Seismic Design Strategy Memorandum

The Design-Builder will develop a seismic design strategy memorandum (the “**Seismic Design Strategy Memorandum**”) to be submitted to the Province’s Representative as part of the Interim Design and Final Design submissions, which will establish how the seismic requirements of the Project will be accommodated in the Design and will include details of subsurface and groundwater conditions geotechnical and structural analysis methods and results, assumptions, load paths, displacement estimates, specialized seismic devise and systems.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 47 -

4.7 Seismic Performance Drawing

The Design-Builder will provide a drawing indicating the expected damage to the Structures and Geotechnical Systems components for the different Design Earthquake Events. This drawing will be in the format of, and with the information shown on the Seismic Performance Drawings Template located in the Data Room.

ARTICLE 5 GEOTECHNICAL DESIGN CRITERIA

5.1 Order of Precedence

Geotechnical investigation and design will be in accordance with the criteria contained in this Article, the other requirements of this Agreement and the Reference Documents, and if there is any conflict between the criteria contained in this Article, the other requirements of this Agreement and any Reference Document, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) Technical Circular T-04/17;
- (d) Bridge Standards and Procedures Manual, including the BC Supplement to CSA S6:19;
- (e) the DBSS; and
- (f) CSA S6:19.

5.2 General

The Design-Builder will be responsible for all geotechnical investigations and interpretations of all data required for the design and construction of the Project Work. This will also include geotechnical investigations and design for all temporary and permanent material stockpiles, surplus material/waste landfills and disposal sites.

5.3 Slope Stability

- (a) New and modified cut and fill slopes and embankments will meet the static design requirements as defined in Table 6.2b of BC Supplement to CSA S6:19. A Factor of Safety of 1.34 for global stability of permanent slopes under static conditions may be used provided that the consequence from slope instability is considered low and is accepted by the Province.
- (b) For seismic design of all new or modified cut and fill slopes or embankments refer to Article 4 [Seismic Design Criteria] of this Part.
- (c) Where existing slopes are modified, all functional and performance requirements specified in this Schedule will be met.
- (d) The existing natural slope or embankment condition can be accepted on the highway corridor if their performances are proven satisfactory without any indication of instability.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 48 -

Consequently, a full stability analysis of such slope(s) in question is not required provided that all of the following are satisfied:

- (i) to accept the performance of the slope, the slope in question must not be modified or altered by the Project;
 - (ii) special care must be given if works on the highway grade may negatively impact the stability of existing slopes (such as ditching at the base of a slope, added water to slope, etc.), in which case the Design-Builder will demonstrate that altering the toe conditions is conducted in a controlled method which will not negatively impact the overall stability of the slope;
 - (iii) justification for use of the existing slope condition will be documented in the Design documents; and
 - (iv) a description will be provided of the potential consequence of the existing slope failure impacting various components such as safety, environmental, and financial.
- (e) All new or modified cut and fill slopes or embankments will be provided adequate protection against erosion and shallow slope movement. Except in the case of slopes under the end spans of overpass and underpass Bridges, the Design of such protection will be in accordance with the Manual of Control of Erosion and Shallow Slope Movement. For slopes under the end spans of overpass and underpass Bridges, slope protection will be provided in accordance with Article 3 [Structure Design Criteria] of this Part.

5.4 Settlement and Deformation

- (a) Settlement and deformation analysis of Structures and embankments will be performed. Settlement analysis (including that for new fills) will consider the influence of underlying geological conditions.
- (b) Foundations for Structures will 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 as defined in Article 3 [Structural Design Criteria] of this Part.
- (c) Highway embankments and bridge approach fills will meet the following criteria:
 - (i) At 2 years after construction (warranty):
 - (A) maximum estimated differential settlement from the abutment to the grade supported end of the approach slab will not exceed 25 mm;
 - (B) maximum estimated settlement at any point on the approach fill will not exceed 150 mm;
 - (C) maximum estimated deviation in longitudinal grade from initial design grade due to settlement at any point on the approaches will not exceed 0.3%, as measured over a 20 m length; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 49 -

- (D) estimated changes in grades will be consistent with the criteria for pavement design, and will be limited such that pavement drainage is maintained, Ponding and sheeting of water is prevented, and the function of culverts and ditches is preserved.
- (ii) At 25 years after construction:
 - (A) maximum estimated differential settlement from the abutment to the grade supported end of the approach slab will not exceed 75 mm;
 - (B) maximum estimated settlement at any point on the approach fill will not exceed 300 mm;
 - (C) maximum estimated deviation in longitudinal grade from initial design grade due to settlement at any point on the approaches will not exceed 0.6%, as measured over a 20 m length; and
 - (D) estimated changes in grades will be consistent with the criteria for pavement design, and will be limited such that pavement drainage is maintained, Ponding and sheeting of water is prevented, and the function of culverts and ditches is preserved.
- (d) A monitoring program will be instituted to measure the absolute and differential settlements and lateral deformations at locations corresponding to the above-noted estimates. As a minimum, survey will be completed within 30 days of Substantial Completion and 30 days prior to the expiry of the General Project Work Defect Warranty Period and in accordance with all provisions of Part 8 [Project Work Defects and Warranties] of Schedule 3. Accurate survey measurements will be established and provided to the Province's Representative from permanent survey control points with elevations and horizontal coordinates taken to 1 mm accuracy. The survey information will include a sketch plan showing survey control locations and descriptions as well as the location of survey information taken on the Structures.
- (e) Should surveyed settlements or deformations exceed estimated values, a plan will be submitted 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 will complete all mitigation measures listed in the plan prior to the end of the General Project Work Defect Warranty Period.

5.5 Lightweight Fills

Light weight fills, if used, will be compliant with Section 6.20 of the BC Supplement to CSA S6:19.

5.6 Use of Timber Piles for Ground Improvement

- (a) Timber piles, if used for ground improvement, must be installed permanently below groundwater level.
- (b) Timber piles will not be used as Foundations supporting Structures, utility poles or highway sign bases.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 50 -

5.7 Geotechnical Design and Construction Reporting

- (a) Comprehensive geotechnical investigation and design reports will be completed for the Project, including geotechnical investigation reports (if applicable) and geotechnical design reports. The geotechnical investigation reports will cover existing geotechnical information and known site conditions, new geotechnical investigations performed for the Project and geotechnical test results. The geotechnical design reports will include geotechnical engineering analysis, geotechnical design assumptions, design parameters (and the basis for these), and geotechnical design recommendations. The geotechnical design reports will also include foundation settlements, pile capacities, seismic ground response analysis and design response spectra. All assumptions used in analyses will be clearly documented in the reports.
- (b) The geotechnical reports will be submitted to the Province's Representative at the Interim Design review.
- (c) The geotechnical reports associated with any Category III Structures or Geotechnical Systems will be reviewed by the Checking Team for Category III Structures and Geotechnical Systems prior to submitting the Interim Design.
- (d) All geotechnical drawings and reports will be sealed by a qualified Professional Engineer.

5.8 Geotechnical Investigation

- (a) A geotechnical investigation gap analysis will be completed and submitted to the Province's Representative pursuant to the Consent Procedure within 20 days following the Effective Date, and within 20 days following the Province's approval of the gap analysis, a geotechnical investigation plan (the "**Geotechnical Investigation Plan**"), which will describe the geotechnical investigation scope in connection with the Design and Construction of the Project, will be prepared and submitted to the Province's Representative in accordance with the Review Procedure. The Geotechnical Investigation Plan will include:
 - (i) the location and type of tests;
 - (ii) the qualification requirements for geotechnical testing staff;
 - (iii) the identification, qualification and certification of laboratories conducting the tests; and
 - (iv) reference to relevant Quality Documentation.
- (b) Within 90 days following the Effective Date, the Geotechnical Investigation Plan will be reviewed by the Checking Team for Category III Structures and Geotechnical System, updated to address comments from the Checking Team, and re-submitted to the Province's Representative in accordance with the Review Procedure with all comments and responses attached.

5.9 Foundations

- (a) Design of shallow and deep Foundations will be completed using Limit States Design procedures outlined in CSA S6:19 and the BC Supplement to CSA S6:19. In the case of any

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 51 -

conflicting Design criteria, Article 3 [Structural Design Criteria] of this Part will govern. Refurbishment of existing foundations will follow the same criteria set in this document.

- (b) Structures will be founded such that bearing, stability, and settlement criteria are achieved for the duration of the Design Life of the Structures.
- (c) Design and construction of drilled shafts, piles, and other deep Foundation elements not covered by CSA S6:19 and the BC Supplement to CSA S6:19, will be according to the AASHTO LRFD Bridge Design Specifications.
- (d) Soil anchors permanently included in Structures will be PTI – Class I Double Corrosion Protected (as defined in PTI DC35.1-14. Installation and testing of soil and rock anchor systems will also be according to PTI DC35.1-14.
- (e) Foundations for retaining walls, including MSE walls, will also include the following minimum criteria:
 - (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 and compound stability, erosion, and frost protection.

5.10 Instrumentation

- (a) The geotechnical design will identify and include provisions for geotechnical instrumentation systems (including piezometers, slope inclinometers, settlement gauges, survey/settlement monuments, 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 Design-Builder will also be responsible for maintaining and monitoring pre-existing geotechnical instrumentation for at least the following locations:
 - (i) Standpipe Piezometers: TH22-SEG 1-54, TH22-SEG 1-53; TH22-SEG 1-64; and
 - (ii) Vibrating Wire Piezometers: TH22-SEG 1-50; TH22-SEG 1-54; TH22-SEG 1-85 (2 NESTED), TH22-SEG 1-84 (2 NESTED); TH22-SEG 1-53; TH22-SEG 1-51.
- (c) The locations described in Section 5.10(b) of this Part will be monitored prior to the commencement of Construction and no less than monthly thereafter during Construction and the General Project Work Defect Warranty Period, unless otherwise agreed to by the Province's Representative. Any of the above listed installations will be replaced, should they be disrupted or damaged by activities, unless otherwise agreed to by the Province's Representative. Within three days after each monitoring event, a report (including trend plots

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 52 -

of movement over time) will be provided depicting the results of each monitoring event to the Province's Representative.

- (d) Instrumentation will be placed on representative cross sections with intervals not greater than 50 m.

5.11 Surcharge / Preload (and Ground Improvements)

- (a) Surcharging, preloading, and/or ground improvements will be identified, designed, and implemented to reduce the long-term consolidation of the clay deposits as encountered in the project area to the acceptable limits as defined in the Section 5.4 [Settlement and Deformation] of this Article.
- (b) It will be assessed if the provision of vertical drains is required to reduce the settlement quantities to the requirements of this document.
- (c) The surcharge and preload program will satisfy the schedule and general requirements of the Project.

ARTICLE 6 ELECTRICAL, SIGNALS AND LIGHTING DESIGN CRITERIA

6.1 Order of Precedence

The Design for all electrical, lighting, and signals will be in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards, and if there is any conflict between criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) Electrical and Traffic Engineering Manual and applicable Ministry Technical Bulletins and Circulars;
- (d) the DBSS;
- (e) Electrical and Signing Materials Standards;
- (f) Standard Electrical Equipment Maintenance Manual;
- (g) Econolite Cobalt Controller Unit Programming Guide;
- (h) Volume 2 TS2 Controller Cabinets of the TS2 Traffic Controller Assembly Manual;
- (i) the applicable documented specifications of the Municipality;
- (j) Pedestrian Crossing Control Manual;
- (k) Traffic Management Manual; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 53 -

- (l) MMCD.

6.2 Materials – General Requirements

- (a) All electrical products used in the Project are to be selected from the Recognized Products List. The use of electrical products not on the Recognized Products List requires written acceptance from the Province's Representative in accordance with the Consent Procedure. All materials used within municipal jurisdictions will be in accordance with the applicable standards of the Municipality.
- (b) All equipment will be new. No existing equipment will be re-used.

6.3 New 264th Street Underpass Bridge Structure(s)

The new 264th Street Underpass Bridge Structure(s) will include the following electrical equipment:

- (a) Electrical equipment as required to meet all of the requirements of this Article and Article 12 [Intelligent Transportation Systems (ITS)] of this Part.
- (b) Conduit across the full length of the Structure(s) extending 20m beyond the Bridge abutment or 10m beyond approach slabs whichever provides the greatest length of conduit. Conduits to be provided with concrete junction boxes on the approaches for the installation of future conductors or fibre optic cabling (assume a 144C fibre cable). Conduits will be installed in a manner to restrict physical access for the purposes of preventing vandalism and theft while still allowing access for maintenance and future installation of wire and cabling. Conduits will include as a minimum the following:
 - (i) two 50 mm conduits in each Bridge parapet, one designated for power and one designated for communication use;
 - (ii) four 50 mm conduits for power not located within the parapet;
 - (iii) four 50 mm conduits for communication not located within the parapet; and
 - (iv) separate or split junction boxes will be cast into any bridge parapet where the distance exceeds 75 m to aid in future cable installation. The Design will take into account requirements for any expansion joint fittings for the conduit and transition of conduits off the structure to at grade junction boxes for power and communication.

6.4 Electrical Servicing Power Distribution

- (a) Electrical equipment on this Project that falls under municipal jurisdiction will be provided with separate power sources from those under provincial jurisdiction.
- (b) All electrical services will be metered in accordance with BC Hydro standards.
- (c) 347/600V power distribution is permitted to support lighting systems. A separate 120/240V conduit system will be required on all roadways to support future ITS and non-lighting needs.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 54 -

- (d) The Design-Builder will undertake all coordination with power Utility Suppliers for all required servicing and will provide a list of all electrical loads to the power Utility Suppliers, as required. The Design-Builder will coordinate preparation and submittal of service applications with the Province's Representative. The Design-Builder will provide copies of all service applications to the Province's Representative at the time of submission to the power Utility Suppliers.

6.4.1 Wire Theft Deterrence

The Design-Builder will ensure that the following wire theft prevention strategies are implemented for this Project:

- (a) for Province Infrastructure: use aluminum for all underground roadway lighting conductors, including bonds, with the sole exception being copper for traffic signal wiring;
- (b) for Township of Langley Infrastructure: use copper for all underground conductors;
- (c) eliminate junction boxes between poles, except for those poles with breakaway bases;
- (d) secure junction box lids and pole hand-hole covers with security bolts; and
- (e) provide and install wire sentry devices or steel barriers on poles within the Township of Langley jurisdiction.

6.5 Roadway Lighting

- (a) The Design-Builder will ensure that all lighting is dark sky compliant. Light trespass and disability glare for drivers will be minimized.
- (b) All lighting will be LED technology.
- (c) High mast lighting is not permitted.
- (d) Luminares on Structures will have safety cables designed to meet the ANSI C136.31 requirements for vibration.
- (e) Full continuous lighting will be provided on 264th Street between 56 Avenue North and 56 Avenue South, 56 Avenue to the northeast of 264th Street, the Transit Mobility Hub access roads and all connections (i.e. intersections, roundabouts, ramps, and interchanges), including a pole, bracket and luminaire at the intersection of 52 Avenue and 264th Street, and the lighting levels will meet or exceed the design criteria outlined in the Electrical and Traffic Engineering Manual.
- (f) Partial Interchange Lighting will illuminate areas deemed critical for safety and operational efficiency. The Design-Builder will determine the precise locations and intensity levels of Partial Interchange Lighting in accordance with the relevant sections of this Agreement.
- (g) The Design-Builder will ensure that all Bridge Structures crossing Highway 1 are equipped with under-bridge lighting. Specifically, the Design-Builder will evaluate and determine the necessity for both daytime and nighttime lighting for each Underpass Structure.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 55 -

- (h) All decisions regarding lighting placement, intensity, and duration will be made with safety and operational efficiency as paramount considerations.
- (i) Lighting on municipal roads will meet the applicable design and construction standards of the Township of Langley and the MMCD standards.
- (j) All pedestrian, cyclist and MUP routes will be provided with full continuous lighting. Lighting levels will meet or exceed the design criteria outlined in the Electrical and Traffic Engineering Manual.
- (k) Conduits will be provided to all bus shelters for future lighting and signage.

6.6 MUP and Pedestrian Lighting

- (a) The Design-Builder will design and install lighting for all MUPs on the Project. The MUP lighting will be consistent with the MUP lighting on the Mainline West Project, including that:
 - (i) the Design-Builder will coordinate its lighting and power distribution design with the Mainline West Project to ensure uniformity in terms of light pole and fixture types, wattage, light levels, and power distribution for the MUPs; and
 - (ii) if a shared service is used to power lights outside the Project limits, the Design-Builder will account for loads from other projects in its power distribution design.
- (b) The Design-Builder will ensure that the MUP's pedestrian areas are illuminated in accordance with the following table:

Table 6.6

Roadway Names	Classification	Minimum Average Horizontal Illumination (Lux)	Average Vertical Illumination (Lux)	Maximum Average to Minimum Uniformity Ratio (Avg/Min)
MUP Parallel to Highway 1	Low	2.0	1.0	10.0
MUPs and Sidewalks – 264th Street Interchange	Medium	5.0	2.0	5.0

Notes: MUP/Pedestrian Conflict and Lighting Levels.

- (c) The Design-Builder will use 5 metre tall Ministry standard Type 2 pedestrian-scale poles, equipped with tenon-mounted LED luminaires for the MUP's lighting throughout the Project. LED luminaires will be from a manufacturer listed on the Recognized Products List, will have a colour temperature of 4000K and wattage and distribution suitable to achieve the lighting criteria.
- (d) The Design-Builder will ensure that, where feasible, roadway luminaires incorporate a lower MUP light fixture to minimize the need for additional pedestrian-scale poles.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 56 -

6.6.1 Roadway Classifications and Pedestrian Conflict Levels

To standardize the lighting design, the Design-Builder will consistently apply the following criteria in Table 6.6.1, which presents roadway classifications and pedestrian conflict levels essential for determining roadway lighting design criteria.

Table 6.6.1

Roadway Name	Roadway Classification	Pedestrian Conflict
Highway 1 and Ramps	Freeway Class A	N/A
Highway 1 WB Off-ramp Bus exit ramp to Transit Mobility Hub	Major	Med
264th Street	Major	Med
56 Avenue	Collector	Med
Transit Mobility Hub access roads and connections	Local	Med

Notes: Roadway Classification and Pedestrian Conflict Levels.

6.6.2 Lighting – Surround Ratio

Interchange and roadway lighting designed per ANSI/IES RP-8-22 will include surround area calculations where warranted.

6.7 Lighting for Transit Mobility Hub

- (a) The Design-Builder will design and install parking lot lighting for the Transit Mobility Hub. The design will be in accordance with the TransLink Bus Infrastructure Design Guidelines.
- (b) Table 6.7 outlines the recommended light levels for various areas within the transit exchange, accounting for high pedestrian volumes:

Table 6.7

Area	Minimum Average Horizontal Illumination (Lux)	Average Vertical Illumination (Lux)	Maximum Average to Minimum Uniformity Ratio (Avg/Min)
Bus Loading/Unloading Bays, including waiting areas	50.00	20.00	3.0
Bus Shelter	20.0	N/A	3.0
Crosswalks	40.0	40.0	3.0
Parking Areas	10.0	N/A	5.0

Notes: Transit Exchange Recommend Light Levels.

- (c) The Design-Builder will ensure that the luminaire poles and fixtures used are in accordance with the Recognized Products List for pole and fixture makes and models.

6.8 Lighting for Truck Parking Facility

The Design-Builder will design and install parking lot lighting for the Truck Parking Facility. The Design-Builder will ensure that the lighting of the Truck Parking Facility adheres to the requirements of ANSI/IES RP-8-21 Chapter 17, table 17-2.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 57 -

6.9 Traffic Signals

6.9.1 Ministry Traffic Signals

- (a) New traffic signals will be designed and installed where warranted in accordance with the Electrical and Traffic Engineering Manual.
- (b) The Design-Builder will be responsible for modifying existing traffic signals to suit Traffic Management requirements or the Design-Builder's Design, including staged works. This will include, but not be limited to, modifications to signal timing design, phasing, signal poles, signal head, cabling, inductive loop detectors, hardware and software. Modifications are to be in accordance with the Electrical and Traffic Engineering Manual.
- (c) Traffic engineering checklists and signal timing sheets will be prepared for all new and modified signals and submitted to the Province with the Final Design submission in accordance with Article 1 [Laning and Geometrics Design Criteria] of this Part.
- (d) All traffic signal displays will be 300 mm.
- (e) All traffic signals will be equipped with audible pedestrian signals configured with a melody consistent with the applicable municipal and Canadian Institute for the Blind recommendations for the local area.
- (f) All traffic signals will be equipped with emergency pre-emption in accordance with municipal requirements.
- (g) All traffic signals will be equipped with uninterruptible power supplies.
- (h) The Design-Builder will provide a 50 mm RPVC conduit between the signal controller conduit system and the ITS conduit Infrastructure.
- (i) The Design-Builder will supply and install Econolite Cobalt traffic controllers programmed compliant with the Econolite Cobalt Controller Unit Programming Guide, for all new and temporary signal installations.
- (j) The Design-Builder will supply and install NEMA TS-2 Type 1 traffic controller cabinets compliant with the TS2 Traffic Controller Assembly Manual.
- (k) All traffic signals will be tested, programmed, and commissioned by the Design-Builder
- (l) Two dedicated 50 mm conduits will be installed between all Ministry operated traffic controller cabinets that are located within 500 m of each other to accommodate hardware interconnection.
- (m) The Design-Builder will provide preliminary signal design and installation of underground ducting for future traffic signal infrastructure and control at the intersection of 264th Street and 52 Avenue, in accordance with the following:
 - (i) four segments of 3-78mm RPVC conduit will be installed around the perimeter of the intersection;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 58 -

- (ii) four type 66 concrete service boxes will be installed at the end of each segment of the 3-78mm RPVC conduit, on each of the four corners of the intersection; and
- (iii) all conduit and junction boxes will be positioned behind any planned sidewalks or other hardscape features.

6.9.2 Municipal Traffic Signals

The Design-Builder will be responsible for liaising and coordinating with the Municipality for any modifications that may be required to municipal traffic signals to suit staged Construction works, and will be responsible for the operational control of municipal traffic signals in accordance with Section 7.2(b) of Schedule 3 [Design and Construction General Requirements].

6.9.3 Rectangular Rapid Flashing Beacons

The Design-Builder will be responsible for the design and installation of rectangular rapid flashing beacons at locations where warrants for these devices are met. The rectangular rapid flashing beacons will be designed and installed in accordance with the requirements of this Part and the BC Active Transportation Guide as well as the material and construction standards of the Province or the Municipality, as applicable. The Design-Builder will provide a signal timing sheet for the rectangular rapid flashing beacons and be responsible for commissioning of rectangular rapid flashing beacon signals.

6.10 Electrical Cabinet and Kiosks

Power cabinets and kiosks will meet the following requirements:

- (a) Provide enclosures that meet the requirements of Section 402 of the Electrical and Signing Materials Standards.
- (b) Supply enclosures manufactured by Province approved suppliers.
- (c) In addition to the requirements outlined in Section 402 of the Electrical and Signing Materials Standards, provide extruded polystyrene insulated walls, door and ceiling for each cabinet. The insulation will have a minimum “R” rating of 4.5.
- (d) Provide a fold down shelf permanently fastened to each door for holding testing equipment or documentation.
- (e) Provide adequate power supplies to accommodate equipment.
- (f) Supply all cabinets with a complete set of their respective as-built design drawings in the plan pouches.

6.11 Temporary Lighting During Construction

- (a) All existing lighting will be maintained in operational order during Construction until such time as replacement temporary or permanent lighting is energized.
- (b) Temporary illumination will be provided for the roadways to accommodate traffic detours in accordance with the Reference Documents specified in this Article.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 59 -

6.12 Truck Parking Facility Access Control Gate

- (a) The Design-Builder will design and install a vertical swing arm access control gate with an integrated gate controller to regulate vehicular entry and exit at the Truck Parking Facility as follows:
 - (i) entry will be controlled by a push-button within the guard house; and
 - (ii) exit will be automated through inductive loops placed before the swing arm, triggering the gate to temporarily open for vehicle passage.
- (b) The model of access control swing arm control unit will be approved by the Province in accordance with the Consent Procedure.

6.13 Construction Cameras

- (a) The Design-Builder will protect the Construction Camera(s) and associated Infrastructure and Utilities (installed by the Province) as shown in Drawings 264th Construction Camera Advance Works provided in the Data Room to avoid any disruptions and/or outages.
- (b) If the Design-Builder wishes to relocate any of the Construction Camera(s) or associated Infrastructure or Utilities, the Design-Builder will plan, coordinate and schedule the relocation in a manner that minimizes any outage(s) and will submit the plan to relocate to the Province for approval in accordance with the Consent Procedure prior to carrying out any such relocation.

ARTICLE 7 DRAINAGE DESIGN CRITERIA

7.1 Order of Precedence

Drainage Design and Construction will be in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards and, if there is any conflict between the criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the criteria listed in the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) CSA S6:19;
- (d) BC Supplement to CSA S6:19;
- (e) BC Supplement to TAC;
- (f) TAC Geometric Design Guide;
- (g) EGBC Climate Change – Resilient Design;
- (h) Technical Circular T-04/19;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 60 -

- (i) Township of Langley Subdivision and Development Servicing Bylaw;
- (j) Standard Specifications for Highway Construction;
- (k) CSPI Handbook of Steel Drainage and Highway Construction Products;
- (l) Environmental Best Practices for Highway Maintenance Activities;
- (m) BC Stormwater Planning Guidebook;
- (n) AASHTO Culvert and Storm Drain System Inspection Guide;
- (o) Culverts and Fish Passage; and
- (p) Fish-Stream Crossing Guidebook.

7.2 General Design Basis

The Design-Builder will develop a drainage system Design based on the following requirements:

- (a) The drainage system Design will be in accordance with the design goal stipulated in the BC Stormwater Planning Guidebook;
- (b) the specific drainage design objectives of the Project will be developed based on the Reference Documents listed in Section 7.1 [Order of Precedence] of this Part;
- (c) the drainage Design will take into consideration the possible adverse impacts to existing stormwater infrastructure, water quality, and any downstream infrastructure;
- (d) the drainage Design will consider future climate projections within the anticipated serviceable life of the proposed infrastructure; and
- (e) the runoff calculation will not limit in range of the project limitation, and the off-site inflows will be considered if the off-site inflows impact the Project drainage Design.

7.3 Project Specific Requirements

The following Project specific requirements supplement the Reference Documents described in Section 7.1 [Order of Precedence] of this Part.

7.3.1 General

Drainage Design for the Project will meet the requirements of this Article. Generally, the drainage Design will include the following:

- (a) Catchment delineation will be based on the ultimate design surface, the structures, and the lands associated with them.
- (b) Highway drainage facilities, culverts and bridges will be designed according to the design flood return periods shown in Table 1010.A in the BC Supplement to TAC.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 61 -

- (c) Climate change adaption will be considered when determining the design flows in accordance with Section 7.3.2 [Climate Change Adaptation] and Article 16 [Climate Change Adaptation] of this Part.
- (d) Quantity control will be addressed using a combination of detention storages and/or low impact development measures such as permeable pavements and infiltration trenches.
- (e) Quality control will be provided applying water quality ponds, oil grit separators or end-of-pipe filtration facilities before the stormwater discharge to streams or connects to Municipal Infrastructure.
- (f) The Design-Builder will develop and implement an erosion and sediment control plan for the Construction period to Total Completion.
- (g) A catch basin or spillway will be installed at the curb upstream of locations where concentrated flows will cross any roadway (for example from one Superelevated curve crossing to another Superelevated curve).
- (h) Catch basins will only be used where spillways are not feasible, including along median barriers and adjacent to retaining walls.

7.3.2 Climate Change Adaption

The following drainage Design requirements are in addition to all other requirements stipulated in Article 16 [Climate Change Adaptation] of this Part and elsewhere in the Agreement.

- (a) The latest climate station Abbotsford Airport (Station ID 1100030) data will be used as the basis for the climate change analysis.
- (b) The analysis tool IDF-CC listed in the Appendix 2 of Technical Circular T-04/19 will be used to create the climate change impacted intensity-duration-frequency (“**IDF**”) curves.
- (c) The shared socioeconomic pathway scenarios SSP5-8.5 will be selected in the IDF-CC tool to project the IDF curve for the hydraulic and drainage design elements to accommodate a reasonable increase of intensity due to climate change.
- (d) The climate change adaptation analysis will project to the year 2100 to cover the Design Life of the culverts.
- (e) A Design Criteria Sheet for Climate Change Resilience specific for drainage Design will be prepared based on evaluation of future climate change effects and impacts. The Design Criteria Sheet will be submitted with the Final Design in accordance with Section 2.8.11 [Climate Change Adaptation Design] of Part 2 of this Schedule.

7.3.3 Culvert Hydrotechnical Design

- (a) Culverts will be designed to comply with the BC Supplement to TAC regarding design flows, hydraulics, durability constraints and geometry such as lengths, slopes, minimum sizes, skews and invert embedment.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 62 -

- (b) Culverts designed to provide fish passage will comply with the requirements of the Fish-Stream Crossing Guidebook regarding factors such as culvert slope, water velocities, invert embedment and bedrock characteristics.
- (c) Existing culvert(s) will be removed and replaced with new culverts if:
 - (i) the existing culvert(s) are not in good condition as defined in the AASHTO Culvert and Storm Drain System Inspection Guide;
 - (ii) the existing culvert has less than 10 years left in its designed service life; or
 - (iii) the existing culvert(s) need to be changed for other reasons.

Existing culverts will be inspected according to the AASHTO Culvert and Storm Drain System Inspection Guide. An inspection report will be submitted to the Province's Representative pursuant to the Review Procedure.

- (d) The tailwaters of culverts will be considered to reflect further downstream hydraulic grade line impacts such as backwater or water drops due to downstream hydraulics structures, waterfalls, or tides.
- (e) The culvert hydraulic performance will be demonstrated by a one-dimensional analysis program such as HEC-RAS or HY-8, as per the recommendation of the BC Supplement to TAC, or other hydrotechnical industry standard software subject to acceptance by the Province in its discretion.

7.3.4 Drainage Design

- (a) A stormwater industry standard numerical model, such as PCSMWW, EPA SWMM or other model, subject to acceptance by the Province in its discretion, will be used to demonstrate that the drainage system Design for the land development areas and highway structures comply with the Reference Documents listed in Section 7.1 [Order of Precedence] of this Part.
- (b) The drainage system will be checked using 24-hour duration storm hydrographs.
- (c) The catch basin or spillway spacings will be calculated individually for each catch basin or spillway based on the local geometrical parameters of the designed roads.
- (d) The intention of the following drainage criteria requirements is to reduce the frequency of catch basins and optimize the use of existing site conditions:
 - (i) catch basin minimum spacing to be 20 m;
 - (ii) spillway minimum spacing to be 40 m; and
 - (iii) a hybrid spacing of catch basins and spillways is also acceptable if the minimums are achieved.
- (e) The following requirements will apply to ambient drainage ditches:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 63 -

- (i) no ponding in ditches (such as no reverse grading);
 - (ii) existing drainage patterns are not interrupted;
 - (iii) if adjacent properties drain into ditches, it will be accommodated in the Design; and
 - (iv) surface runoff onto adjacent properties must not increase, with the baseline for such assessment determined by numerical modelling of existing conditions, or by analysis of historical records.
- (f) Water quality control devices will be designed for each parking lot if the downstream of the parking lots have no water quality ponds.
- (g) Emergency spill routes will be accommodated for the storage/detention ponds where the overflow from a 1:100-year 24-hour storm event cannot be safely conveyed.

7.3.5 Drainage Design Report

The Design-Builder will prepare and submit in accordance with Part 2 [Design and Certification Procedure] of this Schedule a drainage design report (the “**Drainage Design Report**”) in accordance with the following:

- (a) The Drainage Design Report will contain the information outlined in Section 1010.03 of the BC Supplement to TAC (Reports for Land Development Drainage and Reports for Highway Drainage), as applicable.
- (b) The Drainage Design Report will summarize all aspects of the drainage Design, including the hydrological analysis, hydraulic analysis, and ensure all Design objectives are clearly outlined and complied in the conclusion and recommendation sections, which Design objectives will be listed according to the drainage design requirements in the Reference Documents set out in Section 7.1 [Order of Precedence] of this Part and conditions encountered during the Project.
- (c) The Drainage Design Report will describe all the Design methodology, assumptions, and limitations, including catchment delineation, the hydrology and hydraulics calculation/modelling method, parameters selection, and including all calculations and modelling results to demonstrate the Design achieves the Design objectives for drainage Design including culverts, ditches, catch basin or spillway type and maximum ponding depths, storage common characteristics, stormwater hydraulic grade line profiles and release rates.
- (d) The Drainage Design Report will include a summary of findings, the effect of the proposed works on adjacent channel reach and nearby infrastructure, future maintenance and monitoring recommendations, and include conclusions.
- (e) Overland drainage drawings will be attached in the Drainage Design Report, including catchment boundaries and names (IDs), direction of drainage flow arrows, proposed contours, overland escape routes arrows and major and minor system with labels.
- (f) The Design-Builder will include with the submission of the Drainage Design Report all model files used in the Design.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 64 -

7.3.6 Maintenance and Operation Manual

The Design-Builder will provide a maintenance and operation manual for the drainage infrastructure.

ARTICLE 8 SIGNING AND PAVEMENT MARKING DESIGN CRITERIA

8.1 Order of Precedence

Signing and pavement marking will be designed and installed in accordance with the criteria contained in this Article, the other requirements of this Agreement, the requirements of DBSS and the following codes and standards, and if there is any conflict between the criteria contained in this Article, the other requirements of this Agreement, the requirements of DBSS and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) the DBSS;
- (d) Technical Bulletin TE-2005-05;
- (e) the applicable Ministry Technical Bulletins and Circulars;
- (f) Manual of Standard Traffic Signs and Pavement Markings;
- (g) TransLink Bus Infrastructure Design Guidelines;
- (h) BC Active Transportation Design Guide;
- (i) Catalogue of Standard Traffic Signs;
- (j) Specifications for Standard Highway Sign Materials, Fabrication and Supply,
- (k) TAC Manual of Uniform Traffic Control Devices; and
- (l) the guide signing concept included in preliminary, functional and detailed design studies and drawings for the Highway 1 – 264th Street Interchange.

8.2 Materials

- (a) Sign sheeting for all overhead guide signs will have a reflectivity level of ASTM Type 9/9. Sheeting for all Shoulder mounted guide signs will have a reflectivity level of ASTM Type 9/3. The text and graphics used on all guide signs will be cut from ASTM Type 9 sheeting. Signs will not be lighted.
- (b) All signs will be new except with the prior written consent of the Province.
- (c) Standard signs will be from the Catalogue of Standard Traffic Signs.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 65 -

- (d) Draft sign records will be produced by the Design-Builder for acceptance prior to final sign record preparation.
- (e) The final sign records to be used for the manufacture of any custom signing will be provided by the Province.

8.3 Guide Signing

- (a) Guide signing will be in accordance with the Reference Documents and, where applicable, incorporate existing messaging and messaging provided in the preliminary guide signing concept developed in the technical studies and drawings available in the Data Room. The Design-Builder will refine this preliminary guide signage design to reflect the final design of the Highway 1 – 264th Street Interchange and Highway 1 within the project limits.
- (b) Sign placement will consider guide signs and existing/relocated DMS.

- (d) Regulatory, warning, information, and service and attraction signing will be consistent in form, format and specification to that currently existing along Highway 1 throughout the Project. Existing service and attraction signing will be retained or relocated and/or replaced to suit the New Project Infrastructure. Final guide sign designs (“**Guide Sign Records**”) are to be completed and issued by the Province. The Design-Builder will ensure that a preliminary guide sign Design submission is made at least nine months prior to when the signs are needed to allow the Province sufficient time to review the guide sign Design and issue the Guide Sign Records.
- (e) text fonts for guide signs will be “Clearview Type Fonts”. Text and graphics will be sized to meet the following standards:
 - (i) urban high volume freeway standards will apply to Highway 1 mainlines, ramps and interchanges;
 - (ii) urban conventional highway standards will apply to all other roads, and
 - (iii) font size will be as per Table 8.3:

Table 8.3

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 66 -

Message Design Detail	Font Letter Type	
	Overhead	Shoulder Mount
Main Destination / Name (i.e. Community Name, Route Name, Cross Street, Major Airport)	400 mm (16 in) U/L Case	325 mm (13 in) U/L Case
Font Type - Messaging	ClearviewHwy 5W Series	ClearviewHwy 5W Series
Route Number in Shield	400 mm (16 in)	325 mm (13 in)
Font Type - Route Number in Shield	Helvetica Medium	Helvetica Medium
Cardinal Direction	300 mm (12 in) Upper Case	244 mm (9.75 in) Upper Case
Exit-Tab Number - “123” or A, B, C etc.	400 mm (16 in)	325 mm (14 in)
Exit-Tab - “EXIT”	225 mm (9 in) Upper Case	200 mm (8 in) Upper Case
ASTM Retro-reflectivity	Type 9/9	Type 9/3

Notes:

The above values are based on a sign displaying messages with nine conceptual units (CU) or major words or less.

If the message on the guide sign does not fit on the sign due to restricted sign space, then a narrower series font may be used to condense the message. One line of text, within two or three lines of text messaging may be reduced, but not by more than one font series.

ClearviewHwy font software is available from the developer of the Clearview font type system. For further information on the ClearviewHwy font, please refer to the website:

<http://www.clearviewhwy.com>.

- (f) All guide signs with lane designation, direction or exit arrows will be erected over the applicable traffic lanes.
- (g) Exit markers with exit numbers will be used for Highway 1 as applicable.
- (h) Distance markers will be installed at 1 km intervals.
- (i) The guide signing location and messaging Design will be coordinated with the location of all DMS and ITS Hybrid Signs within the Project limits or located in adjacent Highway segments to ensure proper operational placement of each as it relates to location and messaging along the Highway.
- (j) The Design-Builder will liaise with the Province through the Interim Design submission process to initiate the involvement of the Province’s Sign Program.
- (k) The final guide sign messages will be submitted for acceptance to the Province’s Representative, in accordance with the Consent Procedure.

8.4 Regulatory and Other Signing

- (a) Standard regulatory signage, warning, information, and service & attraction signs will be designed and installed in accordance with the Reference Documents.
- (b) Where minimum highway geometric design standards are proposed as a result of physical constraints, active signage warning systems will be incorporated. These will include, but not be limited to, electronic speed reader boards and electronic curve and other warning signs.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 67 -

- (c) A 'W-116 Prepare to Stop When Amber Flashing' sign will be installed on the south approach to the 264th Street and 56 Avenue south intersection, in accordance with the requirements of the Manual of Standard Traffic Signs and Pavement Markings and Section 400 of the Electrical and Traffic Engineering Manual.

8.5 Pavement Markings

- (a) Pavement markings will meet the requirements of the Manual of Standard Traffic Signs and Pavement Markings and the applicable Ministry Technical Bulletins and Circulars.
- (b) Pavement marking materials will 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. Use of durable pavement marking MMA is acceptable.
- (c) Inlaid pavement markings are an acceptable alternative to painted markings.
- (d) Under dry conditions the retro-reflectivity of any marking, when measured in accordance with ASTM D6359, will exceed:
 - (i) 175 millicandela m-2 lux-1 for yellow markings; and
 - (ii) 250 millicandela m-2 lux-1 for white markings.
- (e) Testing will be done under dry conditions by an independent third-party testing agency. The retro-reflectivity will be measured by a Mirolux 30 retro-reflectometer or equivalent retro-reflectometer.
- (f) Thermoplastic pavement markings will be utilized for applications such as pavement text, arrows, restricted lane symbols, stop bars, crosswalks, etc. as per typical Ministry practice.

8.5.1 Post Mounted Delineators

The Design-Builder will 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 will be equipped with reflectors made from ASTM Type 9 sheeting. Flexible post mounted delineators are an acceptable alternative to rigid post mounted delineators.

8.5.2 Reflectors on Barriers

Reflectors will be of a type listed on the Recognized Product List and installed at the spacing in the Manual of Standard Traffic Signs and Pavement Markings. Reflectors will be mounted on top of barriers and reflectors designed only for top mounting will be used. Spacing for reflectors will be 12.5 m on median barrier, and 25.0 m on roadside barrier.

8.5.3 Raised Pavement Markings

Raised pavement markings will be of a type listed on the Recognized Product List and installed at the spacing in the Manual of Standard Traffic Signs and Pavement Markings. Raised pavement markings are to be flush with the top of the pavement surface (recessed installation).

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 68 -

8.5.4 Glare Screens

The Design-Builder will evaluate the need for glare screens for mitigating headlight glare between opposing vehicles on 56 Avenue South (L74000) and Eastbound Exit Ramp (L74200). If required, glare screens will be of a type listed on the Recognized Product List and installed per the manufacturer's specifications.

8.6 HOV/EV Lanes and Bus-on-Shoulder Operation

- (a) The Design-Builder will be responsible for the design and implementation of signing and pavement marking required to accommodate HOV/EV lanes and Bus-on-Shoulder operation.
- (b) Pursuant to Part 4 [Interface Requirements] of Schedule 3, the Design-Builder will meet with and coordinate its work with that of the Program Contractors for the 216th to 264th Widening Project and the Mainline West Project at the west and east Project boundaries, respectively, of the Highway 1 improvements to ensure that the construction and operation of the HOV/EV lanes, General Purpose Lanes, and Bus-on-Shoulder lanes (where applicable) are integrated across the west and east boundaries of the Project.
- (c) Buses using the Bus-on-Shoulder lane at the westbound exit ramp to 264th Street are required to cross exiting ramp traffic. At this location, an active yellow warning sign with flashers will be used with "When Flashing Yield to Buses from Right" messaging.

8.7 Transit-Only Lanes

- (a) The Design-Builder will be responsible for the design and implementation of signing and pavement marking required to accommodate transit-only operations to and from the Transit Mobility Hub and at locations where transit-only lanes are provided within the Project.
- (b) Bus-only entrances and exits to and from the Transit Mobility Hub will have directional arrows on the pavement and "No Entry except Buses" signage.

8.8 Active Transportation Facilities

Pavement marking and signing for active transportation facilities including MUPs, sidewalk and separated bike path, and intersection and driveway crossings will be in accordance with the TransLink Bus Infrastructure Design Guidelines and the following:

- (a) MUPs will have a dashed yellow pavement centerline marking;
- (b) crossings of the MUP at signalized intersections will include two parallel white lines delineating crossings;
- (c) roadway approach signage including pedestrian/bike crosswalk signs (R-111-1);
- (d) pedestrian/bike crosswalk signs (B-R-102) at MUP approaches;
- (e) zebra markings should be used for all crossings of unsignalized intersections under provincial jurisdiction and for crossings of channelized right turn lanes at intersections; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 69 -

- (f) MUP crossings of driveways and minor roads will include zebra markings for the width of the driveway and a stop bar on the outbound approach of the driveway.

8.9 CVSE Pullouts

CVSE pullouts will have “No Parking Except Maintenance and Authorized Vehicles” signage (P001 and R-019-Ta signs) at either end of the CVSE Pullouts.

ARTICLE 9 LANDSCAPE AND SITE RESTORATION DESIGN CRITERIA

9.1 Order of Precedence

The Design-Builder will design and implement landscaping and site restoration works in accordance with the criteria contained in this Article, the other requirements of this Agreement, the requirements of DBSS and the following codes and standards, and if there is any conflict between the criteria contained in this Article, the other requirements of this Agreement, the requirements of DBSS and any of the Reference Documents, the following will apply, in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) the DBSS;
- (d) Manual of Aesthetic Design Practice;
- (e) Landscape Policy and Design Standards; and
- (f) Nursery Stock Standards.

9.2 General

9.2.1 Landscaping Classification and Objectives

The overall highway aesthetic classification for this Project will be “Tourway”, as defined in the Manual of Aesthetic Design Practice, with the general landscape design level standard designated as “Suburban”, as described under “Landscape Design Standards” in the Landscape Policy and Design Standards document. The landscape treatments outlined for these categories will be applied as appropriate to all areas of the Project, with the focus of the landscape Design and Construction directed, but not limited to:

- (a) the landscaping of highway interchanges;
- (b) the revegetation of the back slope of ditch areas;
- (c) plantings between the ditch and the highway right of way line, including the establishment of general ground cover;
- (d) plantings in front of walls for screening purposes;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 70 -

- (e) the preservation of existing native vegetation;
- (f) revegetation with low maintenance, primarily indigenous tree, grass and shrub species that are climate change resistant;
- (g) the mitigation of visual impacts of hard structural elements through the use of appropriate planting or aesthetic design treatments;
- (h) lands within the Project Lands and adjacent to lands identified in the ALC Resolution as being available for agriculture, will meet the following requirements:
 - (i) grading to match adjacent ground levels; and
 - (ii) appropriate drainage; and
- (i) lands adjacent to the Project Lands identified in the ALC Resolution as being available for agriculture and which are impacted by Construction, will meet the following requirements:
 - (i) grading to match adjacent ground levels;
 - (ii) appropriate drainage;
 - (iii) agriculture capability class 4 or better for organic soils as defined by the Land Capability Classification for Agriculture in British Columbia;
 - (iv) clean, debris and stone free, organic topsoil to a depth of 0.5m; and
 - (v) where applicable, subsoil to a thickness of 0.5m which is clean, debris free, non-stony, medium textured and free draining.

9.2.2 Agricultural Lands

Prior to the start of Construction, the Design-Builder will retain a Qualified Professional Agrologist to establish the protocols and procedures for the stripping and removal of agriculturally suitable organic and topsoil material.

9.3 Landscaping Requirements

The Design and Construction of the landscaping and site restoration works will comply with the criteria set out in this Schedule and Schedule 6 [Environmental Obligations].

9.3.1 Conservation of Existing Vegetation

The Design-Builder will preserve 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 will 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.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 71 -

9.3.2 Integration of “Hard” and “Soft” Landscape Elements

The Design-Builder will 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 will address transition points by providing solutions that are low maintenance and have greater aesthetic value.

9.3.3 Retaining Walls and Hardscape Surfacing

- (a) Where retaining walls and hardscape surfacing, (such as medians, traffic islands and bridge abutment aprons) are required in areas visible from a public roadway the Design-Builder will incorporate design treatments for these Structures that are aesthetically appealing. Retaining walls will be screened with vegetation plantings in front of and/or covering the surface of the Structures. Hardscaped areas will have pleasing surface texturing, patterning, and/or relief appropriate for the situation. Design treatments will follow a consistent theme for the particular section of roadway, interfaces with adjacent highway work areas and if suitable, for the entire Highway corridor.
- (b) Wire basket type walls or mechanically stabilized earth “green walls” with vegetated facing will only be used in areas where an appropriate landscape vegetation treatment for screening them can be successfully implemented. Such walls will require substantial terracing to accommodate soil and support vegetation directly on them and should be installed and maintained as per the manufacturer’s specifications.
- (c) All retaining walls will have adequate soil provision at the base of the walls for screen planting in front of them.
- (d) The work will be complementary to, and in accordance with, all applicable references in the Table of Commitments.

9.3.4 Landscape and Restoration Planting

- (a) For landscaping purposes, primarily mass planted native trees and shrubs will be used within all highway right-of-way areas and installed within intersections, medians and other roadside locations. Shrub only planting will be utilised where tree planting is not suitable.
- (b) Plantings will be provided along all roadside areas within the Highway, between the back slope of the ditch(es) and the highway right of way property line.
- (c) Plantings will be designed with plants that improve wildlife habitat diversity, provide windbreaks, and control drainage. Where these plantings may serve other specific purposes, plants will be selected on a best fit basis for the particular purpose.
- (d) The back slope of ditches on the non-highway side, up to the top of the ditch break, will be revegetated with a combination of seeded grass and woody shrub vegetation. The shrub vegetation will be established using a hedge-brush layering technique on the back slope.
- (e) Planting at interchanges will consist primarily of mass planted evergreen conifer trees, supplemented with deciduous trees to provide colour, contrast and diversity. Shrubs and grasses will be planted at interchanges where trees are not appropriate.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 72 -

- (f) Where functional plantings are required to provide screening to augment highway structural components, suitable native plant selections appropriate for the application will be used.
- (g) Where existing desirable vegetation adjacent to private or municipal property is impacted or removed, it will be replaced with similar plant material to mitigate the loss.
- (h) Where planting is proposed for environmental reasons such as riparian vegetation restoration/enhancement, habitat compensation, or other such requirement, this work will take precedence over opportunities for general landscape planting, and will 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 will design and construct the landscaping to be complementary to and coordinated with the environmental works.
- (i) Remnants of old road surfaces or Structures that are not retained as part of the New Project Infrastructure will be removed, and the areas occupied suitably prepared and planted and/or seeded, in accordance with this Schedule.

9.3.5 Planting Requirements

- (a) All areas scheduled for planting will 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 the available space between the back of the ditch and the highway right of way line is less than 0.75 m in width, that area will be treated as part of the back slope revegetation.
- (c) All coniferous trees will be minimum 1 m to maximum 2 m high container grown stock. All shrub material will be #2 pot size container stock. Deciduous trees will be minimum 1.75 m to maximum 2.5 m high container grown stock.
- (d) 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 will be installed around it.
- (e) Invasive plants growing in areas where Project Work is being undertaken will be removed and disposed of according to best practices for disposal of the particular species or invasive plants.
- (f) 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 will be left as is and planting will continue beyond these established areas.
- (g) Plant material will be installed per the DBSS requirements. 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 competing vegetation will be removed prior to planting.
- (h) The back slope of ditch areas will be revegetated using a hedge-brush layering technique. This bio-technical technique will utilize a combination of dormant woody brush cuttings of willow and red stem dogwood along with container grown stock of the same and other suitable plants.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 73 -

- (i) Terraced, angled ledges (approx. 10 degrees) will be created at approximately 1/3 and 2/3 of the distance up the back slope. Along these terraces, dormant cuttings will be placed at a density of 10 cuttings per linear metre, and protrude about 0.2 m beyond the slope surface. Rooted container stock will be placed alternately with the cuttings at a density of 1 plant per linear metre. The trench will be backfilled with soil and subsequently compacted. Subject to acceptance by the Province under the Consent Procedure, alternative configurations may be used provided all the requirements of this Article are met.
- (j) Planting to screen wire basket and ‘green wall’ type retaining walls will be carried out using plants most appropriate for the situation, such as drought tolerant shrubs and vines, to provide vegetative screening and surface cover of the walls. Where substantial terracing of the walls is implemented, adequate provision for soil to support the growth of the plants will be provided.
- (k) A trench of sufficient size to support tree growth will be provided at the base of the walls and filled with topsoil. Trees will be planted to screen the walls. These trees may be supplemented by appropriate species of climbing vines on the walls.
- (l) Groupings of trees will be inter-plantings of the species noted in Table 9.3.5. Subject to acceptance by the Province under the Consent Procedure, alternative species may be used provided all the requirements of this Article are met.

Table 9.3.5 General Interchange Tree Planting Criteria

Plant Material	Size	Plant Quantities
Douglas Fir (<i>Pseudotsuga menziesii</i>)	1.25 m 2.00 m	30% of total 5% of total
Western Red Cedar (<i>Thuja plicata</i>)	1.25 m 2.00 m	20% of total 5% of total
Shore Pine (<i>Pinus contorta</i>)	1.75 m	20% of total
Big Leaf Maple (<i>Acer macrophyllum</i>)	2.5 m	10% of total
Black Cottonwood (<i>Populus balsamifera ssp trichocarpa</i>)	2.5 m	5% of total
Black Hawthorn (<i>Crataegus douglasii</i>)	1.75 m	5% of total

9.3.6 Revegetation Seeding

- (a) The default treatment for mitigating surface soil erosion will be the establishment of grass by the hydraulic application of seed with wood fibre mulch, fertilizer, and tackifier onto existing soils.
- (b) All disturbed ground that is to be revegetated but will not be receiving tree or shrub planting, bark mulch or hard surfacing, will 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 will be suitably scarified prior to seeding.
- (c) Areas that are highly susceptible to wind or water erosion will 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 will be graded and seeded promptly after removal of the materials.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 74 -

9.3.7 Tree Retention/Replacement

Existing trees should be retained and protected where possible. No excavation or build-up of materials should take place within the canopy of the trees to be retained. If trees larger than 20 cm in diameter at breast height are removed beyond the limits of New Project Infrastructure and are not otherwise required to be removed by this Agreement, then replacement trees will be proposed at a ratio of 2:1 and planted at a suitable location acceptable to the Province's Representative.

9.3.8 Landscape Design Submissions

- (a) The Design-Builder will 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 will show where the described landscape treatments are proposed to be carried out. The drawings will also have sufficient detail to convey an understanding of the various landscaping requirements.
- (c) The Construction Records will include post Construction drawings including, as a minimum, the number, species, and locations of planted trees, shrubs, and plants.

9.3.9 Pedestrian and Cycling Facilities

Landscaping will be designed to prevent visual obstructions along pedestrian and cycling facilities. Landscaping within 2 m of a path edge will not exceed 30 cm height.

ARTICLE 10 CYCLING AND PEDESTRIAN FACILITIES

10.1 Order of Precedence

The Design-Builder will design and implement cycling and pedestrian facilities including MUPs for cyclists and pedestrians on the Project in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards. If there is a conflict between the criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) Pedestrian Crossing Control Manual;
- (d) Technical Bulletin TE-2002-07;
- (e) Bicycle Traffic Control Guidelines;
- (f) BC Active Transportation Design Guide;
- (g) BC Supplement to TAC;
- (h) TAC Geometric Design Guide;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 75 -

- (i) TAC Bikeway Traffic Control Guidelines; and
- (j) applicable documented standards of the Municipality.

10.2 General Requirements

- (d) Where the scope of pedestrian and cycling requirements is not specifically defined, the Design-Builder will, as a minimum, maintain or reinstate existing pedestrian and cycling facilities and maintain continuity along routes.
- (e) Sufficient width will be provided. MUP clear widths will be typically 4 metres, and where not indicated will not be less than 3 metres. MUPs will widen out near the ends of long downhill runs.
- (f) The Design will consider the speed and safety of cyclists and will make allowance for changes in speed on uphill and downhill sections of the MUP within the maximum and minimum grade tolerances provided in Table 10.3.1. For segments of the MUP along steeper grades (greater than 5%) additional measures to improve safety may be required based on Road Safety Audit recommendations. These may include centerline striping on hills in accordance with the BC Active Transportation Design Guide, and steep grade signs with the appropriate grade percent indicated. Expansion joints in Bridges will be in accordance with Article 3 [Structural Design Criteria] of this Part and be safe for cyclists and as close to 90 degrees as possible, with small gaps, smooth and non-slip in all conditions.
- (g) Grades will not exceed 5% (unless otherwise dictated by ramp grades, where a maximum of 6% will be permitted for a short section) and where possible the grade will not exceed 4%. Rest zones and wider sections to allow passing will be provided for long uphill grades. For downhill grades that are not dictated by ramp grades, a maximum of 6% will be permitted for a short section. The required clear width will be maintained at all sections of a path. Paths will not be interrupted by any obstacles including poles and signs.
- (h) Elevation changes will be minimized.
- (i) Access for first responders will be provided to all parts of a path.
- (j) Lighting will be provided for all paths in accordance with Section 6.6 [MUP and Pedestrian Lighting] of this Part.
- (k) CPTED principles will be implemented.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 76 -

- (l) MUPs will be designed to avoid the accumulation of surface debris, including gravel, garbage and snow, and will be free-draining.
- (m) MUPs will be designed for access by maintenance equipment and will be provided with a skid resistant surface. Sidewalks will also be provided with a concrete surface.
- (n) All MUPs on Structures will be barrier separated from vehicle travel lanes.
- (o) Catch basin and manhole covers will be safe for cyclists.

10.3 Design Requirements

10.3.1 Geometric Requirements

- (a) Table 10.3.1 provides the geometric design criteria that are to be applied for the Design and Construction of the Highway 1 and 264th Street MUPs.

Table 10.3.1

Geometric Design Criteria	Highway 1 and 264th Street MUPs
Design Classification	Multi-Use Pathway (MUP)
Posted Speed	N/A
Design Speed	30 – 50 km/h ⁽¹⁾
Pathway Width	4.0 ⁽²⁾
Lateral Clearance	0.5 m ⁽³⁾
Min. Horizontal Radius	24 – 82 m ⁽⁴⁾
Min. K Factor Sag VC	2.5 – 6 ⁽⁵⁾
Min K Factor Crest VC	See Note 6
Max. Grade	See Note 6
Min. Grade	>0.60% ⁽⁷⁾
Max. Superelevation	5.0% ⁽⁸⁾
Cross Slope	2% ⁽⁹⁾
Min. Stopping Sight Distance (SSD)	31 m ⁽¹⁰⁾
Clearance to top of Adjacent Slope that exceeds BC ATG Slope/Drop Thresholds	>=1.5 m ⁽¹¹⁾ or Provide Railings
Design Vehicle	Cargo Bike, or Bike with Trailer, or Tandem ⁽¹²⁾
Vertical Clearance	3.6 m ⁽¹³⁾
Stairways ⁽¹⁴⁾	
- Minimum Width	1.1 m
- Runs	280 – 355 mm
- Risers	125 – 180 mm
- Landing Frequency	At least every 3.7 m
- Handrail	Both sides, Height 860 mm – 920 mm

Notes:

- (1) Refer to BC Active Transportation Guide Pg. E18 and Note 5.
- (2) Refer to BC Active Transportation Guide Table E-20 and Note 5.
- (3) Refer to BC Active Transportation Guide Table E-20.
- (4) Refer to TAC Table 5.5.2. Noted Values are for E=0.02 m/m.
- (5) Refer to TAC Table 5.5.5.
- (6) Refer to BC Active Transportation Guide Table E-22. Criteria vary depending on speed and algebraic difference in grades.
- (7) Refer to BC Active Transportation Guide Pg. E18 and Note 7.
- (8) Refer to TAC Table 5.5.2.
- (9) Refer to BC Active Transportation Guide Pg. E19.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 77 -

- (10) Refer to BC Active Transportation Guide Pg. E20 or TAC Table 5.5.1. Criteria vary based on speed and grade
 - (11) Refer to BC Active Transportation Guide Pg. E19 and E20, BC Supplement Section 660 and Note 8 Railings.
 - (12) Refer to BC Active Transportation Guide Figure B-11 and Note 9.
 - (13) Refer to BC Active Transportation Guide Figure B-14.
 - (14) Refer to TAC 6.5.2.2. Include Bicycle Push Ramps.
- (b) The MUP located on the north side of Highway 1 will be designed to meet the following requirements:
- (i) Concrete Median Barriers will be installed on the highway in accordance with Section 1.2.13(i) of this Part to separate the highway from those sections of the MUP that are adjacent to the highway;
 - (ii) MUP will have a minimum separation from the Highway 1 westbound carriageway, from the edge of Bus-on-Shoulder lane to the edge of MUP, of 6.5 m, except for the following situations:
 - (A) at the eastern Project limit where the MUP will tie into the Mainline West Project design;
 - (B) is adjacent to existing Class A, A(O), and B aquatic and/or riparian areas.

10.3.2 Intersections

- (a) Provision will be made for cyclists and pedestrians at signalized intersections. Such provisions will include crosswalks, splitter islands, cycling curb cuts, pedestrian/cyclist signal heads and pushbuttons.
- (b) Pavement marking and signage of cyclist and pedestrian crossings at intersections will be in accordance with requirements of Article 8 [Signing and Pavement Marking Design Criteria] of this Part.

10.3.3 Transitions

- (a) Transition sections are to be provided to match to existing facilities. Where cyclists approach on-road facilities or where no existing facilities exist, it will be assumed that cyclists operate on both sides of the road in the direction of traffic.
- (b) The MUP on the east side of 264th Street south of 52 Avenue will provide a transition to the existing bike accessible shoulder on 264th Street.

10.3.4 Ramp/Road Crossings

- (a) MUPs will be direct, safe and convenient. The use of spiral ramps and switchbacks will be avoided, where possible.
- (b) Where pedestrian and cycling facilities cross ramp terminals that include free right turns from or onto arterial roads, safety elements will be included to improve driver awareness of crossing

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 78 -

pedestrians and cyclists. Such elements will include additional signage, lighting and pavement markings and the requirements of Article 8 [Signing and Pavement Marking Design Criteria] of this Part.

- (c) Where a sidewalk or MUP crosses a ramp in which the geometric design speed exceeds 40 km/h, the Design will include a special crosswalk in accordance with the TAC Bikeway Traffic Control Guidelines.

10.3.5 Design Speeds

- (a) MUPs will be designed to safely accommodate pedestrians and cyclists travelling at the following speed:
 - (i) flat grade – 35 kilometres per hour;
 - (ii) down grade – 50 kilometres per hour; and
 - (iii) upgrade – 30 kilometres per hour.
- (b) Cycling facilities that are not integral with a roadway will maintain a minimum outside radius of 13.0 m. Where reversal of direction (switchback) is required to gain or lose elevation and meet grade requirements, a minimum outside radius of 4.5 m will be permitted.

10.3.6 Cross Sections

- (a) Table 10.3.6 describes the minimum clear-width requirements for cycling facilities.

Table 10.3.6

Cycling Facility Clear Width Requirements	
Cycling and Pedestrian Facility	Minimum Clear Width
Sidewalk	1.8 m typical / 2.5 m high traffic area ⁽¹⁾
MUP	4.0 m ⁽²⁾

Notes:

- (1) Wider sidewalk widths required in high traffic areas including the Transit Mobility Hub.
- (2) Two-way MUP 4.0 m width includes 2.0 m cycling/pedestrian lane in each direction.

- (b) Where MUPs are directly adjacent to the Travelled Lanes, a minimum boulevard of 0.3 m will be provided between the roadway and MUP provided the addition of the boulevard does not result in additional structural (including retaining walls) or property impacts.
- (c) MUPs and sidewalks adjacent to the roadway and within the Clear Zone will be separated from vehicle traffic by barrier, parapet or curbing.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 79 -

- (d) An additional 0.5 m of clear width is required beyond the widths listed above within pedestrian/cyclist only underpasses/tunnels.
- (e) Pedestrian sidewalks will have a minimum width of 1.8 m.

10.3.7 Railings and Fencing

- (a) Railings will be provided in accordance with the BC Supplement to TAC.
- (b) The Design-Builder will provide debris fencing on the outside of pedestrian sidewalks situated above roadways on all Bridges. The debris fencing will extend a minimum of 3.0 m beyond the outside edges of the shoulders of the roadway below. Bicycle fencing in accordance with the BC Active Transportation Design Guide and TAC Bikeway Traffic Control Guidelines will be provided along the Bridge beyond these extents up to the abutments. The Design-Builder will submit signed and sealed drawings for the debris fencing design to the Province's Representative for acceptance under the Consent Procedure.
- (c) Bicycle railing is to be installed on one or both sides of the MUP throughout the alignment when warranted by the design guidelines.
- (d) Chain-link fencing will be used instead of bicycle railing when MUP is tight to the highway for snow plowing considerations and protection of pedestrians.

10.3.8 Cyclist Signage/Pavement Marking

- (a) Signage will provide positive guidance and wayfinding over the Project area.
- (b) The wayfinding signage will be established in consultation between the Design-Builder, the Municipality and the Province, and incorporated into the Design.
- (c) Bicycle stencils and other designated markings will be provided along bike lanes and shared use markings will be provided on MUPs in accordance with applicable design guidelines.
- (d) At intersections or mid-block crossings under Provincial jurisdiction, cyclists must be directed to dismount.

10.4 Specific Requirements

This Section describes the requirements for the cycling and pedestrian facility Design in specific areas.

10.4.1 Highway 1 Corridor

- (a) In addition to the requirements of Section 10.3 [Design Requirements] of this Part, the Design-Builder will coordinate with the Interfacing Works pursuant to Part 4 [Interface Requirements] of Schedule 3. This includes the MUP connection at the East limit of the Project to active transportation facilities extending east of the Project being designed and built by others.
- (b) The MUP will connect to the Township of Langley road network at the following locations:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 80 -

- (i) connection will be provided to 48 Avenue, at or near where 48 Avenue changes to 272 Street, and include a marked crosswalk that will line up with the existing sidewalk letdown on the north side of 48 Avenue/272 Street; and
 - (ii) connection will be provided to 48 Avenue at the west side of the 275 Street intersection, and include a marked crosswalk that will line up with the existing letdown in the northeast corner.
- (c) A MUP with connection to 264th Street and the Transit Mobility Hub in the northwest quadrant of the Highway 1 – 264th Street Interchange will extend along to north side of Highway 1 easterly to the east limit of the Project. The MUP is to be separated from the highway as much as possible over this length except in constrained areas as defined in Section 10.3.1(b)(ii) of this Part where the MUP alignment will be shifted closer to the highway and separated from the highway by 810 mm Concrete Median Barrier.

10.4.2 Highway 1 – 264th Street Interchange

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 81 -

10.4.3 Transit Mobility Hub

The Design-Builder will provide pedestrian and cyclist facility connections the Transit Mobility Hub MUP and sidewalk network surrounding these facilities. The widths of MUPs and sidewalks within will be designed in accordance with the requirements of Article 11 [Transit Mobility Hub] of this Part. Wayfinding within these facilities will be provided in accordance with Section 10.3.8 [Cyclist Signage/Pavement Marking] of this Part.

10.4.4 Truck Parking Facility

The Design-Builder will provide sidewalk connections to the Truck Parking Facility in accordance with the requirements of Article 12 [Truck Parking Facility] of this Part.

ARTICLE 11 TRANSIT MOBILITY HUB

11.1 Order of Precedence

The Design-Builder will design and construct transit infrastructure in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards, and if there is any conflict between the criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) the applicable Ministry Technical Bulletins and Circulars;
- (d) TransLink Bus Infrastructure Design Guidelines;
- (e) BC Supplement to TAC;
- (f) TAC Geometric Design Guide;
- (g) BC Active Transportation Design Guide;
- (h) TAC Bikeway Traffic Control Guidelines;
- (i) TAC Manual of Uniform Traffic Control Devices;
- (j) Electrical and Signing Materials Standards; and
- (k) Township of Langley Zoning Bylaw No. 2500.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 82 -

11.2 General Requirements

- (a) The Design-Builder will develop a Design for the Transit Mobility Hub using as a basis the concept design contained in the Reference Concept.
- (b) The Design-Builder will consult with TransLink and BC Transit during the design of the transit infrastructure and prior to submitting the Design to the Province's Representative pursuant to the Consent Procedure.
- (c) The Design-Builder will ensure that Stoppages along transit routes during Construction are minimized and are coordinated with TransLink and BC Transit to prevent adverse impacts on transit operating schedules.
- (d) The Design-Builder will arrange with TransLink, BC Transit and the Municipality for the relocation of bus stops and associated facilities.
- (e) Lighting for the Transit Mobility Hub will be provided in accordance with Article 6 [Electrical, Signals and Lighting Design Criteria] of this Part.

11.3 Geometric Design

- (a) Table 11.3 provides the geometric design criteria that are to be applied for the Design and Construction of the Transit Mobility Hub. Site specific additional requirements and/or exceptions (if any) to these requirements are addressed in Section 11.4 [Specific Requirements] of this Part.

Table 11.3

Geometric Design Criteria	Transit Mobility Hub
Functional Classification	Transit Bus Loop and Park and Ride Lot
Posted Speed	20 km/h ⁽¹⁾
Design Speed	20 km/h ⁽¹⁾
Number of Basic Lanes	1
Maximum Grade – Bus Lane	6.0% ⁽¹⁾
Maximum Grade – Bus Loop	3.0% ⁽¹⁾
Circulating Lane Width	6.75 m ⁽²⁾
Bus Stall Width	3.0 m ⁽²⁾
Median Width – Bus Loop	12.25 m ⁽²⁾
Design Vehicle	I-BUS
Parking Stall Width	2.75 m ⁽³⁾
Parking Stall Depth	5.9 m ⁽³⁾
Barrier-Free Stall Width (minimum)	3.7 m ⁽³⁾
Barrier-Free Pull Through EV Charging Stall	3.7 m wide x 11.8 m long
Barrier-Free Pull Through Island Width	1.4 m
Pull Up EV Charging Stall	2.75 m wide x 5.9 m long
Pull Up EV Charging Island Width	2.7 m
Parking Isle Width	6.7 m ⁽³⁾
Sidewalk Width (minimum)	1.8 m – 2.5 m
MUP Width	4.0 m

Notes:

- (1) In accordance with TransLink Bus Infrastructure Design Guidelines.
- (2) In accordance with BC Transit guidelines.
- (3) In accordance with Town of Langley Zoning Bylaw.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 83 -

- (b) The Design-Builder will ensure all designs consider bus-specific vehicle characteristics including but not limited to visibility, impairment zones, acceleration/deceleration rates, lane widths, maximum grades and minimum clearances as further described in the TransLink Bus Infrastructure Design Guidelines. Critical vehicle dimensions as outlined in the TransLink Bus Infrastructure Design Guidelines will be used for the design of all roadways and intersections unless otherwise limited in this Article. The Design vehicle selected will reflect the “worst case” condition for the types of vehicles, including buses, expected to operate on the specific routes accessing the Transit Mobility Hub.
- (c) The Design-Builder will conduct bus AutoTURN analysis on all road infrastructure designs accommodating buses using both standard and articulated bus design vehicles. Acceptance of bus road infrastructure will be subject to bus field tests, which will be the responsibility of the Design-Builder, carried out under the direction of TransLink and BC Transit.
- (d) Signage and pavement marking will be in accordance with Article 8 [Signing and Pavement Marking Design Criteria] of this Part and will be designed and constructed in accordance with the TAC Manual of Uniform Traffic Control Devices in addition to the specific signs developed by TransLink and outlined in the TransLink Bus Infrastructure Design Guidelines.
- (e) Minimum bus clearances from vertical obstructions will be 0.5 m along straight tangent movements and 1.5 m along bus turning movements.
- (f) The Design of any related active transportation facilities and crossings will be in accordance with the requirements of Article 10 [Cycling and Pedestrian Facilities] of this Part.

11.4 Specific Requirements

11.4.1 Transit Mobility Hub Bus Stops, Bus Loop, Furniture and Artwork

The Design for the Transit Mobility Hub should be based on the Reference Concept and provide the following facilities:

- (a) 6.75 m bus loop surrounding 12.25 m island platform accommodating two articulated bus stops for an I-BUS design vehicle in the transit bus loop;
- (b) Foundations and concrete pads for two bus shelters as shown on Drawing 101537-R-REV B-2023-06-20 provided in the Data Room (installation of the bus shelters as shown on Drawing SH-015-044-R-REV A-2023-09-25-E4-FF-ALUM-GRID-FBW, provided in the Data Room, will be by others as noted in Section 11.4.4 [Work by Others] of this Part);
- (c) Foundations and concrete pad for bike racks/lockers at a bike parkade of a minimum size of 6.5 m x 15 m adjacent to the central island of a bus loop (installation of bike racks/lockers will be by others);
- (d) Foundations and concrete pad for a cultural recognition piece measuring up to 2 m x 2 m within the central island of the bus loop (installation of cultural recognition piece will be by others); and
- (e) landscaping and other user amenities provided in accordance with Article 9 [Landscape and Site Restoration Design Criteria] of this Part.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 84 -

11.4.2 Transit Connections

The following connections will be provided:

11.4.3 Park and Ride Facility

- (a) The Design-Builder will provide a park and ride facility adjacent to the Transit Mobility Hub access and bus loop that provides for the following:
 - (i) minimum 200 Park and Ride parking spaces each measuring 2.75 m wide by 5.9 m long, 8 accessible parking spaces each measuring 3.7 m wide by 5.9 m long and 22 EV charging spaces, including 2 pull through spaces and 20 pull up spaces in accordance with Table 11.3 and as contemplated in Section 11.4.4(a) of this Part;
 - (ii) parking pullouts for two community shuttle buses;
 - (iii) Foundations and concrete pads for bus shelters, bike racks/lockers, and a cultural recognition piece as described in Section 11.4.1 [Transit Mobility Hub Bus Stops, Bus Loop, Furniture and Artwork] of this Part;

- (b) The existing park and ride facility will be closed at the outset of the Project to facilitate staged reconstruction of 264th Street and the Highway 1 – 264th Street Interchange.

11.4.4 Work by Others

- (a) During the Project, BC Hydro will be installing EV charging infrastructure (the “**EV Charging Infrastructure**”) in both the Transit Mobility Hub and the Truck Parking Facility which will, in general terms, include EV chargers protected by concrete pads and/or bollards,

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 85 -

underground conduits with pull-boxes, electrical support infrastructure (including substations, transformers and switch gear), and new underground electrical power supply from existing BC Hydro infrastructure. A concept for the EV Charging Infrastructure is shown on the “Hwy13-1 Interchange EV Charging Hub” drawings dated October 2023 prepared for BC Hydro and contained in the Data Room. In connection with the EV Charging Infrastructure:

- (i) BC Hydro will be responsible for the design and installation of all EV Charging Infrastructure, including conduit and pull-box installation including trenching and backfill, construction of concrete pads and bollards, and all electrical infrastructure; and
- (ii) the Design-Builder will be responsible for coordination with BC Hydro and ensuring that the Project Work in connection with the Transit Mobility Hub accommodates and is not in conflict with BC Hydro’s work in relation to the EV Charging Infrastructure, including coordinating with BC Hydro in a manner so as to allow BC Hydro sufficient time to design and install the EV Charging Infrastructure to be fully operational by Substantial

but provided that the completion of the installation by BC Hydro of the electrical components of the EV Charging Infrastructure will not be a requirement for the achievement of Substantial Completion or Total Completion by the Design-Builder in accordance with this Agreement.

- (b) The Foundations and concrete pads to be constructed by the Design-Builder pursuant to Section 11.4.1(b) of this Part will be used by other contractors for:
 - (i) the installation of bus shelters, as shown in drawing SH-015-044-R-REV A-2023-09-25-E4-FF-ALUM-GRID-FBW contained in the Data Room;
 - (ii) the installation of bike racks and lockers in the bike parkade; and
 - (iii) the erection of a cultural recognition piece.

The Design-Builder will coordinate and schedule its work and provide site access to such other contractors so that there is sufficient time for such installation or erection, and so that the Transit Mobility Hub will be fully operational by Substantial

ARTICLE 12 INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

12.1 Order of Precedence

The Design-Builder will design and install all intelligent transportation systems in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards, and if there is any conflict between the criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 86 -

- (c) the DBSS;
- (d) Electrical and Traffic Engineering Manual and applicable Ministry Technical Bulletins and Circulars;
- (e) Electrical and Signing Materials Standards;
- (f) Standard Electrical Equipment Maintenance Manual; and
- (g) Fibre Reference Guidelines.

12.2 ITS Equipment

- (a) The Design-Builder will provide or modify the following equipment specified for the intelligent transportation system (together, the “**ITS Equipment**”) in this Article:
 - (i) networking and fibre optics;
 - (ii) communications conduit;
 - (iii) cabinets;
 - (iv) Dynamic Message Sign;
 - (v) ITS Hybrid Signs;
 - (vi) traffic count stations;
 - (vii) camera system;
 - (viii) vehicle detection system;
 - (ix) pedestrian and cyclist counting equipment; and
 - (x) bus warning flasher system.
- (b) All ITS Equipment will be new production products with the latest versions of hardware and software at the time of installation.
- (c) The Design-Builder will provide all equipment, materials and cabling necessary to make the ITS Equipment fully operational.
- (d) The Design-Builder will ensure that no ITS Equipment installed is discontinued by its manufacturer before purchase of equipment.
- (e) Not less than 30 days prior to the Design-Builder placing orders for equipment, the Design-Builder will submit a list of required equipment and suppliers to the Province’s Representative in accordance with the Consent Procedure.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 87 -

- (f) Except for network equipment detailed in Section 12.4 [ITS Communication System] of this Part, the Design-Builder will design, procure, construct, install and test the ITS Equipment and all associated devices to ensure all systems are complete and functional.
- (g) ITS Equipment will be located to eliminate to the extent possible the need to close traffic lanes for maintenance purposes by locating cabinets and equipment behind barrier flares.
- (h) The ITS Equipment will provide accurate data on a real-time basis and be accessible and controllable by the Province through the Province's fibre network 24 hours a day, 7 days a week.
- (i) Support Structures for the ITS Equipment will meet the requirements of Article 3 [Structural Design Criteria] of this Part and will meet vertical clearance and Clear Zone requirements with respect to the roadway.
- (j) The Design-Builder will provide the Province with manufacturer's warranties for all ITS Equipment. The warranties will be a minimum of three years in length, commencing on the date of Substantial Completion.

12.3 ITS Design and Implementation

The following outlines the minimum expectations for the Design and process of implementing and commissioning the ITS Equipment for the Project:

- (a) Within 180 days following the Effective Date, the Design-Builder will submit a plan for implementing the ITS Equipment to the Province's Representative, pursuant to the Review Procedure. The ITS implementation plan will be in accordance with the FHWA Systems Engineering Process for Intelligent Transportation Systems (the "**Systems Engineering Process**").
- (b) The Design-Builder will complete the following stages of the Systems Engineering Process:
 - (i) High-Level Design (Interim Design);
 - (ii) Detailed Design (Final Design);
 - (iii) Field Installation;
 - (iv) Unit/Device Testing; and
 - (v) Subsystem Verification.
- (c) Pursuant to the Review Procedure, at each stage of the Systems Engineering Process, the Design-Builder will submit to the Province's Representative Design deliverables, including the following:
 - (i) High-Level Design
 - (A) Site plans, elevation drawings and other drawings and documents as required by the Electrical and Traffic Engineering Manual;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 88 -

- (B) ITS Equipment: network diagrams;
 - (C) ITS Equipment: an all-inclusive hardware spreadsheet containing the make, model number, and quantity of each individual piece of the ITS Equipment (the “**Hardware Spreadsheet**”) and, for network equipment, a description of the physical location, quantity and type of ITS Equipment connected to each network device will be provided;
 - (D) ITS Equipment: unit/device test plans (factory acceptance);
 - (E) ITS Equipment: unit/device test plans (field installation);
 - (F) ITS Equipment: sub-system verification plan;
 - (G) ITS communications system: conduit riser diagrams;
 - (H) ITS communications system: fibre optic cable riser diagrams;
 - (I) ITS communications system: fibre optic splice diagrams;
 - (J) ITS communications system: fibre strand assignment spreadsheets; and
 - (K) ITS communications system: conduit riser diagram.
- (ii) Detailed Design
- (A) Site plans, elevations and other drawings and documented as required by the Electrical and Traffic Engineering Manual;
 - (B) ITS Equipment: network diagrams;
 - (C) ITS Equipment: hardware spreadsheet (make, model number, quantity) and, for network equipment, a description of the physical location, quantity and type of ITS equipment connected to each network device will be provided;
 - (D) ITS Equipment: unit/device test plans (factory acceptance);
 - (E) ITS Equipment: unit/device test plans (field installation);
 - (F) ITS Equipment: sub-system verification plan;
 - (G) ITS communications system: conduit riser diagrams;
 - (H) ITS communications system: fibre optic cable riser diagrams; and
 - (I) ITS communications system: fibre optic splice diagrams.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 89 -

- (iii) Field Installation
 - (A) ITS Equipment: all vendor specific software and shop drawings, product data sheets and user manuals.
- (iv) Unit/Device Testing
 - (A) ITS Equipment: unit/device test reports (factory acceptance);
 - (B) ITS Equipment: unit/device test reports (field installation); and
 - (C) ITS communications system: fibre optic cable test results.
- (v) Subsystem Verification
 - (A) ITS Equipment: sub-system verification.
- (d) The Design-Builder will coordinate with the Province at the following stages of the System Engineering Process:
 - (i) at Detailed Design, the Design-Builder will submit the Hardware Spreadsheet to the Province's Representative for approval in accordance with the Consent Procedure;
 - (ii) the Design-Builder will test, verify, and accept the functionality of all subsystems within the ITS Equipment in collaboration with the Province and, following this verification, the Design-Builder will grant the Province access to the ITS Equipment to support its integration into the Province's system, which access and verification must be completed no less than 60 days before the projected date of Substantial Completion; and
 - (iii) the Design-Builder will provide assistance and support to the Province throughout the integration process of the ITS Equipment into the Province's existing system.

12.4 ITS Communication System

The following subsections summarize the requirements of certain ITS Equipment to be provided by the Design-Builder as listed in Section 12.2 [ITS Equipment] of this Part.

12.4.1 Networking and Fibre Optics

- (a) The Design-Builder will ensure that Technical Bulletin TE-2020-01 and Technical Bulletin TE-2021-01 are adhered to when selecting and procuring network equipment and/or installing, testing and commissioning network equipment.
- (b) The existing fibre optic cable runs along the south shoulder of Highway 1, within the confines of the Project. This cable is co-owned by the Province and Rogers Communications, and currently lies within a shared conduit and vault system. Specifically:
 - (i) the Province possesses a 144-conductor single-mode fibre optic cable; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 90 -

- (ii) Rogers Communications holds a 432-conductor, single-mode fibre optic cable.
- (c) The Design-Builder will liaise with both Rogers and the Province to determine the optimal timing for relocating and replacing the fibre optic cables within new conduit structures, such that the fibre optic cables remain operational with minimal interruption to the services carried by the fibre optic cables. This coordination should accommodate both the phases of construction and the final construction layout.
- (d) The Design-Builder will provide dedicated 12-conductor single-mode fibre optic cables to each ITS cabinet and connect these cables directly to the Province's 144 single-mode fibre optic mainline cable.

12.4.2 Communications Conduit

- (a) The Design-Builder will ensure that the conduit infrastructure for the ITS Equipment meets the following requirements:
 - (i) vaults are installed every 500 metres;
 - (ii) intermediate junction boxes are installed every 100 metres for any 50 mm RPVC conduits; and
 - (iii) conduit crossings beneath the road will be installed to connect any ITS Equipment located on the side opposite to the duct bank.
- (b) The conduit infrastructure for the ITS Equipment west of the 264th Street interchange will be as follows:
 - (i) where existing 2-50 mm communications conduits are found, these will be reused or replaced as Construction requires;
 - (ii) new 2-50 mm communication conduits will be installed;
 - (iii) where existing 1-50 mm power conduits are found for feeder cables supplying power to the ITS Equipment, these will be reused or replaced with new, as Construction requires;
 - (iv) existing 1-32 mm communication conduit will be reused or replaced with 2-50 mm communication conduits, if Construction impacts it; and
 - (v) existing 5-32 mm telecommunications conduits, owned by Rogers Communications, will be reused or replaced with 5-32 mm telecommunications conduits, if Construction necessitates a relocation of them.
- (c) The conduit infrastructure for the ITS Equipment east of the 264th Street interchange will be as follows:
 - (i) new 2-50 mm communication conduits will be installed for the length of this segment;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 91 -

- (ii) existing 5-32 mm telecommunications conduits owned by Rogers Communications will be reused or replaced with 5-32 mm telecommunications conduits, if construction necessitates a relocation of these conduits; and
- (iii) new 1-50 mm power conduit will be installed for the feeder cables supplying power to the ITS Equipment.

12.4.3 Cabinets

- (a) Cabinets will be installed to house, power and network the ITS Equipment.
- (b) The cabinets will have the capacity to serve the ITS Equipment, with all network and/or power distance considerations engineered in the Design.
- (c) All cabinet power cables will be rated for 600 volts, with step-down transformers located inside the cabinet to provide 120 volt distribution to the ITS Equipment.
- (d) Cabinets will be located outside of Clear Zone requirements or will be protected by roadside barriers.
- (e) A pure sinewave UPS will be provided with sufficient capacity for 90 minutes of uninterrupted operational power for all ITS Equipment, both inside and outside of each cabinet. The UPS will be designed to operate in extreme environments with automatic voltage regulation and programmable dry contacts for monitoring and control functions. Depending on space availability, dedicated cabinets for some UPS units may be necessary.

12.4.4 Dynamic Message Sign

- (a) The Design-Builder will install a 8 x 12 pixel character DMS for westbound traffic on Highway 1, after 264th Street, at a location that is coordinated with guide sign locations, such that they work in concert together.
- (b) The DMS and DMS controller will be equipped with a pure sinewave UPS, with sufficient capacity for 90 minutes of uninterrupted operational power for the DMS, DMS controller, and all equipment required for proper DMS functions and communications. The UPS will be designed to operate in extreme environments with automatic voltage regulation and programmable dry contacts for monitoring and control functions.

12.4.5 ITS Hybrid Signs

- (a) The Design-Builder will install shoulder-mounted G-005 series ITS Hybrid Signs, similar to sign record GS-14-91-0349, with LED line matrices, sign controllers, UPS units, cellular data modems, and all associated cabinets, at the following locations:
 - (i) eastbound on Highway 1, in advance of 264th Street; and
 - (ii) westbound on Highway 1, in advance of 264th Street.
- (b) The Design-Builder will ensure that the locations of the ITS Hybrid Signs are coordinated with guide sign locations, such that they work in concert together.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 92 -

- (c) One 50 mm empty conduit from the ITS Hybrid Sign control cabinet back to the nearest ITS communications junction box or vault along the main ITS communication network will be installed to facilitate future fibre optic communication connectivity.
- (d) Hybrid ITS signs and associated components will be equipped with a pad-mount, pure sinewave UPS, with sufficient capacity for 90 minutes of uninterrupted operational power for the ITS Hybrid Sign and all related equipment required for proper functions and communications of the ITS Hybrid Sign. The UPS will be designed to operate in extreme environments with automatic voltage regulation and programmable dry contacts for monitoring and control functions.

12.4.6 Traffic Count Stations

The Design-Builder will install traffic counting stations to the west of the Highway 1 – 264th Street Interchange, on the north and south sides of the highway, in accordance with the following:

- (a) Traffic data will be continuously collected for all Travelled Lanes, eastbound and westbound, by permanent traffic counters.
- (b) The traffic counting stations will contain wireless communications and single data collection access points that connect to all sensors and are accessible for data collection.
- (c) Traffic counting equipment will be installed, tested and commissioned at least one month prior to Substantial Completion.
- (d) Traffic measurement equipment will be capable of reprogramming to permit changes to the parameters of the data types.

12.4.7 Camera System

The Design-Builder will design and install a CCTV system as a continuation of the existing Highway 1 ATMS with the following parameters:

- (a) Full CCTV coverage of Highway 1 and ramps. At the Highway 1 – 264th Street Interchange and associated intersections, coverage of the CCTV system will include connecting highways and arterial highways within the Highway 1 – 264th Street Interchange area, as well as along the connecting roadways for a distance of at least 300 metres on the approaches to the interchanges and intersections.
- (b) A clear view of the conditions of the roadway under all lighting conditions to confirm incidents and traffic conditions will be provided.
- (c) A cabinet will be provided for each CCTV located on a pole.
- (d) The maximum spacing between each CCTV along Highway 1 will be no more than 1 kilometer or as required to meet Sections 12.4.7(a) and 12.4.7(b).
- (e) Each CCTV will have pan-tilt-zoom dome cameras.
- (f) IR illuminators will be provided where lighting levels are insufficient.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 93 -

12.4.8 Vehicle Detection System

The Design-Builder will design and install a vehicle detection system as a continuation of the existing Highway 1 ATMS software with the following parameters:

- (a) The vehicle detection technology will be radar sensor-based.
- (b) Coverage will include all Highway 1 lanes and ramp terminals, with no additional detection along ramps.
- (c) Any gaps between vehicle detectors will not exceed 500 metres.

12.4.9 Pedestrian and Cyclist Counting Equipment

- (a) The Design-Builder will design and install pedestrian and cyclist counting equipment at a designated location along the MUP, south of the Comfort Inn Hotel and adjacent to the Highway 1 – 264th Street Interchange. The precise installation locations will be determined in coordination with the Province's Representative.
- (b) The pedestrian and cyclist counting equipment will be equipped with a cellular modem and must be capable of bi-directional data collection for both pedestrians and cyclists.

12.4.10 Bus Warning Flasher System

A bus warning flasher system will be installed at locations where shoulder lanes intersect with General Purpose Lanes on interchange ramps. These flashing signs must automatically activate when a bus approaches, signaling motorists to yield. The Design-Builder will determine the optimal placement of these signs for Highway 1, specifically in advance of the 264th Street ramps, guided by the Reference Concept.

ARTICLE 13 ROAD SAFETY AUDIT

13.1 Order of Precedence

The Design-Builder will conduct Road Safety Audits in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards, and if there is any conflict with the criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) Technical Circular T-02/04;
- (d) Road Safety Audit Guidelines; and
- (e) TAC Road Safety Audit Guide.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 94 -

13.2 Road Safety Audit Team

The Road Safety Audit Team will consist of a minimum of two auditors. Each team member will 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.

13.3 Design-Builder's Responsibility

- (a) The Design-Builder will be responsible for:
 - (i) scheduling, initiating, and managing the Road Safety Audit process at the appropriate times during the course of the Project;
 - (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.
- (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 will address all recommendations made by the Road Safety Audit Team.

13.4 Road Safety Audit Process

13.4.1 General Requirements

- (a) The Road Safety Audit process will be carried out in accordance with the TAC Road Safety Audit Guide, the Road Safety Audit Guidelines and in accordance with Part 2 [Design and Certification Procedure] of this Schedule.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 95 -

- (b) The Road Safety Audit Team will prepare an audit report to document the audit findings. Road Safety Audit reports will be submitted to the Design Team for the stages identified below.
- (c) The Road Safety Audit reports will clearly identify safety hazards that need to be addressed by the Design-Builder along with recommendations for remediation. The Design-Builder will respond to the identified hazards and recommendations with remediation countermeasures.
- (d) Road Safety Audits reports will be provided to the Province for review, in accordance with the Review Procedure, at four stages, as identified below.
- (e) The Road Safety Audit Team will review the Traffic Management Plan prepared in accordance with Part 3 [Traffic Management] of this Schedule as part of the Road Safety Audit process.

13.4.2 Stage 1: Interim Design Road Safety Audit

A Stage 1 Road Safety Audit will be conducted immediately before submission of the Interim Design in accordance with Part 2 [Design and Certification Procedure] of this Schedule. This Road Safety Audit will 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 will include:

- (a) Design consistency;
- (b) horizontal and vertical alignment;
- (c) cross section Design;
- (d) interchange/intersection 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 will be conducted at Final Design in accordance with Part 2 [Design and Certification Procedure] of this Schedule. The audit will 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 will include:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 96 -

- (a) signing and Pavement Markings;
- (b) traffic signal configuration;
- (c) interchange and intersection details;
- (d) drainage;
- (e) lighting;
- (f) fencing;
- (g) clearances to roadside objects;
- (h) safety barriers;
- (i) surface standards;
- (j) landscaping;
- (k) provision for vulnerable road users;
- (l) accommodation of design vehicles; and
- (m) any Stage 1 items affected by the Final Design.

13.4.4 Stage 3: IFC Road Safety Audit

For any changes to the Final Design or IFC Drawings completed subsequent to the review of the Final Design, the Design-Builder will submit a Stage 3 Road Safety Audit, which must address those design changes and confirm that all recommendations in the Road Safety Audit of the Final Design have been addressed.

13.4.5 Stage 4: Post Construction Road Safety Audit

- (a) Prior to opening for traffic operation, a Stage 4 Road Safety Audit will be carried out to identify potential safety enhancements that may reduce the frequency of collisions.
- (b) Stage 4 Road Safety Audits will 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 will be carried out as each stage of the relevant Construction activities is completed and before a Construction Certificate is issued in accordance with Part 2 [Design and Certification Procedure] and Part 3 [Traffic Management] of this Schedule.
- (d) For the purposes of completing a Stage 4 Road Safety Audit required pursuant to paragraphs (a) and (b) above, the Road Safety Audit Team will fully examine the New Project Infrastructure, including:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 97 -

- (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 will be conducted during Design for any temporary traffic control set-up or lane shift with:
 - (i) a duration of two weeks or longer, provided that 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
 - (ii) complexity exceeding that of the standard template used in the Traffic Management Manual.
- (b) Each such Road Safety Audit will be completed prior to the implementation of the temporary traffic control set-up unless otherwise agreed to by the Province's Representative.
- (c) Each such Road Safety Audit will consider the influence in traffic operations of other temporary traffic control set-ups in close proximity.

13.6 Temporary Traffic Control (On-site) Road Safety Audit

- (a) For each phase of Construction activity, Road Safety Audits will be conducted on the Project Site, following implementation, for any temporary traffic control set-up or lane shift with:
 - (i) a duration of two weeks or longer, provided that 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;
 - (ii) complexity exceeding that of the standard template used in the Traffic Management Manual; or
 - (iii) 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 with 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 being 2 km or less.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 98 -

- (b) Each such Road Safety Audit will be completed within two days after implementation unless otherwise agreed to by the Province.
- (c) The Road Safety Audit Team will follow a check list based on the ITE Temporary Traffic Control Guidelines. The Road Safety Audit will 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 four 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 will submit to the Province's Representative a Road Safety Audit Certificate.

ARTICLE 14 DEMOLITION, REMOVALS AND DISPOSAL

14.1 Demolition

- (a) The demolition, disassembly and removal of Infrastructure and other buildings, improvements and amenities from the Project Site will satisfy all Environmental Laws and requirements of Governmental Authorities and Utility Suppliers.
- (b) The Design-Builder will prepare and submit demolition plans to the Province's Representative in accordance with the Consent Procedure for any demolition, disassembly and removal of Infrastructure and other buildings, improvements and amenities from the Project Site, a minimum of 90 days in advance of 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 will submit all subsequent changes to such demolition plan to the Province's Representative pursuant to the Review Procedure.
- (d) The Design-Builder will complete the demolition in accordance with this Article before the Design-Builder submits a request for a Certificate of Total Completion pursuant to Part 12 [Certification of Substantial Completion and Total Completion] of Schedule 3.
- (e) Demolition will include backfilling abutment excavations, grading and landscaping of demolition sites upon completion of the demolition work.
- (f) Unless noted otherwise, the Design-Builder will demolish structures to a minimum depth of 1.0 m below the finished grade. Underground locations of remaining structures will be documented in the Construction Records.
- (g) Portions of roadway that are not retained as part of the New Project Infrastructure will be removed and restored in accordance with this Article and Article 9 [Landscape and Site Restoration Design Criteria] of this Part.
- (h) The Design-Builder will demolish the entire existing County Line Rd. Underpass (No. 01616) including full depths of the pier and abutment foundations.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 99 -

- (i) The Design-Builder will conduct testing of existing bridge components as required to determine disposal requirements under the *Environmental Management Act* (British Columbia).
- (j) The Design-Builder will dispose of demolition materials in accordance with Environmental Laws.

14.2 Waste Removal

- (a) All waste/debris arising from the Project Work and all material brought to site but not incorporated into the Project Work will be removed from the Project Site by the Design-Builder prior to Substantial Completion.
- (b) The Design-Builder will dispose of all contaminated, hazardous or dangerous material, in accordance with the regulations of relevant Governmental Authorities.
- (c) Disposal at sea, as defined in Environmental Laws, is not anticipated. If the Design-Builder elects to consider disposal at sea, it is the Design-Builder's responsibility to liaise with the Regional Ocean Disposal Advisory Committee and acquire the necessary permit from Environment Canada in accordance with applicable regulatory requirements.

14.3 Strong Pit Disposal Site

The Design-Builder may use the Province provided disposal site 'Strong Pit', free of charge, for disposal of certain materials, subject to the conditions outlined in this Article.

14.3.1 General Requirements

- (a) The Design-Builder will ensure that only materials exclusively originating from the Project Site are disposed of at Strong Pit in accordance with Section 14.3.3 [Material Specific Requirements] of this Part, the *Ministry of Energy and Mines Act* (British Columbia) and the Health, Safety and Reclamation Code.
- (b) The Design-Builder will ensure that it and all Subcontractors engaged in Project Work activities within Strong Pit are qualified and meet all the requirements of the *Ministry of Energy and Mines Act* (British Columbia) and the Health, Safety and Reclamation Code and that all of the Design-Builder's activities and the activities of its Subcontractors are in strict compliance with the regulations and requirements set forth under the *Ministry of Energy and Mines Act* (British Columbia) and the Health, Safety and Reclamation Code.

14.3.2 Access and Site Management

Coordination will be necessary with other contractors operating within Strong Pit and, at all times, the Design-Builder will coordinate and comply with the requirements of the pit manager for Strong Pit.

14.3.3 Material Specific Requirements

- (a) The Design-Builder will establish measures to verify and ensure that only AL- Type D and Strippings type soil is disposed of at Strong Pit, with:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 100 -

- (i) AL- having the meaning given in the *Contaminated Sites Regulation* (British Columbia);
 - (ii) Type A soil being solid rock of sufficient hardness that drilling, blasting, very heavy ripping or similar methods are typically required prior to excavation, and Type D soil being any soil that is not Type A; and
 - (iii) Strippings type soil being a subtype of Type D soil and referring to soil from the topsoil layer.
- (b) Any other material from the Project Site requiring disposal, including clearing and grubbing materials, woody debris, wood chips, fences, old culverts, old concrete, and asphalt, will be disposed of by the Design-Builder at a disposal site provided by the Design-Builder.
- (c) The Design-Builder will place materials within the designated fill areas shown on the Strong Pit Reclamation Plan – 264th Interchange Zone Drawings located in the Data Room, or such other fill areas as may be determined from time to time by the Province in its discretion, and spread, leveled, and track rolled at each one-metre lift.
- (d) Organic stripping and all other organic subtypes of Type D soil will be separated and stockpiled in the fill areas specified on the Strong Pit Reclamation Plan – 264th Interchange Zone Drawings located in the Data Room, or such other fill areas as may be determined from time to time by the Province in its discretion.
- (e) The final appearance of the fill areas area must be neat and regular, minimizing the occupied area, and satisfactory to the Province's Representative.

14.3.4 Environmental Protocols

The Design-Builder will:

- (a) adhere to best management practices for debris and dust control, aligning with the Aggregate Operators Best Management Practices Handbook for BC; and
- (b) implement effective measures for drainage, erosion, and sediment control.

14.3.5 Documentation and Records

- (a) The Design-Builder will maintain comprehensive records of all materials disposed of at Strong Pit, including:
 - (i) source site soil materials evaluations and fill acceptability assessments;
 - (ii) daily logs of material received detailing dates, truckloads, and volumes; and
 - (iii) placement location and elevation data for materials from each source site, referenced by road chainage, GPS coordinates or other suitable locating methods.
- (b) The Province's Representative has the authority to inspect materials arriving at Strong Pit.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 101 -

- (c) The Design-Builder will establish an authorized list of trucks or a verification system to prevent unauthorized placement of materials at Strong Pit.
- (d) Materials with any signs of contamination or suspicious odors are strictly prohibited and will be disposed of elsewhere in accordance with Environmental Laws.

14.3.6 Strong Pit Fill Management Plan

In the event that the Design-Builder elects to use Strong Pit, the Design-Builder will prepare and submit a fill management plan for Strong Pit to the Province's Representative in accordance with the Consent Procedure no less than 30 days prior to the Design-Builder using Strong Pit, and will:

- (a) detail procedures, safety and environmental protocols, documentation protocols, and coordination mechanisms to ensure compliant and efficient disposal operations at Strong Pit;
- (b) include an erosion and sediment control plan, specific to Strong Pit; and
- (c) comply with all other relevant provisions of this Agreement.

14.4 Removal of Existing Electrical Equipment

- (a) The Design-Builder will remove and properly dispose of all existing electrical equipment, both above and below ground, within the Project Site and not incorporated into the New Project Infrastructure, including underground boxes, foundations, wiring and the at-grade lighting fixtures within the landscaped zone marked "Visit Fort Langley".
- (b) Existing traffic signal controllers and controller cabinets not required by the Design-Builder will be removed.
- (c) The Design-Builder will remove and dispose of any and all existing luminaire and signal poles and bases.
- (d) If there is existing wiring within conduit to be abandoned, then the Design-Builder will remove and dispose of the wiring prior to abandoning the conduit.
- (e) The Design-Builder will identify and remove any abandoned wire within the existing lighting and traffic signal junction boxes. Following the removal of the wire, the Design-Builder will also ensure the complete removal and proper disposal of the junction boxes themselves.
- (f) The Design-Builder will maintain both high mast pole structures located in the southwest and southeast quadrants of the existing 264th Street interchange and the attached Pan-Tilt-Zoom closed-circuit television. The Design-Builder will decommission and remove all existing high mast light fixtures from both high mast poles.
- (g) The Design-Builder will provide the Province with a list of all ITS and electrical equipment proposed for disposal prior to removing any such equipment. The Province may direct the Design-Builder to return some of such to be removed equipment, such as luminaire poles, signal poles, sign poles, high mast lighting fixtures, service equipment and traffic controllers, to the Ministry Electrical Maintenance Contractor Yard. All other removed equipment will be properly disposed of off-site by the Design-Builder.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 102 -

14.5 Removal of Existing Utilities

- (a) The Design-Builder will remove from the Project Site or decommission any abandoned pipe exceeding 600 mm in diameter situated beneath permanent Travelled Lanes. Decommissioning will be achieved by completely filling the void in the pipe with a controlled density fill and sealing both ends. Controlled density fill will be designed to have a minimum unconfined compressive strength of 1 Mpa at 28 days and be designed to minimize shrinkage. All mix designs will be signed and sealed by the responsible engineer, who will be a duly experienced Professional Engineer of an appropriate discipline. Abandoned pipe that is less than 600 mm in diameter may be abandoned in place with the ends capped.
- (b) The Design-Builder will remove all abandoned exposed Utilities in their entirety within the Project Lands.
- (c) The Design-Builder will remove abandoned in place manholes and vaults down to 1 m below final grade and fill the space within the structure with compacted sand. The ends of utilities less than 600 mm in diameter protruding into the manholes/vaults will, at a minimum, be capped with grout within the structures prior to backfilling.
- (d) Locations of abandoned utilities and explanations of the methods of abandonment will be marked on the Construction Records.
- (e) All removed abandoned Utilities will be properly disposed of off-site by the Design-Builder.
- (f) Abandoned groundwater wells within the Project Lands will be decommissioned in accordance with Environmental Laws.

14.6 Fort Langley Sign Salvage

- (a) In accordance with the requirements of the Municipality, the Design-Builder will salvage the flags and flag poles (the “**Salvaged Flags**”) from the roadside sign for Fort Langley (the “**Fort Langley Sign**”) during the course of the Project Work.
- (b) The Design-Builder will carefully remove the Salvaged Flags and deliver them to a designated municipal works yard of the Municipality, with the exact delivery location to be specified and communicated by the Municipality during Construction.
- (c) The Design-Builder will properly dispose of all other components, materials, or parts related to the Fort Langley Sign, excluding the Salvaged Flags.

ARTICLE 15 TRUCK PARKING FACILITY

15.1 Order of Precedence

The Design-Builder will design and construct the Truck Parking Facility in accordance with the criteria contained in this Article, the other requirements of this Agreement and the following codes and standards, and if there is any conflict between criteria contained in this Article, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 103 -

- (a) the criteria contained in this Article;
- (b) the other requirements of this Agreement;
- (c) the applicable Ministry Technical Bulletins and Circulars;
- (d) BC Supplement to TAC;
- (e) TAC Geometric Design Guide;
- (f) BC Active Transportation Design Guide;
- (g) TAC Manual of Uniform Traffic Control Devices;
- (h) Manual of Standard Traffic Signs and Pavement Markings;
- (i) Specifications for Standard Highway Sign Materials, Fabrication and Supply;
- (j) Electrical and Signing Materials Standards; and
- (k) Township of Langley Zoning Bylaw No. 2500.

15.2 General Requirements

The Design-Builder will, prior to submitting the Design of the Truck Parking Facility to the Province's Representative in accordance with Part 2 [Design and Certification Procedure] of this Schedule, consult with the Province, the Municipality and the BC Trucking Association in connection with such Design.

15.3 Geometric Design

- (a) Table 15.3 provides the geometric design criteria that are to be applied for the Design and Construction of the Truck Parking Facility, to be located on the North side of 56 Avenue South, West of 264th Street. Site specific additional requirements and/or exceptions (if any) to these requirements are set out in Section 15.4 [Specific Requirements] of this Part.

Table 15.3

Geometric Design Criteria	Truck Parking Facility
Functional Classification	Truck Parking Lot
Posted Speed	20 km/h
Design Speed	20 km/h
Number of Basic Lanes	1
Max. Grade – Access and Circulating Lane	6% ⁽¹⁾
Max. Grade – Bus Loop	3% ⁽¹⁾
Access Width	10.5 m ⁽²⁾
Circulating Lane Width	10(2)m
Design Vehicle	WB-20/WB-24 ⁽³⁾
Truck Parking Stall Width	4.0 m
Truck Parking Stall Depth	25.0 m
Truck Parking Module Width	16.0 m

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 104 -

Geometric Design Criteria	Truck Parking Facility
EV Charging Stall Separating Island	1.4 m ⁽⁴⁾
Sidewalk Width (Min)	1.8 m
Left Turn Lane Storage	45.0 m

Notes:

- (1) In accordance with Township of Langley Zoning Bylaw.
 - (2) As required to accommodate design vehicle movements.
 - (3) In accordance with BC Supplement to the TAC Geometric Design Guide. The Truck Parking Facility will accommodate WB-20 movements without lane/stall encroachment. The Truck Parking Facility will also accommodate the passage of WB-24 design vehicles with the acceptance of lane/stall encroachment.
 - (4) Painted separating island to be designed to accommodate future concrete charging unit pedestal and bollards.
- (b) The Design-Builder will ensure that all Designs for access to the Truck Parking Facility accommodate WB-24 design vehicles. These movements along the routing between Highway 1 and the Truck Parking Facility and the turning requirements (swept area) for design vehicles will also be considered in the Design by the setting back of obstructions to the movement of these vehicles.
- (c) The Truck Parking Facility will include a turnaround near the access to 56 Avenue South and will accommodate a WB-24 design vehicle for a U-turn movement outside the gated entrance.
- (d) The Design-Builder will conduct truck AutoTURN analysis on all road infrastructure Designs accommodating trucks using WB-20 design vehicles.
- (e) Signage and Pavement Marking will be in accordance with Article 8 [Signing and Pavement Marking Design Criteria] of this Part and will be designed and constructed in accordance with the TAC Manual of Uniform Traffic Control Devices in addition to the Manual of Standard Traffic Signs and Pavement Markings.
- (f) Minimum truck clearance from vertical obstructions will be 5.2 m.
- (g) The Design of any related active transportation facilities and crossings will be in accordance with the requirements of Article 10 [Cycling and Pedestrian Facilities] of this Part.
- (h) The Design of any related landscaping features or site restoration will be in accordance with the requirements of Article 9 [Landscape and Site Restoration Design Criteria] of this Part.
- (i) Lighting and an access control gate will be provided in accordance with Article 6 [Electrical, Signals and Lighting Design Criteria] of this Part.

15.4 Specific Requirements

15.4.1 Truck Parking Facility

The truck parking facility (the “**Truck Parking Facility**”) will:

- (a) be located in the southwest quadrant of the Highway 1 – 264th Street Interchange, north of 56 Avenue South and west of 264th Street, and will include the access intersection with 56 Avenue South and connecting active transportation facilities;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 105 -

- (b) have 25 truck parking spaces, each measuring 25 m in length and 4 m in width, including 10 spaces designated for EV charging with an adjacent 1m square space for EV charging infrastructure;
- (c) have one access to 56 Avenue South, including a separate eastbound left turn lane with storage for at least two WB-20 design vehicles, which separate eastbound left turn lane is on lands under the jurisdiction of the Township of Langley and is to be designed in accordance with the Township of Langley's standards and subject to approval by the Township of Langley;
- (d) have a Type D 1.8m standard height chain link fencing extending from the sidewalk and gate at the main entrance around the complete perimeter of the Truck Parking Facility, and located 1.5 m behind continuous concrete roadside barrier located around the facility adjacent to the perimeter travelled lanes within the facility;
- (e) have a guard house that meets the requirements of a Type A site office specified in Volume 1 of the Standard Specifications for Highway Construction, with electrical heat and lighting (including service connection to BC Hydro), tiled concrete floor, concrete or masonry block walls, standing seam metal roof, and steel doors;
- (f) have two reserved parking stalls next to the guard house, each 5.9 m in length and 2.75 m in width; and
- (g) have a washroom building as detailed in Section 15.4.2 [Truck Parking Facility Washroom Building] of this Part.

15.4.2 Truck Parking Facility Washroom Building

The Design-Builder will design and construct a washroom building within the Truck Parking Facility with details as follows:

- (a) architectural floor plan, interior finishes, plumbing, mechanical, and electrical to be similar to the washroom building shown on the Highway 17 – South Fraser Perimeter Road North Surrey Truck Parking – Phase 2 Drawings R1-849-801 to -803 in the Data Room;
- (b) structure to consist of concrete floor with epoxy floor coating, concrete or masonry block walls, and standing seam metal roof;
- (c) washroom to be serviced by a potable water supply, originating from a new connection to the Township of Langley water supply system;
- (d) washroom to be connected to a septic sewer system designed to the Township of Langley design criteria, MMCD standards, applicable MOECCS standards, the Sewerage System Standard Practice Manual and the EGBC Onsite Sewerage Systems Guidelines;
- (e) washroom electrical (including lighting, hot water heater and space heater) to be connected to BC Hydro infrastructure, with the new connection coordinated and paid for by the Design-Builder; and
- (f) washroom design to be in accordance with Good Industry Practice and the BC Building Code (with the Province acting as the Authority Having Jurisdiction).

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 106 -

15.4.3 Work by Others

In connection with the EV Charging Infrastructure to be designed and installed by BC Hydro in the Truck Parking Facility, as described in Section 11.4.4(a) of this Part, the Design-Builder will be responsible for design and construction coordination with BC Hydro, ensuring the site layout provides adequate drainage away from all pad-mounted electrical infrastructure and for constructing all sidewalks, curbs/gutters, drainage infrastructure, landscaping, and paving after BC Hydro has installed its civil works. The Design-Builder's work will be coordinated and scheduled so that BC Hydro has sufficient time for the EV Charging Infrastructure to be fully operational by Substantial Completion.

15.4.4 56 Avenue South Access

- (a) The access from the Truck Parking Facility to 56 Avenue South will be designed to serve trucks primarily but may also have to provide a 'U'-Turn Route for local traffic if rerouting of this traffic is required as a result of the interchange design and access restrictions on 264th Street.
- (b) The truck parking access will provide all-directional movement by automobiles and trucks. Intersection corner radii and median island bull noses will be designed to provide for the movement of WB-20 design vehicles without lane encroachment and WB-24 design vehicle with acceptance of lane encroachment.

15.4.5 Sidewalk Connections

A sidewalk connection will be provided from the sidewalk and MUP at the northwest corner of the 264th Street and 56 Avenue South intersection extending along the north side of 56 Avenue South adjacent to the westbound traffic lane to the entrance to the Truck Parking Facility and extending around the east curb radius and terminating inside the main entrance

ARTICLE 16 CLIMATE CHANGE ADAPTATION

16.1 General Requirements

The Design-Builder will comply with Technical Circular T-04/19.

16.2 Climate Data

The Design-Builder will determine the appropriate climate data to be used in the Design to account for anticipated climate change. The climate data used will:

- (a) be data from southwest coastal British Columbia or derived for the Lower Mainland;
- (b) consider at a minimum, temperature, rain, sea level, storm surges, snow, ice, fog, hail, frost, humidity, ice accretion, wind, floods, extreme temperatures and precipitation, and storms of various intensities; and
- (c) rely on climatological modelling analysis that is consistent with current climate science and relevant to the Lower Mainland.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 1: Design and Construction Requirements

- 107 -

16.3 Climate Vulnerability Risk Assessment & Analysis

The Design-Builder will produce a climate change risk assessment report which assesses climate change vulnerability. The vulnerability risk assessment will:

- (a) comply with minimum levels of effort as per EGBC Climate Change – Resilient Design, section 3.0;
- (b) consider and accommodate at minimum, climate/design parameters related to extreme weather events involving such things as temperature, rain, sea level, snow, ice, fog, hail, frost, humidity, ice accretion, wind, floods, extreme temperatures and precipitation, storms of various intensities, and combinations of these factors;
- (c) produce a climate change risk assessment matrix including key infrastructure, as well as any at-risk infrastructure;
- (d) 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
- (e) assess how these vulnerability risks are anticipated to change over the Design Life of each component of the Project Infrastructure.

16.4 Climate Change Adaptation Report

The Design-Builder will prepare and submit to the Province's Representative, as part of the Interim Design and Final Design submissions, in accordance with the Review Procedure, a preliminary climate change adaptation report demonstrating the assessment completed and how the requirements of Technical Circular T-04/19 and this Article will be met in the Final Design.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

**PART 2
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 will submit a Design Management Plan to the Province's Representative in accordance with the Consent Procedure. The Design Management Plan will include:

- (a) an organization chart for all design activities;
- (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 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 procedures for integrating GBA Plus Requirements into the development of the Design;
- (i) the process for Designer reviews during Construction;
- (j) an overview of document management and controls;
- (k) the drawings standards used by the Design-Builder;
- (l) the process and procedures for authenticating electronic drawings and documents in accordance with the EGBC Authentication of Documents Guidelines;
- (m) a drawing tree indicating the organization and hierarchy of the Design-Builder's drawings;
- (n) appropriate metrics to measure the progress of the Design for each discipline;
- (o) a description of the issues, risks and assumptions to be clarified and addressed during Design and Construction; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 109 -

- (p) a signed and sealed letter of commitment from the Design Manager to act as the Coordinating Professional Engineer for the Project.

Any subsequent amendments or updates to the Design Management Plan will 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 will 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 will 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 will be informal and will not be considered for the purposes of this Agreement as either Province Changes or Value Engineering 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 will 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 will 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 will 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 will be in the format shown in Appendix 4B [Sample Contents for a Structural TAF] to this Schedule and will:

- (a) 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;
- (b) for Construction submissions, provide the relevant Construction Certificate for such Construction; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 110 -

- (c) be signed by 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 any Construction, will 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 will 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 will 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 will ensure that all certification procedures referred to in the Design Management Plan and the Design and Certification Procedure are complied with by the appropriate persons referred to therein, including the Design Team, the Designer and any independent team or checking engineer within the Designer, as the case may be (together, the “**Appropriate Persons**”), and that all Appropriate Persons are at all relevant times duly authorized and qualified to carry out such procedures and to sign the relevant certificates. Any failure by the Appropriate Person to fulfil the certification procedure obligations required of them under the Design Management Plan or the Design and Certification Procedure will 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 will 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 will provide one PDF file and one AutoCAD data file for each Interim Design and Final Design submission.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 111 -

- (b) Drawings will be in a format in accordance with the requirements of the Ministry Standards. The Design-Builder will confirm drawing conventions and standards, including AutoCAD standards, title block and stationing convention, with the Province's Representative prior to commencing design drawing production.
- (c) Drawings for the New Project Infrastructure to be constructed by the Design-Builder that will, in accordance with the Ministry Jurisdictional Atlas, be within municipal jurisdiction, will be in accordance with the applicable standards of the Municipality.

2.5 Preparation of Design Data

All Design Data will 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, will 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 will submit to the Province's Representative Interim Designs, including interim TAFs and supporting information, for, at a minimum, the Project Infrastructure and geotechnical Design. The supporting information will include the traffic engineering analysis and reporting in accordance with Article 1 [Laning and Geometrics Design Criteria] of Part 1 of this Schedule.
- (b) Interim Design submissions will be informal and will not be reviewed according to the Review Procedure. Rather, such informal Interim Design submissions will 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 will be appropriate to the subject and discipline and include any specific requirements for such submissions set out in this Agreement. The information provided will be adequate to show that the Design is proceeding in compliance with the Project Requirements and is taking into consideration the relevant Construction.
- (d) In accordance with this Design and Certification Procedure, the Design-Builder and the Province will 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

Final Designs from all design disciplines will 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.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 112 -

2.8 Final Design Submissions

2.8.1 General

- (a) Design folders will be prepared for the Final Design submissions and will have indexes and sectional dividers. The design folders will contain pertinent correspondence, will be arranged by subject matter in chronological order, and will include design calculations and backup information. Design folders will include, without limitation, copies of all approvals, design reports, correspondence, internal design reviews, quality control records and calculations.
- (b) The Final Design submissions will address any comments by the Province from the Interim Design Review.
- (c) Final Design drawings and reports will be signed and sealed by the responsible engineer or qualified professional, who will be a duly experienced Professional Engineer or qualified professional of an appropriate discipline.

2.8.2 Roadway and Drainage Design

The Final Design submission will, without limitation:

- (a) contain all design drawings, including complete laning and geometrics, profiles, typical and template cross-sections, right of way acquisitions and drainage;
- (b) include the Drainage Design Report in accordance with Section 7.3.5 [Drainage Design Report] of Part 1 of this Schedule; and
- (c) include revisions to address stakeholder issues, plans for Utility relocations, critical constructability and traffic handling considerations, environmental issues and mitigation plans.

2.8.3 Bridge Design

The Final Design submission will 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 report for each of the Structures;
- (c) a final Seismic Design Strategy Memorandum for the applicable Structures, which will be submitted to the Province's Representative at the Interim Design review and be updated and resubmitted with the Final Design submission;
- (d) a spreadsheet (in electronic form) containing Structure parameters data in accordance with Article 3 [Structural Design Criteria] of Part 1 of this Schedule;
- (e) seismic performance drawings in accordance with the Seismic Performance Drawings Template located in the Data Room;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 113 -

- (f) a neat, bound, indexed set of design calculations for the Bridge Structures initialled by the responsible engineer, who will be a duly experienced Professional Engineer of the appropriate discipline; and
- (g) a plan for the settlement monitoring of Structures.

2.8.4 Other Structures Design

The Final Design submission will contain, without limitation, the following:

- (a) final geotechnical report for each of the Structures;
- (b) descriptions of aesthetic treatment for all walls;
- (c) descriptions of maintenance considerations for all Structures;
- (d) global stability reports, if applicable; and
- (e) a neat, bound, indexed set of design calculations for the Structures, initialled by the responsible engineer, who will be a duly experienced Professional Engineer of the appropriate discipline.

2.8.5 Geotechnical Design

- (a) For the Final Design submission the Design-Builder will prepare a comprehensive geotechnical report for the Project that covers existing geotechnical information and known site conditions, new investigations performed for the Project, geotechnical engineering analysis, geotechnical design assumptions and design parameters (and the basis for these) and geotechnical design recommendations. The report will be submitted to the Province's Representative at the Interim Design review and updated and resubmitted with the Final Design.
- (b) In addition, the Final Design submission will, without limitation, contain:
 - (i) a summary of any additional work and subsurface investigations that have been completed since the Interim Design, including drafted drill summary logs in Ministry format;
 - (ii) final recommendations for foundation systems, allowable loads and estimates of total and differential settlements at 2 and 25 years following construction;
 - (iii) material and construction specifications for deep foundation elements including testing requirements and acceptance criteria;
 - (iv) geotechnical design recommendations for retaining structures;
 - (v) light weight fill designs and geotechnical design recommendations for pavements;
 - (vi) estimates of total and differential settlement of embankments and roadways at 2 and 25 years following construction;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 114 -

- (vii) liquefaction assessments, ground displacement estimates, and soil structure interaction analysis of Bridge foundations demonstrating that design meets Performance Based Design requirements of the BC Supplement to CSA S6:19 and CSA S6:19;
- (viii) requirements for ground improvement measures necessary to meet the static and seismic performance requirements for foundations, cut and fill slopes, embankments and retaining structures;
- (ix) an assessment of the stability of approach embankments, road embankments, cut slopes and fill slopes under static and seismic loading conditions and the ability of these to meet the seismic performance requirements;
- (x) drawings showing the road alignment in plan and profile with drill hole locations shown on the plan and simplified summary logs shown on the profile (design notes are to be shown along the bottom of the drawings); and
- (xi) a final geotechnical report for the Structures with drawings showing the general arrangements for the Bridge Structures in plan and profile, with drill locations shown in plan and simplified summary logs shown in profile.

2.8.6 Electrical, Signing and Pavement Markings Design

- (a) The Final Design submissions will include electrical (including signals, lighting and telecommunications), signing and Pavement Marking plans.
- (b) Design drawings for all electrical systems will contain, without limitation, the following:
 - (i) electrical equipment and all associated support structure locations;
 - (ii) lighting calculations where appropriate;
 - (iii) traffic signal site plans, elevations, signal phasing diagrams, and details;
 - (iv) service locations; and
 - (v) schematics showing electrical wiring layout.
- (c) Sign design sheets will be submitted for all custom guide signs. Sign design sheets will be produced using Transoft Guide sign (or equivalent) software.
- (d) All cantilever and sign bridge Structures submissions will be undertaken in accordance with Section 300 of the Electrical and Signing Materials Standards.

2.8.7 ITS Equipment

The Final Design submission will contain, without limitation, design drawings for the ITS Equipment containing, without limitation, the following:

- (a) equipment and all associated cabinet locations;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 115 -

- (b) equipment support structure locations;
- (c) elevations;
- (d) service locations;
- (e) schematics showing communications and electrical wiring layout;
- (f) wiring diagrams;
- (g) fibre optic splice details and riser diagrams; and
- (h) communications conduit plans (on electrical plans) and riser diagrams.

2.8.8 Landscaping and Site Restoration

The Final Design submission will 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 will document changes and describe the design work that has been completed since the Interim Design submission. Design will be compliant with DBSS 751, 754 and 757. Drawings will be of a suitable scale for legibility and will provide enlarged detailing where needed.

2.8.9 Traffic Modelling and Traffic Engineering

The Final Design submission will contain, without limitation, the following:

- (a) traffic engineering analysis, micro-simulation models and associated reports and files in accordance with Section 1.5 [Traffic Engineering] of Part 1 of this Schedule;
- (b) traffic engineering checklists and signal timing sheets associated with the design of signalized intersections;
- (c) the assigned traffic volumes, along with the traffic engineering checklists and signal timing sheets for opening day operation of signalized intersections; and
- (d) traffic engineering analysis along with the traffic engineering checklists and signal timing sheets whenever traffic signal timings are adjusted after opening day.

2.8.10 Environmental Design

The Final Design submission will contain, without limitation:

- (a) applicable construction drawings that include:
 - (i) all critical and sensitive wildlife habitats and ecosystems (including nest trees, red and blue listed plant communities and wetlands);
 - (ii) “no disturbance” riparian and “vegetation to remain” (protected vegetation) areas;
 - (iii) all fish bearing streams and aquatic habitats; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 116 -

- (iv) all archaeological features;
- (b) riparian restoration and terrestrial reclamation/revegetation drawings that, as a minimum, describe timing requirements, seed mixes and application 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;
- (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; and
 - (ii) 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) and (c) of this Section that demonstrates consideration of and compliance with the environmental requirements and commitments applicable to the particular design package.

2.8.11 Climate Change Adaptation Design

The Final Design submission will contain, without limitation a climate change adaptation report demonstrating the assessment completed and how the requirements of Technical Circular T-04/19 and Article 16 [Climate Change Adaptation] of Part 1 of this Schedule will be met in the Final Design, which will include discipline specific climate change design criteria sheets, including high level cost estimates for climate change adaptation.

2.8.12 Settlement Monitoring

No less than 60 days prior to the commencement of any Construction, the Design-Builder will prepare and submit a Settlement Monitoring Plan to the Province's Representative in accordance with the Consent Procedure. The Settlement Monitoring Plan will demonstrate compliance with the settlement criteria outlined in the provisions of Part 1 [Design and Construction Requirements] of this Schedule. The Settlement Monitoring Plan will include but not be limited to:

- (a) the types of monitoring to be used and locations of planned monitoring points to establish baselines and adequately measure actual settlement;
- (b) the procedures to be used for monitoring settlement during Construction;
- (c) the procedures to be used for monitoring settlement for the duration from completion of Construction of the individual components, to the expiration of the General Project Work Defect Warranty Period; and
- (d) procedures and measures to bring non-compliant work into full compliance with the settlement requirements.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 117 -

The Design-Builder will implement and comply with the Settlement Monitoring Plan which has been accepted by the Province's Representative under the Consent Procedure. In addition, the Design-Builder will provide monthly monitoring results and updates during Construction and for six months after Construction for all monitoring of Structures, approach fills, and Utilities.

2.9 Road Safety Audit Design Data

All Design Data will be subject to Road Safety Audits in accordance with Article 13 [Road Safety Audit] of Part 1 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 will so notify the Design-Builder and the Design-Builder will, 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 Value Engineering 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 will not be departed from otherwise than in accordance with Schedule 11 [Changes] of this Agreement.

2.12 IFC Drawings

The Design-Builder will 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 will not commence or permit the commencement of the Construction (including any Temporary Works) unless and until:

- (a) 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 consideration in accordance with the Design Management Plan and the Design and Certification Procedure;
- (b) all Environmental Work Plans in respect of the relevant part of the Construction have been submitted by the Design-Builder to the Province's Representative for review in accordance with Schedule 6 [Environmental Obligations] and there has been no objection thereto by the Province in accordance with the Review Procedure;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 118 -

- (c) each of the Construction Environmental Management Plan and the Traffic Management Plan has been submitted by the Design-Builder to the Province's Representative and has been accepted by the Province in accordance with the Consent Procedure; and
- (d) all of the respectful workplace policies and procedures in the Respect in the Workplace Plan have been fully implemented in accordance with Section 4.6 [Respect in the Workplace] of Schedule 13 to this Agreement.

2.14 Designer Review During Construction

During Construction, the Design-Builder will 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, utilizing the standards of care, skill and diligence that, in accordance with the standards of their profession, are required of experienced professionals undertaking such examinations, examines the same and satisfies itself that such Project Work has been designed, constructed, completed, commissioned, tested and maintained in accordance 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 will include those items intended for public use and/or potentially affecting public safety. Final Designs, including TAFs, for these Temporary Works will be submitted to the Province's Representative in accordance with the Review Procedure.
- (b) Design Data relating to any Temporary Works will be checked by a Checking Team independent of the Designer.
- (c) In performing the check referred to in paragraph (b) above, the Checking Team will 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 Project Infrastructure.
- (d) Where any Temporary Works may endanger public safety on any highway or other road or area used by or accessible to the public other than the New Project Infrastructure, the Design-Builder will consult the relevant highway Governmental Authority and the Design Data will reflect the requirements of such Governmental Authority.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 119 -

2.16 Documentation for Ministry Jurisdictional Atlas

The Design-Builder will prepare drawings for the Ministry Jurisdictional Atlas. The Design-Builder will consult with the Province prior to preparing the drawings. The drawings will 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 INDEPENDENT REVIEW AND CHECKING OF STRUCTURES AND GEOTECHNICAL SYSTEMS

3.1 Independent Review

- (a) In addition to the requirements of this Article, all Structures and Geotechnical Systems will have, as part of the Interim Design and Final Design submission, an independent review ("**Independent Review**") in accordance with bylaw 7.3.5 [Standard for Independent Review(s) of Structural Designs] of the EGBC Bylaws and the EGBC Independent Review Guidelines. A copy of the documentation will be included in the Interim Design and Final Design submissions.
- (b) Independent Reviews of performance-based seismic design will be carried out by recognized subject matter-experts in relevant fields as specified in the BC Supplement to CSA S6:19.
- (c) All geotechnical analysis and design methods will be subject to Independent Review.

3.2 Documented Checking

In addition to the requirements of this Article, the Design-Builder will also conduct all checking for Structures and Geotechnical Systems ("**Documented Checking**") in accordance with bylaw 7.3.4 [Standard for Checks] of the EGBC Bylaws and the EGBC Documented Checks Guidelines.

3.3 Categories of Structures and Geotechnical Systems

The "Category" of a Structure or Geotechnical System will determine the degree of independence of Documented Checking and Independent Review of Design Data required for that Structure or Geotechnical System. Every Structure and Geotechnical System will be placed in one of four Categories:

- (a) Category 0. Minor individual Structures and Geotechnical Systems provided they conform to one of the following:
 - (i) a Structure with a single span of less than 10m and which is statically determinate;
 - (ii) a buried Structure less than 3m clear span/diameter, or multicell buried Structure where the cumulative span is less than 5m and having more than 1 m cover;
 - (iii) a conventional retaining wall without tie-back anchors and less than 3 m retained height; or
 - (iv) mechanically stabilized earth with concrete facing panel systems less than 3 m in height.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 120 -

- (b) Category I. Simple individual Structures and Geotechnical Systems provided they conform to one of the following:
 - (i) a conventional retaining wall without tie-back anchors and with 3m or more but less than 7 m retained height;
 - (ii) a buried concrete box or corrugated steel buried Structure with less than 8 m span;
 - (iii) a Structure with a simply supported single span of less than 20 m and having less than 25 deg. skew;
 - (iv) mechanically stabilized earth with concrete facing panel system with 3 m or more, but less than 7 m, in height; or
 - (v) noise walls 3 m or more than 3 m in height.
- (c) Category II. All those Structures and Geotechnical Systems not within the parameters of Categories 0, I or III.
- (d) Category III. Structures and Geotechnical Systems which:
 - (i) require sophisticated analysis; or
 - (ii) contain low structural redundancy; or
 - (iii) contain unconventional design aspects; or
 - (iv) have any span exceeding 50 metres; or
 - (v) have a skew exceeding 45 degrees; or
 - (vi) have unusual or complex Foundation configurations; or
 - (vii) are Bridges with suspension systems, cable stayed Bridges, steel Bridges with orthotropic decks, floating structures, hinged arch structures and all tunnels, movable Bridges and Bridge access gantries; or
 - (viii) are Lifeline Structures; or
 - (ix) are retaining walls with tie-back anchoring systems.

3.4 Existing Structures

The assessment of existing Structures and Geotechnical Systems (whether existing on the date of this Agreement or constructed as part of the Project Work) and the renewal or strengthening work affecting structural integrity of existing Structures and Geotechnical Systems will be categorized on the basis of the original Structure or Geotechnical System unless otherwise agreed by the Province.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 121 -

3.5 Category Proposal

As soon as sufficient Design Data for a Structure or Geotechnical System has been prepared to allow the determination of a category, the Design-Builder will 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.

3.6 Structure Checking Procedure

Design Data relating to each Structure and Geotechnical System (including without limitation calculations, assessments, drawings and bar schedules) will be subject to Independent Review and Documented Checking as follows:

- (a) Category 0 and Category I Structures and Geotechnical Systems, as described in Section 3.3 [Categories of Structures and Geotechnical Systems] of this Part, require Documented Checking and an Independent Review by a Professional Engineer, other than the engineer who designed the Structure or Geotechnical System. The Professional Engineer carrying out the check may be from the original Design Team. The Professional Engineer carrying out the Independent Review may be from the Designer but will be independent of the Design Team.
- (b) Category II Structures and Geotechnical Systems require Documented Checking and an Independent Review by a Checking Team which may be from the Designer but will be independent of the Design Team.
- (c) Category III Structures and Geotechnical Systems require Documented Checking and an Independent Review to be carried out by a Checking Team appointed to perform an independent detailed review by experts in Bridge structural analysis and design, and in seismic design by an organization not related to the Designer. The Checking Team will report directly to the Design-Builder.

3.7 Checking Team

At the time it submits the initial Design Management Plan, the Design-Builder will submit to the Province's Representative under the Consent Procedure a proposal, which will 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 will be required of and incorporated in the Checking Team for Category III Structures and Geotechnical Systems:

- (a) The Checking Team will be responsible for:
 - (i) conducting design checks to ensure that the design of such Category III Structures and Geotechnical Systems meets performance expectations outlined in this Agreement and that such design is carried out according to accepted industry standards;
 - (ii) conducting checks of liquefaction assessments and ground displacement analyses including verifying assessment and analysis methodologies, and soil structure interaction analyses to demonstrate that seismic performance requirements are met;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 122 -

- (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) conducting analyses and design checks to confirm the requirements of seismic performance-based design;
 - (vi) checking the Designers' materials and construction specification for deep Foundation designs; and
 - (vii) checking the Designers' acceptance criteria for deep Foundations and verifying acceptance of deep Foundation elements construction.
- (b) The Checking Team will also be responsible for carrying out the Independent Reviews for Category II and Category III Structures and Geotechnical Systems. Professional Engineers from the Checking Team carrying out the Independent Reviews will have appropriate and current experience for type, risk, and complexity of the reviewed Structures and Geotechnical Systems.
- (c) The following expertise will be included in the expertise of the Checking Team:
 - (i) recognized structural and geotechnical expertise in seismic design and analysis of Bridges located in high seismic risk regions and in soils susceptible to liquefaction;
 - (ii) recognized expertise in ground improvement methods to mitigate liquefaction;
 - (iii) individuals who are generally recognized experts in the performance-based seismic design provisions of the BC Supplement to CSA S6:19 and CSA S6:19; and
 - (iv) individuals who are registered or qualified to be registered as Professional Engineers.

3.8 Structure and Geotechnical System Design Checking Responsibility

The Design Team, Designer and the Checking Team will each satisfy itself as to the applicability and accuracy of all computer programs used and will ensure the validity of the program for each application. The Design Team, Designer and the Checking Team will each also be responsible for its own interpretation of the relevant ground information.

3.9 Independence

Independence of the Design Team and Checking Team, and the independence of the Designer and the Design-Builder, will be maintained at all times. The method of analysis they employ need not be the same. They may consult each other to ensure that the results they are obtaining are directly comparable.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 123 -

ARTICLE 4 DESIGN CERTIFICATION

4.1 Design Certificates

The Design-Builder will issue a Design Certificate for each Final Design package that is submitted. All Design Certificates will be:

- (a) on the appropriate form(s) attached as Appendix 4A [Form of Design and Construction Certificates] to this Schedule; and
- (b) be signed and sealed by the responsible engineer, who will be a Professional Engineer and a principal of the Designer and, in the case of Design Certificates for environmental works incorporated in the Project Work, the Environmental Manager.

All parties that sign Design Certificates will clearly print their name and position held in their organization.

4.2 Submission of Design Certificates

All Design Certificates together with the supporting documentation will 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 will submit to the Province's Representative a certificate (a "**Road Safety Audit Certificate**") in the form attached as Appendix 4A [Form of Design and Construction Certificates] to this Schedule in respect of the Stage 1, Stage 2, Stage 3 and Stage 4 Road Safety Audits respectively. Each Road Safety Audit Certificate will be signed by the Road Safety Audit Team and by the Design Manager in the role of the Coordinating Professional Engineer and on behalf of the Designer.
- (b) The Stage 3 Road Safety Audit Certificate will be provided to the Owner's Engineer, and the Certificate of Substantial Completion will not be issued unless a Stage 4 Road Safety Audit Certificate in respect thereof has been submitted and signed by the Road Safety Audit Team and by the Design Manager in the role of the Coordinating Professional Engineer and on behalf of the Designer.

4.4 Coordinating Professional Engineer Certificate

The Design-Builder will submit to the Province's Representative in accordance with the Review Procedure a Coordinating Professional Engineer Certificate, authenticated by the Design Manager in the role of the Coordinating Professional Engineer and on behalf of the Designer, within 15 days of submitting the last of the Final Design packages, on the appropriate form attached as Appendix 4A [Form of Design and Construction Certificates] to this Schedule.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 2: Design and Certification Procedure

- 124 -

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, all testing will be carried out by a duly accredited and certified testing facility and organization. The Province's Representative will be given timely advance notice (being not less than 2 Business Days) of the date of such tests, unless the Province gives written notice that it does not require such notice for any categories of tests. The Province will be entitled to attend at any test. Any materials or Plant which fail such tests will be rejected.

5.2 Test Recording and Reporting

With respect to continuous testing operations (such as concrete quality, structural concrete strengths, aggregate quality, compaction tests and bituminous material quality) the Design-Builder will provide to the Province's Representative at regular intervals (not to exceed weekly unless otherwise agreed) test summary sheets and statistical analyses indicating strength and quality trends and will do so in accordance with the requirements of Schedule 17 [Records and Reports], including Section 1.6 [Province Access to Records] thereof.

ARTICLE 6 CONSTRUCTION CERTIFICATES

6.1 Construction Certificates

The Design-Builder will, 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 will be submitted to the Province's Representative prior to opening any New Project Infrastructure for use by the public. All Construction Certificates will be signed by the Design-Builder's Representative and by the Design Manager in the role of the Coordinating Professional Engineer and on behalf of the Designer. The Design-Builder will provide a copy of all Construction Certificates to the Owner's Engineer.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

**PART 3
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 activities will be in accordance with the criteria contained in this Part, the other requirements of this Agreement and the following codes and standards and if there is any conflict between the criteria contained in this Part, the other requirements of this Agreement and any of the Reference Documents, the following will apply in descending order of precedence:

- (a) the criteria contained in this Part;
- (b) the other requirements of this Agreement;
- (c) the applicable Ministry Technical Bulletins and Circulars;
- (d) OHS Regulation, Part 18 Traffic Control;
- (e) Traffic Management Manual;
- (f) Traffic Management Guidelines for Work on Roadways;
- (g) the DBSS;
- (h) Electrical and Traffic Engineering Manual;
- (i) Manual of Standard Traffic Signs and Pavement Markings;
- (j) Electrical and Signing Materials Standards;
- (k) Specifications for Standard Highway Sign Materials, Fabrication and Supply;
- (l) BC Supplement to TAC;
- (m) TAC Geometric Design Guide;
- (n) TAC Bikeway Traffic Control Guidelines;
- (o) TransLink Bus Infrastructure Design Guidelines; and
- (p) applicable documented standards of the Municipality.

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.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 126 -

1.3 General Requirements

- (a) The restrictions outlined in this Part will be the basis for the development of the Traffic Management Plan and Traffic Control Plans. 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. All traffic data used for analysis for Traffic Management purposes will be less than six months old. The Design-Builder will be responsible for obtaining any traffic data necessary for traffic analysis.
- (c) All existing road capacities and intersection turning movements, capacities and storage lengths will be maintained during Restricted Periods.
- (d) Implementation and removal of any Lane Closures, Stoppages, Full Closures, Detour Routes, Lane Shifts or other changes in traffic patterns will be completed outside of Restricted Periods.
- (e) In staging of the work, the Design-Builder will ensure that the existing configuration remain fully operational at the same capacity as under existing conditions until such time as the temporary or permanent replacement of the existing configuration is in place, completely functional and ready for use.
- (f) The Design-Builder will 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.
- (g) The Province may, in its discretion, temporarily adjust the Traffic Disruption Event restrictions identified in this Part in circumstances considered appropriate by the Province including, without limitation, for the purposes of or during statutory holidays, unspecified Special Events, Incidents and Operation and Maintenance.
- (h) The Province may direct the Design-Builder, on 30 days advance notice, to eliminate any or all Traffic Disruption Events and initiate free-flow traffic for a 24 hour period from midnight to midnight on the day of any major planned event other than a Special Event.
- (i) If the Design-Builder's Traffic Control Supervisor determines that any traffic Stoppages, queues or disruptions are excessive (meaning, where the extent of vehicular queues affects upstream intersection or interchange operations or the ability of vehicles on a highway to exit at upstream interchange ramps), the Design-Builder will cease any relevant roadway Construction and safely make all the necessary travel lanes available to traffic as quickly as possible.
- (j) Further to DBSS 194.30, at the direction of the Province's Representative, the Design-Builder will immediately remove all equipment and personnel from Highway 1 so that all traffic can clear the work zone.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 127 -

- (k) Any proposed Lane Closures, Full Closures, Stoppages, Detour Routes and Lane Shifts not included in the Design-Builder's accepted Traffic Control Plan will be subject to prior acceptance by the Province in accordance with the Consent Procedure.
- (l) Multiple active Construction zones along Highway 1, Interchange Ramps, Other Specified Roads, or routes between them, such that traffic encounters multiple disruptions or discontinuity in the lane geometries, will not be permitted.
- (m) In development of the Traffic Management Plan, the Design-Builder will meet with and coordinate its work as required with the other Program Contractors undertaking projects that are adjacent to or close to the Project so that multiple active construction zones on Highway 1 and other Specified Roads or routes between them do not overlap and do not create multiple disruptions or discontinuities in lane geometry or traffic control measures during construction.
- (n) The Design-Builder must ensure that Stoppages at a work zone on Highway 1 do not exceed five minutes and that the time interval a vehicle requires to travel a Traffic Controlled zone does not exceed 15 minutes during each Traffic Control occasion.
- (o) The Design-Builder must further ensure that Stoppages do not exceed five minutes on 264th Street (Highway 13) and that the time interval a vehicle requires to travel a Traffic Controlled zone does not exceed 12 minutes through all Project operations along 264th Street between 52 Avenue and 56 Avenue North.
- (p) Should either of the limits in Sections 1.3(n) and 1.3(o) of this Schedule be exceeded without prior written authorization from the Province's Representative, the Design-Builder will immediately cease Construction and restore the road conditions for the safe passage of traffic. In the event either of the limits in Sections 1.3(n) and 1.3(o) of this Schedule are exceeded on more than one occasion, the Design-Builder will submit to the Province's Representative pursuant to the Consent Procedure a revised Traffic Control Plan modifying methods of operation to avoid future delays.
- (q) For each scheduled Full Closure, Lane Closure or Detour Route, the Design-Builder will provide advance notice to the travelling public and other stakeholders of the scheduled Full Closure, Lane Closure or Detour Route in accordance with this Article and Article 5 [Traffic Management Communications] of this Part and in such a way that the closures are consistent and predictable by the travelling public.
- (r) The Design-Builder will provide PDMS to provide advance notice of each scheduled Full Closure, Lane Closure or Detour Route and all traffic pattern changes and disruptions. PDMS (including flashers and other warning devices) will be placed at strategic upstream locations.
- (s) The Design-Builder will not use private roads without making prior arrangements with all affected or Interested Parties and the Province. The Design-Builder will be responsible for all costs arising from or in connection with the use of the private roads.
- (t) Physical access to all adjacent properties will be maintained throughout active Construction zones.
- (u) Construction vehicle access to active Construction zones on Highway 1 and Interchange Ramps will be permitted only outside of the applicable Restricted Periods, unless separate

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 128 -

acceleration and deceleration lanes are provided from and to such active Construction zones. Design of acceleration and deceleration lanes will take into account all construction vehicle types to be used in the performance of the relevant Project Work.

- (v) Existing emergency turnarounds will either be maintained or relocated in the immediate vicinity.
- (w) Full access for emergency and first responders will be maintained at all times.
- (x) For existing intersections during periods other than Restricted Periods, all existing turning movements will be maintained unless otherwise accepted by the Province in accordance with the Consent Procedure.
- (y) The Design-Builder will provide all staff and contractors with off-street parking within walking distance of the site or an alternative means for accessing the site.
- (z) Construction site access and haul routes will avoid residential areas where alternatives are available. Where alternatives are not available, the Design-Builder will obtain prior approval from the Province through the Consent Procedure for any construction site access or haul routes that are required in or through residential areas.

1.4 Location and Storage of Materials and Equipment

- (a) The Design-Builder will show its proposed equipment staging and lay down areas on the Traffic Management Plan.
- (b) The Design-Builder will not store equipment on the travel portion or Shoulder of any road at any time. Equipment stored within the Clear Zone of any road will be protected by appropriate barrier flares/tapers and safety measures in accordance with the applicable Reference Documents.

1.5 Incident Management

The Design-Builder will implement incident management in accordance with the Incident Management Plan.

1.6 Special Events

The Design-Builder will comply with the following requirements when scheduling hours of work or the Design-Builder-initiated Traffic Disruption Events during the following events and circumstances (together, “**Special Events**”):

- (a) The Design-Builder will not implement any Traffic Disruption Events during any of the periods (the “**Special Event Restricted Periods**”) set out in Table 1.6b in relation to any of the holiday events identified in Table 1.6a.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 129 -

Table 1.6a

Holiday Events	
New Year's Day BC Family Day Good Friday Easter Monday Victoria Day Canada Day British Columbia Day	Labour Day National Day for Truth and Reconciliation Thanksgiving Day Remembrance Day Christmas Day Boxing Day

Table 1.6b

Special Event Restricted Periods	
Day on which Holiday Event falls	Timeframes for Restrictions
Weekday (Monday to Friday)	From 12:00 (noon) of the weekday before the holiday event to 12:00 (noon) of the weekday following the holiday event
Weekend (Saturday and Sunday)	From 12:00 (noon) of the Friday before the holiday event to 12:00 (noon) of the Tuesday following the holiday event

- (b) For the purposes of the application of restrictions set out in Table 1.6b to Highway 1 and Interchange Ramps, the United States holiday events identified in Table 1.6c will also constitute a holiday event.

Table 1.6c

US Holiday Events	
Martin Luther King Jr. Day President's Day Memorial Day	Independence Day Columbus Day Thanksgiving Day plus the following day

- (c) The Design-Builder will actively search for other major events in the region that may affect traffic volumes on Highway 1 (for example, sporting events, festivals and parades). The Design-Builder will assess these events for their effect on traffic and alter the Traffic Control Plans appropriately.

1.7 Detour Route and Lane Shift Requirements

1.7.1 General

- (a) All Detour Routes and Lane Shifts will be paved with appropriate Pavement Markings and signs placed in accordance with the Traffic Management Manual.
- (b) The Design-Builder will ensure that 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) The Traffic Engineer will ensure that any selected Detour Route is safe and suitable for the traffic volumes and vehicle types expected to use the Detour Route.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 130 -

- (d) The Design-Builder will schedule Construction such that no milled surface will be open to traffic for more than one daytime shift. Each milled surface open to traffic will be clean and allow adequate drainage.
- (e) The Design-Builder will prepare an engineered design for each Detour Route and Lane Shift that will conform to the minimum requirements of the Traffic Management Manual and this Part.
- (f) The Design-Builder will provide Detour Routes and Lane Shifts with adequate drainage facilities to prevent hydroplaning, pooling of water on and flow of water across the roadway and not unduly flood the adjacent properties and/or facilities.
- (g) Variations to the Detour Route and Lane Shift Design criteria will not be permitted unless accepted by the Province in accordance with the Consent Procedure.
- (h) Detours utilizing municipal roads outside of the Project require prior consultation with the affected municipality.

1.7.2 Traffic Control Devices

- (a) Construction and Advisory Signs:
 - (i) The Design-Builder will 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, border wait time and dynamic message signs. The location and type of each sign will 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, will meet the Specifications for Standard Highway Sign Materials, Fabrication and Supply.
- (b) Portable Dynamic Message Signs:
 - (i) The Design-Builder will provide PDMS as required and will use PDMS to provide advance notification of planned traffic pattern changes in accordance with Article 5 [Traffic Management Communications] of this Part.
 - (ii) The Design-Builder will provide a total of up to eight PDMS for the Project, as follows:
 - (A) two PDMS will be used at the Highway 1 entrances to the Project Site;
 - (B) up to four PDMS will be used at interchanges and intersections; and
 - (C) an additional two PDMS will be used exclusively for Traffic Management for Oversize Vehicles.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 131 -

- (iii) PDMS are to be used at least 14 days prior to the commencement of Construction through to the end of Construction and will comply with DBSS 194.46 and the requirements of Section 4.3 of the Traffic Management Manual.
 - (iv) Sign locations and messages will be as shown on the Traffic Control Plan. In addition, the Design-Builder is to use PDMS to provide notification of Incidents or unplanned traffic pattern changes, as deemed necessary by the Incident Management Plan.
 - (v) The Design-Builder will ensure that any messages displayed on PDMS are current and applicable to prevailing conditions.
 - (vi) When in operation, the bottom of each PDMS will be a minimum of 2 m above the road surface, and will be level and capable of pivoting for visibility purposes.
- (c) Speed Reader Boards:
- (i) The Design-Builder will provide two SRBs for use as required by the Province's Representative.
 - (ii) The deployment of the SRBs with regards to application and placement will be in accordance with Section 4.11.3 of the Traffic Management Manual.

1.7.3 Concrete Roadside Barrier Requirements

- (a) The Design-Builder will supply and install temporary Concrete Roadside Barriers:
 - (i) between traffic and median wall construction;
 - (ii) between traffic and excavations/embankment construction;
 - (iii) between traffic and Underpass/Overpass construction;
 - (iv) to meet drop-off delineation requirements; and
 - (v) where required by the Design-Builder's Traffic Control Plan.
- (b) Traffic barriers used for Detour Routes and Lane Shifts, or used for the protection of the Project Site, will be continuous or adequately protected by terminals, flares, or impact attenuators in accordance with the AASHTO MASH Test Level 3. Temporary barriers will have reflectors installed in accordance with the Manual of Standard Traffic Signs and Pavement Markings.
- (c) Where equipment is actively working adjacent to the Highway 1 and Interchange Ramps, in order to avoid driver distraction, headlight glare and to inhibit debris from blowing onto the travel surfaces, visual screens will be installed on or adjacent to barriers. The Design-Builder will submit the product proposed for visual screens to the Province's Representative for acceptance in accordance with the Consent Procedure.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 132 -

- (d) Where traffic barriers are used, the Design-Builder will make adequate provision for drainage and removal of snow, ice and debris.

1.7.4 Drop-Offs

The Design-Builder will perform all Construction to minimize any drop-offs (abrupt changes in roadway elevation) left exposed to traffic during non-working hours. Drop-offs left exposed to traffic during non-working hours will be delineated as follows:

- (a) Drop-offs up to 60 mm may remain exposed with appropriate traffic control devices alerting motorists to the condition. However, no drop-offs will be allowed between adjacent lanes of traffic.
- (b) Drop-offs greater than 60 mm that are in the roadway or Shoulder will be delineated with appropriate traffic control devices and further delineated as described in paragraph (c) below. Subject to a Road Safety Audit, the Design-Builder may use channelizing devices as listed in paragraph (c) below provided that the Design-Builder's Traffic Control Plan can demonstrate the effectiveness of the relevant channelizing device(s) and the drop-off is less than 100 mm.
- (c) Drop-offs greater than 60 mm but less than 150 mm that are not within the roadway or Shoulder will be delineated with appropriate traffic control devices and further protected or delineated in accordance with at least one of the following:
 - (i) A wedge of compacted stable material (25 mm well graded base course aggregate or better) placed at a slope of 4:1 or flatter;
 - (ii) Channelizing devices (Type 1 barricades, plastic safety drums, or other devices 1 m or more in height) placed along the traffic side of the drop-off and a new edge-of-pavement stripe placed a minimum of 2 m from the drop-off. Appropriate traffic control devices will be placed in advance of and throughout the drop-off treatment; and
 - (iii) Temporary concrete barrier, or other accepted barrier, installed on the traffic side of the drop-off with 300 mm between the drop-off and the back of the barrier and a new edge-of-pavement stripe placed a minimum of 500 mm from the face of the barrier. An accepted terminal, flare, or impact attenuator will be required at the beginning of the section. For night use, the barrier will have reflective markers and/or warning lights.
- (d) Drop-offs of more than 150 mm that are not within the roadway or Shoulder will be delineated with appropriate traffic control devices and further delineated as indicated in paragraph (c) above if all of the following conditions are met:
 - (i) the drop-off is less than 600 mm;
 - (ii) the drop-off does not remain for more than three consecutive days;
 - (iii) the drop-off is not present at any time during any Special Event Restricted Periods described in Section 1.6 [Special Events] of this Part; and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 133 -

- (iv) the drop-off is only on one side of the roadway.
- (e) Drop-offs of more than 150 mm that are not within the roadway or Shoulder and are not otherwise covered by (d) above will be delineated with appropriate traffic control devices and further delineated as indicated in Sections 1.7.4(c)(i) and (ii) of this Schedule.
- (f) Any drop-off of over 150 mm in height will be protected with Concrete Roadside Barrier with end treatments as required by the Traffic Management Manual.

All areas of excavation and their proposed safety measures will be shown in the Traffic Control Plan.

1.7.5 Temporary Pavement Markings

- (a) Further to Section 4.4 of the Traffic Management Manual, the Design-Builder will be responsible for the application, maintenance and removal of all temporary Pavement Markings and reflective devices. Only permanent Pavement Markings will be applied to the final pavement surfaces.
- (b) The Design-Builder will establish temporary Pavement Markings prior to removing construction channelizing devices. Temporary Pavement Markings will be provided in accordance with Section 4.4 of the Traffic Management Manual.
- (c) When traffic lanes are to be redefined for long-duration work (more than one daytime shift), the Design-Builder will 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.
- (d) Notwithstanding Section 194.45 of the DBSS, the Design-Builder will supply all temporary Pavement Markings. The material used for any temporary Pavement Markings will be paint with glass bead or thermoplastic marking supplemented with temporary overlay markers or raised pavement markings.
- (e) The Design-Builder will apply all Pavement Markings in accordance with the signing and pavement markings drawings and the Detour Route and Lane Shift Design drawings.
- (f) The Design-Builder will maintain positive delineation at all times and will re-apply temporary pavement markings, raised pavement markers, delineators and barrier reflectors that are faded, damaged or missing.
- (g) Raised pavement markers will be installed on any Detour Routes and Lane Shifts on Highway 1, Interchange Ramps and Other Specified Roads in accordance with the Signage and Pavement Marking Manual.

1.7.6 Speed Limits and Safe Passage through Project Site

- (a) 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, the existing speed limits will be maintained.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 134 -

- (b) Where the Province considers it is either not practical on a Detour Route or Lane Shift to achieve a Design speed equal to the existing posted speed, or where a temporary speed zone has been established within active Construction zones for short-duration work (not more than one shift), then a temporary reduction in speed limit may be granted. The Design-Builder may seek the acceptance of the Province, in its discretion, in accordance with the Consent Procedure, of a temporary reduction in the speed limit to a construction zone speed limit through an active Construction zone on Highway 1 of 80 km/h and on 264th Street (Highway 13) to 50 km/h.

1.8 Seasonal Shutdown

- (a) The Design-Builder will implement seasonal shutdowns (each, a “**Seasonal Shutdown**”) only where approved by the Province in accordance with the Consent Procedure as meeting the following criteria or as otherwise considered acceptable by the Province’s Representative:
 - (i) The Project Site will be left in a safe and functional condition for the Seasonal Shutdown.
 - (ii) The requirements for roads during Seasonal Shutdown are specified in Section 2.7 [Detour and Lane Shift Design Requirements for Highway 1], Section 3.7 [Detour and Lane Shift Design Requirements for Interchange Ramps] and Section 4.7 [Detour and Lane Shift Design Requirements for Other Specified Roads] of this Part.
 - (iii) The Design-Builder will be responsible for installing and maintaining the Pavement Markings for Seasonal Shutdown, with the layout approved by the Province’s Representative prior to Pavement Marking and the Pavement Markings meeting the same requirements as permanent Pavement Markings as set out in Article 8 [Signing and Pavement Marking Design Criteria] of Part 1 of this Schedule.
 - (iv) Prior to the start of the Seasonal Shutdown, all areas of the Project Site excavated, graded, or otherwise disturbed by the Design-Builder will have been shaped and stabilized, by revegetation seeding or other means, so as to prevent weathering, erosion, slumping or siltation, and so that the requirements for protection of the environment in accordance with Schedule 6 [Environmental Requirements] have been, and will continue to be met during the Seasonal Shutdown.
 - (v) If, during Seasonal Shut-Down, there may be an increased risk that sediment will be released from the Project, the Design-Builder will be responsible for implementing remedial measures in accordance with the erosion and sediment control plan referred to in Section 7.3.1(f) of Part 1 [Design and Construction Requirements] of this Schedule.
 - (vi) If Active Work requiring traffic control occurs during a Seasonal Shutdown, the Design-Builder will:
 - (A) coordinate its planned Active Work with the Winter Maintenance Contractor to ensure the safety of workers and the public and to address any potential impacts the planned Active Work may have on the ability of

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 135 -

the Winter Maintenance Contractor to deliver routine winter maintenance services;

- (B) assess the Project Site conditions and determine if and what additional maintenance measures, beyond those currently being performed by the Design-Builder or the Winter Maintenance Contractor, are required to ensure that the Active Work can be safely performed; and
 - (C) be responsible for implementing, at its cost, any such additional maintenance measures and accommodation of the Winter Maintenance Contractor, either by the Design-Builder's own forces or by the Winter Maintenance Contractor.
- (b) The Design-Builder will submit to the Province's Representative in respect of each Seasonal Shutdown:
 - (i) a set of signing and pavement marking Design drawings for the Project Site during the proposed Seasonal Shutdown, signed and sealed by a Professional Engineer; and
 - (ii) notification of any changes to the name and telephone number of its representative(s) who can be reached on a 24 hours-a-day, 7 days-a-week basis during the Seasonal Shutdown and evidence it has given each representative the authority to act on behalf of the Design-Builder to arrange and ensure prompt maintenance whenever required.
- (c) No Seasonal Shutdown will commence until the Province has provided its approval in accordance with the Consent Procedure.

1.9 Existing Traffic Signals

- (a) Modifications to existing traffic signals will be undertaken in accordance with Article 1 [Laning and Geometrics Design Criteria] and Article 6 [Electrical, Signals and Lighting Design Criteria] of Part 1 of this Schedule.
- (b) The Design-Builder will be responsible for modifying the existing traffic signal timings in accordance with the Traffic Management Plan and to meet the traffic operational requirements. Changes to the existing traffic signal timing will be supported by traffic analysis by the Traffic Engineer and signed and sealed Traffic Engineering Checklists and Signal Timing Sheets will be provided to the Province's Representative in accordance with the Consent Procedure as required. If modifications are required to existing traffic signals at intersections under municipal jurisdiction, the Design-Builder will consult with and ensure these changes are acceptable to the relevant municipality.
- (c) Traffic operations at any existing signalised intersection will be controlled by either existing traffic signal or traffic control personnel but not both at the same time. In the event traffic control personnel are controlling traffic at any signalised intersection, the Design-Builder will be required to put the signal in flash mode.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 136 -

- (d) Modifications to existing illumination will be undertaken in accordance with Article 6 [Electrical, Signals and Lighting Design Criteria] of Part 1 of this Schedule.
- (e) The Design-Builder will develop and implement new signal timing plans as required at existing signalized intersections where Construction will impact intersection operations. The Design-Builder will be responsible for liaising and coordinating with the Municipality regarding any required modifications to existing municipal signalized intersections, as required.
- (f) Existing signal coordination will be maintained at all traffic signals affected by the Construction.

1.10 Temporary Traffic Signals and Lighting

- (a) If temporary traffic signals are required during Construction staging of improvements to the Highway 1 – 264th Street Interchange and Other Specified Roads within the Project Site, the temporary traffic signals will be provided where required in accordance with Article 1 [Laning and Geometrics Design Criteria] and Article 6 [Electrical, Signals and Lighting Design Criteria] of Part 1 of this Schedule.
- (b) Temporary traffic signals will be designed and implemented to allow actuated operation.
- (c) Temporary lighting will be provided in accordance with Article 6 [Electrical, Signals and Lighting Design Criteria] of Part 1 of this Schedule.
- (d) When night-time works are performed on the Project, the Design-Builder will supply, install and maintain adequate lighting to fully illuminate the Project Work to the satisfaction of the Province's Representative. Equipment will be equipped with adequate individual auxiliary lighting units. The Design-Builder will provide auxiliary lighting such that the lamps can be adjusted or tilted so as not to be a safety hazard to traffic. Tube cones and pylons must be equipped with reflective bands to provide maximum visibility.

1.11 Accommodation of Pedestrians and Cyclists

- (a) The Design-Builder will ensure passage at each existing facility and crossing point within the Project Site currently used by pedestrians and cyclists is maintained in a safe and efficient manner throughout Construction, except at facilities or crossing points that are to be permanently closed.
- (b) Temporary closures or re-routing of pedestrian or cycling routes may be permitted by the Province contingent upon provision of a suitable alternative route. Any proposed temporary closure or re-routing of pedestrian or cycling routes will be submitted to the Province's Representative in accordance with the Consent Procedure.
- (c) Any temporary closure of pedestrian or cycling routes exceeding 10 minutes will be preceded with signage indicating the dates and duration of any closure as well as alternative routes available in accordance with Schedule 15 [Communications and Engagement].

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 137 -

1.12 Accommodation of Transit

- (a) The Design-Builder will ensure passage along each existing transit route within the Project Site is maintained or rerouted in a safe and efficient manner throughout Construction.
- (b) The Design-Builder will consult with TransLink and BC Transit with respect to any Construction activities that might affect transit operations, facilities, schedules or routing.
- (c) The Design-Builder will coordinate with TransLink and BC Transit to prevent adverse impacts on transit operating schedules.
- (d) The Design-Builder will arrange with TransLink, BC Transit and the Municipality for any relocation of bus stops and associated facilities.
- (e) The Design-Builder will design and construct all temporary transit facilities in accordance with the TransLink Bus Infrastructure Design Guidelines.

1.13 Property Access

The Design-Builder will maintain access to all public roads, intersections, highway ramps, businesses and residences affected by the Project Work, at all times unless otherwise authorized by the Province's Representative.

1.14 Consequences of Occurrence of Non-Permitted Traffic Disruption Events

Traffic Management Payments will be payable by the Design-Builder to the Province pursuant to and in accordance with Schedule 9 [Performance Mechanism], in respect of each Non-Permitted Traffic Disruption Event.

ARTICLE 2 HIGHWAY 1

2.1 General Requirements

- (a) The requirements in this Article are applicable to Highway 1.
- (b) Only for the purposes of placement and sizing of Traffic Control Devices, the speed limit will be assumed to be no less than 100 km/h.
- (c) The Design-Builder will provide two PDMS in accordance with Section 1.7.2(b)(ii)(A) of this Part to provide advance notice of each scheduled Full Closure, Lane Closure or Detour Route and to provide advance notice of all traffic pattern changes and disruptions. PDMS (including flashers and other warning devices) will be placed at strategic upstream locations in order to provide motorists with advanced warning and allow them adequate opportunity to divert prior to reaching the Closure or Detour Route location.
- (d) For each scheduled Full Closure, Lane Closure or Detour Route, the Design-Builder will provide advance notice to the travelling public and other stakeholders of the scheduled Full Closure, Lane Closure or Detour Route in accordance with Article 5 [Traffic Management Communications] of this Part.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 138 -

2.2 Restricted Periods for Highway 1

Restricted Periods for Highway 1 are as follows:

Table 2.2

Direction	Weekdays	Saturday	Sunday
Eastbound	5:30 a.m. – 9:00 p.m.	7:30 a.m. – 9:00 p.m.	7:30 a.m. – 9:00 p.m.
Westbound	5:00 a.m. – 8:30 p.m.	8:00 a.m. – 8:30 p.m.	8:00 am – 8:30 p.m.

2.3 Lane Closures on Highway 1

- (a) As a minimum, the number of lanes in each direction existing at the Effective Date on Highway 1 will be kept open for traffic during Restricted Periods.
- (b) Except where Full Closures are permitted, a minimum of one basic lane (not including auxiliary lanes) in each direction will be maintained open for general traffic outside of Restricted Periods.

2.4 Stoppages on Highway 1

Except in the circumstances in which Full Closures are permitted pursuant to Section 2.5 [Full Closures on Highway 1] of this Part, Stoppages of traffic on Highway 1 will not be permitted at any time.

2.5 Full Closures on Highway 1

Subject to acceptance by the Province in accordance with the Consent Procedure, in exceptional situations (e.g. Bridge girder erection, demolition of existing Structures or sign gantry installation), the Province may permit mainline directional Full Closures on a site-specific basis and under the following conditions:

- (a) Full Closures will be permitted only between 11:00 p.m. and 4:30 a.m.
- (b) Where a Detour Route is provided on-site (e.g. rerouted along Interchange Ramps), then the Full Closure may be permitted up to the entire duration of the hours between 11:00 p.m. and 4:30 a.m.
- (c) If a Detour Route is not provided on the Project Site, then the Full Closure will not exceed a duration of twenty minutes, at which time the vehicular queues must be cleared prior to the commencement of another Full Closure.
- (d) If a Detour Route is not provided on the Project Site, there will not be more than one Full Closure per direction along the entire Project corridor length at any one time (i.e. maximum of one Full Closure location per direction).

2.6 Non-Permitted Traffic Disruption Events on Highway 1

Each of the following Traffic Disruption Events occurring on Highway 1 is a Non-Permitted Traffic Disruption Event:

- (a) a Lane Closure occurring on Highway 1:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 139 -

- (i) during a Restricted Period for Highway 1;
 - (ii) during a Special Event Restricted Period in contravention of Section 1.6 [Special Events] of this Part; or
 - (iii) in any other circumstances not expressly permitted pursuant to Section 2.3 [Lane Closures on Highway 1] of this Part;
- (b) a Full Closure occurring on Highway 1:
- (i) during a Restricted Period for Highway 1;
 - (ii) during a Special Event Restricted Period in contravention of Section 1.6 [Special Events] of this Part; or
 - (iii) in any other circumstances not expressly permitted pursuant to Section 2.5 [Full Closures on Highway 1] of this Part;
- (c) a Stoppage occurring on Highway 1 in circumstances not expressly permitted pursuant to Section 2.4 [Stoppages on Highway 1] of this Part; and
- (d) any disruption to the flow of traffic resulting from a failure of the Design-Builder to comply with the requirements of Section 2.8(c) of this Part in connection with access to the median within the Restricted Periods for Highway 1 shown in Table 2.2.

2.7 Detour Route and Lane Shift Design Criteria for Highway 1

- (a) Table 2.7 summarizes the minimum geometric design criteria that will be incorporated into the Design of all Detour Routes and Lane Shifts for Highway 1.

Table 2.7

Construction Detour Route and Lane Shift Design Criteria – Highway 1		
	Existing Highway 1	Seasonal Shutdown
Design/Posted Speed Periods of Inactivity ⁽¹⁾	100 km/h	100 km/h
Design/Posted Speed Active Work periods ⁽¹⁾	80 km/h	N/A
Design Vehicle	WB-20	WB-20
Maximum Grade	6%	6%
Maximum Superelevation	6%	6%
Minimum Radius	As per BC Supplement to TAC	As per BC Supplement to TAC
Vertical Clearance	The lesser of 5.0 m or existing travel lane clearance	The lesser of 5.0 m or existing travel lane clearance
Lane Width	Maintain existing lane widths (min)	Maintain existing lane widths (min)
Outside Paved Shoulder Width (Open)	1.0 m (min) paved plus 0.5 m (min) gravel	1.0 m (min) paved plus 0.5 m (min) gravel

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 140 -

Construction Detour Route and Lane Shift Design Criteria – Highway 1		
	Existing Highway 1	Seasonal Shutdown
Outside Paved Shoulder Width (Closed by Barrier)	1.3 m (min) adjacent to CRB plus 0.3 m behind CRB	1.3 m (min) adjacent to CRB plus 0.3 m behind CRB
Inside Paved Shoulder Width (Closed by Barrier)	1.3 m (min) adjacent to CRB plus 0.3 m behind CRB	1.3 m (min) adjacent to CRB plus 0.3 m behind CRB
Side Slopes (w/o Barrier)	The lesser of 4:1 (max) or existing	The lesser of 4:1 (max) or existing

Notes:

(1) See Section 1.7.6(b) of this Part regarding speed limit reductions for active Construction zones.

(2) Minimum Shoulder widths will be permitted except where dictated otherwise by sight distance requirements, in which case widened Shoulder width in order to meet sight distance requirements will be provided.

- (b) Notwithstanding the above, localized sections along Highway 1 (i.e. maximum 300 m length) with both reduced inside and outside Shoulder widths (i.e. minimum 0.5 m) will be permitted in order to accommodate median pier Construction. Concrete Roadside Barriers will be provided along both sides, complete with barrier flares, as required.
- (c) Except as permitted in this Article, variations to the above Detour Route and Lane Shift criteria will not be permitted unless accepted by the Province in accordance with the Consent Procedure.

2.8 Specific Highway 1 Requirements

- (a) To coordinate the Project Work with the 216th to 264th Widening Project in accordance with Part 4 [Interface Requirements] of Schedule 3, the Design-Builder will open the eastbound HOV/EV lane concurrently with the 216th to 264th Widening Project or, if the eastbound HOV/EV lane cannot be opened concurrently with the 216th to 264th Widening Project, the Design-Builder will either:
 - (i) in the event that the Project eastbound HOV/EV lane is not ready to be opened when the 216th to 264th Widening Project is opened, install traffic control measures at the east end of the 216th to 264th Widening Project eastbound HOV/EV lane when it is opened to traffic to merge HOV/EV traffic into the General Purpose Lanes until the Project eastbound HOV/EV lane is open; or
 - (ii) in the event that the 216th to 264th Widening Project is not ready to be opened when the Project eastbound HOV/EV lane is opened, carry out such measures as may be specified by the Province and the provisions of Part 7 [Province Changes and Value Engineering Proposals] of this Agreement will apply accordingly.
- (b) To coordinate the Project Work with the Mainline West Project in accordance with Part 4 [Interface Requirements] of Schedule 3, the Design-Builder will:
 - (i) relocate the existing General Purpose Lanes of Highway 1 to their new locations at the eastern Project limit concurrently with the Mainline West Contractor's relocation of these lanes, with the Design-Builder and the Mainline West Contractor working collaboratively to plan and implement this relocation work;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 141 -

- (ii) accommodate the installation of traffic control measures at the east end of the Project by the Mainline West Contractor when the Project eastbound HOV/EV lane is opened to traffic to merge HOV/EV traffic into the General Purpose Lanes until the eastbound HOV/EV lane of the Mainline West Project is open; and
 - (iii) work collaboratively in accordance with Part 4 [Interface Requirements] of Schedule 3 on planning and implementing their respective required work on days and times that is agreeable to both parties and coordinated through the Interface Committee.
- (c) Access to Median:
 - (i) Access to and egress to the highway median will be safe and impact to the highway traffic will be minimal and non-disruptive. Access to the median will be permitted within the Restricted Periods for Highway 1 shown in Table 2.2 if the Design-Builder demonstrates that access can be achieved without a Lane Closure or speed reduction.
 - (ii) Access for Construction consists of the necessary work and operations to allow for the movement and placement of personnel, equipment, and materials to and within the Project Site to facilitate Construction and manage and dispose of all excavated materials throughout the course of the Project Work. Access includes the Design and Construction of Temporary Works, including accesses and associated cuts and fills.
 - (iii) The Design-Builder will, as part of the Traffic Management Plan, submit access drawings clearly showing all details and locations of all required access works to the Province's Representative no later than ten Business Days prior to the start of Construction.
 - (iv) The Design-Builder will take into consideration the designated environmental sensitive areas in the development of the temporary accesses.
 - (v) Unless otherwise accepted by the Province's Representative in accordance with the Consent Procedure, all temporary accesses and associated works will be removed upon completion of the Project Work.
- (d) Temporary Protective Concrete Barrier and Safety Screen Fence:
 - (i) The Project Work on Highway 1 will be separated from the Travelled Lanes with temporary protective concrete barriers complete with safety screen fence.
 - (ii) The concrete barrier will be included in the Traffic Management Plan and will be in place prior to commencement of the Project Work. At the time of Construction, the Province will confirm, if requested by the Design-Builder, whether any used concrete roadside barriers are available in the Province's stockpile for use on this Project.
 - (iii) The Design-Builder will supply and install a fabric safety screen on top of the protective concrete barriers to mitigate traffic from being distracted from the

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 142 -

Project Work zones. The Design-Builder will maintain the safety screen fence on a regular basis and make necessary repairs to ensure proper working order until Construction is completed.

- (iv) The safety screen will be installed to the satisfaction of the Province's Representative, at locations to be determined in the field and accepted by the Province's Representative prior to installation, and provided that the safety screen will not be installed in an area that would impact available turning site distances for vehicles to safely turn off the highway.
- (v) The safety screen height will be a minimum of 2.0 metres above the highway pavement. The safety screen will be designed to be durable and withstand wind loading, including air movement from adjacent traffic, without damage or deflection into traffic or distortion that causes a distraction to drivers. When attaching the screen to the barrier, no part of the screen will be closer to traffic than the concrete barrier's top edge closest to traffic, and the attachment method will not damage the barrier.
- (vi) Openings in the safety screen and concrete barriers may be made as required for Project Site Construction access in accordance with the Traffic Management Plan.
- (vii) Should the Design-Builder choose to install further concrete barriers along the Project Site as part of the Traffic Management Plan due to Construction drop-offs or otherwise, the Design-Builder will comply with any direction provided by the Province's Representative as to whether screen fencing will be applied to those additional concrete barrier areas.

ARTICLE 3 INTERCHANGE RAMPS

3.1 General Requirements

- (a) The requirements in this Article are applicable to that portion of any entrance or exit ramp connecting Highway 1 to 264th Street (Highway 13) or other Specified Roads within the Project Site (the "**Interchange Ramps**").
- (b) The Design-Builder will provide two PDMS at Interchange Ramps and terminal intersections in accordance with Section 1.7.2(b)(ii) of this Part to provide advance notice of each scheduled Full Closure, Lane Closure, Stoppage or Detour Route and to provide advance notice of all traffic pattern changes and disruptions. PDMS (including flashers and other warning devices) will be placed at strategic upstream locations in order to provide motorists with advance warning and allow them adequate opportunity to divert prior to reaching the Closure or Detour Route location.
- (c) All existing ramp turning movements at the Highway 1 – 264th Street Interchange location will be provided outside of Restricted Periods, unless otherwise accepted by the Province in accordance with the Consent Procedure.
- (d) Traffic volumes and capacities of existing ramps are to be maintained until replacement lanes and ramps are completed, fully functional and ready for use. Temporary lanes or ramps will be designed to provide adequate storage capacity such that queues do not spill back and

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 143 -

adversely affect the operation of upstream intersections, ramps or highway mainlines. Permanent lanes, ramps, intersections and merge/diverge points on the highway will be designed to meet the traffic operational requirements.

- (e) Temporary Works at existing on and off ramps will be designed to prevent queueing onto Highway 1.
- (f) For each scheduled Full Closure, Lane Closure, Stoppage or Detour Route, the Design-Builder will provide advance notice to the travelling public and other stakeholders of the scheduled Full Closure, Lane Closure, Stoppage or Detour Route in accordance with Article 5 [Traffic Management Communications] of this Part.

3.2 Restricted Periods for Interchange Ramps

Restricted Periods for Interchange Ramps are as follows:

Table 3.2

Direction	Weekdays	Saturday	Sunday
Northbound	5:30 a.m. – 9:00 p.m.	7:00 a.m. – 9:00 p.m.	8:00 a.m. – 9:00 p.m.
Southbound	5:30 a.m. – 9:00 p.m.	7:00 a.m. – 9:00 p.m.	8:00 a.m. – 9:00 p.m.

3.3 Lane Closures on Interchange Ramps

- (a) All existing ramp turning movements, capacities and storage lengths at each location will be maintained during Restricted Periods.
- (b) Except in the circumstances in which Stoppages or Full Closures are permitted pursuant to this Article, a minimum of one basic lane (excluding auxiliary lanes) on each Interchange Ramp will be kept open for general traffic outside of Restricted Periods for Interchange Ramps.

3.4 Stoppages on Interchange Ramps

- (a) Stoppages of less than two minutes will be permitted outside of Restricted Periods.
- (b) Subject to acceptance by the Province in accordance with the Consent Procedure, Stoppages greater than two minutes in duration but less than 20 minutes in duration, between 12:00 a.m. and 4:30 a.m. only, may be permitted outside of Restricted Periods for Interchange Ramps.
- (c) After a Stoppage has been implemented and removed, the Design-Builder will allow all queues to clear before implementing another Stoppage.
- (d) Notwithstanding the criteria contained in this Article, the Design-Builder will ensure that the extent of vehicular queues as a result of the Design-Builder implementing a Stoppage do not spill back onto the Highway 1 mainline.

3.5 Full Closures on Interchange Ramps

Subject to acceptance by the Province in accordance with the Consent Procedure in exceptional situations (e.g. Bridge girder erection, demolition of existing Structures or sign gantry installation), the

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 144 -

following directional Full Closures on Interchange Ramps may be permitted on a site specific basis and under the following conditions:

- (a) Full Closures will be permitted only between 12:00 a.m. and 4:30 a.m.
- (b) If a Detour Route is provided, then a Full Closure may be permitted up to the entire duration of the period between 12:00 a.m. and 4:30 a.m.
- (c) If a Detour Route is not provided, then any Full Closure otherwise permitted under this Section will not exceed a duration of 20 minutes, at which time the vehicular queues must be cleared prior to the commencement of another Full Closure.

3.6 Non-Permitted Traffic Disruption Events on Interchange Ramps

Each of the following Traffic Disruption Events occurring on an Interchange Ramp is a Non-Permitted Traffic Disruption Event:

- (a) a Lane Closure occurring on an Interchange Ramp:
 - (i) during a Restricted Period for Interchange Ramps;
 - (ii) during a Special Event Restricted Period in contravention of Section 1.6 [Special Events] of this Part
 - (iii) in any other circumstances not expressly permitted pursuant to Section 3.3 [Lane Closures on Interchange Ramps] of this Part;
- (b) a Full Closure occurring on an Interchange Ramp:
 - (i) during a Restricted Period for Interchange Ramps;
 - (ii) during a Special Event Restricted Period in contravention of Section 1.6 [Special Events] of this Part; or
 - (iii) in any other circumstances not expressly permitted pursuant to Section 3.5 [Full Closures on Interchange Ramps] of this Part; or
- (c) a Stoppage occurring on an Interchange Ramp in circumstances not expressly permitted pursuant to Section 3.4 [Stoppages on Interchange Ramps] of this Part.

3.7 Detour Route and Lane Shift Design Criteria for Interchange Ramps

Table 3.7 summarizes the minimum geometric design criteria that will be incorporated into the Design of all Detour Routes and Lane Shifts for all Interchange Ramps.

Table 3.7

Construction Detour Routes and Lane Shift Design Criteria – Interchange Ramps	
Design/Posted Speed Periods of Inactivity ⁽¹⁾	40 km/h

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 145 -

Design/Posted Speed Active Work periods ⁽¹⁾	40 km/h
Design Vehicle	WB-20
Maximum Grade	6%
Maximum Superelevation	6%
Minimum Radius	The lesser of 55 m or existing
Vertical Clearance	The lesser of 5.0 m or existing travel lane clearance
Lane Width	4.5 m (min) for one-lane ramps 3.5 m (min) for two-lane ramps
Outside Paved Shoulder Width (Open)	1.0 m (min) for one-lane ramps 1.5 m (min) for two-lane ramps
Outside Paved Shoulder Width (Closed by Barrier)	1.5 m (min) plus 0.3 m behind CRB
Inside Paved Shoulder Width (Closed by Barrier)	1.0 m (min) plus 0.3 m behind CRB
Inside Paved Shoulder Width (Open)	0.5 m (min) plus 0.3 m behind CRB
Side Slopes (w/o Barrier)	The lesser of 3:1 (max) or existing

Notes:

(1) Design Criteria for Interface Ramps during Seasonal Shutdown are the same as shown in the table above.

(2) Minimum Shoulder widths will be permitted except where dictated otherwise by sight distance requirements, in which case widened Shoulder width in order to meet sight distance requirements will be provided.

ARTICLE 4 OTHER SPECIFIED ROADS

4.1 General Requirements

- (a) The requirements in this Article 4 are applicable to 264th Street (Highway 13), 56 Avenue (North and South), Gloucester Way, 52 Avenue, 272 Street and 48 Avenue (the “**Other Specified Roads**”).
- (b) The Design-Builder will provide two PDMS at the entrances to the Project Site on Other Specified Roads in accordance with Section 1.7.2(b)(ii) to provide advance notice of each scheduled Full Closure, Lane Closure, Stoppage or Detour Route and to provide advance notice of all traffic pattern changes and disruptions. PDMS (including flashers and other warning devices) will be placed at strategic upstream locations in order to warn motorists in advance and allow them adequate opportunity to divert prior to reaching the Closure, Stoppage or Detour Route location.
- (c) For each scheduled Full Closure, Lane Closure, Stoppage or Detour Route, the Design-Builder will provide advance notice to the travelling public and other stakeholders of the scheduled Full Closure, Lane Closure, Stoppage or Detour Route in accordance with Article 5 [Traffic Management Communications] of this Part.
- (d) Temporary Works at intersections in the vicinity of exit Interchange Ramps will be designed to prevent queuing onto Highway 1 and to meet the requirements of Sections 3.1(d), (e) and (f) of this Part.
- (e) Existing traffic signal co-ordination along Other Specified Roads and adjacent municipal roadways will be maintained.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 146 -

- (f) Vehicular access to/from existing accesses will be retained throughout the duration of Construction.

4.2 Restricted Periods for Other Specified Roads

Restricted Periods for Other Specified Roads are as follows:

Table 4.2

Direction	Weekdays	Saturday	Sunday
All	5:30 a.m. – 9:00 p.m.	7:00 a.m. – 9:00 p.m.	8:00 a.m. – 9:00 p.m.

4.3 Lane Closures on Other Specified Roads

Except in circumstances in which Stoppages or Full Closures are permitted pursuant to this Article, a minimum of one basic lane (excluding auxiliary lanes) in each direction will be kept open for general traffic outside of Restricted Periods for Other Specified Roads.

4.4 Stoppages on Other Specified Roads

- (a) Subject to acceptance by the Province in accordance with the Consent Procedure, the following Stoppages may be permitted outside of Restricted Periods for Other Specified Roads:
- (i) Stoppages of less than two minutes' duration; and
 - (ii) Stoppages of greater than two minutes' duration but less than 20 minutes' duration between 12:00 a.m. and 5:00 a.m. only.
- (b) After a Stoppage has been implemented and removed, the Design-Builder will allow all queues to clear before implementing another Stoppage.
- (c) The aforementioned requirements are not applicable to random minor interruptions in traffic (i.e. not exceeding two minutes' duration in each case) which may need to occur from time to time, including during Restricted Periods for Other Specified Roads.

4.5 Full Closures on Other Specified Roads

Full Closures of Other Specified Roads are not permitted except:

- (a) with the approval of the relevant municipality; and
- (b) with the prior acceptance of the Province pursuant to the Consent Procedure.

4.6 Non-Permitted Traffic Disruption Events on Other Specified Roads

Each of the following Traffic Disruption Events occurring on an Other Specified Road is a Non-Permitted Traffic Disruption Event:

- (a) a Lane Closure occurring on an Other Specified Road;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 147 -

- (i) during a Restricted Period for Other Specified Roads; or
- (ii) in any other circumstances not expressly permitted pursuant to Section 4.3 [Lane Closures on Other Specified Roads] of this Part;
- (b) a Full Closure occurring on an Other Specified Road:
 - (i) during a Restricted Period for Other Specified Roads; or
 - (ii) in any other circumstances not expressly permitted pursuant to Section 4.5 [Full Closures on Other Specified Roads] of this Part; or
- (c) a Stoppage occurring on an Other Specified Road and not expressly permitted pursuant to Section 4.4 [Stoppages on Other Specified Roads] of this Part.

4.7 Detour Route and Lane Shift Design Criteria for Other Specified Roads

Table 4.7 summarizes the minimum geometric design criteria that will be incorporated into the Design of all Detour Routes and Lane Shifts for all Other Specified Roads.

Table 4.7

Construction Detour Route and Lane Shift Design Criteria – Other Specified Roads		
	50 km/h or Less Design/ Posted Speed	60 km/h Design/ Posted Speed
Design Vehicle	WB-20	WB-20
Maximum Grade	8% or existing	8% or existing
Maximum Superelevation	6%	6%
Minimum Radius	The lesser of 90 m or existing	The lesser of 130 m or existing
Vertical Clearance	The lesser of 5.0 m or existing travel lane clearance	The lesser of 5.0 m or existing travel lane clearance
Lane Width	Maintain existing lane widths (min)	Maintain existing lane widths (min)
Outside Paved Shoulder Width (Open)	1.0 m (min) paved, plus 0.5 m (min) gravel	1.5 m (min) paved, plus 0.5 m (min) gravel
Outside Paved Shoulder Width (Closed by Barrier)	1.0 m (min)	2.0 m (min)
Inside Paved Shoulder Width (Closed by Barrier)	0.5 m (min)	0.5 m (min)
Side Slopes (w/o Barrier)	The lesser of 3:1 or existing	The lesser of 3:1 or existing
Pedestrian/cycle facilities	To match existing	To match existing

Notes:

- (1) Design Criteria for Seasonal Shutdowns are the same as in the Table above
- (2) Minimum Shoulder widths will be permitted except where dictated otherwise by sight distance requirements, in which case, widened Shoulder width in order to meet sight distance requirements will be provided.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 148 -

ARTICLE 5 TRAFFIC MANAGEMENT COMMUNICATIONS

5.1 Performance Measures

- (a) The table in Section 5.2 [Traffic Management Performance Measures] of this Part sets out:
- (i) performance measures to be met by the Design-Builder in relation to traffic management communications;
 - (ii) the timing for each such performance measure, where applicable; and
 - (iii) whether any deliverables included within such performance measures are required to be submitted under the Review Procedure or the Consent Procedure.
- (b) In respect of any performance measure set out in such table with a designation of "Major" or "Severe" in the column entitled "Performance Mechanism Index", such designation will inform the basis on which NCE Points will be assigned in accordance with Appendix 9A [Assignment of NCE Points] to Schedule 9, and NCE Points may be assigned in accordance with Section 6.1 [Nonconformity Reporting Process] of Schedule 7 for any other performance measures set out in such table.
- (c) Any timing requirements in such table will be in addition to, and will not replace, any other timing requirements provided in this Agreement.

5.2 Traffic Management Communications

	Performance Measure	Timing	Performance Mechanism Index
5.2.1	Construction and Traffic Notifications: The Design-Builder will:		
	(a) provide, using email templates provided by the Province, 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, Full Closures, Lane Shifts or Detours, to emergency responders (including but not limited to Police, fire, ambulance, search and rescue, regional health authorities, area hospitals and regional emergency service providers, DriveBC, Transportation Management Centre of BC, the Winter Maintenance Contractor, the BC Trucking Association, CVSE, the Municipality, Trinity Western University, School District 35 – Langley, BC Provincial Permit Centre, BC Transit, TransLink, Kwantlen First Nation, Matsqui First Nation and Katzie First Nation);	(A) no later than 7 days in advance of the approved activity;	Major
		(B) immediately upon actual occurrence of the approved activity and upon its termination; and	Major

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 149 -

	Performance Measure	Timing	Performance Mechanism Index
		(C) within 15 minutes in the event that the activity is postponed or rescheduled	Major
	(b) develop and distribute, using email or mail templates provided by the Province, notification of approved Construction, or Operations and Maintenance activity, including traffic notifications, for email subscribers and Interested Parties:	(A) no later than 7 days in advance of the approved activity for activities such as a Lane Closure, 30 Minute Full Closure or daytime construction;	Major
		(B) no later than 15 days in advance of the approved activity for activities such as pile driving, significant noise, and 2 Hour Full Closures; and	Major
		(C) within 1 Business Day in the event that the activity is postponed or rescheduled;	Major
	(c) submit all email notifications for approved activities to the Province pursuant to the Review Procedure;	Submit 15 days prior to scheduled distribution	
	(d) keep the Design-Builder's electronic tracking system established in accordance with Schedule 15 [Communications and Engagement] updated to track Construction and traffic notification activities, including a description of the type of notification, date it was issued, method of delivery and to whom the notice was issued (including mail-out areas, email distribution lists, door-to-door delivery or visits) and any related correspondence; and	Current to within 1 Business Day	

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 150 -

	Performance Measure	Timing	Performance Mechanism Index
	(e) enter information regarding Construction and Operation and Maintenance activities that have the potential to adversely affect traffic, including but not limited to approved Stoppages, Lane Closures, Lane Shifts or Detours, into the Transportation Management Centre of British Columbia/Drive BC traveller information system:	(A) no later than 7 days in advance of the approved activity	Major
		(B) immediately upon actual occurrence of the approved activity and upon its termination; and	Major
		(C) within 15 minutes in the event that the activity is postponed or rescheduled	Major
5.2.2	Advertising Communications: The Design-Builder will:		
	(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 15 days of request by the Province	
	(b) using templates provided by the Province, communicate notice of Construction activities that are of significant impact or duration, via construction notices through direct mail to residents and businesses within a 2 kilometre distribution radius of the area/interchange of impact and via email;	Not less than 7 days in advance of scheduled Construction activity	Major
	(c) submit all material in Section 5.2.2(a) and (b) of this Part to the Province's Representative pursuant to the Consent Procedure; and	Not less than 30 days before intended distribution	
	(d) 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	
5.2.3	Information Signs: The Design-Builder will:		
	(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

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 151 -

	Performance Measure	Timing	Performance Mechanism Index
	(ii) ensure that signs meet Province standards and are of appropriate size, colour, lighting and location to ensure visibility;		Major
	(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;		Major
	(iv) keep signs in good condition when installed and repair or replace damaged signs within 48 hours;		Major
	(v) remove graffiti on signs within 48 hours, or, if graffiti cannot be removed, replace signs within 72 hours; and		Major
	(vi) provide personnel to install, remove, and relocate signs on an expedited basis as required and if requested by the Province;		Major
	(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; and	Minimum of 5 Business Days prior to the date of implementation	Major
	(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;		
	(ii) visually differentiates from the Province and other government agencies;		
	(iii) clearly communicates the Project intent; and		
	(iv) is consistent with other Design-Builder communications and engagement material for the Project, as accepted by the Province in accordance with this Schedule.		

ARTICLE 6 TRAFFIC MANAGEMENT PLAN

6.1 General Requirements

- (a) Within 60 days following the Effective Date, the Design-Builder will submit an initial Traffic Management Plan, including all sub-plans, to the Province's Representative pursuant to the Consent Procedure. At a minimum the initial Traffic Management Plan and sub-plans will

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 152 -

cover the first six months of activities following the Effective Date. Following the acceptance of the initial Traffic Management Plan by the Province in accordance with the Consent Procedure, the Design-Builder will submit all subsequent proposed changes to the Traffic Management Plan, including changes to Traffic Control Plans and all other sub-plans to incorporate conditions or requirements that may have not been established clearly at the beginning of the Project, to the Province's Representative pursuant to the Consent Procedure.

- (b) The Design-Builder will develop and maintain a schedule of Traffic Management Plan submission time, allowing a minimum of 20 Business Days of review time by the Province in accordance with the Consent Procedure.
- (c) The Traffic Management Plan will be signed and sealed by a Professional Engineer qualified and experienced in traffic management planning and highway safety.
- (d) The Traffic Management Plan and all updates thereto will be consistent with and comply with all of the requirements set forth in this Part and all other relevant provisions of this Agreement.
- (e) The Traffic Management Plan is to be a complete and living document, with no draft submission. Subsequent individual task or work-specific Traffic Control Plans, layouts or updates thereto will be issued as addenda to the sub-plans within the over-arching Traffic Management Plan.
- (f) The Traffic Management Plan will reference and interface with the Quality Management Plan provided in accordance with Schedule 7 [Quality Management] and the Construction Communications and Engagement Plan provided in accordance with Schedule 15 [Communications and Engagement].
- (g) The Design-Builder will submit a Traffic Management Plan Audit Form/Checklist to ensure quality compliance of all Traffic Management Plan submissions in the form set out in Appendix D of the Traffic Management Manual.
- (h) The Design-Builder will include, as part of the Traffic Management Plan, detailed documentation on "Risk Assessment", developed in accordance with Section 18.3 (and applicable sub-sections) of the OHS Regulation and Technical Circular T-04/21.
- (i) In addition to the requirements set out in this Article, the Design-Builder will not conduct any Construction that affects traffic without a current Traffic Management Plan that has also been accepted and sealed by the Traffic Engineer.
- (j) In preparing the Traffic Management Plan, the Design-Builder will meet with and coordinate the Project Work and traffic management with the other Program Contractors in accordance with the requirements of Section 1.3 [General Requirements] and Section 2.8 [Specific Highway 1 Requirements] of this Part and Part 4 [Interface Requirements] of Schedule 3, which coordination may require the Design-Builder to update the Traffic Management Plan.
- (k) This work has been assessed to be a Category 3 Project in accordance with the Traffic Management Manual. The Traffic Management Plan will comply with the definitions and guidelines provided in the Traffic Management Manual.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 153 -

- (l) The Traffic Management Plan will outline how general traffic, as well as the traffic generated by Project Work, is to be managed.
- (m) The following sub-plans for the Traffic Management Plan are required:
 - (i) Traffic Control Plans;
 - (ii) Incident Management Plan;
 - (iii) Public Information Plan; and
 - (iv) Implementation Plan.
- (n) As part of the Traffic Management Plan, the Design-Builder will outline its approach to maintaining accurate records documenting traffic control measures, activities, and Incidents in accordance with the Traffic Management Manual.
- (o) Starting on the Effective Date, the Design-Builder will provide to the Province a schedule of proposed Closures for the upcoming three months and the schedule will be updated and resubmitted to the Province on a monthly basis.

6.2 Traffic Management Sub-Plans

6.2.1 Traffic Control Plans

- (a) Traffic Control Plans will be in accordance with Section 3.2.1 of the Traffic Management Manual.
- (b) The Design-Builder will prepare Project specific Traffic Control Plans including but not limited to the following traffic control layouts, specific to the work zone:
 - (i) traffic control layouts for each specific work activity area;
 - (ii) each Construction stage;
 - (iii) activation of newly constructed roads, interchanges and Structures;
 - (iv) any alteration to cycling and pedestrian facilities, transit facilities, and truck parking and park and ride facilities;
 - (v) single lane alternating traffic;
 - (vi) Closures and temporary Detours to complete the Project Work;
 - (vii) all accesses to the Highway 1 median;
 - (viii) excavation, paving, and installation of temporary protective barriers; and
 - (ix) Periods of Inactivity.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 154 -

- (c) Traffic control layouts will be specific to the Project Work, with direct copies of the traffic control layouts in Sections 7 to 19, inclusive, of the Traffic Management Manual not being considered Project Site specific.
- (d) Traffic Control Plans will provide a description of the intent of the traffic control layouts and outline the specific traffic control devices that will be used, how they will be implemented, and on what schedule, including a combination of text descriptions, customized traffic control layouts and drawings.
- (e) The Design-Builder is assigned responsibility for, and will 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.
- (f) 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 will in no way diminish the Design-Builder's responsibility to meet the requirements of the Traffic Management Manual.
- (g) Construction signs, specific to an operation, will be either removed or effectively covered so that their message is obscured whenever such operation is not in progress.
- (h) Further to the Category 3 Traffic Management Plan requirements in the Traffic Management Manual, the Design-Builder will conduct traffic analysis on the Traffic Control Plan for each stage of the Construction where traffic operations are affected. The traffic analysis will determine the effect of each Traffic Control Plan on the roadway capacity and operation, including the resulting vehicle Stoppages and queue lengths. The analysis will confirm that the resulting Stoppages and queues are acceptable and are expected to clear before the commencement of a Restricted Period. The traffic analysis will be conducted for the proposed design speed and the representative hour(s) and day(s) that each Traffic Control Plan is in operation. Traffic analysis will be included in the Traffic Control Plan submission.
- (i) The Design-Builder will be responsible for including Construction generated traffic data in the Traffic Control Plan and any associated analysis.
- (j) The Design-Builder will continuously measure the effectiveness of Traffic Control Plans and, if those measurements indicate a Traffic Control Plan is non-compliant, the Design-Builder will immediately adjust the Traffic Control Plan to bring it into compliance.
- (k) The Traffic Control Plan will include engineered designs for each Stoppage, Full Closure, Detour Route, Lane Shift and Lane Closure. The locations and details of all signs, PDMS, Pavement Markings, barriers, and protective works will be provided on the drawings. All drawings are to be signed and sealed by the Traffic Engineer.
- (l) The Traffic Control Plans and traffic analysis will consider regional traffic, planned works by others on Highway 1, Other Specified Roads and other major roads in the region.
- (m) Storage lengths at existing signalized intersections will not be reduced unless analysis confirms acceptable operation can be maintained.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 155 -

- (n) Acceleration/deceleration lane lengths will not be reduced unless analysis confirms acceptable operation can be maintained.
- (o) The Design-Builder will consult the Municipality on any Traffic Control Plan proposed on any portion of road owned by the Municipality.
- (p) The Design-Builder will provide at least 48 hours' notice prior to implementation of any Traffic Control Plan on any portion of road owned by the Municipality.

6.2.2 Incident Management Plan

- (a) The Design-Builder will prepare and submit an Incident Management Plan in accordance with the incident management plan requirements of the Traffic Management Manual, this Part, and Schedule 15 [Communications and Engagement].
- (b) The Incident Management Plan will include, should any unplanned events or Incidents occur, a communications plan describing the procedures for notifying, in addition to the Road Authority as defined in the Traffic Management Manual, the Regional Transportation Management Centre, the Winter Maintenance Contractor and other stakeholders regarding worker and public safety, traffic conditions, and actions taken to normalize traffic flow.
- (c) The Incident Management Plan will specify how the Design-Builder will provide access for emergency vehicles and provide assistance to emergency response personnel.
- (d) The Design-Builder will 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.
- (e) The Incident Management Plan will also address access to the Project Site for Incidents or emergencies external to the Project Site but for which emergency vehicles and response personnel require passage through the Project Site.
- (f) The Incident Management Plan will include a description of how the Design-Builder proposes to address the following scenarios:
 - (i) where traffic queues cannot be cleared within 30 minutes, including provisions for easily identifiable personnel to walk the traffic queue in each direction ensuring that:
 - (A) travellers are aware of the events;
 - (B) travellers are aware of their options;
 - (C) travellers are aware of the estimated time of opening and level of confidence for that estimate; and
 - (D) any health issues or safety issues that may arise are tended to;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 156 -

- (ii) in the event the highway is closed for longer than one hour, the Design-Builder's plan to adequately store and/or redirect highway vehicles both on and off the Project Site; and
 - (iii) in the event the highway is closed for a period longer than two hours, an alternate-route detour plan.
- (g) The Incident Management Plan will describe the methods and strategies for implementing the alternate-route detour as quickly as possible when it is required, including pre-installing covered detour route signing, prepared Traffic Control Plans, and arrangements with the Winter Maintenance Contractor.

6.2.3 Public Information Plan

- (a) The Design-Builder will prepare and submit a Public Information Plan for the communications required in accordance with Article 5 [Traffic Management Communications] of this Part and the Public Information Plan requirements of the Traffic Management Manual.
- (b) As part of the Public Information Plan, the Design-Builder will prepare and implement an Advisory Signing Plan that sets out a strategy to notify the travelling public in advance of the scheduled Construction, Detour Routes, Full Closures, Stoppages and Lane Closures and including specific notification measures to be put in place during each work event.
- (c) The Design-Builder will ensure that each Advisory Signage Plan is signed and sealed by the Traffic Engineer.

6.2.4 Implementation Plan

The Design-Builder will prepare and submit an Implementation Plan in accordance with the Traffic Management Manual and Schedule 15 [Communications and Engagement]. This plan will identify the Traffic Control Supervisor, Traffic Engineer and Traffic Manager, along with the qualifications and experience of those named individuals. This plan will 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.

ARTICLE 7 RESPONSIBILITIES FOR TRAFFIC MANAGEMENT PLAN

7.1 Design-Builder Responsibilities

The Design-Builder will accept full responsibility for quality control and quality assurance of all activities affecting the Traffic Management Plan. The Traffic Management Plan quality control process will be included in the Quality Management Plan. The Design-Builder will ensure that all personnel identified in the Traffic Management Plan are suitably qualified and licensed.

7.2 Traffic Manager

- (a) The Design-Builder will designate a Traffic Manager who will be responsible for the following:
 - (i) developing, implementing and managing the Traffic Management Plan;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 157 -

- (ii) ensuring the Province is kept informed of all upcoming traffic activities and any revisions to the Traffic Management Plan;
 - (iii) ensuring that appropriate modifications are made to the Traffic Management Plan if the specified traffic control measures are not achieving the desired effect; and
 - (iv) coordinating with adjacent work areas, including work being carried out by others.
- (b) The Traffic Manager will be a Key Individual subject to the applicable requirements of Section 3.3 [Key Individuals] of this Agreement.
- (c) The Traffic Manager will have profound experience developing, implementing, and monitoring traffic management plans, ensuring the smooth flow of traffic and minimizing disruptions, on projects of equivalent scope, scale, and complexity to the Project.

7.3 Traffic Engineer

- (a) The Design-Builder will 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.
- (b) The Traffic Engineer will sign and seal all traffic engineering checklists and signal timing sheets.

7.4 Traffic Control Supervisors

- (a) The Design-Builder will designate one or more Traffic Control Supervisors, each of whom will have the Design-Builder's authority to respond to traffic control requirements and each of whom will 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 will be on the Project Site full-time when active Construction is underway. The Traffic Control Supervisor will have direct line authority over all of the Design-Builder's traffic control personnel and procedures on the Project Site. The Design-Builder will not designate the Site Superintendent as the Traffic Control Supervisor. The Traffic Control Supervisor will have no other duties.
- (c) The duties of the Traffic Control Supervisor will 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, Full Closures, Detour Routes and Lane Shifts and unauthorized Stoppages and forwarding this information, on a daily basis, to the Province for information;

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Part 3: Traffic Management

- 158 -

- (iv) monitoring 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.
- (d) Traffic control supervision will be provided by the Traffic Control Supervisor on the Project on a 24 hours per day basis when active Construction is underway. During non-work periods, the Traffic Control Supervisor or accepted alternate will be on the Project Site within 45 minutes of being notified. The Traffic Control Supervisor will have appropriate personnel and equipment available on call, at all times.

7.5 Traffic Control Personnel

All traffic control personnel will be qualified in accordance with Health and Safety Laws.

7.6 Temporary Traffic Control On-site Road Safety Audits

Temporary Traffic Control [Design and On-site] Road Safety Audits will be carried out in accordance with Article 13 [Road Safety Audit] of Part 1 of this Schedule.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

**APPENDIX 4A
FORM OF DESIGN AND CONSTRUCTION CERTIFICATES**

1. Design Certificate (General)
2. Design Certificate (Independent Review for Structures and Geotechnical Systems)
3. Design Certificate (Documented Checking for Category II and Category III Structures and Geotechnical Systems)
4. Design Certificate (Environmental)
5. Road Safety Audit Certificate (Stage 1)
6. Road Safety Audit Certificate (Stage 2)
7. Road Safety Audit Certificate (Stage 3)
8. Road Safety Audit Certificate (Stage 4)
9. Construction Certificate
10. Assessment Certificate (Structures)
11. Coordinating Professional Engineer Certificate

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 2 -

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 His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying the Design in accordance with Part 2 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 experienced 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.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

***Commercial in Confidence
Execution***

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 3 -

SCHEDULE

[Include here drawing numbers and titles, reports, calculations, etc.]

Signed:

Designer (Principal)

Name:

Title:

Date:

Professional Registration Number:

Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 4 -

Certificate Form 2

Certificate Ref. No []

**DESIGN CERTIFICATE (INDEPENDENT REVIEW FOR STRUCTURES AND
GEOTECHNICAL SYSTEMS)**

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying the design of Structures and Geotechnical Systems incorporated in the Project Work, in accordance with Part 2 of Schedule 4 to the Agreement.

1. We certify that we have the requisite professional qualifications, skill and experience to perform an Independent Review of the Design Data referred to herein in accordance with the requirements of the Agreement.
2. We certify that we have performed an Independent Review (as required in the Agreement for Structures and Geotechnical Systems) of the Design Data for [.....] **[Name of the Structure or Geotechnical System and list of all elements of the Structure or Geotechnical System 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 experienced professionals undertaking such an Independent Review, 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];
 - ii. the design, methodologies and assumptions are consistent with Good Industry Practice; and
 - iii. any concerns discovered as a result of this Independent Review have been discussed with the professional of record and resolved to the satisfaction of the reviewer.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

***Commercial in Confidence
Execution***

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 5 -

SCHEDULE

[Include here drawing numbers and titles and reports, calculations, etc.]

Signed:

Principal for the Independent Review

Name:

Title:

Date:

Professional Registration Number:

Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 6 -

Certificate Form 3

Certificate Ref. No []

**DESIGN CERTIFICATE (DOCUMENTED CHECKING FOR CATEGORY II AND
CATEGORY III STRUCTURES AND GEOTECHNICAL SYSTEMS)**

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying the design of Category II and Category III Structures and Geotechnical Systems incorporated in the Project Work, in accordance with Part 2 of Schedule 4 to the Agreement.

1. We certify that we have the requisite professional qualifications, skill and experience to perform the Documented Checking of the Design Data referred to herein in accordance with the requirements of the Agreement.
2. We certify that we have performed the Documented Checking (as required in the Agreement for Category II and Category III Structures and Geotechnical Systems) of the Design Data for [.....] **[Name of the Structure or Geotechnical System and list of all elements of the Structure or Geotechnical System 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 experienced professionals undertaking such Documented Checking, and that in our professional opinion:
 - i. the said Design Data has been thoroughly checked and 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.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

***Commercial in Confidence
Execution***

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 7 -

SCHEDULE

[Include here drawing numbers and titles and reports, calculations, etc.]

Signed:

Checking Team (Principal)

Name:

Title:

Date:

Professional Registration Number:

Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 8 -

Certificate Form 4

Certificate Ref No. []

DESIGN CERTIFICATE (ENVIRONMENTAL)

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying the design of environmental works incorporated in the Project Work, in accordance with Part 2 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 [.....] **[Name and list of all elements of the environmental works]** 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 experienced 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.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

***Commercial in Confidence
Execution***

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 9 -

SCHEDULE

[Include here drawing numbers and titles and reports, calculations, etc.]

Signed:
Designer (Principal)
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal and Permit to Practice

Signed:
Environmental Manager
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 10 -

Certificate Form 5

Certificate Ref No. []

ROAD SAFETY AUDIT CERTIFICATE (STAGE 1)

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying that a Stage 1 Road Safety Audit has been carried out in accordance with Article 13 of Part 1 of Schedule 4 to the Agreement.

Road Safety Auditor’s Statement

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 1 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 and Permit to Practice

Designer’s Statement

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 1 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 Manager / Coordinating Professional Engineer
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 11 -

Certificate Form 6

Certificate Ref. No. []

ROAD SAFETY AUDIT CERTIFICATE (STAGE 2)

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying that a Stage 2 Road Safety Audit has been carried out in accordance with Article 13 of Part 1 of Schedule 4 to the Agreement.

Road Safety Auditor’s Statement

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 1 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 and Permit to Practice

Designer’s Statement

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 1 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 Manager / Coordinating Professional Engineer
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 12 -

Certificate Form 7

Certificate Ref. No. []

ROAD SAFETY AUDIT CERTIFICATE (STAGE 3)

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying that a Stage 3 Road Safety Audit has been carried out in accordance with Article 13 of Part 1 of Schedule 4 to the Agreement.

Road Safety Auditor’s Statement

1. We certify that the [Final Design/IFC Drawings] of [.....] has been the subject a Stage 3 Road Safety Audit in accordance with Article 13 of Part 1 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 and Permit to Practice

Designer’s Statement

3. We certify that the [Final Design/IFC Drawings] of [.....] has been the subject of a Stage 3 Road Safety Audit in accordance with Article 13 of Part 1 of Schedule 4 to the Agreement, the Design Management Plan, the Design Quality Management Plan and all other relevant provisions of the Agreement addressing all changes subsequent to the review of the Final Design of [.....] and that all observations and recommendations in the Audit Team’s report have been satisfactorily addressed and resolved.

Signed:
Design Manager / Coordinating Professional Engineer
Name:
Title:
Date:
Professional Registration Number:

***HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT***

***Commercial in Confidence
Execution***

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 13 -

Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 14 -

Certificate Form 8

Certificate Ref. No. []

ROAD SAFETY AUDIT CERTIFICATE (STAGE 4)

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying that a Stage 4 Road Safety Audit has been carried out in accordance with Article 13 of Part 1 of Schedule 4 to the Agreement.

Road Safety Auditor’s Statement

1. We certify that the [reference relevant works] as constructed, tested and commissioned has been the subject a Stage 4 Road Safety Audit in accordance with Article 13 of Part 1 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 and Permit to Practice

Designer’s Statement

3. We certify that the [reference relevant works] as constructed, tested and commissioned has been the subject of a Stage 4 Road Safety Audit in accordance with Article 13 of Part 1 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 Manager / Coordinating Professional Engineer
Name:
Title:
Date:
Professional Registration Number:
Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 15 -

Certificate Form 9

Certificate Ref. No. []

CONSTRUCTION CERTIFICATE

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 (“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 for certifying the Substantial Completion or Total Completion of Construction of the Project Work in accordance with Section 6.1 of Part 2 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 Province Changes and Value Engineering Proposals: [.....]].

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 experienced 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 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 Province Changes and Value Engineering Proposals listed in paragraph 1 above].

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

***Commercial in Confidence
Execution***

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 16 -

Signed.....
Design Manager / Coordinating Professional Engineer
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 17 -

Certificate Form 10

Certificate Ref. No. []

ASSESSMENT CERTIFICATE (STRUCTURES)

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 ("the Agreement"). 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 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 experienced 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:

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 18 -

SCHEDULE

[Include here drawing numbers and title used for the assessment.]

Signed.....
Designer (Principal)
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4A: Form of Design and Construction Certificates

- 19 -

Certificate Form 11

Certificate Ref. No. []

COORDINATING PROFESSIONAL ENGINEER CERTIFICATE

Agreement between His Majesty the King in right of the Province of British Columbia, BC Transportation Financing Authority and KEA Fraser Valley Connectors dated July 24, 2024 ("the Agreement"). Defined terms and expressions used in the Agreement have the same meanings in this Certificate.

Form of Certificate to be used for certifying the comprehensive coordination, oversight, and management of the Design by the Design Manager, also referred to as the Coordinating Professional Engineer, on behalf of the Designer in accordance with Section 4.4 of Part 2 of the Agreement.

We certify that:

1. We have coordinated the Design required for the Project and have relied on the assurances provided in the following Design Certificates:

[insert list of Design Certificates, including those for which the Design Manager took professional responsibility]

2. The Design as a whole substantially complies with all applicable requirements outlined in the Agreement, and considers input provided by Independent Reviews, the Checking Team for Category II and Category III Structures and Geotechnical Systems, and the Road Safety Audit Team, to the satisfaction of the Designer.
3. We have utilized the standards of care, skill, and diligence in accordance with the standards required of professional engineers in the Province of British Columbia.
4. All parts of the Design have been prepared and authenticated by a professional.

Signed.....
Design Manager / Coordinating Professional Engineer
Name.....
Title.....
Date.....
Professional Registration Number:
Affix Professional Seal and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

**APPENDIX 4B
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 (for example).....**
 - 2.1 Obstacles crossed.
- 3. PROPOSED STRUCTURE**
 - 3.1 Description of Structure.
 - 3.2 Structural type) Include reasons
 - 3.3 Foundation type)) for choice
 - 3.4 Span arrangements)
 - 3.5 Articulation arrangements.
 - 3.6 Parapet type.
 - 3.7 Proposed arrangements for inspection and maintenance.
 - 3.8 Materials and finishes.
- 4. DESIGN/ASSESSMENT CRITERIA**
 - 4.1 Live Loading, Headroom.
 - 4.1.1 BC Bridge Code loading:
 - 4.1.2 Design Vehicle.....
 - 4.1.3 Footway or footbridge live loading.
 - 4.1.4 Provision for exceptional abnormal loads.
 - 4.1.4.1 Gross weight tonnes on vehicle no.m.
 - 4.1.4.2 Axle load and spacing.
 - 4.1.4.3 Air cushion tonnes over m xm.
 - 4.1.4.4 Location of vehicle track on deck cross-section.
 - 4.1.5 Any special loading not covered above.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4B: Sample Contents for a Structural TAF

- 2 -

4.1.6 MOT heavy or high load route requirements and arrangements being made to preserve the route.

4.1.7 Authorities consulted and any special conditions required.

4.2 List of relevant design documents.

4.3 Proposed Alternative Proposals.

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 intended 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. SEISMIC DESIGN

6.1 Seismic design inputs.

6.2 Load paths.

6.3 Identification of capacity protected members and hinge locations.

6.4 Special devices such as dampers or bearings.

7. SEISMIC INSTRUMENTATION

7.1 Proposed layout of seismic instrumentation.

8. GROUND CONDITIONS

8.1 Acceptance of interpretative recommendations of the soils report to be used in the design and reasons for any proposed departures.

8.2 Describe Foundations fully including the reasons for adoption of allowable and proposed bearing pressures/pile loads, strata in which Foundations are located, provision for skin friction effects on piles and for lateral pressures due to compression of underlying strata, etc.

8.3 Differential settlement to be allowed for in design of structure.

8.4 Anticipated ground movements or settlement due to embankment loading, mineral extraction, flowing water, and measures proposed to deal with these defects as far as they affect the structure.

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4B: Sample Contents for a Structural TAF

- 3 -

8.5 Results of tests of ground water (e.g. pH value, chloride or sulphate content) and any counteracting measures proposed.

8.6 Anticipated ground movements or settlement due to seismic loading, measures proposed to deal with these impacts as far as they affect the structure.

9. CHECKING

9.1 Name of proposed Checking Team.

10. DRAWINGS AND DOCUMENTS

10.1 List of drawings (including numbers) and documents accompanying the submission. To include (without limitation):

10.1.1 a location plan;

10.1.2 a preliminary general arrangement drawing; and

10.1.3 relevant parts of the ground investigation report.

11. 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 and Permit to Practice

SCHEDULE 4: DESIGN AND CONSTRUCTION TECHNICAL REQUIREMENTS

Appendix 4B: Sample Contents for a Structural TAF

- 4 -

For Temporary Works:

Signed:
Designer (Principal) or designer (Principal), as applicable
Name:
Engineering Qualifications:.....
Date:
Professional Registration Number:
Affix Professional Seal and Permit to Practice

**SCHEDULE 5
INSURANCE REQUIREMENTS**

PART 1 INSURANCE REQUIRED – CONSTRUCTION	1
1.1 Third Party Liability Insurance - Construction	1
1.2 Professional Liability Insurance (Errors & Omissions)	4
1.3 Automobile Insurance	4
1.4 Property Insurance	5
1.5 Additional Conditions In Property and Liability Policies in this Part	9
1.6 Cancellation/Limitation	10
1.7 Loss Payable	10
1.8 Use and Occupancy	10
PART 2 INSURANCE REQUIRED – OPERATION AND MAINTENANCE	11
2.1 Insurance - Operation and Maintenance	11
2.2 Additional Conditions in Liability Policies in this Part	11
2.3 Cancellation/Limitation	12
PART 3 GENERAL INSURANCE PROVISIONS	12
3.1 Project Work after the Substantial Completion Date	12
3.2 Amendments to Insurance Coverages	13
3.3 Primary and Excess Coverage	13
PART 4 INSURANCE REQUIRED – WORKERS’ COMPENSATION	13
4.1 Workers’ Compensation Coverage	13

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 will 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, if and to the extent the Project Work is undertaken or performed in 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.
- (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

- 2 -

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. 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), 1.1(b), 1.1(c) and 1.1(d) 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
 - Damage to Existing Structures
 - Contingent Employers Liability
 - Medical Payments
 - Incidental Medical Malpractice
 - Blanket Written Contractual
 - Cross Liability and Severability of Interest Clause
 - Attached Machinery
 - Non Owned Automobile
 - Legal Liability for damage to hired automobiles
 - Hazardous Operations (XCU)
 - Elevator and Hoist Collision Liability
 - Tenant Legal Liability (All Risk)
 - Fire Fighting Expenses
 - 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 coverage (as more fully outlined under Section 1.6 [Cancellation/Limitation] of this Schedule)
 - Blanket Additional Insureds

- 3 -

- (ii) Coverage Extensions Applicable to the Marine and Aviation Policies
 - Canada and USA coverage territory
 - 60 days notice of Cancellation or Limitation of coverage (as more fully outlined under Section 1.6 [Cancellation/Limitation] of this Schedule)

(f) Inclusions / Exclusions Not Permitted

The following inclusions/exclusions are not permitted for any insurance referred to in Sections 1.1(a), 1.1(b), 1.1(c) and 1.1(d) of this Schedule, except in the case of any insurance referred to in Sections 1.1(b), 1.1(c) and 1.1(d) 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), 1.1(c) and 1.1(d) 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 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.

- 4 -

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 Subcontractors, and/or any engineers, architects, surveyors, and any of their respective employees including personnel on loan to the Design-Builder or Subcontractors and personnel who perform normal services of the Design-Builder under this Agreement. The named insured will 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 will not be required to be maintained for longer than eight years after the effective date of the policy.
- (c) A maximum deductible of will be allowed.
- (d) Exclusions for design/build or joint venture projects will not be permitted.
- (e) The insurance referred to in this Section 1.2 will 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 Securities 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 will be effected on the Effective Date but will 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 with inclusive limits of not less than providing third party liability and accident benefits insurance coverage must be provided for all vehicles required by law to be

- 5 -

licensed that are owned, leased or rented by the Design-Builder and are used in the performance of the Project Work contemplated by this Agreement.

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 cost to be determined at the time of replacement, which will include the following terms:

- (i) specify a policy limit of not less than _____ (including full resultant loss or damage (LEG 3 or equivalent) and including both soft and hard costs);
- (ii) include the following additional covers:
 - (A) off premises service interruption;
 - (B) interruption by civil authority or apparent civil authority;
 - (C) underground services, temporary buildings and structures, temporary boilers and pressure vessels, scaffolding, false work, forms, hoardings, excavation, site preparation, landscaping and similar work;
 - (D) electronic data processing equipment and media, including the cost to restore or recreate data;
 - (E) prevention of ingress or egress;
 - (F) resultant damage from faulty materials, faulty workmanship, and design errors and omissions;
 - (G) damage to existing structures while they are being worked upon;
 - (H) subsurface structures;
 - (I) expediting expense;
 - (J) extra expense; and

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 5: INSURANCE REQUIREMENTS

Commercial in Confidence
Execution

- 6 -

- (K) increased costs due to bylaws or ordinances including demolition, increased costs of repairs and replacement;
- (iii) the following sub-limits (per occurrence unless specified otherwise):
 - (A) unnamed locations, not less than _____ ;
 - (B) professional fees, including costs to establish quantum of any covered loss, not less than _____ ;
 - (C) off-site property or property in transit, not less than _____
 - (D) off premises service interruption, not less than _____
 - (E) prevention of ingress or egress, for a period of not less than _____
 - (F) firefighting expense, not less than _____ ;
 - (G) debris removal and clean up, not less than _____ ;
 - (H) expediting expense, not less than _____
 - (I) extra expense, not less than _____
 - (J) increased costs due to bylaws or ordinances including demolition, increased costs of repairs and replacement subject to a sub-limit of not less than _____ with respect to existing or renovated buildings;
 - (K) valuable papers, not less than _____
 - (L) _____ off premises power interruption;
 - (M) accounts receivable, not less than _____ ; and
 - (N) interruption by civil authority or apparent civil authority, not less than _____ ; and
- (iv) include the following special terms:
 - (A) cover for unintentional errors and omissions;
 - (B) cover for breach of conditions;
 - (C) soft cost coverage extension:
 - (1) in an amount sufficient to compensate the Design-Builder for extra costs related to the insured risks, including but not limited to additional capital payments, additional interest for the extension of financing necessary for the completion of Construction, legal and accounting expenses, property taxes, insurance premiums,

- 7 -

building permits and other miscellaneous costs, various incurred fees, fixed expenses and additional commissions;

- (2) with an indemnity period of not less than and
- (3) subject to a waiting period of not more than

(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 (including maintenance activities in connection with continuing operations undertaken by the Design-Builder or Subcontractors as part of the Project Work) or for which the Design-Builder may be responsible.

(c) Marine Cargo Transit Insurance

If marine transport is used to transport any of the materials, equipment or property supplied under or used in connection with the Project during the Construction Period, the Design-Builder will take out, maintain in force and renew, or will cause to be taken out, maintained and renewed, all risks marine cargo transit property insurance for such materials, equipment or property, which will include the following terms:

- (i) an insured value of not less than the full replacement value of materials, equipment or property in transit;
- (ii) deductibles, self-insured retentions and waiting periods not to exceed except as set out hereunder; and
- (iii) include the following special terms:
 - (A) coverage for the Design-Builder and Subcontractors;
 - (B) Province and shareholders, officials, directors, officers, employees, servants, consultants and agents of all insureds included as additional insureds;
 - (C) insurers to waive their rights of recovery and subrogation against Province and all insureds under the policy;
 - (D) on Institute Cargo Clauses (All Risks) terms, including war and strikes extensions, and including transit and storage where applicable;
 - (E) if an entire vessel is chartered for shipping materials, equipment or property, charterer's liability insurance in an amount sufficient to cover Province, the Design-Builder and all Subcontractors from and against all liability arising out of the chartering of such vessel; and

- 8 -

(F) delay in start-up coverage:

- (1) sufficient to compensate the Design-Builder for finance penalties and charges, and extra costs related to the insured risks, including additional capital payments, legal and accounting expenses, property taxes, insurance premiums, building permits and other miscellaneous costs, various incurred fees, fixed expenses, additional commissions, advertising, margin of profit of the Design-Builder;
- (2) with an indemnity period of not less than ; and
- (3) subject to a waiting period of not more than

(d) Deductibles Per Occurrence

All losses under the Builders' Risk Property Insurance or the Equipment Insurance – up to per occurrence.

(e) Waiver of Subrogation/Builders' Risk Insurance

The following Waiver of Subrogation is to be added to the Builders' Risk Property Insurance Policies:

"In the event of any physical loss or damage to property, the settlement or payment of the subsequent claim will be made without the right of subrogation against:

- (i) His Majesty the King in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the employees, agents and servants of His Majesty the King in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the architects, engineers, consultants or contractors of His Majesty the King in right of the Province of British Columbia;
- (ii) 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 "Highway 1 – 264th Street Interchange Project"; or
- (iii) any other insured under the policies required under Schedule 5 to the design-build agreement for the "Highway 1 – 264th Street Interchange Project".

(f) 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 KEA Fraser Valley Connectors or any of its contractors or subcontractors, the settlement or payment of the subsequent claim will be made without the right of subrogation against:

- 9 -

- (i) His Majesty the King in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the employees, agents and servants of His Majesty the King in right of the Province of British Columbia or the BC Transportation Financing Authority, or any of the architects, engineers, consultants or contractors of His Majesty the King in right of the Province of British Columbia;
- (ii) 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 “Highway 1 – 264th Street Interchange Project”; or
- (iii) any other insured under the policies required under Schedule 5 to the design-build agreement for the “Highway 1 – 264th Street Interchange Project”.

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:

“His Majesty the King in Right of the Province of British Columbia and the BC Transportation Financing Authority are added as Additional Named Insureds.”

- (b) The builders' risk policy referred to in Section 1.4(a) of this Schedule will include as additional insureds any other party which, by virtue of its interest or involvement in the Highway 1 – 264th Street Interchange Project is identified as an additional insured in respect of the builders' risk coverage.

- (c) 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 will be extended to include insurance coverages and clauses as follows:

“His Majesty the King 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 “Highway 1 – 264th Street Interchange Project” (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 will 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 will not affect the protection given by this policy to any other Insured or Additional Named

- 10 -

Insured. The inclusion herein of more than one Insured and Additional Named Insured will not operate to increase the limit of liability under this policy.

Products and Completed Operations Hazard coverage will be provided and such cover will remain in full force and effect for a period of _____ after the work has been completed, irrespective of the expiry date of the policy.”

- (d) The wrap-up liability insurance referred to in Section 1.1(a) of this Schedule will include as additional insureds any other party which, by virtue of its interest or involvement in the Highway 1 – 264th Street Interchange Project is identified as an additional insured in respect of the wrap-up liability insurance.

1.6 Cancellation/Limitation

- (a) The insurance coverages referred to in this Part (except owned automobile insurance and professional liability insurance) will 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 Securities 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 will apply. In the case of Marine and Aviation Policies the Design-Builder will use all reasonable efforts to fulfill the _____’ 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 will not be lapsed without at least _____’ notice in writing by registered mail to the Province’s Representative with a copy by registered mail to “The Corporate Insurance and Securities 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 6.17 [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 will not be cause for any termination of insurance coverage shown in the applicable sections of this Part.

- 11 -

**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 will 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 coverages 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 will be extended to include insurance coverages and clauses as follows:

“His Majesty the King 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 “Highway 1 – 264th Street Interchange Project” (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 will 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 will 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 will not operate to increase the limit of liability under this policy.

Products and Completed Operations Hazard coverage will be provided and such cover will remain in full force and effect for a period after the work has been completed, irrespective of the expiry date of the policy.”

- 12 -

2.3 Cancellation/Limitation

- (a) The insurance coverages referred to in this Part (except owned automobile insurance) will 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 Securities 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 will apply.
- (b) The insurance coverages referred to in this Part will 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 Securities 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).

PART 3 GENERAL INSURANCE PROVISIONS

3.1 Project Work after the Substantial Completion Date

- (a) The insurance described in this Schedule will 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 will have the right to make, and the Design-Builder will 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 will 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 will 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 with respect to any particular part of the Project Work, the Design-Builder will notify the Province of its dispute within 10 Business Days after the Province has notified the Design-Builder of the insurance requirements that will 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 will 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 will be required.

- 13 -

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.

PART 4 INSURANCE REQUIRED – WORKERS' COMPENSATION

4.1 Workers' Compensation Coverage

The Design-Builder will 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 will, 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.

**SCHEDULE 6
ENVIRONMENTAL OBLIGATIONS**

PART 1 GENERAL PROVISIONS	1
1.1 Order of Precedence.....	1
1.2 Environmental Reference Documents	1
1.3 Design-Builder’s Environmental Obligations.....	1
1.4 Table of Commitments	2
1.5 Best Management Practices	2
1.6 Environmental Permits	2
1.7 Inquiries and Reports to Environmental Authorities	3
1.8 Environmental Records.....	3
1.9 Tree and Vegetation Protection and Replacement.....	4
1.10 Performance Measures.....	4
PART 2 ENVIRONMENTAL MANAGEMENT	5
2.1 Environmental Manager	5
2.2 Environmental Specialists.....	6
2.3 Environmental Management Requirements.....	6
2.4 Environmental Plans and Reports.....	7
2.5 Construction Environmental Management Plan	11
2.6 Environmental Enhancement Management Plan	15
PART 3 CONTAMINATION AND HAZARDOUS SUBSTANCES.....	16
3.1 Waiver of Site Disclosure Statement	16
3.2 No Use of Hazardous Substances	16
3.3 Dealing with Hazardous Substances.....	16
3.4 Notification to Province.....	16
3.5 Notification to Environmental Authorities	17
3.6 Removal and Remediation.....	17
3.7 Hazardous Substances Brought onto Project Site	17
3.8 Contamination Management Requirements.....	18
PART 4 ARCHAEOLOGICAL AND HERITAGE OBJECTS.....	18
4.1 Property.....	18
4.2 Archaeological Chance Finds	18

Appendix 6A Table of Commitments

**PART 1
GENERAL PROVISIONS**

1.1 Order of Precedence

The Design-Builder will 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 will apply in descending order of precedence:

- (a) the criteria contained in this Schedule;
- (b) the applicable Ministry Technical Bulletins and Circulars;
- (c) the DBSS, including section 165 *Protection of the Environment*; and
- (d) any other applicable Reference Documents.

1.2 Environmental Reference Documents

The Design-Builder will ensure that the Project Work complies with all guidelines, policies or practices of an environmental nature applicable to the Project and the Project Work, including each of the Environmental Reference Documents set out in Part 2 [Environmental Reference Documents] of Appendix 1C to Schedule 1.

1.3 Design-Builder's Environmental Obligations

The Project Infrastructure is classified as a "designated environmentally sensitive area" in accordance with DBSS subsection 165.01.04 and as such is subject to all the requirements set out in DBSS section 165.

- (a) The Design-Builder will be responsible for managing all environmental issues associated with the Project, and will comply with, observe, satisfy and perform all of the Design-Builder's Environmental Obligations. The Design-Builder will perform the Project Work in full compliance with the Design-Builder's Environmental Obligations, including compliance with the following, subject in each case to Section 1.3(b) of this Schedule:
 - (i) all applicable Environmental Laws and relevant requirements under any other applicable Laws and all applicable Reference Documents that are current at the time of the relevant Project Work;
 - (ii) all applicable requirements of the Permits, including:
 - (A) their conditions; and
 - (B) any conditions, commitments or requirements arising out of any amendment(s) to the Permits as may be subsequently issued from time to time;
 - (iii) the conditions, commitments, responsibilities and information set forth in this Schedule, including, as applicable, those set out in the Table of Commitments; and

- 2 -

- (iv) a requirement to meet monthly with the Province, or more frequently as the Province deems necessary.
- (b) The Design-Builder will maintain or enhance aquatic and riparian habitat areas in carrying out the Project Work, ensuring that any proposed habitat enhancements and offsets are of equal or greater environmental value to those described in the Finalized Habitat Offsetting Memo. Any Design Data affecting aquatic or riparian habitat will be submitted to the Province's Representative in accordance with the Design and Certification Procedure as set out in Part 2 [Design and Certification Procedure] of Schedule 4.
- (c) For greater certainty, the Design-Builder will be responsible, at its own cost and risk, for complying (and will cause all of its employees, agents and Subcontractors and employees of any of them to comply) with all environmental obligations except only for those specifically identified in this Agreement, including in the Table of Commitments, as being the obligation of the Province or not the responsibility of the Design-Builder, notwithstanding that the responsibility for any such environmental obligation may not specifically be an obligation of the Design-Builder.

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 will at all times comply with and will 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 Best Management Practices

The Design-Builder will perform the Design-Builder's Environmental Obligations in accordance with Best Management Practices and will 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.

1.6 Environmental Permits

- (a) Subject to Section 1.6(b) of this Schedule,
 - (i) any changes or amendments to the Province Permits required as a result of the Design-Builder's carrying out of the Project Work or other activities of the Design-Builder, including the Design, will be at the cost and risk of the Design-Builder, whether or not the application for such change is made by the Province or the Design-Builder;
 - (ii) the Design-Builder will be responsible for obtaining all Permits other than the Province Permits from relevant Environmental Authorities which relate to, or are required under Environmental Laws in connection with the Project and the Project

- 3 -

Work, including all other Permits necessary for the Design-Builder to fulfill the Design-Builder's Environmental Obligations; and

- (iii) the Design-Builder will observe and comply with the standards, practices and requirements (including in respect of consultations, hearings, reviews, studies and reports and initial and ongoing mitigative works, and the provision to the Province of any and all information and documentation required by the Province in connection with the Province Permits) in connection with or resulting from all Permits, including the Province Permits and any change or amendment to the Province Permits for which it is responsible under Section 1.6(a)(i) of this Schedule, and for all costs, fees, expenses and delays incurred in connection therewith.
- (b) Where the Design-Builder is unable to apply for any change or amendment to a Province Permit that is the Design-Builder's obligation or responsibility to obtain under this Section without obtaining information, administrative assistance or other assistance from the Province or BCTFA or without submitting the application for such change or amendment in the name of the Province or BCTFA, the Province will at the Design-Builder's cost provide, or cause BCTFA to provide, such information, administrative assistance and other assistance as the Design-Builder may reasonably request and the Province or BCTFA may reasonably be able to provide and have the legal ability to provide under existing Laws and, if requested, will execute or cause to be executed such applications as are required to be in its or BCTFA's name to assist the Design-Builder in obtaining such change or amendment.

1.7 Inquiries and Reports to Environmental Authorities

- (a) The Design-Builder will, 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 will within two Business Days forward to the Province's Representative a copy of any report, submission, application, data 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.

1.8 Environmental Records

The Design-Builder will 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 maintained pursuant to the Construction Environmental Management Plan and the Environmental Enhancement Management Plan, but excluding any documents or records retained in the possession of the Province.

- 4 -

1.9 Tree and Vegetation Protection and Replacement

- (a) The Design-Builder will follow Best Management Practices to minimize disturbance of trees, vegetation, soils and landscaped areas on the Project Site or proximate thereto in the performance of the Project Work. Without limiting the foregoing, the Design-Builder will retain a Qualified Environmental Professional to conduct a survey and create a tree management plan (the “**Tree Management Plan**”) prior to Construction. The Tree Management Plan will be submitted to the Province’s Representative under the Consent Procedure. The Tree Management Plan will at a minimum:
 - (i) identify areas of temporary and permanent tree and other vegetation loss from Design-Builder activities;
 - (ii) identify and quantify trees and vegetation that will be removed;
 - (iii) identify any hazard trees within or adjacent to Project Lands;
 - (iv) identify vegetation to be retained during Construction; and
 - (v) develop measures to protect vegetation and trees on-site in line with relevant municipal by-laws.
- (b) Tree removal and replacement requirements vary depending on the lands on which a tree is located. In all cases, the Design-Builder will use reasonable commercial efforts to not disturb or jeopardize trees. Where trees must be removed in connection with completion of the Project Work, the following requirements apply:
 - (i) for trees located on lands owned by the Municipality, the Design-Builder will comply with the tree removal and replacement requirements of the Municipality;
 - (ii) for trees located on Project Lands, the Design-Builder will perform replanting and revegetation in compliance with all applicable Environmental Laws, and comply with the replacement tree size, species selection, siting and location, planting and maintenance requirements, and survivorship certification and reporting requirements described in Article 9 [Landscape and Site Restoration Design Criteria] of Part 1 of Schedule 4; and
 - (iii) for trees located on lands owned by a person other than the Municipality or the Province, tree removal and replacement requirements are governed by the terms and conditions of private agreements governing or ancillary to the applicable Land Rights, and applicable Site Requirements including any Conditions of Access.

1.10 Performance Measures

- (a) The Table of Commitments sets out:
 - (i) performance measures to be met by the Design-Builder in relation to environmental matters; and
 - (ii) the timing for each such performance measure, where applicable.

- 5 -

- (b) In respect of any performance measure set out in the Table of Commitments with a designation of “Major” or “Severe” in the column entitled “Performance Mechanism Index”, such designation will inform the basis on which NCE Points will be assigned in accordance with Appendix 9A [Assignment of NCE Points] to Schedule 9, and NCE Points may be assigned in accordance with Section 6.1 [Nonconformity Reporting Process] of Schedule 7 for any other performance measures set out in the Table of Commitments.
- (c) Any timing requirements in the Table of Commitments will be in addition to, and will not replace, any other timing requirements provided in this Agreement.

PART 2 ENVIRONMENTAL MANAGEMENT

2.1 Environmental Manager

- (a) The Design-Builder’s Environmental Manager will, irrespective of such person’s other responsibilities, 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 will be a Key Individual subject to the applicable requirements of Section 3.3 [Key Individuals] of this Agreement.
- (c) The Environmental Manager will 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;
 - (ii) leading a multidisciplinary environmental team;
 - (iii) environmental regulatory management;
 - (iv) working with regulatory agencies;
 - (v) maintaining all required environmental records; and
 - (vi) interfacing and liaising with regulatory agencies pertaining to environmental permitting; and
 - (vii) implementing environmental quality management systems and procedures.
- (d) The Environmental Manager will have the following attributes:
 - (i) be a Qualified Environmental Professional;
 - (ii) have an understanding of Environmental Laws; and
 - (iii) have effective communication, conflict resolution and organization skills.

- 6 -

- (e) Without limiting the generality of the foregoing, the job specification and responsibilities of the Environmental Manager will 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) taking a lead role in internal environmental design reviews including development of mitigation and compensation proposals, acceptable to the Province and Environmental Authorities;
 - (vii) liaising with the Province's Representative and acting as the single point representative for the Design-Builder on all matters relating to environmental management;
 - (viii) preparing and submitting to the Province's Representative all reports required under the Table of Commitments, the Construction Environmental Management Plan and the Environmental Enhancement Management Plan;
 - (ix) ensuring environmental issues and requirements are met in accordance with this Agreement; and
 - (x) ensuring all environmental monitoring, reporting, restoration, enhancement and habitat offsetting responsibilities are undertaken throughout the Term or until all environmental monitoring obligations have been fulfilled.

2.2 Environmental Specialists

The Design-Builder will have available, at all times during the Term, a multi-disciplinary team of qualified environmental specialists, including an appropriately qualified environmental monitor.

2.3 Environmental Management Requirements

The Design-Builder will:

- (a) subject to Section 1.3 [Design-Builder's Environmental Obligations] of this Schedule, comply with all environmental requirements set out in environmental Permits and the Table of Commitments;

- 7 -

- (b) prepare all environmental submissions as set out in or required by this Agreement, including Section 2.4 [Environmental Plans and Reports] of this Schedule and Part 2 [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 2 [Design and Certification Procedure] of Schedule 4;
- (d) manage proactive programs in accordance with Schedule 15 [Communications 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) design and implement necessary habitat enhancements and offsets;
- (f) apply current Best Management Practices to the design and implementation of habitat enhancements and offsets and integrate the habitat design with stormwater design;
- (g) restore and revegetate those portions of the Project Infrastructure and Project Site that will be discontinued for road or Construction purposes;
- (h) 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);
- (i) 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;
- (j) maintain appropriate riparian setbacks along the watercourses and ditches within and adjacent to the Project Site; and
- (k) identify and demark wildlife features within the Project Site;
- (l) conduct works in a manner that will prevent the discharge or introduction of deleterious substances into the receiving environment; and
- (m) 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.

2.4 Environmental Plans and Reports

- (a) The Design-Builder will develop, implement, maintain, and update the plans, reports and data listed in Table 2.4:

Table 2.4 Schedule of Plans, Reports and Data (Response Time Measures)

Deliverable Name	Specification Reference	Due Date	Review Procedure or Consent Procedure
Construction Environmental Management Plan (First Submission)	2.5(b)	45 days from the Effective Date	Consent Procedure
Construction Environmental Management Plan (Updates)	2.5(c)	As soon as completed when required, and in any event no later than June 1st annually	Review Procedure
Environmental Enhancement Management Plan (First Submission)	2.6(b)	90 days prior to commencement of activity for which the Environmental Enhancement Management Plan is required	Consent Procedure
Environmental Enhancement Management Plan (Updates)	2.6(c)	As soon as completed, when required, and in any event no later than annually following the Province's acceptance of the initial plan through the Consent Procedure	Review Procedure
Environmental Work Plans	2.4(e)	30 days prior to commencement of activity for which the Environmental Work Plan is required	Review Procedure
Monthly Environmental Reports	2.4(f)	Within 14 days of the end of the month for which the report prepared	Consent Procedure
Annual Environmental Reports	2.4(g)	December 1st annually	Consent Procedure
Environmental Completion Report	2.4(h)	Within 30 days of Total Completion Date	Consent Procedure
Weekly Environmental Monitoring Reports	2.4(i)	Within 1 week of the previous one week period of monitoring	Review Procedure
Annual Certificate of Compliance with all Environmental Laws	2.4(j)	December 1st annually	Review Procedure
Independent Environmental Site Assessment and/or Environmental Audit	2.4(k)	Within 60 days of audit being requested by the Province's Representative	Review Procedure

- (b) The documents referred to in Table 2.4 will be submitted to the Province's Representative for acceptance or review, as applicable, in accordance with the Consent Procedure or the

- 9 -

Review Procedure, as the case may be, pursuant to Schedule 2 [Review Procedure and Consent Procedure].

- (c) The Design-Builder will also develop, implement, maintain and update other plans in accordance with the Table of Commitments, the environmental Permits and the terms set out in this Agreement, including the Traffic Management Plan and communication plans in respect of traffic management in accordance with Part 3 [Traffic Management] of Schedule 4, each of which will, in addition to meeting all applicable requirements set out in this Agreement, be submitted to the Province's Representative:
 - (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 will, within five Business Days of 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 tests relating to the Project Site.
- (e) Environmental Work Plans will 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.
- (f) The Design-Builder will 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 any environmental impacts, and how the Design-Builder was able to comply with all applicable Permits;
 - (ii) provides an update on the status of the Table of Commitments;
 - (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.
- (g) Annual environmental reports, which will be inclusive of all Design and Construction periods of the Project, will be prepared by the Design-Builder and submitted to the Province's Representative to provide a Project wide state of the environment summary.

- 10 -

- (h) An environmental completion report will be prepared by the Design-Builder and submitted to the Province's Representative within 30 days of the Total Completion Date which will include as a minimum:
 - (i) a summary of key environmental requirements pertaining to the scope of the Project Work, including environmental requirements described in this Agreement and in Permit conditions;
 - (ii) a summary of the Design-Builder's environmental management approach and processes used in meeting such requirements;
 - (iii) a summary of the status of environmental design as set out in Part 2 [Design and Certification Procedure] of Schedule 4 and the design implementation;
 - (iv) a demonstration that the Design-Builder met all applicable environmental requirements including a Permit tracking matrix showing close-out of Permit conditions, an environmental monitoring summary showing close-out of environmental monitoring issues and an environmental quality summary showing acceptable disposition of environmental Nonconformities that arose during the Project Work; and
 - (v) the identification of residual environmental issues that are likely to require resolution beyond the Total Completion Date.
- (i) Weekly environmental monitoring reports will be prepared during Construction and submitted to the Province's Representative. Weekly environmental monitoring reports will 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;
 - (v) overall weather conditions;
 - (vi) report recipient(s);
 - (vii) contractor(s) undertaking work;
 - (viii) description, photos and status of Construction by area, including within environmentally sensitive areas;
 - (ix) environmental meetings and key issues discussed;
 - (x) key communications with Environmental Authorities;
 - (xi) status of current sediment and drainage management plans;

- 11 -

- (xii) an issue tracking matrix that provides the description of outstanding environmental issues and/or non-compliances, date of occurrence, corrective 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;
 - (xiii) physical and/or biophysical sampling data collected during reporting period, including water quality monitoring results and photographs; and
 - (xiv) other information as may be required by Environmental Authorities.
- (j) The Design-Builder will, 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).
- (k) The Design-Builder will, 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.

2.5 Construction Environmental Management Plan

- (a) The Design-Builder will develop, implement, maintain and update until the Total Completion Date the Construction Environmental Management Plan in accordance with the environmental Permits, including each of its component plans as set out in Section 2.5(d), 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 each of the component plans listed in Section 2.5(d) of this Schedule; and

- 12 -

- (v) comply with all of the Design-Builder's Environmental Obligations, including those set forth in the environmental Permits.
- (b) The Design-Builder will submit the initial Construction Environmental Management Plan, including each of its component plans required for Construction as set out in Section 2.5(d) of this Schedule, to the Province's Representative in accordance with the Consent Procedure and prior to submitting such initial Construction Environmental Management Plan to any appropriate Environmental Authorities.
- (c) The Construction Environmental Management Plan, including each of its component plans set out in Section 2.5(d) of this Schedule, will 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 will 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 as set out in the environmental Permits:
 - (i) Air Quality and Dust Control Plan, which will, as a minimum, 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.
 - (ii) Agricultural Management Plan, which will, as a minimum, describe the measures that will be implemented to avoid, minimize or reduce impacts to agricultural land and agricultural operations.
 - (iii) Archaeological and Heritage Resources Management Plan, which will, as a minimum, describe the measures to be implemented to identify, report and manage archaeological and heritage resources, and describe procedures to be followed should previously unidentified archaeological or heritage resources be encountered.
 - (iv) Construction and Waste Management Plan, which will, as a minimum, describe procedures and Best Management Practices to manage Construction materials, waste materials, sediment and soil, or other Hazardous Substances, measures to be implemented for managing material that may attract wildlife, appropriate disposal of materials including the prohibition of disposal of land clearing debris by burning unless under written approval of the MOECCS, and the requirement to reuse materials wherever possible.
 - (v) Contaminated Sites Management Plan, which will, as a minimum, 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, include measures to manage and document any movement of soil within the Project Site, including monitoring obligations, and address at a minimum the following requirements:

- 13 -

- (A) The Design-Builder will develop a surface and groundwater monitoring and sampling program, designed to confirm the absence of unacceptable water quality. The surface and groundwater monitoring program will be consistent with any regulatory requirements imposed by the MOECCS.
 - (B) The Design-Builder will undertake semi-annual cap inspections and groundwater and surface water monitoring consistent with the Design-Builder's surface and groundwater monitoring and sampling program, and any regulatory requirements imposed by the MOECCS.
 - (C) The Design-Builder will be responsible for decommissioning, in accordance with the *Groundwater Protection Regulation* (British Columbia), any groundwater monitoring wells that will be impacted by the Project Work.
 - (D) The Design-Builder will be responsible for replacing any groundwater monitoring wells impacted by the Project Work to the extent required to conform to the groundwater monitoring and sampling program described in paragraph (A) above.
 - (E) By February 14 each year, the Design-Builder will submit to the Province's Representative in accordance with the Consent Procedure an annual report for the preceding year in a format acceptable to the Province and, thereafter, consistent with previous annual reports. The annual report will be signed by a Qualified Environmental Professional and will include interpreted results from soil cap observations and surface water and groundwater monitoring and sampling, and a summary of any non-compliant circumstances related to the requirements imposed in paragraphs (A) and (B) above. The summary will include the nature of the non-compliance(s), the corrective measures implemented or to be implemented (including a schedule for completion), and relevant supporting documentation.
- (vi) Environmental Awareness and Education Plan, which will, as a minimum, describe how, when and the type of environmental training, education and awareness programs that 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.
 - (vii) Environmental Monitoring Plan, which will describe the Design-Builder's environmental monitoring program including, as a minimum, general environmental monitoring of Construction as well as more specialized monitoring to check the effective implementation of Construction Environmental Management Plan sub-plans, including monitoring rationale, parameters, sampling approach, issue tracking mechanism and reporting.
 - (viii) Fish and Fish Habitat Management Plan, which will, as a minimum, identify fish habitat within the Project Site, describe fisheries habitat off-sets, fish habitat restoration planning measures, describe applicable instream work windows, isolation and salvage activities, appropriate Construction methodology, and

- 14 -

measures to avoid serious harm to fish and fish habitat and manage potentially deleterious materials including concrete, mortar or grouting, and describe the Construction and post-Construction monitoring program.

- (ix) Health and Safety Plan, which will, as a minimum, summarize aspects of environmental management that have implications for human health and safety and describe applicable health and safety strategies and/or measures, cross-referencing as necessary to the Health and Safety Program.
- (x) Noise and Vibration Management Plan, which will, as a minimum, describe 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 Technical Requirements], including target noise emission levels of equipment, equipment maintenance and management, and describe community communication, and noise monitoring requirements.
- (xi) Spill Management and Emergency Response Plan, which will, as a minimum, 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.
- (xii) Surface Water Quality and Sediment Control Plan, which will, as a minimum, identify areas within the Project Site or 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.
- (xiii) Vegetation Management Plan, which will, as a minimum, identify and describe red- and blue-listed plant species, culturally valued vegetation and plant communities, describe the approach to be used for the 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, culturally valued vegetation and plant communities, manage removal of merchantable timber, restore and/or replant reclaimed abandoned roadways and temporarily disturbed areas with native species, as well as measures for handling, storing, re-using and/or disposing of non-merchantable vegetation, salvaging coarse woody debris for re-use in fish and wildlife enhancements, and measures to prevent and/or control invasive plant species.
- (xiv) Wildlife Management Plan, which will, as a minimum, identify and describe red- and blue-listed wildlife species that may be present, provide for reasonable salvage of such species prior to construction, identify and describe sensitive wildlife habitat on Construction drawings and demark on the Project Site, and identify measures to be implemented to minimize impacts to wildlife and describe wildlife enhancement measures, including restoration planning measures to benefit wildlife.

- 15 -

2.6 Environmental Enhancement Management Plan

- (a) The Design-Builder will develop, implement, maintain and update the Environmental Enhancement Management Plan in accordance with the environmental Permits, the Table of Commitments, and the requirements of Environmental Authorities, which will remain in effect throughout the Term or until all environmental monitoring obligations have been fulfilled, and will:
 - (i) comply with all of the applicable requirements set out in this Schedule;
 - (ii) identify monitoring and reporting requirements;
 - (iii) include all of the matters listed in Section 2.6(d) of this Schedule; and
 - (iv) comply with all of the Design-Builder's Environmental Obligations, including those set forth in the environmental Permits, the Table of Commitments and by Environmental Authorities.
- (b) The Design-Builder will submit the initial Environmental Enhancement Management Plan to the Province's Representative in accordance with the Consent Procedure prior to submitting such initial Environmental Enhancement Management Plan to any Environmental Agencies.
- (c) The Environmental Enhancement Management Plan will be updated throughout the Term to reflect the Project Site conditions and weather dependent contingency measures. The Design-Builder will submit all such updates to 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 Environmental Enhancement Management Plan will, as a minimum, include:
 - (i) a description of and rationale for the environmental enhancements and habitat offsets that are necessary to meet all applicable commitments outlined in the environmental Permits and the Table of Commitments, and to meet the requirements of Environmental Authorities;
 - (ii) site-specific environmental enhancement and offsetting plans, at least at a conceptual design level;
 - (iii) post-Construction environmental monitoring and reporting requirements describing the scope and frequency of environmental monitoring and reporting that will be carried out by the Design-Builder following the Total Completion Date and other environmental monitoring that may be required by Environmental Agencies; and
 - (iv) any other requirements, procedures or plans required to be provided by the Design-Builder on or after the Total Completion Date as set out in the Table of Commitments or required by Environmental Authorities.

- 16 -

**PART 3
CONTAMINATION AND HAZARDOUS SUBSTANCES**

3.1 Waiver of Site Disclosure Statement

The Design-Builder waives the requirement, if any, for the Province to provide a site disclosure statement 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 disclosure statements for any site listed in the site registry established and maintained pursuant to the *Environmental Management Act* (British Columbia).

3.2 No Use of Hazardous Substances

- (a) The Design-Builder will 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 will:

- (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

The Design-Builder will promptly, and in any event within 24 hours, notify the Province’s Representative:

- (a) of 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 including the location, time, agencies involved, damages suffered or caused and remedial action taken;
- (b) 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

- 17 -

- (c) 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

- (a) The Design-Builder will, 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.
- (b) Failure to provide any 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 will:
 - (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 will 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 will 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 will 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 will be and remain the sole and exclusive property of the Design-Builder and will 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.

- 18 -

3.8 Contamination Management Requirements

- (a) The Design-Builder will manage Existing Contamination including carrying out all monitoring requirements applicable to the Project Site from the Effective Date until the expiry of the General Project Work Defect Warranty Period.
- (b) In the event that the Design-Builder locates material on the Project Site believed to be Contamination or a Hazardous Substance, and which has not been previously identified, the Design-Builder will immediately cease work in that area and notify the Province's Representative within 24 hours.

PART 4 ARCHAEOLOGICAL AND HERITAGE OBJECTS

4.1 Property

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 will 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.

4.2 Archaeological Chance Finds

- (a) Upon the discovery of any object referred to in Section 4.1 [Property] of this Schedule on, at or in the Project Site or otherwise during the carrying out of the Project Work, the Design-Builder will:
 - (i) comply with the Archaeological Chance Find Procedure and its requirements;
 - (ii) immediately halt activities within 30 meters of the find and inform the Province's Representative;
 - (iii) 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;
 - (iv) document the nature, location, and context of the discovery and take all necessary steps to preserve the object in the same position and condition in which it was found; and
 - (v) 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 4.2(a) will constitute a Compensation Event and the provisions of Part 8 [Supervening Events] of this Agreement will apply. In the event of a conflict between the Archaeological Chance Find Procedure and the other requirements of this Section, the Archaeological Chance Find Procedure will apply.

- 19 -

- (b) If the Province wishes the Design-Builder to perform procedures which are in addition to those required pursuant to Section 4.2(a) of this Schedule in respect of any object referred to in Section 4.1 [Property] of this Schedule, then the Province will request a Province Change pursuant to Section 7.1 [Province Changes and Value Added Engineering Proposals] in respect of such additional procedures.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS

Commercial in Confidence
Executive

APPENDIX 6A
TABLE OF COMMITMENTS

1. All commitments identified in this Table of Commitments will be interpreted to mean that the Design-Builder will be obliged to perform and carry out the works and activities and comply with the matters described in the relevant condition in their entirety or, as the case may be, as provided otherwise in the Notes included in the “Delivered by” column.
2. The designation of “Major” or “Severe” in the column entitled “Performance Mechanism Index” in this Appendix 6A indicates, in respect of the condition corresponding to such designation in this Appendix 6A, the basis on which NCE Points and Default Points will be assigned in accordance with Part 2 [NCE Points and Default Points] of Schedule 9 to this Agreement, and NCE Points may be assigned in accordance with Section 6.1 [Nonconformity Reporting Process] of Schedule 7 for any other performance measures set out in the Table of Commitments.
3. All terms used in the Table of Commitments and included in the table “Definitions” forming part thereof will have the meanings given in such table. All other defined terms used in the Table of Commitments will have the meanings given in Schedule 1 [Definitions and Interpretation] to this Agreement.

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
1.0 RESPONSIBLE ENVIRONMENTAL MANAGEMENT			
1.1	Prepare and implement a Construction Environmental Management Plan (CEMP), including relevant sub-plans, for the Project prior to the start of relevant construction activities to demonstrate how the design, construction and operation, including maintenance, of the Project: <ul style="list-style-type: none">○ Will be carried out to avoid or mitigate negative impacts;○ Will be carried out in an environmentally responsible manner, in accordance with DBSS 165 [Protection of the Environment]²;○ Will employ Best Management Practices (BMPs³); and○ Will comply with conditions of Laws and Permits.	Design-Builder	Severe
1.2	Obtain required Permits before proceeding with construction that requires such Permits.	Design-Builder	Severe
1.3	Adhere to the terms and conditions of the DBSS section 165 [Protection of the Environment]; and any applicable Permits.	Design-Builder	Severe

¹ Summary provided for guidance only; specific applicable provisions of the Agreement will govern.

² Should there be a conflict between the DBSS165 and these commitments, the more stringent environmental protection measure will apply.

³ Those that are technically and economically feasible and as defined specifically in other sections of this Table of Commitments.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 2 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
1.4	Relevant sub-plans to be included in the CEMP will include those required to address environmental issues, including but not limited to the sub-plans provided in the DBSS section 165 [Protection of the Environment].	Design-Builder	Major
1.5	Manage contamination encountered during project development, regardless of the current assessment of potential contamination, in accordance with applicable regulatory requirements.	Design-Builder	Major
1.6	Prepare and implement an Operational Environmental Management Plan (OEMP), prior to operation and maintenance activities. Provide the OEMP to relevant reviewing and regulatory agencies, for review and comment, at least 30 calendar days prior to the onset of operation and maintenance activities. The Design-Builder is responsible for the preparation of the OEMP and all maintenance during the 2-year warranty period.	Design-Builder	Severe
2.0 MONITORING			
2.1	Ensure that environmental monitoring and reporting for the Project will be conducted, with respect to the requirements of DBSS section 165 [Protection of the Environment] and the terms and conditions of the Permits as applicable.	Design-Builder	Severe
2.2	Incorporate a monitoring component into all applicable sub-plans of the CEMP developed for the construction phase of the Project.	Design-Builder	
2.3	Outline in each of the sub-plans of the CEMP: <ul style="list-style-type: none"> ○ Rationale for monitoring; ○ Parameters to be monitored; ○ Monitoring program details; and ○ Required follow-up actions. 	Design-Builder	
2.4	The Design-Builder will engage an Environmental Monitor for the construction phases of the Project to undertake environmental monitoring activities and oversee implementation of each of component plans of the CEMP developed for the Project. The Environmental Monitor will monitor, evaluate, and report to the owner on construction activities and the effectiveness of the environmental management strategies and mitigation measures, with respect to the terms and conditions of the Permits that may apply. The Environmental Monitor will be responsible for making onsite decisions and taking on-site action to avoid/respond to potential environmental effects which could include temporary stop work orders if necessary.	Design-Builder	Severe

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 3 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
2.5	Abide by, and provide the Province with environmental data as required to fulfil the reporting requirements of, the <i>Water Sustainability Act</i> (British Columbia) Change Approval and the <i>Fisheries Act</i> (Canada) Approval obtained by the Province.	Design-Builder	Severe
2.6	Implement environmental quality management program through monitoring, auditing and reporting activities for the Project with respect to the terms and conditions of the Permits.	Design-Builder	Severe
3.0 INCIDENT MANAGEMENT			
3.1	Respond to environmental incidents, including spill incidents in accordance with the Emergency Response Plan to minimize effects and risks to the general public, on-site workers and the environment.	Design-Builder	Severe
3.2	Include protocols, consistent with the <i>Spill Reporting Regulation</i> (British Columbia), 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. 	Design-Builder	Major
3.3	Train all field Project personnel regarding implementation of the Construction and Hazardous Waste Management and Spill Management and Emergency Response Plans.	Design-Builder	
3.4	Incorporate relevant municipal contacts into the emergency contacts for the Construction and Waste Management, Concrete Waste Management, and Spill Contingency Plans prepared for construction of the Project.	Design-Builder	
3.5	Follow applicable DBSS section 165 and Canadian Council of Ministers of Environment codes and procedures if temporary fuel storage/fuelling facilities are required during construction. Where there is a difference in standards, the most stringent measure for environmental protection will take precedence.	Design-Builder	
4.0 COMMUNITY CONSULTATION			
4.1	Consult with local governments, stakeholders and the public during all stages of Project development.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	Major

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 4 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
4.2	Conduct community open houses and information sessions during the design review stage to obtain input on design refinements, during the preliminary and final design review stages.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	
4.3	Provide regular public information updates on the progress of construction, the schedule, and upcoming milestones.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	
4.4	Provide updated media information materials, as part of the Project commitment to making project information available to the public.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	
4.5	Track project enquiries and responses.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	
4.6	Discuss potential economic opportunities generated by the Project with participating First Nations throughout the Design and Construction Phases of the Project.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	Major
4.7	Obtain input from participating First Nations to identify appropriate measures to mitigate potential project related impacts on their previously identified interests in relation to fisheries and habitat matters.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	Major
5.0 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 and water quality conditions directly adjacent to the corridor.	Design-Builder	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 5 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
5.2	Design, construct and maintain stormwater management infrastructure. Monitoring of the infrastructure will be undertaken to confirm performance objectives are met or, if necessary, additional steps are taken to ensure performance objectives are achieved.	Design-Builder	
5.3	Consult with municipalities adjacent to the new construction area such that the approach to the management of stormwater and drainage design is complementary to, and can be integrated with, adjacent municipal stormwater infrastructure.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	
5.4	Obtain input from participating First Nations regarding mitigation measures outlined in the stormwater and drainage plan and effective integration of those measures into the design and operation of the Project.	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	Major
6.0 AGRICULTURE			
6.1	Obtain Agricultural Land Commission (ALC) Approval for Transportation, Utility and Recreation Trail Use in the Agricultural Land Reserve (ALR) as set out in the ALC Application.	Province	
6.2	<p>Develop and implement an Agricultural Mitigation Plan as outlined in the ALC Application that identifies potential impacts to agriculture as a result of project construction activities and measures for avoiding and addressing such impacts where possible. The scope will include those measures outlined in the Application, including but not limited to mitigation measures focused on:</p> <ul style="list-style-type: none"> ○ Transportation of agricultural goods and property access; ○ Drainage, irrigation and water quality; ○ Soil salvage, storage, re-use and soil quality; ○ Pollinators; ○ Spread of invasive plant species/weeds; and ○ Maintaining the agricultural land base. <p>Consult with individual farm owners and other stakeholders such as MAL, ALC, ToL, to identify potential impact to agricultural operations and infrastructure and ensure that such impacts are avoided, mitigated, or appropriately addressed during future stages or design and construction of the Project.</p>	Province/Design-Builder (consultation roles of parties as set out in this Agreement)	Severe
6.3	Ensure that the construction works, operations and reclamation for the Project are conducted in compliance with the ALC Resolution and that all reasonable measures are taken to address project-related effects on agricultural production within and adjacent to the project footprint.	Design-Builder	Severe

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 6 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
6.4	Develop and implement a direct line of communication with the affected ALR landowners, the Design-Builder and the Province. Contact information, including the individual's name, telephone number and email address will be provided within 30 days of the Effective Date.	Province/Design-Builder (Design-Builder for scope of Project Work specified in this Agreement only)	
6.5	Finalize and implement specific agricultural enhancement initiatives, including but not limited to, compensation mechanisms focused on improving road access and drainage and irrigation, consistent with the ALC Resolution.	Province/Design-Builder (Design-Builder for scope of Project Work specified in this Agreement only)	
6.6	Avoid, to the extent possible, using agricultural lands outside of the Right-Of-Way (ROW), for staging areas and access. For all agricultural lands that are required for use as staging areas, implement construction BMPs (as noted in the Agriculture Mitigation Plan) to mitigate disturbance, manage potential construction related effects, and restore lands to pre-construction condition, or better agricultural capability, upon completion of project works.	Design-Builder	
6.7	Undertake reasonable measures to facilitate the consolidation of parcels of isolated agricultural lands, to promote continued agricultural use of such lands.	Province	
6.8	Undertake reasonable measure to minimize potential loss of ALR lands, including existing farm(s) by: <ul style="list-style-type: none"> ○ Refining the Project footprint where feasible; ○ Optimizing use of existing ROW; ○ Ensuring drainage is improved; ○ Maintaining and improving access for property owners; and ○ Managing the site and equipment to prevent spread of invasive plants and weeds. 	Design-Builder	
6.9	Reclaim Agricultural Zones to a standard of agricultural capability that is equal to or better than that of the surrounding land, unless otherwise specified in plans mutually agreed upon by the Province and the landowner, and approved by the ALC. Submit to the Province's Representative the Environmental Completion Report. Remediate all issues identified by the Province's Qualified Professional Agrologist resulting from the review of the Environmental Completion Report and the reclaimed Agricultural Zones. In cases where reclamation deviates from enhancing agricultural capability, such as for the development of driveway/access, detailed plans must be designed with input from the Province and landowner.	Design-Builder	
6.10	Prepare the ALC closure report and submit it to the ALC.	Province	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 7 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
7.0 AIR QUALITY			
7.1	Ensure that the construction works and operations for the Project are conducted in compliance with Permits and that all reasonable measures are taken to address project-related effects on air quality.	Design-Builder	
7.2	Develop and implement an Air Quality and Dust Control Plan for the construction phase of the project, in alignment with DBSS Standard 165. The plan will: <ul style="list-style-type: none"> ○ Include an air quality monitoring program with thresholds, which if exceeded, will trigger the implementation of additional mitigation and corrective measures; ○ Commit 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 and off-road project equipment in combination with use of a B20 biodieselblend; ○ Include an anti-idling policy for construction equipment and other vehicles associated with construction related activities ; ○ 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. 	Design-Builder	Severe
7.3	Avoid burning as a means for disposing of land clearing debris.	Design-Builder	Major
8.0 NOISE AND VIBRATION			
8.1	Ensure that potential noise impacts associated with the project are considered and mitigation provided for during design, construction and operation of the project.	Design-Builder	Major
8.2	Prepare and implement a Noise and Vibration Management Plan for the construction phase of the Project that will include specific mitigation measures, and locations where they will be applied to address construction related noise.	Design-Builder	Severe
8.3	Prepare a noise complaint protocol as part of the CEMP Noise and Vibration Management Plan 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.	Design-Builder	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 8 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
8.4	Where noise levels at locations of nearby residences exceed those that would have been experienced had the Reference Concept been implemented instead of the Design, provide mitigation measures to address potential operational noise impacts on residential areas as part of the Project, in accordance with to the Noise Policy. The Design-Builder's obligation for providing mitigating measures will not exceed the dollar amounts in the "Cost-benefit Considerations" Section of the Noise Policy.	Design-Builder	
8.5	Conduct noise monitoring at the baseline sites during the first year after construction is complete to assess the effectiveness of mitigation measures, with a commitment to further mitigation if necessary, technically feasible and practical, as per the Noise Policy.	Province (Province for "commitment to further mitigation if necessary, technically feasible and practical" only)/ Design-Builder	
8.6	Monitor ground vibrations, as per standard geotechnical BMPs, adjacent to buildings to confirm that vibration levels are within ranges expected to avoid construction-related vibration.	Design-Builder	
9.0 CONTAMINATED SITES AND PROPERTY ACQUISITION			
9.1	Ensure that potential site contamination is investigated and managed in compliance with the CSR, during all stages of project development including property acquisition, design and construction.	Province/Design-Builder (in accordance with this Agreement)	Major
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.	Province/Design-Builder (in accordance with this Agreement)	
9.3	Manage any contaminated groundwater encountered in accordance with the requirements of the EMA and associated regulations.	Design-Builder	Major
9.4	Undertake risk assessment and remediation activities, as required, and manage potential contamination in compliance with the EMA and CSR.	Province/Design-Builder (in accordance with this Agreement)	Major
9.5	Should contaminated groundwater be identified along the route, include measures to control/mitigate the potential for impacts to surface water in future stormwater design. Any groundwater generated during excavation without a Waste Discharge Authorization under the <i>Waste Discharge Regulation</i> (British Columbia) will be managed in accordance with the EMA and the CSR.	Design-Builder	Major

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 9 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
9.6	Notify MOECCS of potential migration of contaminants from known or identified Tier 1 off-corridor properties of concern discovered during supplementary investigations or Project-related activities and use information to manage and mitigate contaminated sites issues prior to construction.	Design-Builder	
9.7	As part of the CEMP, the Contaminated Sites Management, Construction and Hazardous Waste Management and Spill Management and Emergency Response Plans, develop and implement a protocol for identifying and managing contaminated and potentially contaminated materials during the construction phase of the Project including the submission of a Notice of Independent Remediation (initiation and completion) to the MOECCS.	Design-Builder	Major
9.8	Should design be altered so that more property is required for the project, it is the Design-Builders responsibility to amend the relevant and required Permits and attain more property.	Design-Builder	Major
10.0 FISHERIES			
10.1	Ensure that all works and activities associated with the construction, operation and maintenance of the project are conducted in compliance with the <i>Fisheries Act</i> (Canada) as well as the <i>Water Sustainability Act</i> (British Columbia). This includes implementing mitigation measures and best management practices to ensure that the project does not cause any unauthorized harmful alteration, disruption or destruction of fish habitat, that the project does not cause any harm or mortality to fish, and that the project does not cause or result in the deposit of a deleterious substance of any type, including sediment, into a watercourse that is frequented by fish.	Design-Builder	Severe
10.2	Province to obtain an authorization under subsection 35(2) of the <i>Fisheries Act</i> (Canada) for any unavoidable harmful alteration, disruption or destruction of fish habitat prior to relevant construction works or activities, as well as a <i>Water Sustainability Act</i> (British Columbia) Change Approval. Any amendments required will be the responsibility of the Design-Builder and any application materials to be submitted in support of amendments will be prepared by the Design-Builder and submitted to the Province's Representative.	Province/Design-Builder (in accordance with this Agreement)	Severe
10.3	Develop and construct fish habitat compensation measures that offset all project impacts to fish habitat. These fish habitat compensation measures will be constructed by the Design-Builder as directed by Fisheries and Oceans Canada and Ministry of Water, Lands and Resource Stewardship and in accordance with any s. 35(2) <i>Fisheries Act</i> (Canada) or <i>Water Sustainability Act</i> (British Columbia) authorizations or amendments and the Finalized Habitat Offsetting Memo. Reference drawings, all Province Permits and the Finalized Habitat Offsetting Memo will be provided via the Data Room.	Province/Design-Builder (in accordance with this Agreement)	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 10 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
10.4	Implement appropriate measures to adequately mitigate the effects of the creation of impervious surfaces on volume of surface runoff, rate of runoff, and water quality. These will meet performance targets established in the Stormwater Management Plan Outline (July, 2007) for the project.	Design-Builder	
10.5	Take all reasonable measures to prevent substances that may be harmful to fish from entering the aquatic environment at the construction sites in the proximity to fish and aquatic habitat, paying particular attention to discharges of suspended sediments, construction waste, handling of uncured concrete and other deleterious substances.	Design-Builder	Severe
11.0 WATER QUALITY			
11.1	Ensure that the construction works and operations for the Project are conducted in compliance with environmental requirements and BMPs in order to avoid impacts to water quality.	Design-Builder	
11.2	Develop and implement a Surface Water Quality and Sediment Control Plan and provide the plan for review and comment by relevant environmental agencies at least 30 calendar days prior to the start of relevant construction activities.	Design-Builder	Severe
11.3	Sample water from potentially impacted drinking water wells to assess potential adverse effects to water quality associated with during construction and operation phases of the project. Provide sampling water quality data to the local health authority for review and comment.	Design-Builder	
11.4	The Surface Water Quality and Sediment Control Plan will at a minimum: <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 avoid impacts to water quality; ○ Identify potential water quality contaminants of concern generated by construction activities and associated preventative and mitigative measures; ○ Include a BMP maintenance plan to ensure BMPs implemented are functioning as designed and corrective actions are taken when required; and ○ Be submitted to the applicable regulatory agencies at least 30 calendar days prior to start of construction activities for review. 	Design-Builder	
12.0 WILDLIFE AND VEGETATION			
12.1	Ensure that the design, construction, and operation of the project, avoids where practical and technically feasible, impacts to vegetation and wildlife.	Design-Builder	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 11 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
12.2	Prepare and implement a Wildlife and Habitat Management Plan to avoid and, where necessary, mitigate potential impacts to vegetation, wildlife and wildlife habitat. This plan will comply with requirements in the Permits.	Design-Builder	Severe
12.3	Avoid direct impacts to sensitive red and blue listed plant communities where possible and adhere to construction exclusion windows determined by regulators.	Design-Builder	Major
12.4	Avoid clearing during the migratory bird nesting season, which is defined as March 12 through August 17 for the project area (Zone A1, Environment and Climate Change Canada). undertake pre-construction migratory bird nest surveys. Pre- construction bird nest surveys will include, but not necessarily be limited to the following: <ul style="list-style-type: none"> ○ Raptor, heron or any listed species nest and roost tree surveys, consistent with applicable BMPs, to determine presence of active/inactive raptor and heron nests in the corridor and work scheduling with respect to the nest locations and applicable timing restrictions; ○ During the migratory bird nesting season, where clearing cannot be avoided, prior to new ground-disturbing works, and prior to moving equipment or materials that have been stationary for two days or more, pre-construction migratory bird nest surveys will be required. Pre-construction migratory bird nest survey protocols must be produced to the satisfaction of MOTI 	Design-Builder	
12.5	Consult with MOECCS on the development and implementation of an Invasive Species Management Plan to address potential effects of the project related to the spread of invasive plant and aquatic wildlife species within the project corridor.	Design-Builder	
12.6	Follow the design criteria outlined in the MOTI Manual of Aesthetic Design Practice and the MOTI Landscape Policy and Design Standards that form the landscape and site restoration design criteria for the Project.	Design-Builder	
12.7	Identify the location of sensitive wildlife habitats, including but not limited to habitat for species at risk, red and blue listed plant communities and high biodiversity habitats, on detailed design drawings in order to avoid or minimize potential effects to these areas.	Design-Builder	
13.0 SPECIES AT RISK			
13.1	Ensure that all reasonable measures are taken to avoid or lessen effects of the Project on listed wildlife species and their critical habitat and that potential effects that could occur are monitored. All mitigation and monitoring measures will be undertaken in a manner that is consistent with applicable recovery strategy and actions plans.	Design-Builder	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 12 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
13.2	Undertake a salvage program for Pacific water shrew from, at a minimum, high and moderate-rated habitat adjacent to the Project. Other areas potentially requiring salvage will include lower-rated habitat, connected to higher-rated habitat, and will be determined in consultation with MOECCS and the PWS Recovery Team.	Design-Builder	
13.3	Consult with MOECCS regarding the mitigation of potential effects on Pacific water shrew, and take all practical steps to apply the most recent Pacific water shrew best management practices to address potential effects, including identifying additional opportunities to avoid direct effects to areas, designated as critical habitat by the PWS Recovery Team, during design, construction and operation.	Design-Builder	
13.4	Consult with MOECCS to develop a mitigation and compensation strategy for Pacific water shrew, where opportunities are available, based on habitat quality and connectivity to surrounding habitat. Undertake sampling program, where required, to determine the presence and distribution of Pacific water shrew to support detailed design of mitigation.	Design-Builder	
14.0 ARCHAEOLOGY			
14.1	Ensure that the design, construction and operation of the Project is advanced in a way that avoids or minimizes potential impacts to archaeological sites.	Design-Builder	Major
14.2	Adhere to the Archaeological Chance Find Procedure for the Project and ensure all employees and subcontractors receive training to identify archaeological resources and understand the procedures if undocumented archaeological resources are encountered during construction.	Design-Builder	Major
14.3	Maintain a valid <i>Heritage Conservation Act</i> (British Columbia) Section 12 Heritage Inspection Permit with adequate provisions to address requirements for investigations and potential impacts to previously unrecorded archaeological sites should they arise.	Province (Province for obtaining Section 12 Heritage Inspection Permit only)/ Design-Builder	Major
14.4	Include required edits and revisions to the Application in the final <i>Heritage Conservation Act</i> (British Columbia) Heritage Inspection Permit report.	Province	Major
14.5	Immediately report the discovery of previously undocumented archaeological sites that may come to light during the construction phase to the British Columbia Archaeology Branch and identified Indigenous groups. Engage an archaeologist to investigate and assess such sites under the terms and conditions of the <i>Heritage Conservation Act</i> (British Columbia) Heritage Inspection Permit.	Design-Builder	Major

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS
Appendix 6A: Table of Commitments

Commercial in Confidence
Executive

- 13 -

Ref	Objective Commitments and Assurances	Delivered By ¹	Performance Mechanism Index
14.6	Consult with the British Columbia Archaeology Branch and identified Indigenous groups on the reporting, management and mitigation of impacts to undocumented archaeological sites, including consideration of integration of input from identified Indigenous groups.	Province/Design-Builder	Major
14.7	Notify and invite Indigenous group members to participate in any archaeological work that is to occur at previously undocumented archaeological sites within their respective asserted traditional territories.	Design-Builder	Major
15.0 HERITAGE			
15.1	Ensure that the design, construction and operation of the proposed project is advanced in a way that avoids, or minimizes potential impacts to heritage buildings.	Design-Builder	
15.2	Prior to construction, undertake pre-condition surveys with respect to heritage buildings.	Design-Builder	
15.3	Avoid, where practical and technically feasible, direct impacts to heritage buildings.	Design-Builder	
16.0 SOCIO-ECONOMIC			
16.1	Manage potential impacts to emergency response services by: <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 in Traffic Management Plan development; and Consulting with local fire departments to ensure adequate access. 	Design-Builder	Major

Abbreviations and Acronyms

ALC	Agricultural Land Commission	MoTI	Ministry of Transportation and Infrastructure
ALR	Agricultural Land Reserve	OEMP	Operational Environmental Management Plan
BMP	Best Management Practices	PM	Particulate Matter
CEMP	Construction Environmental Management Plan	ROW	Right-Of-Way
EMA	<i>Environmental Management Act</i> (British Columbia)	ToL	Township of Langley
CSR	<i>Contaminated Sites Regulation</i> (British Columbia)		

**SCHEDULE 7
QUALITY MANAGEMENT**

PART 1 QUALITY MANAGEMENT SYSTEM	1
1.1 Quality Management System.....	1
1.2 Design-Builder Responsibilities	1
1.3 Quality Management System Requirements.....	1
1.4 Compliance	1
1.5 Documentation Deliverables.....	2
1.6 Timing of Implementation.....	3
1.7 Compliance with Quality Management System.....	4
1.8 Continual Improvement	4
PART 2 QUALITY PERSONNEL.....	4
2.1 Quality Director	4
2.2 Quality Managers.....	6
PART 3 TESTING.....	7
3.1 Testing Requirements	7
3.2 Accreditation Standards	7
3.3 Material Verification Testing.....	7
3.4 Structural Component Inspection and Testing.....	8
3.5 Re-Inspection and Re-Testing of Steel Structural Components	9
3.6 Remedial Work	10
3.7 Test Records and Reports	10
PART 4 QUALITY AUDITS AND MONITORING.....	11
4.1 Quality Audit Plans.....	11
4.2 Design-Builder's Quality Audits	11
4.3 Province's Quality Audits.....	12
4.4 Province Monitoring.....	13
4.5 Deficient Quality Audits	13
4.6 Costs of Audits.....	14
4.7 Independent Quality Audits	14
4.8 Traffic Management Auditing	14
4.9 Health and Safety Reviews or Auditing.....	17
4.10 Final Quality Report	17
PART 5 QUALITY DOCUMENTATION	17
5.1 Principles	17
5.2 ISO Reference Documents.....	18
5.3 Quality Documentation Requirements.....	18
5.4 Submission of Quality Documentation.....	19
5.5 Design-Builder Obligation to Update	19
5.6 Changes to Quality Documentation	19
5.7 Amendment of Quality Documentation.....	20
5.8 Quality Records	20
5.9 Quality Management System Reports	20
5.10 Additional Information	21
PART 6 NONCONFORMITIES.....	21
6.1 Nonconformity Reporting Process.....	21
6.2 Nonconformity Tracking System.....	25
6.3 Unremedied Nonconformity	26
6.4 Nonconformity Records.....	26

***HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 7: QUALITY MANAGEMENT***

***Commercial in Confidence
Execution***

- ii -

Appendix 7A	Quality Manual
Appendix 7B	Design Quality Management Plan
Appendix 7C	Construction Quality Management Plan
Appendix 7D	Traffic Management Site Condition Rating Checklist – Sample

PART 1
QUALITY MANAGEMENT SYSTEM

1.1 Quality Management System

The Design-Builder will 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 throughout the Term. The Design-Builder will ensure that all aspects of the Project are the subject of a Quality Management System that complies with the provisions of this Schedule, and will comply with and cause each of its Subcontractors and the employees of Subcontractors 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 will 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

- (a) The Quality Management System will address all aspects of the Project Work for all phases of the Project, including Design and Construction. The Quality Management System will be integrated into all Project Work, including environmental management, traffic management, safety management and communications activities. The Quality Management System will include all quality control and quality assurance activities for all aspects of the Project Work for all phases of the Project.
- (b) The Quality Management System will, at a minimum, include the Quality Documentation described in Part 5 [Quality Documentation] of this Schedule and will comply with:
 - (i) the requirements and principles of the ISO 9001:2015 Standard and any other applicable standards specified in this Schedule;
 - (ii) the Project Requirements;
 - (iii) Good Industry Practice; and
 - (iv) all other requirements set out in this Schedule and this Agreement.

1.4 Compliance

- (a) The Quality Management System must be compliant with the ISO 9001:2015 Standard in accordance with Section 1.3(a) of this Schedule.
- (b) The Design-Builder will update its Quality Management System and all Quality Documentation as required to ensure that the Quality Management System and all Quality

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 7: QUALITY MANAGEMENT

Commercial in Confidence
Execution

- 2 -

Documentation is and at all times remains in full compliance with the ISO 9001:2015 Standard and the requirements of this Schedule and this Agreement.

1.5 Documentation Deliverables

1.5.1 Design-Builder Quality Management Plans

- (a) Without limiting the generality of Section 1.3 [Quality Management System Requirements] of this Schedule, the Design-Builder will prepare and submit to the Province's Representative, by the dates shown in Table 1.5.1, each of the following:

Table 1.5.1 Schedule of Plans and Reports (Response Time Measures)

Deliverable Name	Due Date	Schedule Reference	Review Procedure or Consent Procedure
Quality Manual	Submitted prior to performing any Design or Construction, and with allowance for at least 20 Business Days for review by the Province's Representative under the Consent Procedure	Appendix 7A	Consent Procedure
Design Quality Management Plan	Submitted prior to performing any Design or Construction, and with allowance for at least 20 Business Days for review by the Province's Representative under the Consent Procedure	Appendix 7B	Consent Procedure
Construction Quality Management Plan	Submitted prior to performing any Construction, and with allowance for at least 20 Business Days for review by the Province's Representative under the Consent Procedure	Appendix 7C	Consent Procedure
Other Quality Management Plans (see below)	Submitted prior to performing any other relevant Project activities (such as off-site steel fabrication), and with allowance for at least 20 Business Days for review by the Province's Representative under the Consent Procedure	1.5.2	Consent Procedure
Quality Audit Plans	Submitted within 90 days after submittal of the Quality Manual, and with allowance for at least 20 Business Days for review by the Province's Representative under the Consent Procedure	4.1.1(a)	Consent Procedure

Deliverable Name	Due Date	Schedule Reference	Review Procedure or Consent Procedure
Quality Audit Plan Updates	At twelve monthly intervals after the applicable Quality Audit Plan was approved under the Consent Procedure	4.1.1(b)	Review Procedure
Quality Audit Reports	Within 14 days of Quality Audit completion	4.2.2(d)	N/A
Final Quality Report	Within 30 Business Days of Substantial Completion	4.2.2(e)	Consent Procedure
Traffic Management Auditing reports	Within two Business Days following any audit with a Site Condition Rating other than “Acceptable”	4.8(l)	N/A
Monthly Quality Management System reports	Within 15 Business Days of the start of the month following the Effective Date, and for each month after that until the Total Completion Date	5.9.1	N/A

- (b) The documents above that are indicated to be subjected to the Consent Procedure or the Review Procedure will be submitted to the Province’s Representative in accordance with the Consent Procedure or the Review Procedure, as the case may be, pursuant to Schedule 2 [Review Procedure and Consent Procedure]. All other documents will be submitted to the Province’s Representative for information only.

1.5.2 Other Quality Management Plans

The Design-Builder will 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 and financial 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

The Design-Builder will fully implement the Quality Manual and each of the Quality Management Plans on or before the earlier of:

- (a) the implementation dates set out in the Quality Manual and Quality Management Plans, if any; and
- (b) the date that is 180 days after the Effective Date.

1.6.2 Specific Requirements

The Design-Builder will 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 approved or accepted by 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 will ensure that:

- (a) the Design-Builder complies with the Quality Management System detailed in the Quality Manual and any other Quality Documentation in connection with its management activities and any other Project Work carried out by the Design-Builder;
- (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 the Design-Builder or any Subcontractor complies with the relevant Quality Management Plan prepared and implemented pursuant to Section 1.5.2 [Other Quality Management Plans] of this Schedule in connection with the activities covered by that party's contract with the Design-Builder or such Subcontractor (as the case may be); and
- (d) any person who performs any portion of the Project Work will comply 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 will be documented in the Quality Records.

1.8 Continual Improvement

- (a) The Design-Builder will implement a program and will 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 Design-Builder will use the program described in Section 1.8(a) of this Schedule to continually improve the effectiveness and efficiency of the Design-Builder's Quality Management System.
- (c) The Design-Builder will ensure that all of the Design-Builder's employees and Subcontractors 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 will employ a Quality Director, on a full time basis, who will:

- 5 -

- (i) 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; and
 - (ii) be required to report directly to the Design-Builder's Representative.
- (b)** The Quality Director will have a minimum of ten years of experience in a similar quality management representative role for a successful project of similar scope and complexity and will 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 will be subject to the approval of the Province (such approval not to be unreasonably withheld or delayed), and the Quality Director will be a Key Individual subject to the requirements of Section 3.3 [Key Individuals] of this Agreement.
- (d)** Without limiting the generality of the foregoing, the job specification and responsibilities of the Quality Director will include the following:
 - (i) determining, integrating and implementing the actions required to ensure the Quality Management System will achieve its intended results (including addressing any risks and identifying and implementing opportunities for improvement);
 - (ii) developing, implementing and maintaining, and ensuring the effective operation of, the Quality Management System;
 - (iii) verifying that all Quality Documentation conforms to applicable Project Requirements prior to submission to the Province;
 - (iv) coordinating with quality managers, safety advisors and other quality and safety personnel to ensure integration of the Quality Management System and the Health and Safety Program with and between all Project disciplines;
 - (v) initiating management reviews not less frequently than annually, and taking other actions necessary to ensure the effective operation and continual improvement of the Quality Management System;
 - (vi) approving and signing off on all Quality Management System documents, including all revisions;
 - (vii) scheduling and coordinating Independent Quality Audits with the Independent Quality Auditor;
 - (viii) 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);
 - (ix) ensuring that all Quality Audits required under Section 4.2 [Design-Builder's Quality Audits] of this Schedule and under the Quality Documentation are

- 6 -

conducted, and reporting the findings of such audits to the Province's Representative;

- (x) having the authority to immediately stop any work or activity which is not being performed or carried out in accordance with the Quality Documentation or the Health and Safety Program, as applicable thereto;
- (xi) liaising with the Province's Representative and acting as the primary representative for the Design-Builder on all matters relating to quality management;
- (xii) preparing and submitting to the Province's Representative monthly Quality Management System reports;
- (xiii) ensuring that relevant Records are maintained and retained in accordance with this Agreement, the Quality Management System and the Records Management Protocol;
- (xiv) developing and implementing a program for Correction, and where applicable, Corrective Action in respect of Nonconformities;
- (xv) developing and implementing a program for Opportunities for Improvement in respect of potential Nonconformities or continual improvement initiatives;
- (xvi) approving and signing off on the action taken in close out of Nonconformity Reports in accordance with Section 6.1 [Nonconformity Reporting Process] of this Schedule; and
- (xvii) carrying out any other matters which, in accordance with this Agreement, are the responsibility of the Quality Director.

2.2 Quality Managers

The Design-Builder will appoint designated quality managers, with appropriate qualifications and experience, responsible for overseeing, managing, and ensuring the implementation of the Quality Management System throughout the lifecycle of the Project and for ensuring that all Project Work complies with the established quality standards, the requirements of this Agreement and applicable Laws, to ascertain the Project meets the specified design, functionality, and durability criteria, and will:

- (a) not permit any quality management personnel (including the Quality Director) who will perform quality control for the Design or Construction to perform any other role in the Design or Construction;
- (b) ensure that the quality management personnel (including the Quality Director) are not required to, and do not, report to leads or managers responsible for the Design or Construction (though such personnel may be employed or retained by a Subcontractor); and
- (c) ensure that each quality manager for each Quality Management Plan will:

- 7 -

- (i) have expertise in a similar role on a similar successful project and successful completion of an ISO 9001 Lead Auditor Course; and
- (ii) 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 inspection, calibration, sample, test or trial, such inspection, calibration, sample, test or trial will 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 calibrations, samples, tests and trials, whether performed on the Project Site or off the Project Site, will be carried out by laboratories that are duly accredited for the carrying out of such calibrations, samples, tests and trials.
- (b) Laboratory accreditation will 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: CSA A283, “Qualification Code for Concrete Testing Laboratories”, to the appropriate category for the tests being done;
 - (ii) structural steel and welding: 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 the approval of the Province to use other industry-recognized accreditations, which approval will 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 will have a laboratory, registered as a corporation in Canada and accredited in accordance with this Agreement, carry out verification of the materials as follows:

- (a) test and verify that the material meets the requirements of the design;

- 8 -

- (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 structural steel, fabricated steel elements, steel piles, steel strands, stay cables and pre-cast concrete (the "**Structural Components**"), the Design-Builder will, 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 direction of a Professional Engineer (or its designated representative), who will be present on-site at the mills and fabrication facilities on a full time basis or in accordance with a schedule of site visits set out in the Construction Quality Management Plan accepted pursuant to the Consent Procedure, while the manufacture and fabrication of the Structural Components are in process. If the Province's Representative accepts a schedule of site visits (provided in the Construction Quality Management Plan) under the Consent Procedure, the Province retains the right to require the Design-Builder to have additional site visits by the Professional Engineer if quality issues arise;
 - (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) which will include 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 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

- 9 -

- (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, except reports for Corrective Actions, to the Province's Representative for information only at the times and the milestones identified in this Section. Quality reports and assurances which record Corrective Actions, as required under this Section 3.4, will be submitted to the Province's Representative in accordance with the Consent Procedure.

- (b) The Design-Builder will notify the Province's Representative no later than 60 days prior to shipping the Structural Components to the Project Site.
- (c) The Design-Builder will 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]".
- (d) The Design-Builder will cause a principal of the Designer, as required by Part 2 [Design and Certification Procedure] of Schedule 4, 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 relevant Design Data and the provisions of the Agreement".
- (e) The Design-Builder will submit the declarations referred to in Sections 3.4(c) and 3.4(d) of this Schedule to the Province's Representative in accordance with the Review Procedure five Business Days 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 will, 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 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 will ensure that:
 - (i) such Applicable Steel Structural Component will 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 will be completed in accordance with the testing and inspection requirements of DBSS 421 Structural Steelwork and to ensure that such Applicable Steel Structural

- 10 -

Component was not damaged during transportation and that the shop assembly is in accordance with DBSS 421 Structural Steelwork; and

- (iii) the re-inspection of the welding of such Applicable Steel Structural Component is carried out by a CSA W178.2 Level III certified welding inspector accredited with CSA W47.1/W59 to inspect Applicable Steel Structural Components.
- (c) The Design-Builder will immediately 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 will be responsible at its own expense for any remedial work required as a result of any failure to pass any calibration, sample, inspection, 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. The Design-Builder will retain and preserve all test pieces and samples which represent rejected material until Substantial Completion, unless otherwise permitted by the Province in its discretion, at which time the Design-Builder will transfer all such test pieces and samples which represent rejected material to the Province or otherwise dispose of or remove such materials as determined by the Province.

3.7 Test Records and Reports

The Design-Builder will:

- (a) document all inspections and tests;
- (b) maintain all test records and reports as Quality Records in accordance with Section 5.8 [Quality Records] of this Schedule, and ensure they are readily accessible for the audits required by Section 4.2 [Design-Builder's Quality Audits] of this Schedule;
- (c) permit the Province to attend all tests, retests and inspections and provide the Province with all related records and reports for its review;
- (d) provide the Province, on its request, with calibration certificates and records for testing equipment used by the Design-Builder; and
- (e) include the following in connection with all test records and reports:
 - (i) traceability to the item tested;
 - (ii) traceability of the test equipment used;
 - (iii) specific identification of the relevant work and components if unrelated work is on the reports;
 - (iv) actual test results;
 - (v) remarks regarding conformance with this Agreement;

- 11 -

- (vi) name and position of the person who actually performed the measurements;
- (vii) name, position, signature and contact details of the person who verified and approved the test measurement; and
- (viii) contact information of the Subcontractor doing the testing on the test report/letterhead.

PART 4

QUALITY AUDITS AND MONITORING

4.1 Quality Audit Plans

4.1.1 Performance Measures

- (a) The Design-Builder will provide the Quality Audit Plans to the Province's Representative within 90 days after submittal of the Quality Manual, and with an allowance for at least 20 Business Days for review by the Province's Representative under the Consent Procedure.
- (b) The Design-Builder will provide updated Quality Audit Plans at twelve month intervals thereafter under the Review Procedure. At the same time as providing the updated Quality Audit Plan, the Design-Builder will provide an annual summary outlining whether the planned audit schedule was met and whether the Quality Objectives were achieved.

4.1.2 Specific Requirements

Quality Audit Plans will detail the Internal Quality Audits and the External Quality Audits that will 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 will 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 ISO 19011:2018 and 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 those documented in 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

- (a) The Quality Director will schedule Internal Quality Audits (at least every six months) and External Quality Audits (at least annually) to ensure that all key processes are assessed regularly. The Quality Director will ensure that each Internal Quality Audit and each External Quality Audit will include an audit of the Health and Safety Program, unless otherwise determined by the Province in its discretion.

- 12 -

- (b) The Design-Builder will prepare a Quality Audit Plan for each Quality Audit describing the activities, arrangements, scope and criteria for the Quality Audit, and will provide the Quality Audit Plan to the party being audited (whether the Design-Builder or a Subcontractor) in advance to confirm the scope and schedule of the audit.
- (c) Quality Audits will be scheduled taking into account the duration of the work to ensure that each Subcontractor is subject to at least one Quality Audit.
- (d) Within 14 days of completion of any Quality Audit, the Design-Builder will 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.
- (e) The Design-Builder will, not later than 30 Business Days after Substantial Completion, submit to the Province the Final Quality Report, which meets the requirements specified in Section 4.10 [Final Quality Report] of this Schedule, to provide objective evidence that the quality of the Project Work satisfies the requirements of this Agreement.

4.2.3 Specific Requirements

- (a) Internal Quality Audits and External Quality Audits will be scheduled taking into account the Quality Objectives, feedback from the Province, the importance of the processes being audited, risks and opportunities, organizational changes affecting the Design-Builder as well as the results of previous audits.
- (b) Internal Quality Audits and External Quality Audits will be carried out by personnel who have the education, work experience, auditor training and audit experience required to perform the audit, and who demonstrate an ability to successfully apply these attributes to the auditing role. Such auditors will be objective and impartial toward the area(s) being audited.
- (c) Where necessary, follow-up audits will 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 Province may delegate, to any independent auditor or inspection and testing agency, its rights to audit the Project Work. The Design-Builder will provide and will 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

Without limiting any other rights of the Province (including audit rights) provided in this Agreement, 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 work practices, workmanship, performance measures and general quality of materials and completed components; 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

- (a) 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.
- (b) Where the Province initiates a Nonconformity Report, the Design-Builder will investigate, address and track the Nonconformity in accordance with Part 6 [Nonconformities] of this Schedule.
- (c) All other observations and findings identified by the Province and provided to the Design-Builder in an audit report, will be reviewed and evaluated by the Design-Builder for Opportunities for Improvement.

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 including by carrying out spot checks and making independent inspections and tests of the Project Site or the infrastructure, equipment, material, tools, supplies or other items provided in connection with the Project Work, including any of the foregoing 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 will 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 will 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 will 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, will 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 Audit will 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 will, at a minimum, ensure that all input requirements as required by this Agreement are included in the QMS and adhered to in the performance of the Project Work.
- (d) The Design-Builder will 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 will be implemented by the Design-Builder and reported to the Province's Representative promptly after the corrective measure is taken or performed, as applicable.

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 traffic management or safety Nonconformity is reported to or brought to the attention of the Design-Builder via any source, then the Design-Builder will rectify such Nonconformity immediately.

- 15 -

- (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 1 of Schedule 4, the Road Safety Audit process will be implemented in accordance with Article 13 [Road Safety Audit] of Part 1 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 will 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 section within the Quality Manual, the Site Condition Rating checklist will be submitted to the Province’s Representative in accordance with the Consent Procedure. Submissions of subsequent updates to the checklist will be in accordance with Section 5.6 [Changes to Quality Documentation] of this Schedule.
- (e) The Site Condition Rating checklist will provide the framework for auditing the safety and overall management of traffic at a Traffic Site against the requirements contained in the traffic plans set out in Part 3 [Traffic Management] of Schedule 4 (which includes the Traffic Management Plan and the applicable Traffic Control Plans) and the Traffic Management Manual (collectively, the “**Traffic Management Criteria**”).
- (f) The Site Condition Rating checklist, at a minimum, will include the following information:
 - (i) Traffic Management Plan and applicable Traffic Control Plan – in relation to the approved site specific plan;
 - (ii) General Traffic Requirements – in relation to Article 1 [General Traffic Management Requirements] of Part 3 of Schedule 4, including:
 - Storage of materials
 - Traffic control devices
 - Roadside barriers
 - Drop-offs
 - Clear zones
 - Temporary Pavement Markings
 - (iii) Traffic Management Manual – in relation to all relevant requirements.

A sample Site Condition Rating checklist is set out in Appendix 7D [Traffic Management Site Condition Rating Checklist - Sample] to this Schedule. For clarity, the sample checklist is not an exhaustive checklist and will be considered a minimum, and the Design-Builder will submit a checklist as set out in this Schedule based on specific work zone hazards and risks.

- (g) Each item in the checklist will be assigned a number of Site Condition Rating points (“**SCR Points**”) that reflects its relative importance in relation to the other listed items. SCR Points will be assigned to the Design-Builder for each occurrence of non-compliance with Traffic Management Criteria that is identified at the time of the relevant audit (performed by the Design-Builder or the Province) at the Traffic Site that is the subject of such audit. The aggregate of such assigned SCR Points will indicate the applicable site condition rating

- 16 -

(the “**Site Condition Rating**”) for the subject Traffic Site as at the time of the relevant audit. SCR Points will be allotted for a particular Traffic Site in accordance with the Site Condition Rating checklist.

- (h) The following table sets out the Site Condition Ratings, the number of SCR Points that will result in assignment of a particular Site Condition Rating, the action required of the Design-Builder following assignment of a particular Site Condition Rating and the response time within which such action must be taken. As part of the traffic quality management section within the Quality Manual, the Design-Builder will develop and implement a system which details the required action the Design-Builder will take to rectify each non-compliance with the Traffic Management Criteria.

Table 4.8 Site Condition Ratings

Site Condition Rating category	SCR Points	Required Action on Site	Response Time
Acceptable	1 – 10	Undertake remedial action to bring the subject site up to an "Acceptable" standard.	4 hours (if applicable)
Marginal	11 - 20	Undertake remedial action to bring the subject site up to an "Acceptable" standard.	2 hours
Needs Improvement	21 - 30	Undertake remedial action to bring the subject site up to an "Acceptable" standard.	1 hour
Unacceptable	31+	Immediately cease all work on the subject site and undertake remedial action to bring the subject site up to an "Acceptable" standard.	Immediate

- (i) If the Design-Builder does not respond with the required action within the required response time, as provided in Table 4.8 [Site Condition Ratings], a new non-compliance will be deemed to occur at the end of such response time and the applicable SCR Points will be doubled for the new non-compliance. The provisions of this Section 4.8(i) will apply and will continue to apply until the Design-Builder rectifies the non-compliance. This may result in a change to the Site Condition Rating and, if applicable, the assignment of NCE Points in accordance with Section 4.8(k) of this Schedule.
- (j) At a minimum, Traffic Management Auditing will be carried out weekly by the Design-Builder and on a specifically-selected temporary traffic control set-up. Traffic Management Auditing will be planned taking into consideration the status, importance and level of risk of each traffic control set-up, and generally rotate through the traffic control set-ups implemented for the Project at that time.
- (k) Where a Traffic Site, which is subject to a traffic audit, receives an "Unacceptable" Site Condition Rating, as identified in Table 4.8 [Site Condition Ratings], one NCE Point will be assigned for every 31 SCR Points allocated to the particular Traffic Site, in accordance with Appendix 9A [Assignment of NCE Points] of Schedule 9 to this Agreement. For example, if a particular Traffic Site receives 31 SCR Points, one NCE Point will be

- 17 -

awarded, and if a particular Traffic Site receives 62 SCR Points, two NCE Points will be awarded.

- (l) The Design-Builder will provide copies of all Traffic Management Auditing reports with a Site Condition Rating other than "Acceptable" to the Province within two Business Days following the audit.
- (m) 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.

4.9 Health and Safety Reviews or Auditing

- (a) If any Design-Builder or Province audit in accordance with this Agreement identifies any health or safety Nonconformity, or if a health or safety Nonconformity is reported to or brought to the attention of the Design-Builder via any source, then the Design-Builder will rectify such Nonconformity immediately.
- (b) In addition to any other review and audit requirements set out in this Agreement or as otherwise required by any Health and Safety Laws, the Design-Builder will perform, at a minimum:
 - (i) weekly safety inspections of the ongoing Construction activities; and
 - (ii) monthly workplace safety inspections of the parts of the Project Site where the Design-Builder is the Prime Contractor.

4.10 Final Quality Report

The Design-Builder will submit a Final Quality Report that includes the following:

- (a) a year-by-year summary, up to the Substantial Completion Date, of the Internal Quality Audits and External Quality Audits performed in each calendar year, the scope of such audits, and the number of Nonconformities discovered by such audits in that the applicable calendar year; and
- (b) confirmation that:
 - (i) all scheduled and unscheduled Internal Quality Audits and External Quality Audits have been performed; and
 - (ii) all remedial work, Corrections, and Corrective Actions (if applicable) have been completed.

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 C inclusive to this Schedule. The Design-Builder's Quality Management System will

- 18 -

also comply with the requirements and principles of the ISO 9001:2015 Standard, this Schedule, and the principles of the ISO 9004:2018 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 will also incorporate the requirements of the following:

- (a) ISO 9001:2015 Standard;
- (b) ISO 9004:2018 Standard;
- (c) ISO 9000:2015 Standard;
- (d) ISO 19011:2018 Standard;
- (e) ISO 14001:2015 Standard;
- (f) ISO/IEC 17025:2017 Standard;
- (g) ISO 10005:2018 Standard; and
- (h) ISO 45001: 2018 Standard.

5.3 Quality Documentation Requirements

The minimum documentation requirements for the Quality Management System are:

- (a) the documents required by ISO 9001:2015;
- (b) the Quality Manual as required pursuant to Section 1.5 [Documentation Deliverables] of this Schedule;
- (c) Quality Management Plans for all aspects of the Project Work as required pursuant to Section 1.5 [Documentation Deliverables] of this Schedule;

- 19 -

- (d) that the following are included in each Quality Management Plan:
 - (i) quality system procedures and process flow charts documenting who does the work, what they do, and what evidence will be generated that they have done the work correctly; and
 - (ii) the Quality Audit Plans required pursuant to Section 4.1 [Quality Audit Plans] of this Schedule;
- (e) Work Method Statements, as applicable;
- (f) Inspection and Test Plans, as applicable;
- (g) geotechnical and environmental monitoring plans, as applicable; and
- (h) the Records required pursuant to Section 5.8 [Quality Records] of this Schedule.

5.4 Submission of Quality Documentation

- (a) The Design-Builder will 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 will (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 will 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 will 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 Review Procedure any proposed changes or additions to or revisions of any of the Quality Documentation.

- 20 -

- (b) Without limiting the generality of Section 5.6(a) of this Schedule, the Design-Builder will from time to time submit to the Province's Representative in accordance with the Review 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 will be dealt with in accordance with the Review Procedure as though it had been proposed by the Design-Builder and will not therefore be treated as a Province Change. Any dispute between the parties in respect of any such change will 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 will be amended to incorporate such part, change, addition or revision.

5.8 Quality Records

- (a) The Design-Builder will establish and maintain complete and accurate quality management records (the "**Quality Records**"), which will form part of the Records.
- (b) The Quality Records will 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

For each month from the Effective Date until the Total Completion Date, the Design-Builder will prepare and submit to the Province's Representative within five 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 will 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 will, 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 open",

- 21 -

“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 list of all 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) Internal Quality Audits and External Quality Audits, including any third party Quality Audits performed during the month and a four month look-ahead schedule for planned future Quality Audits;
- (vii) 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;
- (viii) any changes made to the Quality Management System or the Quality Documentation in compliance with the provisions of this Agreement; and
- (ix) progress report photos.

5.10 Additional Information

- (a) The Corrective Action log and Opportunities for Improvement log as described in Sections 5.9.2(b)(ii) and (iii) of this Schedule will be:
 - (i) maintained and updated until the Total Completion Date; and
 - (ii) made easily accessible to the Province.
- (b) Notwithstanding any other provision of this Schedule, the Design-Builder will 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, will follow the process outlined below:

- 22 -

- (a) If the Design-Builder or the Province discovers a Nonconformity, it will initiate a Nonconformity Report in accordance with the ISO 9001:2015 Standard, and as follows:
 - (i) Design-Builder initiated Nonconformity Reports - Upon discovery of a Nonconformity, the Design-Builder will, 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 Quality Director and the Province's Representative; or
 - (ii) Province initiated Nonconformity Reports - If at any time the Province is notified, or otherwise becomes aware (pursuant to the Province's right to review, audit or inspect the Project Work as permitted in this Agreement, including in accordance with Section 4.3 [Province's Quality Audits] of this Schedule), that there is any Nonconformity relating to the Project Work, the Province may issue a Nonconformity Report to the Quality Director and the Design-Builder's Representative, 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 9 [Performance Mechanism].
- (b) The issuance of a Nonconformity Report to the Quality Director under Section 6.1(a) of this Schedule will start the Nonconformity reporting process. The date the Nonconformity Report is issued will start the time period for which the Nonconformity Report has an 'open' status and will be recorded in the Nonconformity Tracking System.
- (c) The Quality Director will respond to all Nonconformity Reports by reviewing and analyzing the Nonconformity Report, investigating the Nonconformity and the cause(s) of the Nonconformity, and determining if similar Nonconformities exist or could potentially occur.
- (d) The Quality Director will deliver a response to the Nonconformity Report through the Nonconformity Tracking System as soon as possible, but no later than five Business Days after the Nonconformity Report is received. Such response will describe:
 - (i) a Correction of the Nonconformity and, if applicable, a Corrective Action in accordance with the ISO 9001:2015 Standard; and
 - (ii) the date by which the Correction (and Corrective Action, if applicable) will be completed and subject to verification by the Quality Director in accordance with Section 6.1(i) of this Schedule (the "**Correction Target Date**").

The Province may require that the Correction, Corrective Action (if applicable), and the Correction Target Date be revised if the Province, acting reasonably, determines that the Nonconformity could be addressed in a quicker, more efficient, or different manner, in which case the Quality Director will update its response to include the revised Correction, Corrective Action, and Correction Target Date required by the Province to the extent applicable.

- (e) If the Quality Director does not respond to the Nonconformity Report within the timeline provided in Section 6.1(d) of this Schedule, the Province may assign one NCE Point. The Province may assign two additional NCE Points for every two days after the expiry of such timeline, until the Quality Director delivers a response to the Nonconformity Report in

accordance with Section 6.1(d) of this Schedule. Once the Quality Director has delivered a response to the Nonconformity Report in accordance with Section 6.1(d) of this Schedule the NCE Points assigned pursuant to this Section 6.1(e) will be deducted from the NCE Points Balance in accordance with Section 2.2(a)(i) of Schedule 9 [Performance Mechanism] to this Agreement.

- (f) Acceptable responses are set out in Table 6.1 for various scenarios.

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 if applicable.	Describe any improvements to process to prevent reoccurrence. Provide a plan committing to scope and timing of the Corrective Action.
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	N/A	N/A

- (g) The Quality Director will change the status of the Nonconformity Report to 'pending' once a Correction, a Correction Target Date and, if applicable, a Corrective Action have been documented for the Nonconformity in accordance with Section 6.1(d) of this Schedule.
- (h) The Design-Builder will rectify each Nonconformity in accordance with the Correction and, if applicable, the Corrective Action described in the Nonconformity Report. If any Nonconformity arises in respect of a document or course of action that was previously "accepted" pursuant to the Consent Procedure or "received", "received with comments" or deemed "received" pursuant to the Review Procedure, and rectification of the Nonconformity requires a change or amendment to such document or course of action, then the Design-Builder will re-submit the document or course of action to the Province's Representative under the Review Procedure or the Consent Procedure, as applicable.
- (i) Once the Correction (and if applicable, the Corrective Action) for the Nonconformity has been implemented, the Design-Builder will provide the Quality Director and the Province's Representative with written notice that the Correction is ready for verification. The Quality Director will verify the Correction (and, if applicable, the Corrective Action) to ensure it conforms to the requirements of the Nonconformity Report and this Agreement. If the Quality Director verifies that the Nonconformity has been corrected, the Quality Director will then change the Nonconformity Report status to 'closed', and will provide a copy of the Nonconformity Report, together with supporting documents which reflect that the Nonconformity has been corrected, to the Province within two Business Days thereafter.

- 24 -

The Province may, within the one month period after receipt of the 'closed' Nonconformity Report, review and provide comments on the Nonconformity Report. If the Province, acting reasonably, determines that the Nonconformity has not been resolved, that the Correction (or Corrective Action, if applicable) does not conform to the requirements of the Nonconformity Report and the Agreement, or that the Design-Builder has not provided sufficient documentation to confirm that the Nonconformity has been corrected, the Province may provide written notice to the Design-Builder and the Quality Director, upon which the Design-Builder and the Quality Director will have up to five Business Days, or such other reasonable time as may be agreed to by the Province, to rectify the Nonconformity. If the Design-Builder and the Quality Director are unable to rectify the Nonconformity in this time, the Quality Director will change the status of the applicable Nonconformity Report to 'pending', and the NCE Points assigned in connection with the applicable Nonconformity will be reassigned by the Province in accordance with Section 2.2(a)(iv)(A) of Schedule 9 [Performance Mechanism] to this Agreement, with additional points being assigned in accordance with Section 6.1(k) of this Schedule.

- (j) If the Quality Director changes the status of a Nonconformity Report to 'pending' in accordance with Section 6.1(i) of this Schedule, it will not be updated to 'closed' until the Design-Builder submits an updated Nonconformity Report (with an updated Correction and/or Corrective Action, as applicable) to the Quality Director and the Province's Representative, and the Province's Representative has verified that the Nonconformity has been corrected.
- (k) If:
 - (i) the status of the Nonconformity Report is not changed to 'closed' in accordance with Section 6.1(i) of this Schedule by the Correction Target Date; or
 - (ii) the status of the Nonconformity Report is changed to 'pending' in accordance with Section 6.1(i) of this Schedule,

the Province may assign one NCE Point. The Province may assign two additional NCE Points for every two days after the Correction Target Date or the date the status of the Nonconformity Report is changed to 'pending' (as applicable), until the status of the Nonconformity Report is changed to 'closed' in accordance with Section 6.1(i) or Section 6.1(j) of this Schedule (as applicable). Once the status of the Nonconformity Report is changed to 'closed', the NCE Points assigned in connection with the applicable Nonconformity Report will be deducted from the NCE Points Balance.

- (l) The Quality Director may not revise the Correction, Corrective Action, or the Correction Target Date delivered in its response to the Nonconformity Report (provided in accordance with Section 6.1(d) of this Schedule, without obtaining the prior written approval of the Province, such approval to be given or withheld in the Province's sole discretion.
- (m) Nothing in this Section 6.1, including a Nonconformity Report being marked 'closed' and the Province's review of any Nonconformity Report, will limit the rights of the Province to conduct follow up reviews, inspections and audits in accordance with this Agreement (including in accordance with Section 4.3 [Province's Quality Audits] of this Schedule) to determine if the Design-Builder's Correction (and Corrective Action, if, applicable), submitted in accordance with this Section 6.1, has been implemented and completed.

- 25 -

- (n) 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.
- (o) If the Design-Builder fails to object to a Nonconformity Report issued by the Province within five Business Days of issuance, the Design-Builder is deemed to have accepted that Nonconformity Report and waived its right to object to the Nonconformity Report issued by the Province. If, in accordance with Section 6.1(i) of this Schedule, the Province determines that a Nonconformity has not been resolved, that a Correction (or Corrective Action, if applicable) does not conform to the requirements of the Nonconformity Report and the Agreement, or that the Design-Builder has not provided sufficient documentation to confirm that the Nonconformity has been corrected, and if the Design-Builder fails to object to the Province's determination within five Business Days of the Province making its determination, the Design-Builder is deemed to have accepted the Province's determination in accordance with Section 6.1(i) of this Schedule, and waived its right to object to the Province's determination.

6.2 Nonconformity Tracking System

- (a) The Design-Builder will implement and maintain a live, electronic, internet-based Nonconformity Tracking System to monitor the status of all Nonconformity Reports, whether initiated by the Province or the Design-Builder. In developing the Nonconformity Tracking System, the Design-Builder will work with the Province, including obtaining the Province's feedback, to ensure the Nonconformity Tracking System meets the requirements in this Agreement.
- (b) The Design-Builder will submit a fully operating Nonconformity Tracking System under the Consent Procedure within 90 days from the Effective Date, which will meet the following minimum requirements:
 - (i) comprise a single repository containing both the Design-Builder and Province initiated Nonconformity Reports;
 - (ii) include the Nonconformity records described in Section 6.4 [Nonconformity Records] of this Schedule;
 - (iii) have the ability to attach supporting material such as photos and documents to Nonconformity Reports;
 - (iv) provide live access to the current status of any Nonconformity Report issued in connection with the Project;
 - (v) automatically apply NCE Points (including reassigned NCE Points) to each Nonconformity in accordance with this Schedule and Schedule 9 [Performance Mechanism];

- 26 -

- (vi) allow for the application of additional NCE Points to individual Nonconformity Reports in accordance with this Schedule and Schedule 9 [Performance Mechanism];
 - (vii) output the total daily and monthly NCE Point total; and
 - (viii) produce monthly summary Reports for delivery to the Province's Representative 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.
- (c) The Design-Builder will give the Province full access to the Nonconformity Tracking System, which will allow the Province to review, but not edit, the Nonconformity Tracking System and the Nonconformity Reports therein, other than Nonconformity Reports issued by the Province in accordance with Section 6.1(a)(ii) of this Schedule, which the Province will be able to issue or edit, as applicable.
 - (d) Once the Nonconformity Tracking System has been endorsed "accepted" under the Consent Procedure, the Design-Builder will hold seminars to train Province personnel on the use of the Nonconformity Tracking System.

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 2.4 [Assignment of Default Points] of Schedule 9.

6.4 Nonconformity Records

In addition to the maintenance of the Nonconformity Tracking System under Section 6.2 [Nonconformity Tracking System] of this Schedule, the Design-Builder will maintain records of:

- (a) each Nonconformity;
- (b) the reference numbers of all Nonconformity Reports;
- (c) a description of all Nonconformity Reports;
- (d) the Quality Director's response to the applicable Nonconformity Report;
- (e) the proposed actions by the Design-Builder to rectify each Nonconformity;
- (f) the date and time at which Nonconformities were identified;
- (g) the date and time at which the status of Nonconformity Report is changed to "pending" in accordance with Section 6.1(g) of this Schedule; and
- (h) the date and time at which a Nonconformity specified in a Nonconformity Report was rectified.

APPENDIX 7A
QUALITY MANUAL

1.0 QUALITY MANUAL

- 1.1 The Design-Builder will 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 will establish the Quality Policy and Quality Objectives for all aspects of the Project Work and will describe the processes that will be established, implemented, controlled, and continually improved to achieve the established Quality Objectives.
- 1.2 The Quality Objectives will 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 will 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 will be subject to Internal Quality Audits and External Quality Audits.
- 1.3 The Quality Manual will 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) will interface with each other. The Quality Manual will also provide the organization chart, authority and responsibilities of all key personnel. The Quality Manual will 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 will include a section addressing the Traffic Quality Management requirements set out in Part 2.0 of this Appendix.
- 1.5 The Quality Manual will include a section addressing the Environmental Quality Management requirements set out in Part 3.0 of this Appendix.
- 1.6 The Quality Manual will clearly define the reporting function and authority of the Design-Builder's Quality Director who will liaise with the Province's Representative and act as the single point representative of the Design-Builder for all matters relating to quality management.

2.0 TRAFFIC QUALITY MANAGEMENT REQUIREMENTS

- 2.1 The Design-Builder will provide a comprehensive Traffic Quality Management section within the Quality Manual 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. Traffic Quality Management will address all phases of the Project Work including Design and Construction. Traffic Quality Management will also detail coordination of traffic management strategies with the Ministry maintenance contractors and emergency services.
- 2.2 The Traffic Quality Management section of the Quality Manual will outline an organizational chart, identifying key Traffic Management personnel and their relationship with the Quality Director for

- 2 -

the overall Quality Management System as documented in the Quality Manual. It will 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.

2.3 The Traffic Quality Management section of the Quality Manual will at a 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 Traffic Management obligations, including the preparation and implementation of the Traffic Management Plan and sub-plans;
- (b) Traffic Control Plan design input and output review;
- (c) Traffic Control Plan design verification to ensure that design input requirements have been met;
- (d) Traffic Control Plan design validation to ensure that the final product is capable of meeting its intended use;
- (e) Traffic Control Plan design changes;
- (f) Subcontractors' quality assessment and procurement;
- (g) External Quality Audits of Subcontractors;
- (h) Internal Quality Audits;
- (i) control of nonconforming activities and/or product;
- (j) the Design-Builder's actions to rectify: (i) any nonconforming Traffic activities or nonconforming Traffic products; and (ii) any non-compliance with the Traffic Management Criteria, within the required response times provided in Table 4.8 of this Schedule;
- (k) Corrective Actions;
- (l) Opportunities for Improvement;
- (m) document management; and
- (n) control of Records.

The above procedures and flow charts will document who does the work, what they do, and what evidence is generated that they have done the work correctly.

2.4 When any of the above processes are addressed as part of other Quality Documentation, these processes will still be provided with their own sub-section heading in the Traffic Quality Management section of the Quality Manual, but the details of such processes in the applicable section of the Quality Manual may be limited to a reference to the section or paragraph of the other

- 3 -

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 or the applicable Traffic Control Plans must include detailed quality system procedures and process flow charts under the Traffic Quality Management section within the Quality Manual.

- 2.5 The Traffic Management Auditing process and Site Condition Rating checklist as described in Section 4.8 [Traffic Management Auditing] of this Schedule will be incorporated into the Traffic Quality Management section of the Quality Manual.

3.0 ENVIRONMENTAL QUALITY MANAGEMENT REQUIREMENTS

- 3.1 The Design-Builder will provide a comprehensive Environmental Quality Management section within the Quality Manual 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. Environmental Quality Management provisions will address all phases of the Project Work including Design and Construction.
- 3.2 The Environmental Quality Management section of the Quality Manual will contain an organizational chart identifying key environmental management personnel and their relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It will 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.
- 3.3 The Environmental Quality Management section of the Quality Manual will 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) staff environmental orientation and training;
 - (c) environmental work plans;
 - (d) obtaining and maintaining Permits;
 - (e) environmental monitoring and reporting;
 - (f) environmental incident reporting and tracking;
 - (g) stop work procedure and documentation;
 - (h) External Quality Audits of Subcontractors;
 - (i) Internal Quality Audits;

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 7: QUALITY MANAGEMENT
Appendix 7A: Quality Manual

Commercial in Confidence
Execution

- 4 -

- (j) control of nonconforming activities and/or products;
- (k) Corrective Actions;
- (l) Opportunities for Improvement;
- (m) document management; and
- (n) control of Records.

The above procedures and flow charts will document who does the work, what they do, and what evidence is generated that they have done the work correctly.

- 3.4 When any of the above processes are addressed as part of other Quality Documentation, such as the Quality Management Plan, these processes will still be provided with their own section heading in the Environmental Quality Management section of the Quality Manual, but the details of such processes in the applicable section of Environmental Quality Management 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 section of the Quality Manual.
- 3.5 The Environmental Quality Management section of the Quality Manual will 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 7B
DESIGN QUALITY MANAGEMENT PLAN

1.0 DESIGN QUALITY MANAGEMENT PLAN

- 1.1 The Design-Builder will 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 will contain an organizational chart identifying key design management personnel and their relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It will also contain a description of the responsibilities, qualifications, and authority of the above personnel, as well as Subcontractors, and the organizational interfaces, reporting and communication among the above personnel, and with other engineering groups, environmental management, and construction disciplines, Subcontractors, external stakeholders and others involved in the Project Work.
- 1.3 The Design Quality Management Plan will, 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) compliance with the Design and Certification Procedure;
 - (e) design changes;
 - (f) design subcontractor quality assessment and procurement;
 - (g) field reviews;
 - (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 design subcontractor(s);
 - (j) Internal Quality Audits;
 - (k) control of nonconforming activities and/or product and re-submission of documents and courses of action under the Review Procedure and Consent Procedure in accordance with Section 6.1(h) of this Schedule;
 - (l) Corrective Actions;
 - (m) Opportunities for Improvement;

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 7: QUALITY MANAGEMENT
Appendix 7B: Design Quality Management Plan

Commercial in Confidence
Execution

- 2 -

- (n) document management;
- (o) control of Records; and
- (p) management of equipment and human resources, including the assessment of competence and training needs.

The above procedures and flow charts will document the practices, resources, and sequence of activities to be used to ensure that quality standards, materials, and processes are maintained and verified, including documentation of 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 will 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 7C
CONSTRUCTION QUALITY MANAGEMENT PLAN

1.0 CONSTRUCTION QUALITY MANAGEMENT PLAN

- 1.1 The Design-Builder will 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 will contain an organizational chart identifying key Construction management personnel and their relationship with the Quality Director for the overall Quality Management System as documented in the Quality Manual. It will 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, Subcontractors, external stakeholders and others involved in the Project Work.
- 1.3 The Construction Quality Management Plan will, at a minimum, include or reference detailed quality system procedures and process flow charts for the following processes:
- (a) Construction safety audits;
 - (b) inspection, testing and monitoring;
 - (c) materials identification and traceability;
 - (d) chain of custody for sampling and testing;
 - (e) receiving inspections;
 - (f) Subcontractors' quality assessment and procurement;
 - (g) management of equipment and human resources, including the assessment of competence and training needs;
 - (h) 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 during Construction;
 - (i) External Quality Audits of Subcontractors;
 - (j) Internal Quality Audits;
 - (k) control of nonconforming activities and/or product;
 - (l) Corrective Actions;
 - (m) Opportunities for Improvement;
 - (n) document management;

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 7: QUALITY MANAGEMENT
Appendix 7C: Construction Quality Management Plan

Commercial in Confidence
Execution

- 2 -

- (o) control of Records; and
- (p) any other processes and procedures that are mandatory under the ISO 9001:2015 Standard.

The above procedures and flow charts will document the practices, resources, and sequence of activities to be used to ensure that quality standards, materials, and processes are maintained and verified, including documentation of 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 will 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 will include or reference an Inspection and Test 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 Test Plan will, at a minimum, include:
 - (a) description of the inspection, test and monitoring activity;
 - (b) frequency of inspections, tests and monitoring;
 - (c) calibration and certification program that describes the plan and standards applied to the calibration and certification, all measuring equipment and tools to be used in the performance of the Project Work and the implementation of the Quality Management System;
 - (d) reference to standards, codes, specifications, and acceptance criteria;
 - (e) reports, documents, certificates and checklists required;
 - (f) personnel responsible for inspection, testing and monitoring activity;
 - (g) quality assurance review, witness and hold points; and
 - (h) description and frequency of geotechnical instrumentation monitoring and adherence to acceptance criteria.

The Construction Quality Management Plan will also identify all major work activities requiring detailed Work Method Statements. Work Method Statements will describe the processes and methodologies required to deliver the Project Work. Work Method Statements will be developed and in place prior to the commencement of the relevant work activity.

APPENDIX 7D
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

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

*Commercial in Confidence
Execution*

SCHEDULE 7: QUALITY MANAGEMENT

Appendix 7D: Traffic Management Site Condition Rating Checklist - Sample

- 2 -

SITE CONDITION RATING

Category & Item		SCR Points	Tally box	Total
Regulatory Signs (excluding parking Signs)	Sign missing	31		
	Incorrect Sign	31		
	Sign not located as per TCP	15		
	Sign in poor condition (faded/damaged)	5		
	Sign misaligned/not visible	31		
	Contradictory signs not covered/removed	31		
	Unapproved sign layout/material	15		
	Sign too low	15		
	Sign obscured	31		
	Sign obstructs Traffic	31		
Parking Signs	Sign missing	5		
	Incorrect Sign	5		
	Sign not located as per TCP	5		
	Sign in poor condition (faded/damaged)	5		
	Sign misaligned/not visible	5		
	Contradictory signs not covered/removed	5		
	Unapproved sign layout/material	5		
	Sign too low	5		
	Sign obscured	5		
	Sign obstructs Traffic	15		
Pavement Markings	Missing Pavement Markings	15		
	Incorrect Pavement Markings	15		
	Pavement Markings not located as per TCP	15		
	Pavement Markings in poor condition (faded)	5		
	Contradictory Pavement Markings not adequately eradicated	31		
Warning Signs	Sign missing	15		
	Incorrect Sign	2		
	Sign not located as per TCP	2		
	Sign in poor condition (faded/damaged)	2		
	Sign misaligned/not visible	2		
	Contradictory Signs not covered/removed	15		
	Unapproved Sign layout/material	2		
	Sign too low	2		
	Sign obscured	2		
	Sign obstructs Traffic	15		
	Flashing arrow board (FAB) missing/not functioning	31		
	Flashing arrow board (FAB) not located as per TCP	15		
	Warning Signs not adequate	15		
Traffic Advisory Signs, PDMSs and Information Signs	Incorrect messaging	5		
	Sign not located as per TCP	5		
	Messaging not current/valid	5		
	Contradictory messaging	5		
	Sign obstructs Traffic	5		

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

**Commercial in Confidence
Execution**

SCHEDULE 7: QUALITY MANAGEMENT

Appendix 7D: Traffic Management Site Condition Rating Checklist - Sample

- 3 -

Category & Item		SCR Points	Tally box	Total
Delineation Devices	Guidance	Device not provided as per TCP	5	
		Device in poor condition (damaged/faded)	5	
		Device misaligned or missing	5	
	Safety	Pedestrians	31	
		Workers	31	
		Cyclists	31	
Protective Works	Barriers/fencing not located as per TCP	31		
	Excavation not adequately protected	31		
	Workers not adequately protected	31		
	Barriers/fencing incorrectly located	31		
	Barriers installed with inadequate tapers	15		
	Barriers/fencing misaligned	15		
	Barriers/fencing damaged	15		
	Barriers have exposed ends facing Traffic	31		
Miscellaneous	Change to illumination resulting in unsafe Traffic conditions or working conditions	15		
	Workers working in live lanes	31		
	PPE not worn by workers	31		
	PPE in poor condition	15		
	Construction equipment materials obstruct Traffic, pedestrians or cyclists	31		
SCR POINT TOTAL				

**Audit Result (Site
Condition Rating)**

*Acceptable
(0-10)*

*Marginal
(11-20)*

*Needs Improvement
(21-30)*

*Unacceptable
(31+)*

Actions taken

**SCHEDULE 8
LANDS**

PART 1 GENERAL TERMS.....	1
1.1 Access to and Responsibility for Project Site	1
1.2 Limited Use.....	1
1.3 Location of Project Facilities	2
1.4 No Registration	2
PART 2 TERMS AFFECTING PROJECT SITE ACCESS.....	2
2.1 Project Site Access Subject to Other Rights	2
2.2 Project Lands Not Yet Acquired.....	3
2.3 Commencement of Access to Project Site	3
2.4 Design-Builder to Provide Assistance	3
2.5 Termination of Project Site Access.....	3
PART 3 PROJECT LANDS AND OTHER LANDS.....	3
3.1 Postponement of Specified Access Date.....	3
3.2 Early Specified Access Date	4
3.3 Other Lands.....	4
3.4 Design-Builder Not to Acquire Project Lands.....	5
3.5 Acquisition of Additional Project Lands by the Province	5
PART 4 LAND RIGHTS AND ENCUMBRANCES	5
4.1 Performance of Agreements	5
4.2 Exceptions to Design-Builder Responsibilities for Project Lands.....	5
4.3 Project Work to Comply	6
4.4 Additional Agreements	6
4.5 No Encumbrances by Design-Builder	7
4.6 Notice of Liens.....	7
4.7 Removal of Liens.....	8
4.8 Compliance with <i>Builders Lien Act</i> and Payments to Subcontractors	8
PART 5 OTHER PROPERTY MATTERS.....	9
5.1 Design-Builder Property Obligations	9
Appendix 8A Project Lands	
Appendix 8B Certain Project Site Encumbrances	
Appendix 8C Project Lands Drawings	
Appendix 8D Design-Builder Property Obligations	

PART 1
GENERAL TERMS

1.1 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 this Schedule 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 this Agreement, including Part 11 [Province's Monitoring and Step-In Rights] of this Agreement and Part 11 [Use, Access and Uncovering Work] of Schedule 3 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 will 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 1.1(a)(ii) of this Schedule), 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 will cease, provided that such cessation will 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 1.1(c) of this Schedule.
- (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 will, 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.

1.2 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 will not make any use of, or

- 2 -

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) In addition to the restrictions in Section 1.2(a) of this Schedule, the Design-Builder will make only such use of, and will cause the Subcontractors and all other persons engaged or involved in the performance of the Project Work, and their respective representatives, agents, employees and contractors to make only such use of, the Municipal Infrastructure as may be necessary for the purposes of carrying out the Project Work that specifically relates thereto, and no other Project Work, and in so doing the Design-Builder will make all reasonable efforts, and will cause the Subcontractors and all other persons engaged or involved in the performance of the Project Work, and their respective agents, employees and contractors to make all reasonable efforts, to avoid or, if unavoidable, to minimize, disruption to the operations and use of, and physical damage to, the Municipal Infrastructure.
- (c) Without limiting the generality of the foregoing, except as permitted by or pursuant to Section 2.5(a) of this Agreement, the Design-Builder will 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.

1.3 Location of Project Facilities

The Design-Builder covenants and agrees that no part of the New Project Infrastructure will be constructed or located on any lands that are not Project Lands.

1.4 No Registration

Subject to the Design-Builder's rights pursuant to the *Builders Lien Act* (British Columbia), the Design-Builder will 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.

PART 2 TERMS AFFECTING PROJECT SITE ACCESS

2.1 Project Site Access Subject to Other Rights

Without limiting any other provision of this Agreement, the Design-Builder's rights of access to, entry upon and use of the Project Site are subject to the following (collectively, the “**Conditions of Access**”):

- (a) in the case of any part of the Project Site that is Crown land, all rights over Crown land;
- (b) in the case of any part of the Project Site which is subject to the *Land Title Act* (British Columbia), any applicable exceptions to indefeasible title set out in section 23(2) thereof;
- (c) any Compulsory Acquisition Orders and any Land Rights in respect of any part or parts of the Project Site;

- 3 -

- (d) the Utility Agreements affecting the Project Site;
- (e) Indigenous Requirements; and
- (f) the Requirements of Interested Parties.

2.2 Project Lands Not Yet Acquired

The Design-Builder acknowledges that, as at the Effective Date, the Province may not have acquired all Project Lands and Land Rights in respect of all such Project Lands.

2.3 Commencement of Access to Project Site

The Province will make each part of the Project Site available for access by the Design-Builder in accordance with Section 1.1(a)(i) of this Schedule on or before the Specified Access Date.

2.4 Design-Builder to Provide Assistance

The Design-Builder will provide such information and documentation and such assistance as may be reasonably requested by the Province and as the Design-Builder may be able to provide, to assist the Province in completing the acquisition in respect of any Project Lands or Land Rights.

2.5 Termination of Project Site Access

Subject to Section 1.1(c) of this Schedule, the Design-Builder's access to each part of the Project Site pursuant to Section 1.1(a)(i) of this Schedule will terminate and expire on the earlier to occur of:

- (a) the Substantial Completion Date;
- (b) the Access Period Expiry Date;
- (c) 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
- (d) the Termination Date.

PART 3 PROJECT LANDS AND OTHER LANDS

3.1 Postponement of Specified Access Date

The Province may, by notice to the Design-Builder, postpone any Specified Access Date, from time to time, with respect to any parcel of Project Lands or Land Rights, and any such postponement will be treated as a Compensation Event.

- 4 -

3.2 Early Specified Access Date

The Province, in its discretion and at any time on 20 Business Days' notice to the Design-Builder, may make available to the Design-Builder any part of the Project Lands pursuant to Section 1.1(a)(i) of this Schedule which has not yet been made available to the Design-Builder and the date so specified in the notice will thereafter be the Specified Access Date for the purposes of this Agreement.

3.3 Other Lands

- (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 Lands, desired by the Design-Builder, or required, to enable the Design-Builder to perform its obligations under this Agreement.
- (b) The Design-Builder will 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 respect of Other Lands acquired or used for the purposes of performing the obligations of the Design-Builder under this Agreement.
- (c) The Design-Builder will 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 respect of Other Lands 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 Lands, for the purposes of performing the obligations of the Design-Builder under this Agreement, and before using or allowing the use of any Other Lands for such purposes, the Design-Builder will provide to the Province Representative:
 - (i) 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; and
 - (ii) a draft of the lease or other agreement pursuant to which the Design-Builder proposes to acquire any access to or use of, or any Land Rights in respect of, such Other Lands, the terms of which lease or other agreement will be subject to the approval of the Province acting reasonably.
- (e) At the Province's direction, the Design-Builder will ensure that, if this Agreement is terminated prior to the Substantial 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 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 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 3.3(e), the Design-Builder will 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 incurred by, or brought or made against,

- 5 -

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 3.3(e) will survive the termination of this Agreement.

3.4 Design-Builder Not to Acquire Project Lands

For greater certainty, neither the Design-Builder, nor any Subcontractor, nor any Affiliate of the Design-Builder or of a Subcontractor will acquire Project Lands or Land Rights in Project Lands (including for certainty any rights to the airspace above or the surface or subsurface of any such lands), without the prior written consent of the Province in its discretion.

3.5 Acquisition of Additional Project Lands by the Province

The Design-Builder may submit a Value Engineering Proposal in accordance with Part 2 [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 4 LAND RIGHTS AND ENCUMBRANCES

4.1 Performance of Agreements

Without limiting or derogating from any other obligation of the Design-Builder pursuant to this Agreement, the Design-Builder will:

- (a) observe, comply with and perform, and cause the Subcontractors and any other person for whom the Design-Builder is in law responsible to observe, comply with and perform, all Site Requirements and any Compulsory Acquisition Orders, Utility Agreements, Indigenous Requirements, Requirements of Interested Parties and Permits; and
- (b) not do or omit to do, and not cause or permit to be done or omitted by any Subcontractor, or any other person for whom the Design-Builder is in law responsible, anything that would constitute or result in non-compliance with any of the Site Requirements or any Compulsory Acquisition Orders, Indigenous Requirements, Requirements of Interested Parties and Permits.

4.2 Exceptions to Design-Builder Responsibilities for Project Lands

With respect to Project Lands, the Design-Builder will not have any obligation to pay any rent, land user fees, property taxes (if any) or occupancy costs that are or become payable by the Province in respect

- 6 -

thereof or to indemnify third parties in respect of the non-payment thereof, except for any rent, land user fees, property taxes or occupancy costs that become payable as a direct result of a failure by the Design-Builder to observe, comply with or perform:

- (a) any of the Site Requirements; or
- (b) any obligations of the Design-Builder under this Agreement.

4.3 Project Work to Comply

The Design-Builder will perform the Project Work such that:

- (a) the Design-Builder observes, complies with and performs all Site Requirements, Compulsory Acquisition Orders, Utility Agreements, Indigenous Requirements, Requirements of Interested Parties and Permits;
- (b) all Project Work is performed in a manner that does not breach any of the Site Requirements, Compulsory Acquisition Orders, 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, any Subcontractor or any other person for whom the Design-Builder is in law responsible, that gives rise to a right for any person to obtain any Land Rights or creates an Encumbrance on the Project Site, the Project Infrastructure or the Plant or any part thereof.

4.4 Additional Agreements

- (a) The Province may from time to time obtain, enter into, assume or grant, additional or amended agreements that create new Site Requirements or amend existing Site Requirements and all obligations of the Design-Builder under this Agreement will apply with respect to such new or amended Site Requirements, including those resulting from Compulsory Acquisition Orders.
- (b) If the Province obtains, enters into, assumes or grants any such additional or amended agreements after the Financial Submittal Date, or otherwise amends any of the Site Requirements after the Financial Submittal Date, the Province will issue a request for a Province Change and the provisions of Part 7 [Changes] of this Agreement will apply accordingly unless:
 - (i) such additional or amended agreement, or other amendment, is formalizing an arrangement between the relevant parties substantially on the same terms as, or formalizing the terms which, have been disclosed in the Disclosed Data prior to the Financial Submittal Date;
 - (ii) such additional or amended agreement, or other amendment, including the ALC Resolution, is on terms:
 - (A) disclosed in the Disclosed Data prior to the Financial Submittal Date;

- 7 -

(B) substantially the same as those disclosed in the Disclosed Data prior to the Financial Submittal Date; or

(C) which have no material adverse impact upon the Design-Builder; or

(iii) in the case of the ALC Resolution, it is issued prior to the Effective Date,

and, in the cases of Sections 4.4(b)(i), 4.4(b)(ii) and 4.4(b)(iii) of this Schedule, the Province will give the Design-Builder prompt notice of having entered into the additional or amended agreement.

4.5 No Encumbrances by Design-Builder

(a) The Design-Builder will not:

(i) grant, create, incur or cause any Encumbrance upon, affecting or against all or any part of the Project Site, the Project Infrastructure or any Plant title to which has passed to the Province in accordance with Section 2.7 [Transfer of Title] of this Agreement; nor

(ii) do or omit to do, or cause, suffer or permit to be done or omitted by any Subcontractor or any other 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 2.7 [Transfer of Title] of this Agreement.

(b) If all or any part of the Project Site or the Project Infrastructure or any Plant becomes subject to any Encumbrance as a result of a breach of Section 4.5(a) of this Schedule, the Design-Builder will immediately take all necessary steps to remove such Encumbrance. Subject to Section 4.7 [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 either the Province may, but without any obligation to do so, remove or cause to be removed the Encumbrance at the Design-Builder's cost.

(c) The Design-Builder will 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 Design-Builder's breach of this Section 4.5.

4.6 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 filed against or otherwise affect or relate to the Project Site or the Project Infrastructure or any part thereof, promptly after the Design-Builder becomes aware thereof.

- 8 -

4.7 Removal of Liens

- (a) Without limiting the generality of Section 4.5 [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 filed against or otherwise affect or relate to the Project Site or the Project Infrastructure or any part thereof to be either:

- (i) paid, satisfied, released and vacated and, if filed, to be cancelled from title; or
- (ii) removed or cancelled from title following the procedures set out in the *Builders Lien Act* (British Columbia),

within 15 Business Days (or such longer period as may reasonably be required in the circumstances (including where the Design-Builder is disputing any such Adverse Claim in good faith and is in compliance with its obligations under Section 4.7(b) of this Schedule, provided that the Design-Builder is proceeding with all due diligence) following the date on which the Design-Builder becomes aware thereof and, if the Design-Builder fails to do so, the Province may, but without any obligation to do so, pay, satisfy and discharge the Adverse Claim or cause it to be removed or cancelled from title by paying money into or posting security with the Court. The Design-Builder will, on demand, reimburse the Province (as the case may be) all amounts so paid or attributable to or drawn under the security so posted together with all related costs (including legal costs) and the provisions of Section 1.4 [Province's Right of Set-Off] of Schedule 10 will apply to all such amounts, costs and expenses.

- (b) If the Design-Builder, in good faith, disputes any Adverse Claim, the Design-Builder will be entitled to defend against the Adverse Claim in any proceedings if the Design-Builder first:
- (i) pays into Court an amount of money equal to, or posts with the Court sufficient security for, the amount claimed and costs as the Court may direct, and obtains a Court order for the removal or cancellation of such Adverse Claim as an Adverse Claim filed against or otherwise affecting or pertaining to the Project Site or Project Infrastructure or any part thereof, and registers any such order in the Land Title Office to remove or cancel any such Adverse Claim from title to the Project Site or any part thereof; or
 - (ii) provides to the Province's Representative such other security or remedies in favour of the Province in respect of such Adverse Claim as are acceptable to the Province, acting reasonably.

4.8 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.

- 9 -

- (b) Without limiting any of its other rights or obligations under this Agreement or any Laws, the Design-Builder will pay or provide for the payment when due, and will 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 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).

PART 5

OTHER PROPERTY MATTERS

5.1 Design-Builder Property Obligations

The Design-Builder will carry out the specific property obligations and site modification requirements and allowances in relation to the Project Lands as set out in Appendix 8D [Design-Builder Property Obligations] to this Schedule, with such property obligations and site modification requirements and allowances will be in effect from the Effective Date (or, where a Specified Access Date other than the Effective Date is specified for any parcel in Appendix 8A [Project Lands] to this Schedule, the Specified Access Date so specified) to the Total Completion Date.

***HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS***

***Commercial in Confidence
Execution***

**APPENDIX 8A
PROJECT LANDS**

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS
Appendix 8A: Project Lands

Commercial in Confidence
Execution

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS
Appendix 8A: Project Lands

Commercial in Confidence
Execution

- 3 -

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS
Appendix 8A: Project Lands

Commercial in Confidence
Execution

- 4 -

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS

Commercial in Confidence
Execution

APPENDIX 8B
CERTAIN PROJECT SITE ENCUMBRANCES

***HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS***

***Commercial in Confidence
Execution***

**APPENDIX 8C
PROJECT LANDS DRAWINGS**

See attached.

**APPENDIX 8D
DESIGN-BUILDER PROPERTY OBLIGATIONS**

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS
Appendix 8D: Design-Builder Property Obligations

Commercial in Confidence
Execution

- 2 -

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 8: LANDS
Appendix 8D: Design-Builder Property Obligations

Commercial in Confidence
Execution

- 3 -

**SCHEDULE 9
PERFORMANCE MECHANISM**

PART 1 CALCULATION OF PERFORMANCE INCENTIVE PAYMENTS.....	1
1.1 Calculation of Performance Incentive Payments	1
1.2 Calculation of Traffic Management Payments.....	1
1.3 Calculation of Non-Compliance Event Payments.....	3
PART 2 NCE POINTS AND DEFAULT POINTS.....	5
2.1 Assignment of NCE Points	5
2.2 Calculation of NCE Points Balance	7
2.3 Calculation of NCE Points (Default) Balance.....	9
2.4 Assignment of Default Points	9
Appendix 9A Assignment of NCE Points	

PART 1
CALCULATION OF PERFORMANCE INCENTIVE PAYMENTS

1.1 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 5.1(a) of Schedule 10 [Payment] will 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 5.1(a) of Schedule 10 [Payment]

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 5.1(a) of Schedule 10 [Payment], determined in accordance with Section 1.2 [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 5.1(a) of Schedule 10 [Payment], determined in accordance with Section 1.3 [Calculation of Non-Compliance Event Payments] of this Schedule

1.2 Calculation of Traffic Management Payments

- (a) Subject to Sections 1.2(d), 1.2(e), 1.2(f), 1.2(g) and 1.2(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 5.1 [Obligation to make Performance Incentive Payments] of Schedule 10 will be determined in accordance with the following formula:

$$TMP_{pn} = \sum_{i=1}^I \text{Traffic Management Amount}_i$$

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 5.1(a) of Schedule 10 [Payment]

$\text{Traffic Management Amount}_i$ = the Traffic Management Amount in respect of Non-Permitted Traffic Disruption Event i , calculated in accordance with Section 1.2(b) of this Schedule

- 2 -

- (b) The Traffic Management Amount in respect of Non-Permitted Traffic Disruption Event i will be determined in accordance with the following formula:

$$\text{TrafficManagementAmount}_i = LTDE_i \cdot DTDE_i \cdot [TDECC_i]$$

where:

$LTDE_i$ = the aggregate number of lanes closed by Non-Permitted Traffic Disruption Event i of any of Highway 1, Interchange Ramps or Other Specified Roads

$DTDE_i$ = the duration (in minutes, rounded up to the nearest minute) of Non-Permitted Traffic Disruption Event i

$TDECC_i$ = the Traffic Disruption Event Charge in respect of Non-Permitted Traffic Disruption Event i , determined in accordance with Section 1.2(c) of this Schedule

- (c) The Traffic Disruption Event Charge for any Non-Permitted Traffic Disruption Event i will be calculated with reference to the Traffic Disruption Event Charge Lookup Table below:

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 occurs		
Duration of Non-Permitted Traffic Disruption Event i	≥ 2 year prior to Substantial Completion Target Date	< 2 years and ≥ 1 year prior to Substantial Completion Target Date	< 1 year prior to Substantial Completion Target Date and after Substantial Completion Date*
First 15 minutes			
After the first 15 minutes			

- (d) If a Non-Permitted Traffic Disruption Event referenced in Section 1.2(c) of this Schedule affects more than one lane of any of Highway 1, Interchange Ramps or Other Specified Roads, 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 will be calculated separately for each such lane pursuant to Section 1.2(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 will be multiplied by two.
- (f) No Traffic Management Amount, or part thereof, is payable in respect of a Non-Permitted Traffic Disruption Event that is the direct result of:

- 3 -

- (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 two or more Payment Periods will 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.
- (h) Despite anything else in this Section 1.2, and without limiting the generality of Section 17.7 [Waiver] of this Agreement, the Province expressly reserves the right to waive, reduce or defer the obligation to pay, any Traffic Management Amount otherwise payable pursuant to Section 1.2(a) of this Schedule in respect of a Non-Permitted Traffic Disruption Event, as such Traffic Management Amount is calculated in accordance with Section 1.2(b) of this Schedule, and the Province may do so in its 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 will only be effective if in writing signed by the Province, and will 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 will be payable by the Design-Builder in respect of any Traffic Management Amount that is deferred by the Province under this Section 1.2(h).

1.3 Calculation of Non-Compliance Event Payments

- (a) Subject to Sections 1.3(c), 1.3(d), 1.3(e) and 1.3(f) of this Schedule, at all times during the period described in Section 5.1(a) of Schedule 10 [Payment], 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 5.1 [Obligation to make Performance Incentive Payments] of Schedule 10 will be determined in accordance with the following formula:

$$NCEP_{pn} = \sum_{d=1}^D NCEPP_d + \sum_{d=1}^D NCECP_d$$

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:

x [the greater of (i) (NCE Points_d – 15) and (ii) 0]

where:

NCE Points_d = the NCE Points Balance on day d

- 4 -

$NCECP_d$ = 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 , determined in accordance with Section 1.3(b) of this Schedule

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) The NCE (Cash) Payments will be calculated in accordance with Table 1.3:

Table 1.3 – NCE (Cash) Payment Amounts

Non-Compliance Event	Payment*
Failure to meet the Minimum Indigenous Contracts Requirement as required by Section 1.1(a) of Schedule 12 [Indigenous Requirements]	See Section 1.5(b)(ii) of Schedule 12 [Indigenous Requirements]

- (c) If the occurrence of a Non-Compliance Event listed in Table 1.3 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, then the payment in respect of that Non-Compliance Event will be multiplied by two.
- (d) A Non-Compliance Event listed in Table 1.3, the occurrence of which spans portions of two or more Payment Periods will be treated as a new Non-Compliance Event for each successive Payment Period or period, as the case may be, that commences while the Non-Compliance Event is continuing.
- (e) No NCE (Cash) Payment, or part thereof, is payable in respect of a Non-Compliance Event listed in Table 1.3 that is the direct result of:
- (i) an Excluded Event;
 - (ii) a Relief Event; or
 - (iii) a Force Majeure Event.
- (f) Despite anything else in this Section 1.3, and without limiting the generality of Section 17.7 [Waiver] of this Agreement, 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 1.3(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 be) is calculated in accordance with Section 1.3(a) of this Schedule, and the Province may do so in its 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) will only be effective if in writing signed by the Province, and will 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 will be payable by the Design-Builder in respect of any Non-Compliance Event Payment that is deferred by the Province under this Section 1.3(f).

- 5 -

PART 2
NCE POINTS AND DEFAULT POINTS

2.1 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 will be assigned by the Province on the basis set out in Appendix 9A [Assignment of NCE Points] to this Schedule, Part 6 [Nonconformities] of Schedule 7 and in accordance with this Section 2.1. NCE Points will be reassigned, and further NCE Points will be assigned, in accordance with Section 2.2 [Calculation of NCE Points Balance] of this Schedule.
- (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 Reporting 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 this Part, 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
 - (ii) has not, or would not have become a Non-Compliance Event, then the Province may assign one NCE Point in respect thereof.
- (d) If a Nonconformity is discovered through a Nonconformity Report, or a Quality Audit of the Quality Management System, and that Nonconformity relates to a requirement in respect of which a Nonconformity has occurred previously (a “**Repeat Nonconformity**”), the Province may assign up to three NCE Points for the occurrence of a Repeat Nonconformity.
- (e) No NCE Points will be assigned by the Province in respect of a Non-Compliance Event that is the direct result of a Province Non-Excusable Event.
- (f) No NCE Points will be assigned by the Province in respect of the occurrence of a Non-Compliance Event that results in a NCE (Cash) Payment.
- (g) If, after the date of occurrence of a Nonconformity (other than a Nonconformity 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 Nonconformity subsists for a period of 28 calendar days, then (in addition to any NCE Points assigned upon the initial occurrence of the Nonconformity) the applicable number of NCE Points will thereupon again be assigned by the Province in respect of that Nonconformity.

- 6 -

For each successive 28 calendar day period that such Nonconformity subsists, the applicable number of NCE Points will again be assigned by the Province in respect of that Nonconformity, so that the aggregate number of NCE Points outstanding in respect of that Nonconformity at any time will be determined by application of the following formula:

$$\text{NCE Points outstanding in respect of any subsisting Nonconformity} = \text{Points} \cdot (1 + \text{Compounding Periods})$$

where:

Points = the number of NCE Points applicable to the Nonconformity as assigned (or reassigned) by the Province on the basis set out in Appendix 9A [Assignment of NCE Points] to this Schedule, Part 6 [Nonconformities] of Schedule 7 and in accordance with this Section 2.1 and Section 2.2 of this Schedule (including in accordance with Sections 2.1(b), 2.1(c) and 2.1(d) of this Schedule).

Compounding Periods = the total number of successive 28 calendar day periods having elapsed since the date of initial occurrence of the Nonconformity, as at the date of determination of the number of NCE Points outstanding.

- (h) Despite anything else in this Section 2.1, and without limiting the generality of Section 17.7 [Waiver] of this Agreement, the Province expressly reserves the right to refrain from assigning (or reassigning) all or any portion of the NCE Points set out in Part 6 [Nonconformities] of Schedule 7, this Section 2.1, Section 2.2 [Calculation of NCE Points Balance] and Appendix 9A [Assignment of NCE Points] to this Schedule in respect of any Non-Compliance Event, Nonconformity or Nonconformity Report and the Province may do so in its discretion and without prejudice to any of its other available rights and remedies in respect of that Non-Compliance Event, Nonconformity or Nonconformity Report and without prejudice to its right to assign (or reassign) NCE Points, and to exercise any of its other available rights and remedies, in respect of any other Non-Compliance Event, Nonconformity or Nonconformity Report. Any such refraining from assigning (or reassigning) any NCE Points by the Province will not excuse the Design-Builder from performing, nor otherwise affect the Design-Builder's obligation to perform, all of its obligations under this Agreement.
- (i) The Province will notify the Design-Builder of the assignment by the Province of any NCE Points pursuant to this Section 2.1, or the reassignment or assignment of any NCE Points pursuant to Section 2.2 [Calculation of NCE Points Balance] of this Schedule, promptly after such assignment or reassignment as applicable.
- (j) The Design-Builder will be entitled to dispute the assignment or reassignment of any NCE Points only if:
 - (i) subject to Section 2.1(j)(iii) of this Schedule (to the extent applicable), the number of such NCE Points assigned by the Province pursuant to Sections 2.1(a) and 2.1(d) of this Schedule in respect of a Non-Compliance Event or Nonconformity 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]

- 7 -

Applications] of Schedule 10 as being assignable in respect of that Non-Compliance Event or Nonconformity; or

- (ii) it is disputing the reasonableness of the Province's determination pursuant to Sections 2.1(b) or 2.1(c) of this Schedule; or
 - (iii) where the Province assigns NCE Points in accordance with Section 6.1(k) of Schedule 7 [Quality Management] or reassigns NCE Points in accordance with Section 2.2(a)(iv) of this Schedule, and the Design-Builder asserts that the status of the Nonconformity Report was 'closed' prior to the Correction Target Date, and therefore NCE Points should not have been assigned or reassigned as applicable; and
 - (iv) the Design-Builder refers any such dispute referred to in Sections 2.1(j)(i), 2.1(j)(ii) or 2.1(j)(iii) of this Schedule to the Dispute Resolution Procedure within 14 days after its receipt from the Province of notice of such assignment (or reassignment) If the Design-Builder does not refer the Dispute to the Dispute Resolution Procedure within such 14-day period, the Design-Builder will be deemed to have accepted the Province's assignment (or reassignment, if applicable) of the relevant NCE Points.
- (k) The assignment and reassignment of NCE Points as contemplated by this Section 2.1 and in Section 2.2 [Calculation of NCE Points Balance] of this Schedule 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 will see fit, without prejudice to any of its other available rights and remedies.

2.2 Calculation of NCE Points Balance

- (a) For purposes of Section 1.3 [Calculation of Non-Compliance Event Payments] of this Schedule:
 - (i) subject to Section 2.2(a)(iv) of this Schedule, NCE Points that have been assigned pursuant to Section 2.1 [Assignment of NCE Points] of this Schedule (other than as a result of a traffic management audit process conducted pursuant to Section 4.8 [Traffic Management Auditing] of Schedule 7) will subsist for the duration of the period from the date of occurrence of the Nonconformity in respect of which such NCE Points have been assigned until such NCE Points may be deducted in accordance with Sections 6.1(e) and 6.1(k) of Schedule 7 [Quality Management] as applicable (which period will not, in any event, be less than one calendar day), whereupon such NCE Points will be deducted from the then current NCE Points Balance;
 - (ii) NCE Points that have been assigned pursuant to Section 2.1 [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 will:

- 8 -

- (A) subsist until 11:59 pm on the date of occurrence of the Nonconformity in respect of which such NCE Points have been assigned (and will be included in the calculation of the NCE Points Balance as at any time on that date after their assignment), whereupon such NCE Points will be deducted from the then current NCE Points Balance, provided that the deficiencies identified in the traffic management audit have been rectified by 11:59 pm on the date the Nonconformity occurs; or
 - (B) subsist until 11:59 pm on the date the deficiencies identified in the traffic management audit have been rectified (and for each day the traffic management-related Nonconformity subsists, the applicable number of traffic management-related NCE Points assigned will be doubled and included in the calculation of the NCE Points Balance as at any time on each date since their assignment), whereupon such NCE Points will be deducted from the then current NCE Points Balance;
- (iii) for certainty, any NCE Points assigned or reassigned as contemplated in Section 2.1 [Assignment of NCE Points] and this Section 2.2 will be included in the calculation of the NCE Points Balance as at any time on the date of their assignment or reassignment 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 2.2(a) of this Schedule; and
- (iv) if NCE Points are deducted from the NCE Points Balance in accordance with Section 6.1(k) of Schedule 7 [Quality Management], in addition to any NCE Points assigned in accordance with Section 6.1(k) of Schedule 7 [Quality Management], then the greater of:
- (A) the NCE Points originally assigned in respect of the Nonconformity will be reassigned; and
 - (B) if the number of NCE points reassigned pursuant to Section 2.2(a)(iv)(A) of this Schedule is less than five, then additional NCE Points will be assigned to bring the total number of NCE Points reassigned and assigned in accordance with this Section 2.2(a)(iv) to five,

and such NCE Points will be included in the NCE Points Balance in accordance with Section 2.2(a)(iii) of this Schedule. The NCE Points reassigned and assigned in accordance with this Section 2.2(a)(iv) will subsist in the NCE Points Balance from the day after the Correction Target Date until (and including) the date on which the Quality Director changes the status of the Nonconformity Report, in respect of the Nonconformity, to "closed" in accordance with Sections 6.1(i) or 6.1(j) of Schedule 7 [Quality Management] (as applicable), whereupon such NCE Points will be deducted from the NCE Points Balance.

- (b) Where NCE Points are assigned or reassigned in accordance with Section 2.2(a)(iv) of this Schedule, Sections 2.1(g) and 2.1(i) of this Schedule will apply to such assigned and reassigned NCE Points, as applicable.

- 9 -

- (c) At all times during the period from the Effective Date until the Total Completion Date, each of the Province and the Design-Builder will respectively maintain a record of:
 - (i) the aggregate number of NCE Points assigned and reassigned pursuant to Section 2.1 [Assignment of NCE Points] of this Schedule and this Section 2.2 at any time during the period from the Effective Date until such time; and
 - (ii) the aggregate number of NCE Points assigned and reassigned pursuant to Section 2.1 [Assignment of NCE Points] of this Schedule and this Section 2.2 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 2.2(a) of this Schedule (the “**NCE Points Balance**”).

2.3 Calculation of NCE Points (Default) Balance

- (a) For purposes of Section 2.4 [Assignment of Default Points] of this Schedule, NCE Points that have been assigned pursuant to Section 2.1 [Assignment of NCE Points] and Section 2.2 [Calculation of NCE Points Balance] of this Schedule will subsist for the duration of the period from the date of occurrence of the Non-Compliance Event or Nonconformity 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 2.4(a) of this Schedule; and
 - (ii) the end of the Contract Year in which such NCE Points were assigned,whereupon such NCE Points will be deducted from the then current NCE Points (Default) Balance. NCE Points that have been reassigned in accordance with Section 2.2(a)(iv) of 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 will maintain a record of the aggregate number of NCE Points assigned pursuant to Section 2.1 [Assignment of NCE Points] and Section 2.2 [Calculation of NCE Points Balance] of this Schedule at any time during the period from the commencement of the then current Contract Year until the end of such Contract Year, and such record will reflect the NCE Points that are still outstanding as at the relevant date in such Contract Year, as determined pursuant to Section 2.3(a) of this Schedule (the “**NCE Points (Default) Balance**”).

2.4 Assignment of Default Points

Default Points will be assigned to the Design-Builder on the basis set out in this Section 2.4.

- (a) For each 120 NCE Points assigned to the Design-Builder the Province will assign to the Design-Builder one Default Point. Upon any such assignment of a Default Point, the then current NCE Points (Default) Balance will be reduced by 120 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 2.4(c) of this Schedule, but

- 10 -

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 that continues unremedied (as contemplated 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; or
- (iii) any failure by the Design-Builder to comply with Section 1.3(w) of Part 3 [Traffic Management] 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 2.4, Default Points will subsist until the Total Completion Date (but, for the purposes of Section 2.4(e)(ii) of this Schedule, will 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 will maintain a record of:

- (i) the aggregate number of Default Points assigned pursuant to this Section 2.4 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 2.4 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 will notify the Design-Builder of the assignment of any Default Points pursuant to this Section 2.4 promptly after such assignment.

(g) The Design-Builder will 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 Schedule 10 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 will be deemed to have accepted the Province’s assignment of the relevant Default Points.

- 11 -

- (h) The Province's right to assign Default Points as contemplated by this Section 2.4 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 will see fit, without prejudice to any of its other available rights and remedies.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 9: PERFORMANCE MECHANISM

Commercial in Confidence
Execution

APPENDIX 9A
ASSIGNMENT OF NCE POINTS

Performance Requirement	Performance Category	Basis of Assessment	NCE Points Assigned
Design-Build Agreement and All Schedules			
Submittals relating to the management, implementation or remediation of the Project Work provided to the Province under the Review Procedure or the Consent Procedure, including those submittals included in the Cost Items	Implementation	Where the Design-Builder fails to implement any submittal it is required to provide the Province under this Agreement in accordance with the provisions of such submittal, and such failure: (a) has had or might reasonably be expected to have a material adverse effect on the Project; (b) is a breach of Section 5.1 [Design-Builder to Carry Out Project Work] of this Agreement; or (c) has caused or might reasonably be expected to cause an Emergency	
Schedule 3 : Design and Construction General Requirements			
Interface Requirements	Compliance	Where the Design-Builder fails to comply with any obligations set out in Part 4 of Schedule 3, including a failure to provide any notice of Interfacing Issues to the Province as required in Section 4.3(b) of Schedule 3	
Interface Requirements	Compliance	Where the Design-Builder's Interface Committee Liaison fails to attend an Interface Committee meeting	
Schedule 6 : Environmental Obligations			
Environmental work plans	Implementation	Where the Design-Builder fails to submit an Environmental Work Plan as required in Section 2.4(e) of Schedule 6	
Notification to Province and/or Environmental Authorities	Notification	Where the Design-Builder fails to provide any notice of environmental matters to the Province and/or Environmental Authorities as required in Sections 3.4 and 3.5 of Schedule 6	

SCHEDULE 9: PERFORMANCE MECHANISM

Appendix 9A: Assignment of NCE Points

- 2 -

Performance Requirement	Performance Category	Basis of Assessment	NCE Points Assigned
Environmental conditions	Implementation	As designated as “Major” in Appendix 6A [Table of Commitments]	
		As designated as “Severe” in Appendix 6A [Table of Commitments]	
Schedule 7 : Quality Management			
Failure to respond to Nonconformity Report	Implementation	Where the Quality Director does not respond to the Nonconformity Report within the timeline provided in Section 6.1(d) of Schedule 7	
Unresolved Nonconformity	Implementation	Where: (a) the status of the Nonconformity Report is not changed to ‘closed’ in accordance with Section 6.1(i) of Schedule 7 by the Correction Target Date; or (b) the status of the Nonconformity Report is changed to ‘pending’ in accordance with Section 6.1(i) of Schedule 7	
Traffic Management	Implementation of Traffic Management requirements in respect of Schedule 7	Where a Site Condition Rating of “Unacceptable” is assigned in accordance with Section 4.8 [Traffic Management Auditing] of Schedule 7	
Nonconformity Tracking System	Implementation	Where the Design-Builder fails to submit a fully operating Nonconformity Tracking System within the timeline provided in Section 6.2(b) of Schedule 7	
Schedule 12 : Indigenous Requirements			
Indigenous Requirements	Implementation	Where the Design-Builder fails to comply with, or carry out any measures identified in, the Indigenous Participation Plan in accordance with the Indigenous Participation Plan.	

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

**Commercial in Confidence
Execution**

SCHEDULE 9: PERFORMANCE MECHANISM

Appendix 9A: Assignment of NCE Points

- 3 -

Performance Requirement	Performance Category	Basis of Assessment	NCE Points Assigned
Indigenous Requirements	Reporting	Where the Design-Builder fails to submit a monthly report or final report as required in Section 1.7 of Schedule 12	
Schedule 15 : Communication and Engagement			
Performance Measures	Communication and Engagement	As designated as “Major” in Schedule 15	
		As designated as “Severe” in Schedule 15	

**SCHEDULE 10
PAYMENT**

PART 1 CONTRACT PRICE AND PAYMENT.....	1
1.1 Contract Price and Payments	1
1.2 Additional Payments	1
1.3 Province Rights to Audit.....	2
1.4 Province’s Right of Set-Off	2
1.5 Payments in Canadian Dollars	2
1.6 Due Date for Payments	2
1.7 Payment of Disputed Amounts	2
1.8 Inaccuracies in Payments	3
1.9 Interest on Overdue Amounts	3
1.10 Interest without Prejudice	4
1.11 Payment of Interest by Province	4
PART 2 PAYMENT OBLIGATIONS OF PROVINCE	4
2.1 Obligation to make Progress Payments.....	4
2.2 Obligation to pay Indigenous Contracts Incentive Payment	4
2.3 Obligation to pay Apprenticeship Incentive Payment.....	5
2.4 Obligation to pay Equity Incentive Payment	6
2.5 Obligation to pay Early Construction Commencement Incentive Payment.....	7
2.6 Obligation to pay Safety Incentive Payment.....	8
2.7 Obligation to pay Contract Compliance Incentive Payment	9
2.8 Obligation to pay Traffic Management Incentive Payment	11
2.9 Obligation to pay Early Substantial Completion Incentive Payment.....	12
PART 3 CALCULATION OF PROGRESS PAYMENTS	13
3.1 Calculation of Progress Payments.....	13
PART 4 HOLDBACKS	15
4.1 Deficiency Holdback.....	15
4.2 Warranty Holdback	16
PART 5 PAYMENT OBLIGATIONS OF DESIGN-BUILDER.....	16
5.1 Obligation to make Performance Incentive Payments	16
5.2 Obligation to pay Delay Liquidated Damages	17
PART 6 PERIODIC REPORTS AND PAYMENT APPLICATIONS.....	18
6.1 Draw Requests for Progress Payments	18
6.2 Reports for Payment Related Matters	23
6.3 Province can issue Reports and Invoices	25
6.4 Quarterly Forecast of Progress Payments	25
PART 7 ADVANCE PAYMENTS	25
7.1 Payment for Off-Site Materials and Equipment.....	25
Appendix 10A Form of Statement of Progress	
Appendix 10B Progress Measurement Principles	
Appendix 10C Forms	
Appendix 10D Form of Vesting Certificate	

PART 1
CONTRACT PRICE AND PAYMENT

1.1 Contract Price and Payments

- (a) The Design-Builder will perform its obligations under this Agreement for the contract price of \$286,161,000 (the “**Contract Price**”). The Contract Price is not subject to change or adjustment except in accordance with Section 1.2 [Additional Payments] of this Schedule. 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 and all 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, will 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 will remain responsible for providing, performing and carrying out the Project Work in accordance and compliance with this Agreement.

1.2 Additional Payments

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

- (a) a Province Change or Value Engineering Proposal under Part 7 [Changes] of this Agreement, subject to Section 2.7 [Change Certificate] of Schedule 11;
- (b) a Compensation Event (other than in the circumstances described in Section 8.3(b)(ii)) under Part 8 [Supervening Events] of this Agreement;
- (c) a Force Majeure Event (which, for greater certainty, will only be in the circumstances described in Section 8.6(a)(ii) of this Agreement) under Part 8 [Supervening Events] of this Agreement; and

- 2 -

- (d) an event described in Section 8.10 [Sharing of Increased Recoverable Expenditures for Undisclosed Utilities] of this Agreement,

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.

1.3 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 will, before, during and at any time after the payment of any lump sum contemplated in Section 1.2 [Additional Payments] of this Schedule, 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.

1.4 Province's Right of Set-Off

Subject to Section 3.3 [Rights of Set-Off] of Schedule 14, 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, including Delay Liquidated Damages (which, without limiting any other provision of the Agreement, will 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.

1.5 Payments in Canadian Dollars

All payments under this Agreement will 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 1.5.

1.6 Due Date for Payments

- (a) If no date is specified for the making of any payment by a party under this Agreement, such party will make such payment on or before the date that is 30 days after the receipt by such party of the demand, invoice 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 will be extended to the next Business Day.

1.7 Payment of Disputed Amounts

- (a) A party will have the right to dispute, in good faith, any amount specified as payable from one party to another in any demand, invoice or Report.

- 3 -

- (b) Except as otherwise expressly provided in this Agreement, a party will 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 will 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 1.7(a) of this Schedule, upon resolution of such dispute a party will 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 1.7(c); and
 - (ii) the due date for such payment under this Section 1.7(c).

For greater certainty, Section 1.9 [Interest on Overdue Amounts] of this Schedule will apply to any amount payable pursuant to this Section 1.7(c) that is not paid within such 10 Business Days.

1.8 Inaccuracies in Payments

Subject to Section 3.4 [Full and Final Settlement] of Schedule 14, if there is any inaccuracy in any demand, invoice 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 [Province Access to Records] of Schedule 17 or otherwise:

- (a) the necessary adjustments in such demand, invoice or Report and resulting payment will 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 or Report containing such inaccuracy, the paying party or the receiving party will, 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 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.

1.9 Interest on Overdue Amounts

If payment of any amount payable under this Agreement is not made when due (including payments payable pursuant to Schedule 14 [Compensation on Termination] and any payments required pursuant to Section 10.2(g) of this Agreement and Sections 1.7(c) and 1.8(a) of this Schedule), interest will, unless another interest rate is indicated in this Agreement, be payable on such amount at the Default Rate and will be calculated from the date due under this Agreement until paid, compounded monthly.

- 4 -

1.10 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.

1.11 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 2
PAYMENT OBLIGATIONS OF PROVINCE

2.1 Obligation to make Progress Payments

- (a) Subject to the provisions of this Schedule, the Province will make payments (the “**Progress Payments**”), in arrears, to the Design-Builder on account of the Contract Price in the amounts determined in accordance with Part 3 [Calculation of Progress Payments] of this Schedule and the procedure set out in Part 11 [Payments] of this Agreement and Part 1 [Contract Price and Payment] of this Schedule.
- (b) Subject to the provisions of Part 11 [Payments] of this Agreement and Part 1 [Contract Price and Payment] of this Schedule, each such Progress Payment will be calculated in accordance with Part 3 [Calculation of Progress Payments] of this Schedule.
- (c) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, the Province will, after withholding:
 - (i) any amount to be retained in respect of the Progress Payment Holdback in accordance with Section 3.1(a)(iv) of this Schedule;
 - (ii) any amount to be retained in respect of the Deficiency Holdback in accordance with Section 3.1(a)(v) of this Schedule; and
 - (iii) any amount to be retained in respect of the Warranty Holdback in accordance with Section 3.1(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(k) of this Schedule by not later than the fifth Business Day following approval in respect of the Draw Request pursuant to Section 6.1(k) of this Schedule.

- (d) The Province will have no obligation to pay or be responsible in any way for payments to Subcontractors.

2.2 Obligation to pay Indigenous Contracts Incentive Payment

- (a) Subject to the provisions of this Schedule and Section 1.6 [Indigenous Contracts Incentive Payment] of Schedule 12, the Province will pay to the Design-Builder, in accordance with the procedure set out in this Section, the Indigenous Contracts Incentive Payment.

- 5 -

- (b) At any time after issuance of the Certificate of Total Completion, where the Indigenous Contracts Incentive Payment is payable in accordance with Section 1.6 [Indigenous Contracts Incentive Payment] of Schedule 12, the Design-Builder may submit to the Province's Representative a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Indigenous Contracts Incentive Payment, and arrange with the Province's Representative a reasonable opportunity for the Province's Representative to meet with the Design-Builder's Representative to review the draft Payment Application and review such documentation as the Province's Representative may request.
- (c) If the Province's Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province's Representative will notify the Design-Builder of such deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.2(b) of this Schedule.
- (d) The Design-Builder will cooperate with the Province's Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province's Representative pursuant to Section 2.2(b) of this Schedule.
- (e) The Province's Representative will approve the Payment Application as to the applicable Indigenous Contracts Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.2(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant to Section 2.2(e) of this Schedule, the Province will make payment to the Design-Builder of the Indigenous Contracts Incentive Payment approved pursuant to Section 2.2(e) of this Schedule.

2.3 Obligation to pay Apprenticeship Incentive Payment

- (a) Subject to the provisions of this Schedule and Section 3.1(c) of Schedule 13 [ESG Requirements], the Province will pay to the Design-Builder, in accordance with the procedure set out in this Section, the Apprenticeship Incentive Payment.
- (b) At any time after issuance of the Certificate of Total Completion, where the Apprenticeship Incentive Payment is payable in accordance with Sections 3.1(c) of Schedule 13 [ESG Requirements], the Design-Builder may submit to the Province's Representative a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Apprenticeship Incentive Payment, and arrange with the Province's Representative a reasonable opportunity for the Province's Representative to meet with the Design-Builder's Representative to review the draft Payment Application and review such documentation as the Province's Representative may request.
- (c) If the Province's Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province's Representative will notify the Design-Builder of such

- 6 -

deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.3(b) of this Schedule.

- (d) The Design-Builder will cooperate with the Province's Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province's Representative pursuant to Section 2.3(b) of this Schedule.
- (e) The Province's Representative will approve the Payment Application as to the applicable Apprenticeship Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.3(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant to Section 2.3(e) of this Schedule, the Province will make payment to the Design-Builder of the Apprenticeship Incentive Payment approved pursuant to Section 2.3(e) of this Schedule.

2.4 Obligation to pay Equity Incentive Payment

- (a) Subject to the provisions of this Schedule and Section 3.2(c) of Schedule 13 [ESG Requirements], the Province will pay to the Design-Builder, in accordance with the procedure set out in this Section, the Equity Incentive Payment.
- (b) At any time after issuance of the Certificate of Total Completion, where the Equity Incentive Payment is payable in accordance with Section 3.2(c) of Schedule 13 [ESG Requirements], the Design-Builder may submit to the Province's Representative a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Equity Incentive Payment, and arrange with the Province's Representative a reasonable opportunity for the Province's Representative to meet with the Design-Builder's Representative to review the draft Payment Application and review such documentation as the Province's Representative may request.
- (c) If the Province's Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province's Representative will notify the Design-Builder of such deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.4(b) of this Schedule.
- (d) The Design-Builder will cooperate with the Province's Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province's Representative pursuant to Section 2.4(b) of this Schedule.
- (e) The Province's Representative will approve the Payment Application as to the applicable Equity Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.4(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant

- 7 -

to Section 2.4(e) of this Schedule, the Province will make payment to the Design-Builder of the Equity Incentive Payment approved pursuant to Section 2.4(e) of this Schedule.

2.5 Obligation to pay Early Construction Commencement Incentive Payment

(a) Subject to the provisions of this Schedule, the Design-Builder will be entitled to, and the Province will pay to the Design-Builder, an incentive payment (the “**Early Construction Commencement Incentive Payment**”) calculated and payable as follows:

(i) The Early Construction Commencement Incentive Payment will be calculated based on the total number of days between the Effective Date and the Construction Commencement Date (the “**ECCIP Days**”), as follows:

Total Number of ECCIP Days	Early Construction Commencement Incentive Payment
≥ 90	
< 90 and > 40	
≤ 40	

where:

(A) “**Construction Commencement Date**” means the date upon which the Design-Builder, in compliance with Section 2.13 [No Construction] of Part 2 of Schedule 4 and Section 4.6(c) of Schedule 13 [ESG and Workforce Requirements], commences Material Work on Site, provided that, for such purposes:

- (1) any plans submitted on behalf of the Design-Builder in the Proposal will be deemed to have been submitted by the Design-Builder, for the purposes of the Review Procedure and the Consent Procedure, on the day the Design-Builder is named as the Preferred Proponent in accordance with the Request for Proposals; and
- (2) respectful workplace policies and training procedures may be implemented by the Design-Builder to initiate Material Work on Site prior to finalizing the Respect in the Workplace Plan; and

(B) “**Material Work on Site**” means having at least three pieces of heavy equipment (per the Blue Book class and category types with an operating weight over 21,000 pounds, together with haul trucks, support vehicles, traffic control and other related equipment) working within the Project Site for at least eight hours per day on workdays, provided that, if traffic control measures are required in advance of heavy equipment being able to work on the Project Site, up to a total of five workdays of such preparatory traffic control measures may be considered Material Work on Site.

(ii) No Early Construction Commencement Incentive Payment will be payable to the Design-Builder unless the Design-Builder establishes to the satisfaction of the

- 8 -

Province, acting reasonably, that Material Work on Site has continued on each workday from and after the Construction Commencement Date for a period of 10 consecutive weeks, or until October 31, 2024, whichever is earlier (the “**ECCIP Eligibility Period**”).

- (b) At any time after the expiry of the ECCIP Eligibility Period, where the Early Construction Commencement Incentive Payment is payable in accordance with Section 2.5(a) of this Schedule, the Design-Builder may submit to the Province’s Representative a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Early Construction Commencement Incentive Payment, and arrange with the Province’s Representative a reasonable opportunity for the Province’s Representative to meet with the Design-Builder’s Representative to review the draft Payment Application and review such documentation as the Province’s Representative may request.
- (c) If the Province’s Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province’s Representative will notify the Design-Builder of such deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.5(b) of this Schedule.
- (d) The Design-Builder will cooperate with the Province’s Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province’s Representative pursuant to Section 2.5(b) of this Schedule.
- (e) The Province’s Representative will approve the Payment Application as to the applicable Early Construction Commencement Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.5(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant to Section 2.5(e) of this Schedule, the Province will make payment to the Design-Builder of the Early Construction Commencement Incentive Payment approved pursuant to Section 2.5(e) of this Schedule.

2.6 Obligation to pay Safety Incentive Payment

- (a) Subject to the provisions of this Schedule, the Design-Builder will be entitled to, and the Province will pay to the Design-Builder an incentive payment (the “**Safety Incentive Payment**”) based on the total SD Points Balance from the Effective Date to the Total Completion Date, as calculated and determined in accordance with Section 9.4(b) and Appendix 3E [Safety Demerit Points System] of Schedule 3, as follows:

SD Points Balance	Safety Incentive Payment
≥ 60	
< 60 and > 20	
≤ 20	

- 9 -

- (b) At any time after issuance of the Certificate of Total Completion, where the Safety Incentive Payment is payable in accordance with Section 2.6(a) of this Schedule, the Design-Builder may submit to the Province's Representative a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Safety Incentive Payment, and arrange with the Province's Representative a reasonable opportunity for the Province's Representative to meet with the Design-Builder's Representative to review the draft Payment Application and review such documentation as the Province's Representative may request.
- (c) If the Province's Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province's Representative will notify the Design-Builder of such deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.6(b) of this Schedule.
- (d) The Design-Builder will cooperate with the Province's Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province's Representative pursuant to Section 2.6(b) of this Schedule.
- (e) The Province's Representative will approve the Payment Application as to the applicable Safety Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.6(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant to Section 2.6(e) of this Schedule, the Province will make payment to the Design-Builder of the Safety Incentive Payment approved pursuant to Section 2.6(e) of this Schedule.

2.7 Obligation to pay Contract Compliance Incentive Payment

- (a) Subject to the provisions of this Schedule, the Design-Builder will be entitled to, and the Province will pay to the Design-Builder, an incentive payment (the "**Contract Compliance Incentive Payment**") as follows:
 - (i) Each three month period, commencing on the first day of the calendar month following the Effective Date and ending with the three month period in which the Certificate of Total Completion is issued, will be classified as either:
 - (A) an eligible period (each, a "**CCIP Eligible Period**"), in the event that all of the following criteria are satisfied:
 - (1) the aggregate number of NCE Points assigned and reassigned pursuant to Sections 2.1 [Assignment of NCE Points] and Section 2.2 [Calculation of NCE Points Balance] of Schedule 9 at any time during such period do not exceed 30;
 - (2) the daily NCE Points Balance calculated in accordance with Section 2.2(c)(ii) of Schedule 9 [Performance Mechanism] during such period never exceeds 15;

- 10 -

- (3) the average daily NCE Points Balance over such period is less than 5, provided that, for the purposes of such calculation for the period in which the Certificate of Total Completion is issued, the daily NCE Points Balance on the Total Completion Date will also apply to all subsequent days in such period;
- (4) no Default Points are assigned to the Design-Builder pursuant to Section 2.4 [Assignment of Default Points] of Schedule 9 during such period; and
- (5) no Delay Liquidated Damages are payable by the Design-Builder during such period in accordance with Section 5.2(a) of this Schedule; or

(B) otherwise, a non-eligible period (each, a “**CCIP Non-Eligible Period**”).

- (ii) The Contract Compliance Incentive Payment will be calculated based on the total number of CCIP Non-Eligible Periods occurring between the Effective Date and the Total Completion Date, as follows:

Total Number of CCIP Non-Eligible Periods	Contract Compliance Incentive Payment
≥ 14	
≥ 1 and ≤ 13	
0	

- (b) At any time after issuance of the Certificate of Total Completion, where the Contract Compliance Incentive Payment is payable in accordance with Section 2.7(a) of this Schedule, the Design-Builder may submit to the Province’s Representative a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Contract Compliance Incentive Payment, and arrange with the Province's Representative a reasonable opportunity for the Province's Representative to meet with the Design-Builder’s Representative to review the draft Payment Application and review such documentation as the Province's Representative may request.
- (c) If the Province’s Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province’s Representative will notify the Design-Builder of such deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.7(b) of this Schedule.
- (d) The Design-Builder will cooperate with the Province's Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province’s Representative pursuant to Section 2.7(b) of this Schedule.

- 11 -

- (e) The Province's Representative will approve the Payment Application as to the applicable Contract Compliance Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.7(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant to Section 2.7(e) of this Schedule, the Province will make payment to the Design-Builder of the Contract Compliance Incentive Payment approved pursuant to Section 2.7(e) of this Schedule.

2.8 Obligation to pay Traffic Management Incentive Payment

- (a) Subject to the provisions of this Schedule, the Design-Builder will be entitled to, and the Province will pay to the Design-Builder, an incentive payment (the “**Traffic Management Incentive Payment**”) as follows:
 - (i) Each one month period, commencing on the first day of the calendar month following the Effective Date and ending with the one month period in which the Certificate of Total Completion is issued, will be classified as either:
 - (A) an eligible period (each, a “**TMIP Eligible Period**”), in the event that both of the following criteria are satisfied:
 - (1) no Nonconformity Reports are initiated pursuant to Section 6.1(a) of Schedule 7 [Quality Management] during such period in respect of any of the requirements set out in:
 - (I) Part 4 [Interface Requirements] of Schedule 3; and
 - (II) Part 3 [Traffic Management] of Schedule 4; and
 - (2) the daily NCE Points Balance calculated in accordance with Section 2.2(c)(ii) of Schedule 9 [Performance Mechanism] during such period includes no NCE Points assigned in respect of any of the requirements set out in:
 - (I) Part 4 [Interface Requirements] of Schedule 3;
 - (II) Part 3 [Traffic Management] of Schedule 4; and
 - (III) Section 4.8 [Traffic Management Auditing] of Schedule 7; or
 - (B) otherwise, a non-eligible period (each, a “**TMIP Non-Eligible Period**”).
 - (ii) The Traffic Management Incentive Payment will be calculated based on the total number of TMIP Non-Eligible Periods occurring between the Effective Date and the Total Completion Date, as follows:

- 12 -

Total Number of TMIP Non-Eligible Periods	Traffic Management Incentive Payment
≥ 36	
≥ 1 and ≤ 35	
0	

- (b) At any time after issuance of the Certificate of Total Completion, where the Traffic Management Incentive Payment is payable in accordance with Section 2.8(a) of this Schedule, the Design-Builder may submit to the Province's Representative a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Traffic Management Incentive Payment, and arrange with the Province's Representative a reasonable opportunity for the Province's Representative to meet with the Design-Builder's Representative to review the draft Payment Application and review such documentation as the Province's Representative may request.
- (c) If the Province's Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province's Representative will notify the Design-Builder of such deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.8(b) of this Schedule.
- (d) The Design-Builder will cooperate with the Province's Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province's Representative pursuant to Section 2.8(b) of this Schedule.
- (e) The Province's Representative will approve the Payment Application as to the applicable Traffic Management Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.8(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant to Section 2.8(e) of this Schedule, the Province will make payment to the Design-Builder of the Traffic Management Incentive Payment approved pursuant to Section 2.8(e) of this Schedule.

2.9 Obligation to pay Early Substantial Completion Incentive Payment

- (a) Subject to the provisions of this Schedule, in the event that the Substantial Completion Date is earlier than the Substantial Completion Target Date, the Design-Builder will be entitled to, and the Province will pay to the Design-Builder, an incentive payment (the "**Early Substantial Completion Incentive Payment**") in an amount equal to _____ for each day by which the Substantial Completion Date precedes the Substantial Completion Target Date, to a maximum total amount of _____.
- (b) At any time after issuance of the Certificate of Substantial Completion, where the Early Substantial Completion Incentive Payment is payable in accordance with Section 2.9(a) of this Schedule, the Design-Builder may submit to the Province's Representative a Payment

- 13 -

Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of the Early Substantial Completion Incentive Payment, and arrange with the Province's Representative a reasonable opportunity for the Province's Representative to meet with the Design-Builder's Representative to review the draft Payment Application and review such documentation as the Province's Representative may request.

- (c) If the Province's Representative identifies any deficiencies or inaccuracies in the Payment Application, the Province's Representative will notify the Design-Builder of such deficiencies or inaccuracies within five Business Days of the draft Payment Application being delivered pursuant to Section 2.9(b) of this Schedule.
- (d) The Design-Builder will cooperate with the Province's Representative to reach agreement on the finalized Payment Application on or before the fifth Business Day following delivery of the Payment Application to the Province's Representative pursuant to Section 2.9(b) of this Schedule.
- (e) The Province's Representative will approve the Payment Application as to the applicable Early Substantial Completion Incentive Payment within five Business Days of the Payment Application being agreed upon pursuant to Section 2.9(d) of this Schedule.
- (f) Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, by not later than the tenth Business Day following approval of the Payment Application pursuant to Section 2.9(e) of this Schedule, the Province will make payment to the Design-Builder of the Early Substantial Completion Incentive Payment approved pursuant to Section 2.9(e) of this Schedule.

PART 3

CALCULATION OF PROGRESS PAYMENTS

3.1 Calculation of Progress Payments

- (a) Subject to Section 3.1(c) of this Schedule, the Progress Payment for each Payment Period will be an amount equal to the total of the amounts described in Sections 3.1(a)(i), 3.1(a)(ii) and 3.1(a)(iii) below:
 - (i) the amount (the “**Progress Amount**”) that is the aggregate of all the Cost Item Progress Amounts (other than a Cost Item Progress Amount payable in respect of a Specified Cost Item) each of which is determined in accordance with Section 3.1(b) of this Schedule for Payment Period *p*;
 - (ii) the aggregate of all the Cost Item Progress Amounts in respect of Specified Cost Items, each of which is determined in accordance with Section 3.1(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 Holdback previously retained by the Province in accordance with Section 3.1(a)(iv) of this Schedule, without interest,

- 14 -

less the amounts, if any, described in Sections 3.1(a)(iv), 3.1(a)(v) and 3.1(a)(vi) of this Schedule:

- (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 5% of the total of the amounts described in Sections 3.1(a)(i) and 3.1(a)(ii) of this Schedule;
 - (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 will be determined in accordance with the following formula:

$$CIPA_p = CIA_{ci} \times RC_p\%$$

where:

$CIPA_p$ = 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 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 10B [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, determined in accordance with Appendix 10B [Progress Measurement Principles] to this Schedule, 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;

from:

- (ii) the total progress, determined in accordance with Appendix 10B [Progress Measurement Principles] to this Schedule, 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;

- 15 -

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, for payments made 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 will be an amount equal to the Contract Price.

PART 4

HOLDBACKS

4.1 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, in accordance with Section 3.1(a)(v) of this Schedule, retain out of the Progress Payment in which the Substantial Completion Date occurs, on account of any defects or deficiencies in the Project Work as identified on the Final Deficiency List Deficiency signed by the Owner's Engineer pursuant to Section 12.6(b)(i) of Schedule 3 [Design and Construction General Requirements], an amount (the "**Deficiency Holdback**") equal to 200% of the Deficiency Agreed Remedy Cost.
- (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 will prepare, and deliver to the Province's Representative, a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule and accompanied by the documentation specified therein, requesting payment of any amounts retained by the Province for the Deficiency Holdback, as the case may be, pursuant to Section 4.1(a) of this Schedule in respect of any Final Deficiency List Deficiency, as the case may be, 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).
- (c) By no later than the tenth Business Day following receipt of any Payment Application that complies with Section 4.1(b) of this Schedule, the Province will, subject to Section 4.1(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 4.1(b) of this Schedule, and in accordance with Section 12.9(a) of Schedule 3 [Design and Construction General Requirements]:

- 16 -

- (A) the Province will be entitled irrevocably to retain any amounts not paid to the Design-Builder in accordance with Section 4.1(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 will 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 4.1(a) of this Schedule but prior to the Total Completion Date, the Province will be entitled irrevocably to retain any such amounts retained pursuant to Section 4.1(a) or Section 4.1(d)(i)(A) of this Schedule and not paid to the Design-Builder in accordance with Section 4.1(b) of this Schedule.

4.2 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 out of the Progress Payments in accordance with Section 3.1(a)(vi) of this Schedule an amount (the “**Warranty Holdback**”) equal to 1% of the Contract Price.
- (b) Following the expiry of the General Project Work Defect Warranty Period, the Design-Builder will prepare, and deliver to the Province’s Representative, a Payment Application in the applicable form set out in Appendix 10C [Forms] to this Schedule requesting payment of the Warranty Holdback (less any amounts applied therefrom by the Province in accordance with Section 8.4(d)(i) or 8.4(f) of Schedule 3 [Design and Construction General Requirements]).
- (c) Subject to Section 8.8(c) of Schedule 3 [Design and Construction General Requirements], by no later than the tenth Business Day following receipt of the Payment Application pursuant to Section 4.2(b) of this Schedule, the Province will make payment, without interest, to the Design-Builder of the Warranty Holdback (less any amounts applied therefrom by the Province in accordance with Section 8.4(d)(i) or 8.4(f) of Schedule 3 [Design and Construction General Requirements]).

PART 5

PAYMENT OBLIGATIONS OF DESIGN-BUILDER

5.1 Obligation to make Performance Incentive Payments

- (a) The Design-Builder will 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] of this Agreement and Part 1 [Contract Price and Payment] of this Schedule, each such Performance Incentive Payment will be

- 17 -

determined in accordance with Section 1.1 [Calculation of Performance Incentive Payments] of Schedule 9.

- (c) If any report delivered pursuant to Section 6.2 [Reports for Payment Related Matters] of this Schedule shows a net amount owing by the Design-Builder to the Province then, without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, the Design-Builder will pay and remit to the Province such amount 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 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 Payment Related Matters] of this Schedule shows a net amount owing by the Province to the Design-Builder, it will 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). Without prejudice to Section 1.7 [Payment of Disputed Amounts] of this Schedule, the Province will 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 working 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).

5.2 Obligation to pay Delay Liquidated Damages

- (a) If the Substantial Completion Date does not occur on or before the Substantial Completion Target Date, then, subject to Section 9.3(b) of this Agreement, and except to the extent such delay is directly attributable to a Province Non-Excusable Event, the Design-Builder will 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 will 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 Payment Related Matters] of this Schedule 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 will 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:

- 18 -

- (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 5.2(a) of this Schedule are not intended, nor will 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 if the Substantial Completion Date does not occur 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 5.2(a) of this Schedule represents a fair and reasonable pre-estimate of the actual losses that will be suffered by the Province if the Substantial Completion Date does not occur on or before the Substantial Completion Target Date.
- (d) The payment of Delay Liquidated Damages in accordance with this Section 5.2 will be the Province's sole remedy if the Substantial Completion Date does not occur on or before the Substantial Completion Target Date, provided that the payment of such Delay Liquidated Damages will not, and will 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) of this Agreement; 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 5.2(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 1.4 [Province's Right of Set-Off] of this Schedule will apply to the Design-Builder's obligation to pay Delay Liquidated Damages pursuant to this Section 5.2.

PART 6

PERIODIC REPORTS AND PAYMENT APPLICATIONS

6.1 Draw Requests for Progress Payments

- (a) On or before five Business Days before the last day of each Payment Period, the Design-Builder will prepare and deliver to the Province's Representative and the Independent Engineer a statement of progress, in Excel format, in respect of the current Payment Period, substantially in the form set out in Appendix 10A [Form of Statement of Progress] to this Schedule, duly completed in accordance with Appendix 10B [Progress Measurement Principles] of this Schedule (a "**Statement of Progress**") and accompanied by working

- 19 -

papers clearly setting forth the derivation of all percentages and dollar amounts required by Appendix 10A [Form of Statement of Progress] 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 will 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 two Business Days following the last day of each Payment Period, the Design-Builder will prepare and deliver to the Province's Representative a draw request substantially in the applicable form set out in Appendix 10C [Forms] to this Schedule, and a Statement of Progress duly certified by the Independent Engineer and accompanied by working papers clearly setting forth the derivation of the percentages and dollar amounts required by Appendix 10A [Form of Statement of Progress] 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 of which will be 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 will 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 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 3.1(b) of this Schedule to be

- 20 -

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 3.1(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 Payment Holdbacks pursuant to Section 3.1(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 3.1(a)(iv) of this Schedule;
- (x) the amount of any holdback on account of the Deficiency Holdback to be made for such Payment Period pursuant to Section 3.1(a)(v) of this Schedule;
- (xi) the amount of any holdback on account of the Warranty Holdback to be made for such Payment Period pursuant to Section 3.1(a)(vi) of this Schedule;
- (xii) the total Progress Payment payable in respect of such Payment Period, determined pursuant to Section 3.1(a) of this Schedule;
- (xiii) the aggregate of all amounts payable in respect of any additional or varied Project Work authorized or approved by a Change Certificate and performed by the Design-Builder 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:
 - (A) the Province's obligation to make Progress Payments pursuant to Section 2.1 [Obligation to make Progress Payments] of this Schedule; and
 - (B) the Province's obligation to make payment for additional or varied Project Work performed by the Design-Builder pursuant to a Change Certificate.
- (d) The Draw Request will be accompanied by working 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 working papers will include all relevant reports, information and documentation (all in such form and content as is acceptable to

- 21 -

the Province's Representative) to support the Design-Builder's application contained in such Draw Request as well as (to the extent applicable) a report which:

- (i) demonstrates that the Key Individuals have been working on the Project as required in accordance with Section 3.3 [Key Individuals] of the Agreement and Schedule 21 [Key Individuals] for the applicable Payment Period; and
 - (ii) if applicable, identifies if a Key Individual has been, or will be, temporarily unavailable (such as vacation or other reasonable temporary absence) and outlines the coverage the Design-Builder has provided to address the Key Individual's duties during the time such Key Individual is, or will be, temporarily unavailable.
- (e) The Draw Request will 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 will be accompanied by a report on the status of the Project, which report will include a description of:
 - (i) the Design-Builder's progress during the Payment Period to which the Draw Request relates; and
 - (ii) the major activities performed by the Design-Builder during the Payment Period.
- (g) To the extent the Design-Builder has requested payment for off-site materials or equipment, and the Province has agreed to provide the payment in advance in accordance with Section 7.1 [Payment for Off-Site Materials and Equipment] of this Schedule, the Draw Request will be accompanied by such Vesting Certificates, Letters of Credit, or other documentation as may be required by the Province in connection with making such payment in advance, in accordance with Section 7.1 [Payment for Off-Site Materials and Equipment] of this Schedule.
- (h) The Draw Request will (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 will be a condition precedent to the obligation of the Province to make any payment pursuant to the Draw Request, and which representation and warranty may, as to the payment of any Subcontractors as described in Section 6.1(h)(iv) of this Schedule, 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;

- 22 -

- (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 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;
- (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; and
- (x) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under this Agreement.
- (i) The Province's Representative will 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 will be subject to Section 1.7 [Payment of Disputed Amounts] of this Schedule.
- (j) The Design-Builder will cooperate with the Province's Representative to reach agreement on a Draw Request and deliver a revised Draw Request on or before the fifth Business Day following identification of any deficiencies or inaccuracies by the Province's Representative pursuant to Section 6.1(i) of this Schedule.
- (k) The Province's Representative will 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 2.1(c) of this Schedule.
- (l) The Draw Request, once agreed upon pursuant to Section 6.1(j) of this Schedule, will not be amended except in writing signed by each of the parties.

- 23 -

6.2 Reports for Payment Related Matters

- (a) On the first Business Day following 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 5.1(a) of this Schedule, the Design-Builder will 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 5.1 [Obligation to make Performance Incentive Payments] and Section 5.2 [Obligation to pay Delay Liquidated Damages] of this Schedule. Specifically, the report will 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), comprising:
 - (A) any Traffic Management Payment payable in respect of that Payment Period (or part thereof, as the case may be); and
 - (B) any Non-Compliance Event Payment payable in respect of that Payment Period (or part thereof, as the case may be);
 - (ii) any Delay Liquidated Damages payable in respect of that Payment Period (or part thereof, as the case may be);
 - (iii) as related to NCE Points:
 - (A) any NCE Points assigned or assignable to the Design-Builder in respect of each Nonconformity occurring during that Payment Period, or part thereof, as the case may be (which will be the number of NCE Points set out in Part 6 [Nonconformities] of Schedule 7, Sections 2.1 [Assignment of NCE Points] or 2.2 [Calculation of NCE Points Balance] of Schedule 9, or Appendix 9A [Assignment of NCE Points] to Schedule 9, as applicable);
 - (B) the total number of NCE Points assigned to the Design-Builder; and
 - (C) the number of NCE Points which the Design-Builder has disputed (if any) in accordance with Section 2.1(j) of Schedule 9 [Performance Mechanism] and the Design-Builder's reasons for disputing such NCE Points;
 - (iv) the NCE Points Balance as at the end of each day of that Payment Period (or part thereof, as the case may be);
 - (v) the NCE Points (Default) Balance as at the end of each day of that Payment Period (or part thereof, as the case may be);
 - (vi) as related to Default Points:
 - (A) the total number of Default Points assigned or assignable to the Design-Builder during that Payment Period, or part thereof, as the case may be,

- 24 -

(which will be assigned or assignable to the Design-Builder in accordance with Section 2.4 [Assignment of Default Points] of Schedule 9); and

- (B) the number of Default Points which the Design-Builder has disputed (if any) in accordance with Section 2.4(g) of Schedule 9 [Performance Mechanism] and the Design-Builder's reasons for disputing such Default Points;
 - (vii) the Default Points Balance as at the end of each day of that Payment Period (or part thereof, as the case may be);
 - (viii) 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);
 - (ix) any adjustments to reflect over-payments and/or underpayments (each such adjustment stated separately) in respect of Performance Incentive Payments made by the Design-Builder during the period prior to that Payment Period (for which adjustment has not already been made);
 - (x) any interest payable in respect of any amounts owed; and
 - (xi) 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 5.1 [Obligation to make Performance Incentive Payments] and 5.2 [Obligation to pay Delay Liquidated Damages], respectively, of this Schedule.
- (b) The report delivered pursuant to this Section 6.2 will also include the Design-Builder's proposed classification of the applicable Payment Period for the purposes of the determination of the Contract Compliance Incentive Payment payable in accordance with Section 2.7 [Obligation to pay Contract Compliance Incentive Payment] of this Schedule and the Traffic Management Incentive Payment payable in accordance with Section 2.8 [Obligation to pay Traffic Management Incentive Payment] of this Schedule. Specifically, the report will include:
- (i) where such Payment Period is the third month in a three month period referenced in Section 2.7(a)(i) of this Schedule, the Design-Builder's proposed classification of such three month period as either a CCIP Eligible Period or a CCIP Non-Eligible Period in accordance with Section 2.7(a)(i) of this Schedule; and
 - (ii) the Design-Builder's proposed classification of such Payment Period as either a TMIP Eligible Period or a TMIP Non-Eligible Period in accordance with Section 2.8(a)(i) of this Schedule.
- (c) A report delivered pursuant to this Section 6.2 will be accompanied by working papers clearly setting forth the derivation of the amounts set out therein in accordance with all applicable calculations specified in this Schedule and the rationale for the Design-Builder's classifications in accordance with Section 6.2(b). Such working papers will include all relevant reports, information and documentation (all in such form and content as is

- 25 -

acceptable to the Province's Representative) to support the Design-Builder's calculation of the relevant Performance Incentive Payment and Delay Liquidated Damages, and the Design-Builder's classifications pursuant to Section 6.2(b), in each case as applicable.

- (d) The Design-Builder's obligation to deliver a written report pursuant to this Section 6.2 will 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 will be accompanied by working 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

On or before the last Business Day of each February, May, August and November during the period from the Effective Date until the Total Completion Date, the Design-Builder will deliver to the Province's Representative a forecast of:

- (a) the cumulative total of all Progress Payments to be paid in respect of the next following 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 next following 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; and
- (d) confirmation that such quarterly forecast accurately reflects the Works Schedule as of the date of such quarterly forecast.

PART 7

ADVANCE PAYMENTS

7.1 Payment for Off-Site Materials and Equipment

- (a) The Design-Builder may request payment for off-site materials or equipment from the Province:
 - (i) prior to such materials or equipment being incorporated into the Project Work or delivered to the Project Site;
 - (ii) where such materials or equipment have a long lead-time for ordering or procurement and therefore require payment prior to the materials or equipment being delivered to the Project Site; or

- 26 -

- (iii) where the procurement of such materials or equipment involves early design work such as the production of shop drawings.
- (b) Notwithstanding that the Province is under no obligation to pay for any material and equipment that has not been delivered to the Project Site, the Province, in its sole discretion, may agree in writing to the Design-Builder's request and provide payment for materials or equipment which have been delivered to, or are located at, an off-site storage facility or site, or prior to such materials or equipment being produced, in accordance with Section 7.1(a) of this Schedule. As a condition to providing its consent, the Design-Builder will provide, at its cost, additional information and documentation in connection with providing such payment to the satisfaction of the Province's Representative, which may include:
 - (i) a Vesting Certificate;
 - (ii) an unredacted invoice from the applicable supplier or manufacturer to confirm or validate the amounts claimed on materials or equipment which require a down payment or advance, or which have a long lead time for ordering;
 - (iii) that documents or information applicable to the materials or equipment be subject to the Review Procedure or Consent Procedure, as determined by the Province's Representative in its discretion;
 - (iv) a Letter of Credit provided by the Design-Builder;
 - (v) evidence that title to the relevant materials or equipment has passed from the supplier or manufacturer, as applicable, to the Design-Builder in accordance with the terms of the relevant purchase orders or supply contracts;
 - (vi) a "no interest" letter issued by any lenders under any credit facility established by or for the benefit of the Design-Builder for the purpose of funding the Design-Builder in connection with the Project whereby the lending entity (or lending entities) disclaims any interest (including a security interest) in the off-site materials or equipment for which the Design-Builder is requesting payment in accordance with this Section;
 - (vii) confirmation that:
 - (A) the Design-Builder is the owner of the off-site storage facility or site, and any evidence requested by the Province which confirms that the Design-Builder is the owner; or
 - (B) the Design-Builder leases or is otherwise not the owner of the off-site storage facility or site, in which case the Design-Builder will provide a direct agreement or a waiver (in a form satisfactory to the Province) from the landlord or owner of the off-site storage facility or site disclaiming any right to seize the material or equipment in exercising its distress right (which may include a waiver of detainment);
 - (viii) any other evidence confirming that no other party has a security interest in the relevant materials or equipment (either specifically against such materials and

- 27 -

equipment, or generally by claiming a security interest in all present and after-acquired personal property of the Design-Builder); or

- (ix) all or any combination of the documents described in this Section 7.1(b).
- (c) Any payment made by the Province in accordance with Section 7.1(b) of this Schedule will be made on account of the Contract Price and, where applicable, on account of the applicable Cost Item, and the Design-Builder will not request payment for any such materials or equipment (including any ancillary costs already paid for by the Province pursuant to Section 7.1(b) of this Schedule) when they are incorporated into the Project Work or delivered to the Project Site. Where payments made on account of a Cost Item in accordance with this Section 7.1(c), the Province, and not the Independent Engineer, will determine the progress made on the applicable Cost Item in connection with any payment made by the Province in accordance with Section 7.1(b) of this Schedule.
- (d) When the off-site materials or equipment have been incorporated into the Project Work, the Design-Builder may apply to the Province for the return of any applicable Letter of Credit requested by the Province in accordance with Section 7.1(b) of this Schedule. If the Province, in its discretion, determines that the materials or equipment for which prior payment was made have been sufficiently incorporated into the Project Work, the Province will return the Letter of Credit provided by the Design-Builder in connection with Section 7.1(b) of this Schedule.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT

Commercial in Confidence
Execution

APPENDIX 10A
FORM OF STATEMENT OF PROGRESS

Each Relevant Completion Percentage will be calculated to 2 decimal places, and each Cost Item Progress Amount will 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	G = A x F
1. Project Management and Key Individuals								
1.1	project management							
1.2	Key Individuals							
1.2.1	Design-Builder’s Representative							
1.2.2	Design Manager							
1.2.3	Construction Manager							
1.2.4	Quality Director							
1.2.5	Environmental Manager							
1.2.6	Traffic Manager							
1.2.7	Indigenous Coordinator							
2. Mobilization								
2.1	mobilization							
2.2	insurance							
2.3	bonding							

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10A: Form of Statement of Progress

Commercial in Confidence
Execution

- 2 -

	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	G = A x F
3. Design								
3.1	Design development							
3.1.1	Design management							
3.1.2	Interim Design							
3.1.3	Final Design							
4. Highway 1 Works								
4.1	temporary detours – construction							
4.2	temporary detours – removal							
4.3	roadworks – preload & surcharge							
4.4	roadworks – grading							
4.4.1	roadworks – grading – site prep							
4.4.2	roadworks – grading – excavation							
4.4.3	roadworks – grading – fills							
4.5	roadworks – landscaping							
4.6	roadworks – paving							
4.6.1	roadworks – pavement – paving							
4.6.2	roadworks – pavement – finishing							

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10A: Form of Statement of Progress

Commercial in Confidence
Execution

- 3 -

	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	G = A x F	
4.7	roadworks – drainage								
4.7.1	Highway 1 and median drainage								
4.7.2	Major Culvert crossings – supply								
4.7.3	Major Culvert crossings – installation								
4.8	active transportation								
4.9	electrical/ITS and lighting								
5. 264th Street Works									
5.1	roadworks – preload & surcharge								
5.2	roadworks – grading								
5.2.1	roadworks – grading – site prep								
5.2.2	roadworks – grading – excavation								
5.2.3	roadworks – grading – fills								
5.2.4	roadworks – grading – walls								
5.3	curbing								
5.4	traffic islands								
5.5	roadworks – landscaping								
5.6	roadworks – utility install, removal and relocations								

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10A: Form of Statement of Progress

Commercial in Confidence
Execution

- 4 -

	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	G = A x F
5.7	roadworks – drainage							
5.8	roadworks – pavement							
5.8.1	roadworks – pavement - paving							
5.8.2	roadworks – pavement - finishing							
5.9	Transit Mobility Hub							
5.10	Truck Parking Facility – site works							
5.11	Truck Parking Facility – buildings							
5.12	habitat compensation and landscaping							
5.13	signs including Guide Sign Structures							
5.14	electrical, ITS, lighting and traffic signals							
6. 264th Street Interchange Structures								
6.1	Demolition of Existing 264th Street Interchange structure							
6.2	portal structure							
6.3	Structures – Foundations							
6.3.1	piles – delivery							
6.3.2	piles – installation							

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10A: Form of Statement of Progress

Commercial in Confidence
Execution

- 5 -

	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	G = A x F
6.3.3	piles – infill							
6.4	Structures – Substructures							
6.4.1	pile caps							
6.4.2	columns							
6.4.3	abutments							
6.4.4	bearings – delivery							
6.4.5	bearings – installation							
6.5	Structures – Superstructures							
6.5.1	bridge girders – fabrication and delivery							
6.5.2	bridge girders – erection							
6.5.3	cast in place diaphragm and structural deck slab							
6.5.4	parapets, railings and fencing							
6.5.5	approach slabs and expansion joints							
6.5.6	waterproofing membrane							
Total				[Sum of Column C]		[Sum of Column E]		[Sum of Column G]

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10A: Form of Statement of Progress

Commercial in Confidence
Execution

- 6 -

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	G = A x F
7. Specified Cost Items								
7.1	All deliverables pursuant to Part 1 [Deliverables for Substantial Completion] of Appendix 3C to Schedule 3							
7.2	All deliverables pursuant to Part 2 [Deliverables for Total Completion] of Appendix 3C to Schedule 3							
Total					[Sum of Column C]		[Sum of Column E]	

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 10B
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, will be deemed to be included in the relevant Cost Item, including provision and execution of all quality management, traffic management and environmental management as required for the work.
- The parties will mutually adjust Tables B-1 and B-2 as required to adjust for the progressive development of the Design.
- 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 will 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 will 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, will be completed in accordance with these principles.
- Specified Cost Items will 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 will 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 will 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 will in no event exceed the Contract Price.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 2 -

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 and Key Individuals				
1.1	project management	Management, supervision and administration of the Project together with all temporary facilities required to complete the Project Work.	<p>In accordance with the following formula: $TP_{(p-1)} + [(100\% - TP_{(p-1)}) / n]$</p> <p>Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - n is the number of Payment Periods from (and including) the relevant Payment Period to the Substantial Completion Target Date. <p>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 will be deemed 100% during the Payment Period during which the Substantial Complete Date occurs.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 3 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1.2	Key Individuals	The value for each Cost Item represents the value to the Project based on the Key Individual position remaining filled for the required basis set out in the Agreement, and for the Key Individual meeting the requirements provided for the position as set out in the Agreement. This value does not represent an hourly rate or other rate of compensation for the specified Key Individual position.		
1.2.1	Design-Builder's Representative	As defined in Section 1.1 [Definitions and Interpretation] of Schedule 1.	<p>In accordance with the following formula: $TP_{(p-1)} + (K_n / N)$</p> <p>Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - K_n is the number of calendar days within the Payment Period where the Design-Builder's Representative position is filled. - N is the total number of calendar days from (and including) the Effective Date to the Total Completion Target Date. <p>If, by the Total Completion Date, the Relevant Percent Complete in respect of this Cost Item has not achieved 100%, the Relevant Percentage Complete for this Cost Item will be deemed 100% during the Payment Period during which the Total Completion Date occurs.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 4 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1.2.2	Design-Manager	As defined in Section 1.1 [Definitions and Interpretation] of Schedule 1.	<p>In accordance with the following formula: $TP_{(p-1)} + (K_n / N)$</p> <p>Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - K_n is the number of calendar days within the Payment Period where the Design Manager position is filled. - N is the total number of calendar days from (and including) the Effective Date to the Substantial Completion Target Date. <p>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 will be deemed 100% during the Payment Period during which the Substantial Completion Date occurs.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 5 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1.2.3	Construction Manager	As defined in Section 1.1 [Definitions and Interpretation] of Schedule 1.	<p>In accordance with the following formula: $TP_{(p-1)} + (K_n / N)$ Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - K_n is the number of calendar days within the Payment Period where the Construction Manager position is filled. - N is the total number of calendar days from (and including) the Effective Date to the Total Completion Target Date. <p>If, by the Total Completion Date, the Relevant Percent Complete in respect of this Cost Item has not achieved 100%, the Relevant Percentage Complete for this Cost Item will be deemed 100% during the Payment Period during which the Total Completion Date occurs.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 6 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1.2.4	Quality Director	As defined in Section 1.1 [Definitions and Interpretation] of Schedule 1.	<p>In accordance with the following formula: $TP_{(p-1)} + (K_n / N)$</p> <p>Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - K_n is the number of calendar days within the Payment Period where the Quality Director position is filled. - N is the total number of calendar days from (and including) the Effective Date to the Substantial Completion Target Date. <p>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 will be deemed 100% during the Payment Period during which the Substantial Completion Date occurs.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 7 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1.2.5	Environmental Manager	As defined in Section 1.1 [Definitions and Interpretation] of Schedule 1.	<p>In accordance with the following formula: $TP_{(p-1)} + (K_n / N)$</p> <p>Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - K_n is the number of calendar days within the Payment Period where the Environmental Manager position is filled. - N is the total number of calendar days from (and including) the Effective Date to the Substantial Completion Target Date. <p>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 will be deemed 100% during the Payment Period during which the Substantial Completion Date occurs.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 8 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1.2.6	Traffic Manager	As defined in Section 1.1 [Definitions and Interpretation] of Schedule 1.	<p>In accordance with the following formula: $TP_{(p-1)} + (K_n / N)$</p> <p>Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - K_n is the number of calendar days within the Payment Period where the Operations/Traffic Manager position is filled. - N is the total number of calendar days from (and including) the Effective Date to the Substantial Completion Target Date. <p>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 will be deemed 100% during the Payment Period during which the Substantial Completion Date occurs.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 9 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
1.2.7	Indigenous Coordinator	As defined in Section 1.1 [Definitions and Interpretation] of Schedule 1.	<p>In accordance with the following formula: $TP_{(p-1)} + (K_n / N)$</p> <p>Where:</p> <ul style="list-style-type: none"> - $TP_{(p-1)}$ is the total progress, expressed as a percentage, up to and including the Payment Period that immediately precedes the relevant Payment Period. - K_n is the number of calendar days within the Payment Period where the Indigenous Coordinator position is filled. - N is the total number of calendar days from (and including) the Effective Date to the Substantial Completion Target Date. <p>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 will be deemed 100% during the Payment Period during which the Substantial Completion Date occurs.</p>	
2. Mobilization				
2.1	mobilization	The activities carried out necessary to commence Design and Construction of the Project, including Proposal development.	<p>Total of item 2.1 Mobilization, paid as follows:</p> <ul style="list-style-type: none"> (a) as to 30%, in the first Payment Period; (b) as to 45%, when all of the following have been completed: <ul style="list-style-type: none"> (i) all Key Individuals have been named in accordance with Section 3.3(a) and Schedule 21; and (ii) the Design-Builder has held the initial meeting with each of the Identified Indigenous Groups in accordance with Section 1.1(b) of Schedule 12; and (c) as to 25%, when all of the following have been completed: <ul style="list-style-type: none"> (i) the Project construction phone line has been established in accordance with Section 3.1.5(a) of Schedule 15; 	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 10 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
			<p>(ii) the training protocol for operators for the Project construction phone line to be developed and implemented in accordance with Section 3.1.5(b) of Schedule 15 has been endorsed “received” by the Province pursuant to the Review Procedure;</p> <p>(iii) all Key Individuals have completed the Indigenous cultural sensitivity and/or awareness training required in accordance with Section 1.1(f) of Schedule 12;</p> <p>(iv) all of the following have been “accepted” by the Province pursuant to the Consent Procedure:</p> <p>(A) Design Management Plan;</p> <p>(B) Traffic Management Plan;</p> <p>(C) Construction Environmental Management Plan;</p> <p>(D) Quality Manual;</p> <p>(E) Indigenous Participation Plan; and</p> <p>(F) Design Quality Management Plan; and</p> <p>(v) all of the following have been endorsed “received” by the Province pursuant to the Review Procedure:</p> <p>(A) Construction Management Plan;</p> <p>(B) Operation and Maintenance Plan;</p> <p>(C) Health and Safety Program; and</p> <p>(D) Respect in the Workplace Plan.</p> <p>Considered to be <u>100% complete</u> following the Payment Period in which all three payments have been made in accordance with the foregoing.</p>	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 11 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
2.2	insurance	Insurance premium payments.	Considered 100% complete during the Payment Period where full Project term coverage taken out for Commercial General Liability insurance, Project Specific Professional Liability insurance and Builders' Risk Insurance. To be supported by documentation from insurance providers which states that premiums have been paid.	
2.3	bonding	Bonding payments to sureties.	Considered 100% complete during the Payment Period where full Project term coverage taken out. To be supported by documentation from sureties where a statement is provided that premiums have been paid.	
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 total of Item 3 Design paid as equal monthly payments over the scheduled Design period, provided that such scheduled Design period will not commence until: (a) the Design Management Plan and the Design Quality Management plans have both been "accepted" by the Province pursuant to the Consent Procedure; and (b) the Design Quality Management Plan has been implemented.	
3.1.2	Interim Design	Interim Design Submission - Work falling within the definition of Interim Design in Section 1.1 [Definitions and Interpretation] of Schedule 1.	45% of the total of Item 3 Design, divided into Interim Design sub-packages. Interim Design and submission in accordance with Schedule 4.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 12 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
3.1.3	Final Design	Work falling within the definition of Final Design in Section 1.1 [Definitions and Interpretation] of Schedule 1.	45% of the total of Item 3 Design, divided into Design sub-packages. Final Design and submission in accordance with Schedule 4. Design sub-package considered to be <u>100% complete</u> when the Final Design is “received” or “received with comments” pursuant to the Review Procedure. Prior to 100% completion the total progress of each Design sub-package will be 0%.	
4. Highway 1 Works				
4.1	temporary detour – construction	Construct detour lanes on Project Site to replace the capacity of any lanes that are unavailable to the public due to construction or the storage of equipment or materials.	Paved detour area completed <u>divided by</u> the total area of paved detours.	
4.2	temporary detour – removal	Pavement removal from temporary detour lanes.	Fully removed paved detour area <u>divided by</u> the total area of paved detours to be removed.	
4.3	roadworks – preload & surcharge	Preload will consist of the following work: supply, placement and compaction of preload or surcharge embankment material; monitoring and maintenance of the preload; removal of preload and post removal grading; provision and execution of all quality management, traffic management and environmental management as required.	Volume of preload or surcharge placed <u>divided by</u> the total volume of preload or surcharge required.	
4.4	roadworks – grading	Site preparation, excavation, fills and walls. Each sub-item includes provision and execution of quality management, traffic management and environmental management as required for the work.		

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 13 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.4.1	roadworks – grading – site preparation	site preparation consists of the following: clearing and grubbing; organic stripping; removals and relocations of existing plant; all other site preparation required to be done prior to roadway and drainage excavation.	Area of site preparation completed <u>divided by</u> total area of site preparation required.	
4.4.2	roadworks – grading – excavation	excavation and disposal consists of the following: roadway excavation; disposal of unsuitable materials to off-site; disposal of surplus and/or surcharge material on site and off site.	Volume of excavation and disposal completed <u>divided by</u> total volume of excavation and disposal required.	
4.4.3	roadworks – grading – fills	Fills consist of the following: supply and installation of geotextiles; embankment construction; supply and installation of light weight embankment materials; supply, placement and compaction of imported rip rap and granular materials.	Volume of fills completed <u>divided by</u> total volume of fills required.	
4.5	roadworks – landscaping	Landscaping includes berms, grading, placement of top-soil and hydroseeding, and placement of vegetation/trees/plantings described by Schedule 4 of this Agreement including execution of all quality management, traffic management and environmental management as required for the work.	Landscaping area completed <u>divided by</u> the total area of landscaping.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 14 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.6	roadworks – pavement	Pavement consists of both paving and finishing as described below. Each sub-item includes provision and execution of quality management, traffic management and environmental management as required for the work.		
4.6.1	roadworks – pavement – paving	Paving consists of the following: 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 temporary pavement markings and temporary barriers.	Lane km's of paving completed <u>divided by</u> the total lane km's of paving required.	
4.6.2	roadworks – pavement – finishing	Finishing consists of the following: supply and application of penetrating primer and tack coat; supply and placement of asphalt pavement top lift; supply and installation of pavement drainage facilities; supply and installation of temporary and final pavement markings and delineation; supply and installation of barriers and appurtenances.	Lane km's of finishing completed <u>divided by</u> the total lane km's of finishing required.	
4.7	roadworks – drainage			
4.7.1	Highway 1 and median drainage	Drainage will consist of (special) open ditches, enclosed/piped facilities, pumps/siphons, stormceptors, manholes, inlet structures, catch basins, spillways etc. required to convey run-off water.	Lump sum item for drainage pro-rated by the percentage completed.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 15 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
4.7.2	Major Culverts – supply	Supply of replacement culverts that cross under the highway	Length of culvert delivered to a site in British Columbia <u>divided by</u> total length of culvert to be installed, provided that title has passed to the Province in accordance with Section 2.8, including satisfactory testing in accordance with Schedule 7.	
4.7.3	Major Culverts – installation	Installation of replacement culverts that cross under the highway	Length of culvert installed <u>divided by</u> total length of culvert to be installed.	
4.8	active transportation	Installation of multi-use pathway, bike lanes and sidewalk throughout Project Site.	Square area of completed multi-use pathway, bike lanes and sidewalk <u>divided by</u> total square area of multi-use pathway, bike lanes and sidewalk to be completed.	
4.9	electrical/ITS & lighting	All electrical, ITS and lighting components required.	Item to be considered <u>100% complete</u> upon successful cut-over to the new/permanent electrical, ITS and lighting system, including 100% completion of all QA/QC and punch list items. Prior to 100% completion the total progress will be 0%.	
5. 264th Street Works				
5.1	roadworks – preload & surcharge	Preload will consist of the following work: supply, placement and compaction of preload or surcharge embankment material; monitoring and maintenance of the preload; removal of preload and post removal grading; provision and execution of all quality management, traffic management and environmental management as required.	Volume of preload or surcharge placed <u>divided by</u> the total volume of preload or surcharge required.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 16 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.2	roadworks – grading	Site preparation, excavation, fills and walls. Each sub-item includes provision and execution of quality management, traffic management and environmental management as required for the work.		
5.2.1	roadworks – grading – site preparation	Site preparation consists of the following: clearing and grubbing; organic stripping; removals and relocations of existing plant; all other site preparation required to be done prior to roadway and drainage excavation.	Area of site preparation completed <u>divided by</u> total area of site preparation required.	
5.2.2	roadworks – grading – excavation	Excavation and disposal consist of the following: roadway excavation; disposal of unsuitable materials to off-site; disposal of surplus and/or surcharge material on site and off site.	Volume of excavation and disposal completed <u>divided by</u> total volume of excavation and disposal required.	
5.2.3	roadworks – grading – fills	Fills consist of the following: supply and installation of geotextiles; embankment construction; supply and installation of light weight embankment materials; supply, placement and compaction of imported rip rap and granular materials.	Volume of fills completed <u>divided by</u> total volume of fills required.	
5.2.4	roadworks – grading – walls	Walls consist of permanent retaining walls.	Area of walls completed <u>divided by</u> total area of walls required.	
5.3	curbing	Installation of curbing for roadworks, traffic islands, medians, multi-use pathways and sidewalk.	Length of curbing installed <u>divided by</u> total length of curbing to be installed.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 17 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.4	traffic islands	Construction of median and traffic islands.	Square area of islands constructed <u>divided by</u> total square area of islands to be constructed.	
5.5	roadworks - landscaping	Landscaping includes berms, grading, placement of top-soil and hydroseeding, and placement of vegetation/trees/plantings described by Schedule 4 of this Agreement including execution of all quality management, traffic management and environmental management as required for the work.	Landscaping area completed <u>divided by</u> the total area of landscaping.	
5.6	roadworks – utility installs, removals and relocations	Utilities will consist of (but not necessarily be limited to) BC Hydro electrical, Fortis BC gas, Telus communications, Rogers communications, Municipal water, and other third party public/private utility services.	Lump sum item for each utility pro-rated by the percentage completed.	
5.7	roadworks – drainage	Drainage will consist of (special) open ditches, enclosed/piped facilities, pumps/siphons, etc. required to convey run-off water.	Lump sum item for drainage pro-rated by the percentage completed.	
5.8	roadworks – pavement	Pavement consists of both paving and finishing as described below. Each sub-item includes provision and execution of quality management, traffic management and environmental management as required for the work.		

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 18 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.8.1	roadworks – pavement – paving	Paving consists of the following: 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 temporary pavement markings and temporary barriers.	Lane km's of paving completed <u>divided by</u> the total lane km's of paving required.	
5.8.2	roadworks – pavement – finishing	Finishing consists of the following: supply and application of penetrating primer and tack coat; supply and placement of asphalt pavement top lift; supply and installation of pavement drainage facilities; supply and installation of temporary and final pavement markings and delineation; supply and installation of barriers and appurtenances.	Lane km's of finishing completed <u>divided by</u> the total lane km's of finishing required.	
5.9	Transit Mobility Hub	Construction of the Transit Mobility Hub, including site works and accommodations for EV charging stations.	Item to be considered <u>100% complete</u> when the Transit Mobility Hub is completed. Prior to 100% completion the total progress will be 0%.	
5.10	Truck Parking Facility – site works	Construction of the Truck Parking Facility, including site works, and accommodations for EV charging stations.	Item to be considered <u>100% complete</u> when the Truck Parking Facility is completed. Prior to 100% completion the total progress will be 0%.	
5.11	Truck Parking Facility - buildings	Guard house & washroom at the Truck Parking Facility	Item to be considered <u>100% complete</u> when the guard house and washroom are completed. Prior to 100% completion the total progress will be 0%.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 19 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
5.12	habitat compensation and landscaping	Development of a habitat compensation method agreed upon by the Province, construction of an access road, and carrying out of landscaping tasks.	Total of item 5.12 paid as follows: (a) as to 75%, for habitat compensation, with the method of progress measurement to be agreed upon by the Province; (b) as to 15%, upon completion of access road; and (c) as to 10%, upon completion of landscaping.	
5.13	signs including guide sign structures	Guide signs will consist of foundation, including piling/footing, pile cap, sign structure, sign board and all other components required.	Lump sum item for each guide sign pro-rated by the percentage completed.	
5.14	electrical, ITS, lighting and traffic signals	All electrical, ITS and lighting components required, including for the Transit Mobility Hub and Truck Parking Facility.	Lump sum for installation of each major element of work. Each element to be considered 100% complete upon successful cut-over to the new/permanent electrical, ITS and lighting system, including 100% completion of all QA/QC and punch list items. Prior to 100% completion the total progress will be 0%.	
6. 264th Street Interchange Structures				
6.1	demolition of existing 264th Street Interchange structure	Demolition and removal of all materials associated with the existing 264th Street Interchange structure.	Considered to be <u>100% complete</u> when the existing 264th Street Interchange structure has been demolished, and all associated materials have been removed. Prior to 100% completion the total progress will be 0%.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 20 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
6.2	portal structure	Excavation, concrete placement and backfill of portal structure at new west-bound onramp in northwest quadrant.	Lump sum item for portal structure pro-rated by the percentage completed.	
6.3	Structures – Foundations	A foundation structure will consist of one or more piles complete with reinforced concrete		
6.3.1	piles – delivery	Delivery of pile steelworks for Foundations, excluding reinforcement.	Tonnage of piles delivered to the Project Site <u>divided by</u> total tonnage of piles to be installed, provided that title has passed to the Province in accordance with Section 2.8, including satisfactory testing in accordance with Schedule 7.	
6.3.2	piles – installation	Installation of piles for Foundations.	Length of piles installed <u>divided by</u> total length of piles to be installed. No progress measurement shall be made for partially installed piles. A pile is considered 100% complete when the pile is ready to receive reinforced concrete pile infill including satisfactory testing in accordance with Schedule 7.	
6.3.3	pile infill	Placement of pile infill reinforced concrete for Foundations.	Quantity of concrete for pile infill placed <u>divided by</u> total quantity of concrete for pile infill to be placed. No progress measurement shall be made for partially infilled piles. Pile infill is considered 100% complete including satisfactory testing in accordance with Schedule 7.	
6.4	Structures – Substructures			
6.4.1	pier caps	Construction of pier caps for Substructures.	Quantity of concrete for pier caps placed <u>divided by</u> total quantity of concrete for pier caps to be placed.	
6.4.2	columns	Construction of columns for Substructures.	Quantity of concrete for columns placed <u>divided by</u> total quantity of concrete for columns to be placed.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 21 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
6.4.3	abutments	Construction of abutments for Substructures.	Quantity of concrete for abutments placed <u>divided by</u> total quantity of concrete for abutments to be placed.	
6.4.4	bearings – delivery	Delivery of bearings for Substructures.	Number of bearings delivered to Project Site <u>divided by</u> total number of bearings to be installed, provided that title has passed to the Province in accordance with Section 2.8, including satisfactory testing in accordance with Schedule 7.	
6.4.5	bearings - installation	Installation of bearings for Substructures.	Number of bearings installed <u>divided by</u> total number of bearings to be installed.	
6.5	Structures – Superstructures			
6.5.1	bridge girders – fabrication and delivery	Fabrication and delivery of bridge girders for Superstructures.	Weight of the bridge girders, identified to be part of the Project Infrastructure, delivered to Project Site <u>divided by</u> the total weight bridge girders to be delivered, provided that title has passed to the Province in accordance with Section 2.8, including satisfactory testing in accordance with Schedule 7.	
6.5.2	bridge girders – erection	Erection of bridge girders for Superstructures.	Area of the bridge girders erected and in place <u>divided by</u> the total weight or area of the bridge girders to be erected.	
6.5.3	cast in place diaphragm and structural deck slab	Installation of cast in place diaphragm and concrete deck required for Superstructures. A structural deck slab will be complete when all work necessary to construct the structural deck slab has been completed excluding paving, and with all temporary structures removed.	Area of the structural deck slab installed <u>divided by</u> the total area of the structural deck slab. No progress measurement will be made for any Structural Deck Slab that is not complete.	
6.5.4	parapets, railings and fencing	Cast in place parapets, road barriers, drainage, miscellaneous metals such as railings and fencing	Lump sum item pro-rated by the percentage completed.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10B: Progress Measurement Principles

Commercial in Confidence
Execution

- 22 -

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
6.5.5	approach slabs and expansion joints	Cast in place approach slab with expansion joint	Lump sum item pro-rated by the percentage completed.	
6.5.6	waterproofing membrane	Application of a waterproofing membrane to the overpass structure.	Square area of waterproofing membrane applied <u>divided by</u> total square area of waterproofing membrane to be applied.	

TABLE B-2 SPECIFIED COST ITEMS

	Cost Item	Description	Progress measurement	Cost Item Amount
A	B	C	D	E
7. Specified Cost Items				
7.1	All deliverables pursuant to Part 1 [Deliverables for Substantial Completion] of Appendix 3C to Schedule 3	As set out in Part 1 [Deliverables for Substantial Completion] of Appendix 3C to Schedule 3.	Considered to be <u>100% complete</u> when all such deliverables have been delivered to the Province and, where applicable, endorsed “received” by the Province pursuant to the Review Procedure. Prior to 100% completion the total progress will be 0%.	
7.2	All deliverables pursuant to Part 2 [Deliverables for Total Completion] of Appendix 3C to Schedule 3	As set out in Part 2 [Deliverables for Total Completion] of Appendix 3C to Schedule 3.	Considered to be <u>100% complete</u> when all such deliverables have been delivered to the Province and, where applicable, endorsed “received” by the Province pursuant to the Review Procedure. Prior to 100% completion the total progress will be 0%.	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

APPENDIX 10C
FORMS

- A Draw Request
- B Deficiency Holdback Payment Application
- C Warranty Holdback Payment Application
- D Indigenous Contracts Incentive Payment Application
- E Apprenticeship Incentive Payment Application
- F Equity Incentive Payment Application
- G Early Construction Commencement Incentive Payment Application
- H Safety Incentive Payment Application
- I Contract Compliance Incentive Payment Application
- J Traffic Management Incentive Payment Application
- K Early Substantial Completion Incentive Payment Application
- L Statutory Declaration in Support of Payment Application

- 1 -

FORM A
DRAW REQUEST

[TO BE PRINTED ON THE DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in Right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (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 3.1(b) of Schedule 10 to be payable in respect of the Relevant Payment Period: \$•

- 2 -

- (iii) the amount of any amount payable for such Payment Period in respect of previous Progress Payments Holdbacks pursuant to Section 3.1(a)(iii) of Schedule 10;
- (iv) the amount of any holdback on account of the Progress Payment Holdback to be made for such Payment Period pursuant to Section 3.1(a)(iv) of Schedule 10;
- (v) the amount of any holdback on account of the Deficiency Holdback to be made for such Payment Period pursuant to Section 3.1(a)(v) of Schedule 10;
- (vi) the amount of any holdback on account of the Warranty Holdback to be made for such Payment Period pursuant to Section 3.1(a)(vi) of Schedule 10;
- (vii) the total Progress Payment payable in respect of the Relevant Payment Period, determined pursuant to Section 3.1(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 2.1 [Obligation to make Progress Payments] of Schedule 10: \$●

Claim for payment for additional or varied Project Work

- 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 [Province Changes] or Part 3 [Value Engineering Proposals] of Schedule 11:
 - (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: \$●

- 3 -

- (ii) the applicable taxes payable in respect of the payment referred to above: \$●

[NTD: list breakdown of tax calculations]

- (iii) 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]

- (iv) 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 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(iv) 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 10B [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;
 - (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;

- 4 -

- (viii) there has not been any material adverse change in the Design-Builder's ability to perform its obligations under the Agreement;
- (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; and
- (x) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.

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 (including relevant reports, information and documentation) clearly setting forth:
 - (a) 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 3.1 [Calculation of Progress Payments] and Section 3.2 [Labour Rate Adjustment] of Schedule 10 or Part 2 [Province Changes] of Schedule 11;
 - (b) the applicable units of measurement as set out in Appendix 10B [Progress Measurement Principles] to Schedule 10 (or an alternative unit of measurement acceptable to the Province, in its discretion) and actual quantities delivered for each Cost Item during the Relevant Payment Period; and
 - (c) a report which (A) demonstrates that the Key Individuals have been working on the Project as required in accordance with Section 3.3 [Key Individuals] of the Agreement and Schedule 21 [Key Individuals] for the applicable Payment Period; and (B) if applicable, identifies if a Key Individual has been, or will be, temporarily unavailable (such as vacation or other reasonable temporary absence) and outlines the coverage the Design-Builder has provided to address the Key Individual's duties during the time such Key Individual is, or will be, temporarily unavailable.
- 9. Attached hereto are documents required by the Province in connection with making payment for off-site materials or equipment in accordance with Section 8.1 [Payment for Off-Site Materials and Equipment] of Schedule 10. **[NTD: To be included if applicable.]**

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 5 -

10. Attached hereto is a statutory declaration in the form attached as Appendix 10C, Form L [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”]**
11. 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.
12. Attached hereto is a report on the status of the Project, including a description of: (i) the Design-Builder’s progress during the Relevant Payment Period to which this Draw Request relates; and (ii) 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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder’s Representative

***HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms***

***Commercial in Confidence
Execution***

- 6 -

Attachment A

[NTD: List any exceptions to representations and warranties]

- 7 -

FORM B
DEFICIENCY HOLDBACK PAYMENT APPLICATION
[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application for amount retained by the Province for the Deficiency Holdback under Section 4.1(b) of Schedule 10 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 4.1(b) of Schedule 10 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:
 - (i) this Payment Application relates to the Final Deficiency List Deficiencies (each a “**Resolved Deficiency**”) described in the table below, in respect of which:

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 8 -

- (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 4.1 [Deficiency Holdback] of Schedule 10 and other relevant provisions of 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;
- (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; and

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 9 -

- (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
- (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.

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 10C, Form L [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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

***HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms***

***Commercial in Confidence
Execution***

- 10 -

Attachment A

[NTD: List any exceptions to representations and warranties.]

- 11 -

FORM C
WARRANTY HOLDBACK PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 4.2(b) of Schedule 10 to the Agreement for payment of the Warranty Holdback

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 4.2(b) of Schedule 10 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 Section 8.4(d) and/or Section 8.4(f) of Schedule 3 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 (iii) 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 4.2 [Warranty Holdback] of Schedule 10 and other relevant provisions of the Agreement;

- 12 -

- (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;
 - (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; and
 - (viii) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 13 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 14 -

Attachment A

[NTD: List any exceptions to representations and warranties.]

- 15 -

FORM D
INDIGENOUS CONTRACTS INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 2.2 of Schedule 10 to the Agreement for payment of the Indigenous Contracts Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.2 of Schedule 10 for payment of the Indigenous Contracts Incentive Payment. 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 Indigenous Contracts Incentive Payment payable in accordance with Section 1.6 [Indigenous Contracts Incentive Payment] of Schedule 12 to the Agreement.

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:
 - (i) Total Completion has been achieved;
 - (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 1.6 [Indigenous Contracts Incentive Payment] of Schedule 12 to the Agreement and other relevant provisions of the Agreement;

- 16 -

- (iii) the Design-Builder is entitled to payment in the amount requested;
 - (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;
 - (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; and
 - (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 17 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

- 18 -

FORM E
APPRENTICESHIP INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 2.3 of Schedule 10 to the Agreement for payment of the Apprenticeship Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.3 of Schedule 10 for payment of the Apprenticeship Incentive Payment. 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 Apprenticeship Incentive Payment payable in accordance with Section 3.1 [Apprenticeship] of Schedule 13 to the Agreement.

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:
 - (i) Total Completion has been achieved;
 - (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 3.1 [Apprenticeship] of Schedule 13 to the Agreement and other relevant provisions of the Agreement;

- 19 -

- (iii) the Design-Builder is entitled to payment in the amount requested;
 - (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;
 - (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; and
 - (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 20 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

- 21 -

FORM F
EQUITY INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 2.4 of Schedule 10 to the Agreement for payment of the Equity Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.4 of Schedule 10 for payment of the Equity Incentive Payment. 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 Equity Incentive Payment payable in accordance with Section 3.2 [Equity] of Schedule 13 to the Agreement.

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:
 - (i) Total Completion has been achieved;
 - (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 3.2 [Equity] of Schedule 13 to the Agreement and other relevant provisions of the Agreement;

- 22 -

- (iii) the Design-Builder is entitled to payment in the amount requested;
 - (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;
 - (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; and
 - (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 23 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

- 24 -

FORM G
EARLY CONSTRUCTION COMMENCEMENT INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 2.5 of Schedule 10 to the Agreement for payment of the Early Construction Commencement Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.5 of Schedule 10 for payment of the Early Construction Commencement Incentive Payment. 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 Early Construction Commencement Incentive Payment payable in accordance with Section 2.5 of Schedule 10 to the Agreement.

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 (iii) 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 2.5 of Schedule 10 to the Agreement and other relevant provisions of the Agreement;
 - (ii) the Design-Builder is entitled to payment in the amount requested;

- 25 -

- (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;
 - (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; and
 - (viii) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 26 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

- 27 -

FORM H
SAFETY INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 2.6 of Schedule 10 to the Agreement for payment of the Safety Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.6 of Schedule 10 for payment of the Safety Incentive Payment. 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 Safety Incentive Payment payable in accordance with Section 2.6 of Schedule 10 to the Agreement for the period from _____ to _____.

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:
 - (i) Total Completion has been achieved;
 - (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 2.6 of Schedule 10 to the Agreement and other relevant provisions of the Agreement;

- 28 -

- (iii) the Design-Builder is entitled to payment in the amount requested;
 - (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;
 - (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; and
 - (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 29 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

- 30 -

FORM I
CONTRACT COMPLIANCE INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 2.7 of Schedule 10 to the Agreement for payment of the Contract Compliance Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.7 of Schedule 10 for payment of the Contract Compliance Completion Incentive Payment. 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 Contract Compliance Incentive Payment payable in accordance with Section 2.7 of Schedule 10 to the Agreement.

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:
 - (i) Total Completion has been achieved;
 - (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 2.7 of Schedule 10 to the Agreement and other relevant provisions of the Agreement;

- 31 -

- (iii) the Design-Builder is entitled to payment in the amount requested;
 - (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;
 - (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; and
 - (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 32 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

- 33 -

FORM J
TRAFFIC MANAGEMENT INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: Payment Application under Section 2.8 of Schedule 10 to the Agreement for payment of the Traffic Management Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.8 of Schedule 10 for payment of the Traffic Management Incentive Payment. 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 Traffic Management Incentive Payment payable in accordance with Section 2.8 of Schedule 10 to the Agreement.

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:
 - (i) Total Completion has been achieved;
 - (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 2.8 of Schedule 10 to the Agreement and other relevant provisions of the Agreement;

- 34 -

- (iii) the Design-Builder is entitled to payment in the amount requested;
 - (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;
 - (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; and
 - (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 35 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

- 36 -

FORM K
EARLY SUBSTANTIAL COMPLETION INCENTIVE PAYMENT APPLICATION

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the "**Province**"), BC Transportation Financing Authority and KEA Fraser Valley Connectors (the "**Design-Builder**")

And Re: Payment Application under Section 2.9 of Schedule 10 to the Agreement for payment of the Early Substantial Completion Incentive Payment

-
1. This letter, including the documentation attached hereto, constitutes the Payment Application pursuant to Section 2.9 of Schedule 10 for payment of the Early Substantial Completion Incentive Payment. 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 Early Substantial Completion Incentive Payment payable in accordance with Section 2.9 of Schedule 10 to the Agreement.

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:
 - (i) Substantial Completion has been achieved;
 - (ii) the amount which is the subject of this Payment Application has been calculated in accordance with the requirements of Section 2.9 of Schedule 10 to the Agreement and other relevant provisions of the Agreement;

- 37 -

- (iii) the Design-Builder is entitled to payment in the amount requested;
 - (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;
 - (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; and
 - (ix) to the best of the Design-Builder's knowledge, no event or circumstance exists which:
 - (A) has a material adverse effect on the financial condition of the Guarantor such that it could reasonably be expected to adversely affect the Project Work; or
 - (B) could reasonably be expected to materially and adversely affect or impair the ability of the Guarantor to perform its obligations under the Guarantee or the ability of the Design-Builder to perform its obligations under the Agreement.
4. Attached hereto is a statutory declaration in the form attached at Appendix 10C, Form L [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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10C: Forms

Commercial in Confidence
Execution

- 38 -

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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder's Representative

APPENDIX 10D
FORM OF VESTING CERTIFICATE

[TO BE PRINTED ON DESIGN-BUILDER LETTERHEAD]

[Date]

HIS MAJESTY THE KING
IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA

Attention: Province's Representative, Highway 1 – 264th Street Interchange Project

Email.: ProvRep.264interchange@gov.bc.ca

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 His Majesty the King in right of the Province of British Columbia (the “**Province**”), BC Transportation Financing Authority (“**BCTFA**”) and KEA Fraser Valley Connectors (the “**Design-Builder**”)

And Re: This Certificate for Vesting of Goods (hereinafter referred to as the “**Vesting Certificate**”) which is for the benefit of the Province and BCTFA.

-
1. This certificate, including the documentation attached hereto, constitutes the Vesting Certificate pursuant to Section 7.1(b) of Schedule 10 to the Agreement. Capitalized terms used and not defined in this Vesting Certificate have the meanings given to them in the Agreement and references to Sections and Schedules are to Sections of and Schedules to the Agreement.

In consideration of the premises, and the mutual covenants, agreements and conditions contained in the Agreement and as otherwise set out herein, the Design-Builder writes in relation to the ownership of certain off-site plant, materials, goods and items.

2. This Vesting Certificate relates to the following:
 - (i) A contract for the supply of goods, services and works between the [●] (the “**Supplier**”) and the Design-Builder dated [●] (the “**Supply Contract**”).
 - (ii) The Supplier has been engaged to enter into the Supply Contract by the Design-Builder pursuant to the Design-Builder's obligations under the Agreement.
 - (iii) The Supply Contract relates to the design, specification, manufacture, construction, testing, certification, supply and sale of the items listed in “**Schedule A**” to this Vesting Certificate (the “**Goods**”), as listed on Invoice # [●] dated [●], a copy of which is appended hereto in “**Schedule B**” to this Vesting Certificate.

- 2 -

3. Prior to the Goods being affixed to or incorporated into the Project Site or the Project Infrastructure, the Design-Builder has applied for payment in relation to the Goods in a Draw Request dated [insert date].
4. The Design-Builder declares that title and property in the Goods will unconditionally pass to and vest absolutely in the Province and BCTFA upon receipt of the Progress Payment (or the portion thereof related to the Goods) related to the Draw Request referred to in Section 3 of this Vesting Certificate.

Representations and Warranties

5. As of the date hereof, the Design-Builder represents, warrants and undertakes that all the actions referred to in this Vesting Certificate have been taken and the statements made herein, including those in this Section 5, are true and correct, including that:
 - (i) the Goods have been manufactured or prepared and are ready for incorporation in the Project Work and are intended to be incorporated in the Project Work;
 - (ii) the Goods have been set apart from any other goods and stored at the premises described in the Schedule D appended hereto, and have been clearly and visibly marked as follows:

“Property of His Majesty The King In Right of The Province of British Columbia, as represented by the Minister of Transportation and Infrastructure and the BC Transportation Financing Authority. These Goods are for use at the Highway 1 – 264th Street Interchange Project.”

but such markings will not damage, permanently deface or harm the Goods;
 - (iii) the Goods have been stored at a safe and secure location, and in a condition and manner that is to the Province’s satisfaction;
 - (iv) property in the Goods (including but not limited to supplies received by the Design-Builder from a third party for incorporation in the Goods) is vested absolutely in the Design-Builder and the Goods are free from all encumbrances, charges and liens and the Design-Builder is able to pass title to the Province and BCTFA in the Goods absolutely on the earlier of (a) the Goods being affixed to or incorporated into the Project Site or the Project Infrastructure; and (b) payment of the Progress Payment (or portion thereof) referred to in Section 4 of this Vesting Certificate. At that time, the Design-Builder, its Subcontractors, the Supplier, and each of their servants and agents, and any other third party shall have no property in any part or all of the Goods, no claim to part or all of the Goods and no lien or charge over part or all of the Goods;
 - (v) the Goods, in every respect, meet the requirements of the Agreement, and, if they are not in accordance with the Agreement, the Design-Builder acknowledges that the Province, or its agents or representatives, may at any time reject the Goods and instruct the Design-Builder that the Goods will immediately re-vest in the Design-Builder and be entirely at the Design-Builder’s risk;

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10D: Form of Vesting Certificate

Commercial in Confidence
Execution

- 3 -

- (vi) the Goods will at all times after the date of this Vesting Certificate until the Goods are affixed to or incorporated into the Project Site or the Project Infrastructure be insured for their full reinstatement value in accordance with the Required Insurance, or, if the Goods are not covered under the Required Insurance, under a policy of insurance, hereto appended in “**Schedule C**”, protecting the interests of the Province and BCTFA against any loss or damage howsoever arising, in the Design-Builder’s name and in the Province’s and BCTFA’s names, and the Design-Builder has provided to Province and BCTFA evidence of the existence of same insurance policy;
 - (vii) the Goods can be inspected at any time upon reasonable notice by the Province or BCTFA and/or the duly authorized agents of the Province and BCTFA; and
 - (viii) the Design-Builder will not, except for use on the Project Work, remove or cause or permit the Goods to be moved or removed from the premises named in the “**Schedule D**” appended.
6. If the Agreement is terminated for any reason, the Design-Builder will, at its cost, deliver the Goods to the Project Site or to an alternative location, as determined by the Province in its discretion, for the purposes of storage. If the Design-Builder fails to promptly perform that delivery, the Province, BCTFA, or their duly authorized agents may enter any premises and, at the Design-Builder’s cost, collect the Goods and take them to the Project Site or to an alternative location, as determined by the Province in its discretion.
7. Nothing contained in this Vesting Certificate or the Agreement or any payment that may be made to the Design-Builder in respect of the Goods will be taken as any approval by the Province and BCTFA that the Goods are in accordance with the Agreement or otherwise used by the Design-Builder to prove that such evidence has been otherwise provided.
8. Without limiting the Design-Builder’s indemnity obligations under the Agreement or the Design-Builder’s liability with respect to the Agreement or the Goods, the Design-Builder will indemnify and save harmless the Province and BCTFA from any and all costs, claims, demands, losses and expenses of whatsoever nature arising from any loss or damage to the Goods howsoever arising and any breach or non-observance of any of the terms contained in this Vesting Certificate.

This Vesting Certificate 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.

KEA FRASER VALLEY CONNECTORS,
by its managing partner
KIEWIT INFRASTRUCTURE BC ULC

By: _____
Name:
Title: Design-Builder’s Representative

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10D: Form of Vesting Certificate

Commercial in Confidence
Execution

SCHEDULE A
THE GOODS

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10D: Form of Vesting Certificate

Commercial in Confidence
Execution

SCHEDULE B
VESTED GOODS INVOICE

SCHEDULE C

VESTED GOODS INSURANCE CERTIFICATE

SCHEDULE D
VESTED GOODS DETAILS

D-1 The Goods will be adequately stored in a suitable indoor environment, climatically controlled as necessary, and will be elevated and wrapped as of their condition for shipping release. The materials will be stored in a location sprinkler protected for fire mitigation and CCTV protected for security.

D-2 Premises:

.....

.....

.....

.....

.....

D-3 Inventory of Goods:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 10: PAYMENT
Appendix 10D: Form of Vesting Certificate
Schedule D: Vested Goods Details

Commercial in Confidence
Execution

- 2 -

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

D-4 Attach photographic evidence of the Goods, in their entirety, set apart and stored at the premises as per D-1.

**SCHEDULE 11
CHANGES**

PART 1 GENERAL TERMS.....	1
1.1 Province Changes	1
1.2 Value Engineering Proposals.....	1
1.3 Consequences of Province Changes and Value Engineering Proposals	1
PART 2 PROVINCE CHANGES.....	1
2.1 Province Change Notice	1
2.2 Design-Builder Objection	2
2.3 Preparation of Preliminary Estimate.....	3
2.4 Preparation of Change Report.....	4
2.5 Design-Builder's Estimate of Change in Costs.....	6
2.6 Agreement or Disagreement Regarding Province Change	10
2.7 Change Certificate	11
2.8 Effect of Change Certificate	12
2.9 Design-Builder Delay in Responding	12
2.10 Requirement to Undertake Competition	13
2.11 Change Directive	13
PART 3 VALUE ENGINEERING PROPOSALS.....	14
3.1 Notice of Value Engineering Proposal	14
3.2 Evaluation of Value Engineering Proposal.....	15
3.3 Change Certificate for Value Engineering Proposal.....	15
3.4 Sharing Benefits of Value Engineering Proposal	15
3.5 Costs of Value Engineering Proposal	15
PART 4 GENERAL PROVISIONS.....	16
4.1 Modification of Processes and Procedures	16
4.2 Changes Not to Correct Errors in Cost Estimates.....	16
4.3 Disputes	16

Appendix 11A Change in Costs Template

**PART 1
GENERAL TERMS**

1.1 Province Changes

- (a) The Province may, at any time during the Term, require Province Changes subject to and in accordance with the provisions of this Schedule, and the Design-Builder will 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 Schedule.
- (b) The Design-Builder:
 - (i) will, 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 Sections 5.1(a), 5.1(b), 5.1(c), 5.1(e) or 5.1(f) of this Agreement, notify the Province's Representative prior to complying with such specific requirements and will, 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, and
 - (ii) may, at any time during the Term, request that the Province consider, in its discretion, initiating as a Province Change any other matter.

1.2 Value Engineering Proposals

The Design-Builder may initiate Value Engineering Proposals to be prepared and evaluated in accordance with Part 3 [Value Engineering Proposals] of this Schedule.

1.3 Consequences of Province Changes and Value Engineering Proposals

- (a) The Design-Builder will not be entitled to any payment, compensation, extension of time or other relief for a Province Change or a Value Engineering Proposal except in accordance with and to the extent provided in this Schedule.
- (b) 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 Value Engineering Proposals will be made in accordance with Part 10 [Payments] of this Agreement.

**PART 2
PROVINCE CHANGES**

2.1 Province Change Notice

The Province may issue to the Design-Builder a request for a Province Change (each, a “**Province Change Notice**”) 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 or not the Design-Builder will be required to:

- (a) seek and evaluate competitive proposals, bids or tenders for the Province Change under Section 2.10 [Requirement to Undertake Competition] of this Schedule; and/or

- 2 -

- (b) prepare and deliver to the Province's Representative a Preliminary Estimate in accordance with Section 2.3 [Preparation of Preliminary Estimate] of this Schedule.

2.2 Design-Builder Objection

- (a) The Design-Builder may, acting reasonably, object to a requirement by the Province to prepare and deliver a Preliminary Estimate, prepare and deliver a Change Report, or commence the performance of a Province Change, as the case may be (each, as applicable, a "**Relevant Obligation**"), 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, 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 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; or
 - (B) 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; or
 - (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,

provided that the Design-Builder will deliver to the Province's Representative, within 10 Business Days after the receipt by the Design-Builder of the request for such Relevant Obligation, written notice of such objection together with an explanation of the Design-Builder's reasons therefor in sufficient detail to permit a considered review thereof by the Province.

- (b) If the Design-Builder does not deliver to the Province's Representative any such written notice of objection within such time period set out in Section 2.2(a) of this Schedule, the

- 3 -

Design-Builder will be deemed to have agreed to proceed to carry out such Relevant Obligation, as applicable, together with any and all other Relevant Obligations in respect of that same Province Change.

- (c) If the Province disagrees with the Design-Builder's objection delivered under Section 2.2(a) of this Schedule, then the Province may notify the Design-Builder of such disagreement within five Business Days of the receipt of the Design-Builder's objection, failing which the request for such Relevant Obligation will be deemed to have been cancelled. Upon delivery of a notice of disagreement from the Province:
 - (i) the parties will cooperate to have any such dispute resolved in a timely manner pursuant to the Dispute Resolution Procedure; and
 - (ii) pending the resolution of such dispute, the Design-Builder will proceed with the performance of the Relevant Obligation in accordance with any Change Directive issued by the Province in accordance with Section 2.11 [Change Directive] of this Schedule.

2.3 Preparation of Preliminary Estimate

- (a) Subject to Section 2.2 [Design-Builder Objection] of this Schedule, within 10 Business Days (or such earlier or later date as the Province may specify acting reasonably in the circumstances) of:
 - (i) the receipt by the Design-Builder of a Province Change Notice requiring the Design-Builder to prepare and deliver a Preliminary Estimate in accordance with Section 2.1(b) of this Schedule; or
 - (ii) where the Design-Builder delivers a notice of objection under Section 2.2(a) of this Schedule, the receipt by the Design-Builder of a notice of disagreement from the Province in accordance with Section 2.2(c) of this Schedule,

the Design-Builder will deliver to the Province's Representative a written preliminary estimate of the impacts of such Province Change (a "**Preliminary Estimate**") covering the matters required to be addressed in a Change Report pursuant to Section 2.4 [Preparation of Change Report] of this Schedule, or in such other form and with such other content as may be requested by the Province.

- (b) Subject to Section 2.3(c) of this Schedule, within 10 Business Days of the delivery of a Preliminary Estimate in accordance with Section 2.3(a) of this Schedule, the Province will notify the Design-Builder in writing whether or not the Province desires to proceed with such Province Change, and, if so, whether the Province requires the Design-Builder to, in respect of such Province Change:
 - (i) prepare and deliver to the Province's Representative a Change Report in accordance with Section 2.4 [Preparation of Change Report] of this Schedule; and
 - (ii) commence the performance of the Province Change as soon as reasonably practicable, and notwithstanding that the matters described in Section 2.7 [Change Certificate] of this Schedule in respect of such Province Change remain to be

- 4 -

determined as contemplated in Section 2.6 [Agreement or Disagreement Regarding Province Change] of this Schedule.

- (c) The Design-Builder will promptly provide the Province's Representative with such further or additional details and other information as the Province may request with respect to any Preliminary Estimate delivered by the Design-Builder pursuant to Section 2.3(a) of this Schedule, and, in the case of any such request, the 10 Business Day period referred to in Section 2.3(b) of this Schedule will not commence to run until such further details and other information have been provided to the Province's Representative.

2.4 Preparation of Change Report

- (a) Subject to Section 2.2 [Design-Builder Objection] of this Schedule:
 - (i) within 10 Business Days (or such earlier or later date as the Province may specify acting reasonably in the circumstances) of receipt by the Design-Builder of a request from the Province for a Change Report under Section 2.3(b)(i) of this Schedule; or
 - (ii) within 15 Business Days (or such earlier or later date as the Province may specify acting reasonably in the circumstances) of:
 - (A) the receipt by the Design-Builder of a Province Change Notice requiring the Design-Builder to prepare and deliver a Change Report in accordance with this Section 2.4; or
 - (B) where the Design-Builder delivers a notice of objection under Section 2.2(a) of this Schedule, the receipt by the Design-Builder of a notice of disagreement from the Province in accordance with Section 2.2(c) of this Schedule,

the Design-Builder will 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 will 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 Province Change] 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 2.5 [Design-Builder's Estimate 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 costs to be paid to Subcontractors and professional advisors as reasonably requested and necessary for the Province to be able to understand and evaluate the estimate;

- 5 -

- (B) any time periods after which such estimated prices or parts thereof will no longer be valid, which periods will be of sufficient length to allow the Province a reasonable time to consider the Change Report and arrive at an initial evaluation;
 - (C) any resulting lump sum payment which the Design-Builder proposes is required to be made pursuant to Section 2.7(c)(i) of this Schedule to reflect the Change in Costs estimated by the Design-Builder under Section 2.4(a)(iii) of this Schedule, together with all supporting information;
 - (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, including any adjustment to the Substantial Completion Target Date or the Total Completion Target Date and 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 any other provision of this Agreement, the Design-Builder will

- 6 -

promptly provide the Province's Representative 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 2.4(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 will not commence to run until such further details and other information have been provided to the Province's Representative.

2.5 Design-Builder's Estimate of Change in Costs

The Design-Builder will estimate and provide to the Province's Representative in the Change Report pursuant to Section 2.4(a)(iii) of this Schedule the Change in Costs, together with 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, to:

- (a) set out, by completing Appendix 11A [Change in Costs Template] to this Schedule, each of the applicable components of the Change in Costs, which components, will be limited to the following, without duplication:
 - (i) the total costs attributable to Design (together, the “**Design Costs**”) (excluding Design and engineering comprised in the cost of supply of equipment and systems, which will be included in the amount of the Construction Costs in accordance with Section 2.5(a)(ii)(B) of this Schedule), which will be determined as follows:
 - (A) 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), provided that:
 - (1) if the Design Costs include the 3.0 multiplier as contemplated in Section 2.5(a)(i)(A) of this Schedule, the Design-Builder will provide supporting documents (such as rate sheets) to demonstrate that a lower rate has not previously been agreed to by the Design-Builder or a Subcontractor for Design services pursuant to a Subcontract; and
 - (2) other than such 3.0 multiplier (if applicable) and, subject to Section 2.5(a)(i)(B) of this Schedule, no Mark-up will be added to such total costs attributable to Design, regardless of the entity actually undertaking the Design; and
 - (B) if:
 - (1) the Design Costs, or any part thereof, relate to the work performed by a Subcontractor that is not a Contracting Affiliate; and

- 7 -

- (2) the Subcontractor performed the Design work at a lower rate than a 3.0 multiple (as contemplated in Section 2.5(a)(i)(A) of this Schedule),

then the Design-Builder may include in its estimate of the Change in Costs any Mark-up charged by a Subcontractor for Design work undertaken by such Subcontractor, and its respective Subcontractors, in connection with the proposed Province Change (the “**Design Costs Mark-up**”), provided that the Design Costs Mark-up does not, in the aggregate, exceed 15% of the Design Costs charged by such Subcontractor and its respective Subcontractors in connection with the proposed Province Change;

- (ii) the total costs attributable to Construction (the “**Construction Costs**”), which will be determined as follows:

- (A) construction labour costs will be based on the wages and salaries paid directly in respect of labour and for supervisory personnel actively and necessarily engaged on site on the particular portion of the work required pursuant to the Province Change, including working supervisors and the first line of non-working supervisors, and 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;
- (B) 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, will be based on the estimated price to be charged by the Subcontractor supplying such materials, consumables or equipment;
- (C) costs of construction equipment will 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 published by BC Roadbuilders, 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; and
- (D) the cost of any other rental, fabrication facility or factory costs directly associated with the implementation of the Province Change will be calculated based on the reasonable direct costs estimated to be paid by the Design-Builder or a Subcontractor,

and provided in each case that such amounts will not include any Mark-up of the net additional direct costs so incurred other than any Mark-up charged by a Lower Tier Subcontractor to a Subcontractor engaged by the Design-Builder for work

- 8 -

undertaken by such Lower Tier Subcontractor, and its Subcontractors, in connection with the proposed Province Change (the “**Construction Costs Mark-up**”), provided that:

- (E) such Lower Tier Subcontractor is not an Affiliate of the Design-Builder; and
 - (F) the Construction Costs Mark-up does not, in the aggregate, exceed 15% of the Construction Costs charged by such Lower Tier Subcontractor and its Subcontractors, in connection with the proposed Province Change;
- (iii) the total costs attributable to site and project management (the “**Site and Project Management Costs**”), including all key personnel managing health and safety, quality, environmental and site establishment, and general management and administration, which amount will be, if the total Change in Costs:
- (A) is \$3 million or less, 5% of the Construction Costs in respect of the Province Change (excluding any Construction Costs Mark-up as permitted in accordance with Section 2.5(a)(ii) of this Schedule); or
 - (B) exceeds \$3 million, the Design-Builder’s reasonable and substantiated costs attributable to Site and Project Management Costs,
- provided that, if the Province Change will result in a delay to the critical path of the Project Work, then the Site and Project Management Costs may also include, without duplication, any additional costs attributable to site and project management arising directly as a result of such delay;
- (iv) the total costs attributable to profit and overhead (the “**Profit and Overhead Costs**”), which amount may not exceed 15% of the aggregate amount of the Construction Costs (excluding any Construction Costs Mark-up as permitted in accordance with Section 2.5(a)(ii) of this Schedule) and the Site and Project Management Costs in respect of the Province Change;
- (v) the total costs attributable to insurance and bonding (the “**Insurance and Bonding Costs**”), which amount will be, if the total Change in Costs:
- (A) is \$3 million or less, 2% of the total Change in Costs in respect of the Province Change (excluding any Design Costs Mark-Up and Construction Costs Mark-up as permitted in accordance with Sections 2.5(a)(i) and 2.5(a)(ii) of this Schedule); or
 - (B) exceeds \$3 million, the Design-Builder’s reasonable and substantiated (by way of documentation from insurers and/or bonding agencies, as applicable) costs attributable to Insurance and Bonding Costs;
- (vi) the total costs, if any, attributable to warranty obligations (the “**Warranty Costs**”), which amount will be, if the total Change in Costs:

- 9 -

- (A) is \$3 million or less, 0.5% of the total Change in Costs in respect of the Province Change (excluding any Design Costs Mark-Up and Construction Costs Mark-up as permitted in accordance with Sections 2.5(a)(i) and 2.5(a)(ii) of this Schedule); or
 - (B) exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Warranty Costs; and
- (vii) the total costs attributable to risk and contingencies (the “**Risk and Contingency Costs**”), which amount will be, if the total Change in Costs:
- (A) is \$3 million or less, 5% of the total Change in Costs in respect of the Province Change (excluding any Design Costs Mark-Up and Construction Costs Mark-up as permitted in accordance with Sections 2.5(a)(i) and 2.5(a)(ii) of this Schedule); or
 - (B) exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Risk and Contingency Costs,

provided that the Risk and Contingencies Costs will be \$0 for any Province Change which is to be paid for on a time and materials basis; and

(b) confirm that:

- (i) the Design-Builder has used all reasonable efforts, including where required in accordance with Section 2.10(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;
- (ii) all costs of the Design-Builder and Subcontractors included in the Design Costs and Construction Costs 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:
 - (A) paid or to be paid or invoiced to the Design-Builder or Subcontractors; or
 - (B) paid by the Design-Builder or Subcontractors,all without addition of any Mark-ups except as otherwise expressly provided for in Section 2.5(a) of this Schedule;
- (iii) the estimate includes an estimate, without any Mark-up, of:
 - (A) all additional amounts that would be payable by the Design-Builder to the Province under Schedule 10 [Payment] as a result of the implementation of the Province Change; and
 - (B) any reduced amounts that would be payable by the Province to the Design-Builder under Schedule 10 [Payment] as a result of the implementation of the Province Change;

- 10 -

- (iv) all costs included in such estimate reflect:
 - (A) 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;
 - (B) rates in accordance with Section 2.5(a) of this Schedule;
 - (C) any and all changes in this Agreement or the Project Requirements arising out of the Province Change; and
 - (D) any and all changes in risk allocation;
- (v) the estimated costs will provide good overall value to the Province and take into account any reasonably foreseeable changes in Laws; and
- (vi) the Design-Builder has used commercially reasonable efforts to 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.

2.6 Agreement or Disagreement Regarding Province Change

- (a) The Province and the Design-Builder will each use all reasonable efforts to reach agreement on the matters described in Section 2.7 [Change Certificate] of this Schedule in respect of any Province Change, and any agreement so reached in writing will, 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 any or all matters described in Section 2.7 [Change Certificate] of this Schedule within 10 Business Days of, as applicable:
 - (i) the delivery by the Province of a Province Change Notice under Section 2.1 [Province Change Notice] of this Schedule that does not require the preparation and delivery by the Design-Builder of a Preliminary Estimate or a Change Report in respect of such Province Change;
 - (ii) the delivery by the Province of notification under Section 2.3(b) of this Schedule, following receipt of a Preliminary Estimate from the Design-Builder, that the Province wishes to proceed with the Province Change and does not require the preparation and delivery by the Design-Builder of a Change Report in respect of such Province Change; or

- 11 -

- (iii) the delivery by the Design-Builder of a Change Report under Section 2.4(a) of this Schedule in respect of such Province Change,

then the Province:

- (iv) may elect not to proceed with the relevant Province Change by notice to the Design-Builder; or
 - (v) otherwise will issue to the Design-Builder a Change Certificate stating the determination of the Province of the matters described in Section 2.7 [Change Certificate] of this Schedule in respect of such Province Change.
- (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)(v) of this Schedule, then the Design-Builder may deliver to the Province's Representative, within 10 Business Days of the issuance of such Change Certificate, notice that it disputes such determinations, failing which such Change Certificate will be deemed to have been accepted by the Design-Builder. The Province and the Design-Builder will 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 will proceed (or continue, where the Province has previously required such implementation pursuant to Section 2.3(b)(ii) of this Schedule) with the implementation of the Province Change as directed by the Province in the Change Certificate and in 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 will be dealt with as part of such Province Change.

2.7 Change Certificate

A Province Change will be authorized by the Province issuing to the Design-Builder a certificate (the "**Change Certificate**"), which will 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;
- (b) the final determination of the Change in Costs for such Province Change;
- (c) where a party is required to make a payment to another party in respect to the Change in Costs for such Province Change, whether such payment will be made:
 - (i) by a lump sum payment in accordance with Section 1.2 [Additional Payments] of Schedule 10; or
 - (ii) at such other times and in such other manner as set out in the Change Certificate; and
- (d) the resolution of any other matters contained in a Province Change Notice, Preliminary Estimate or Change Report in respect of such Province Change.

- 12 -

Unless the Design-Builder disputes the Change Certificate in accordance with Section 2.6(c) of this Schedule, the Design-Builder otherwise agrees to waive and release the Province from any claims, including any claim for Consequential Losses, with respect to, or in any way related to, the subject matter of a Change Certificate, including for any accumulation of Change Certificates, the number of Change Certificates issued by the Province, or any delay by the Province in issuing a Change Certificate.

2.8 Effect of Change Certificate

- (a) A Change Certificate will 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 Procedure 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 will 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 will implement the Province Change as directed in the Change Certificate or as otherwise agreed or directed by the Province in writing, and will, 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 will 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 will be the only relief and/or compensation to which the Design-Builder will be entitled in respect of such Province Change.

2.9 Design-Builder Delay in Responding

If the Design-Builder fails to:

- (a) prepare a Preliminary Estimate, if required by the Province, within the applicable time period set out in Section 2.3(a) of this Schedule;
- (b) prepare a Change Report within the applicable time period set out in Section 2.4(a) of this Schedule;
- (c) commence the performance of any Province Change requested by the Province in accordance with the terms provided for in this Schedule; or
- (d) meet any other time period required in respect of any Province Change under this Schedule,

then, without limiting any rights of the Province under this Agreement in respect of such failure, the Design-Builder will 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 this Schedule in respect of such Province Change as a result of

- 13 -

such delay. The onus for establishing that no such increase has resulted from such delay will be on the Design-Builder.

2.10 Requirement to Undertake Competition

- (a) If the Province gives notice of the requirement for the Design-Builder to undertake a competition for any Province Change pursuant to Section 2.1(a) of this Schedule then, subject to the Competitive Procurement Requirements, the Design-Builder will use all reasonable efforts to 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 Province Change, and at least one of such proposals, bids or tenders will, 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 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) will be the amount obtained pursuant to the proposal, bid or tender which best satisfies the requirements of the competitive process undertaken pursuant to Section 2.10(a) of this Schedule, plus any additional amount contemplated in Section 2.5 [Design-Builder's Estimate of Change in Costs] of this Schedule.

2.11 Change Directive

Subject to Section 2.2 [Design-Builder Objection] of this Schedule but notwithstanding any other provision of this Schedule, the Province may at any time issue to the Design-Builder a written instruction on a form designated as a "Change Directive Form" and signed by the Province's Representative, directing the Design-Builder to immediately proceed with a Province Change, pending the finalization and issuance of a Change Certificate for that Province Change (each, a "**Change Directive**"), and any Change Directive will include at least the level of detail and information required for a Province Change Notice. If the Province issues a Change Directive, the following will apply:

- (a) the Design-Builder will proceed with the Province Change and the valuation and the time extensions and payment of any adjustments will be made as soon as reasonably possible after the implementation thereof in the same manner as a Province Change for which a Preliminary Estimate, Change Report and Change Certificate would be issued hereunder;
- (b) if the Design-Builder has not previously done so, the Design-Builder will within 15 Business Days after the issuance of the Change Directive provide a Change Report in accordance with the requirements of this Schedule for a Change Report;
- (c) pending a final determination as to any time extensions or valuation and payment of any adjustments for a Province Change or any other matters in the Change Report delivered by the Design-Builder pursuant to Section 2.11(b) of this Schedule, the Province will pay the Design-Builder amounts reasonably demonstrated by the Design-Builder in writing from time to time to be payable for the Province Change, including reimbursement of amounts that the Design-Builder reasonably incurs with respect to the Province Change; and
- (d) if the parties:

- 14 -

- (i) agree on the Change Report, the Province will issue a Change Certificate stating the parties' agreed determination of the matters referred to in the Change Report;
- (ii) do not agree on a Change Report, then the Province may issue a Change Certificate stating the Province's determination of the matters referred to in the Change Report and if the Design-Builder disagrees with all or any of the determinations set out in such Change Certificate, then the Design-Builder:
 - (A) may deliver to the Province a Dispute Notice within 10 Business Days of the issuance of such Change Certificate, failing which such Change Certificate will be deemed to have been accepted by the Design-Builder; and
 - (B) will, without prejudice to its rights with respect to such Dispute, continue to implement the Province Change as directed in the Change Directive.

The Province may issue a Change Directive at any time in its discretion, including in the absence of a Preliminary Estimate, at any time following issuance of a Preliminary Estimate, if the Design-Builder fails to provide a Change Report, or if a Change Report or Change Certificate is not promptly agreed upon by the parties, or if there is a Dispute in relation to a Preliminary Estimate, Change Report, or Change Certificate (including a Dispute as to whether there is a Province Change).

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 (a "**Value Engineering Proposal**") which will:

- (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 1.2 [Additional Payments] of Schedule 10 as a result;
- (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; and

- 15 -

- (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 2.2(a) of this Schedule; 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 will 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:
 - (A) the Design-Builder may withdraw any Value Engineering Proposal in respect of which the Province requests any such modifications; and
 - (B) the Province will not be required to consider any Value Engineering 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 Value Engineering Proposal.
- (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 will 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.

3.4 Sharing Benefits of Value Engineering Proposal

If the Value Engineering Proposal causes or will 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 will 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

- 16 -

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 will be borne solely by the Design-Builder, including that the Design-Builder will pay to the Province promptly after receipt of an invoice therefor all costs and expenses reasonably incurred by the Province in connection with:

- (i) reviewing such Value Engineering Proposal;
- (ii) 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; and
- (iii) implementing such Value Engineering Proposal,

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.

PART 4 GENERAL PROVISIONS

4.1 Modification of Processes and Procedures

Nothing in this Schedule or Part 8 [Changes] of this Agreement will limit the ability of the parties to mutually, in writing, modify, simplify or waive some or all of the processes and procedures outlined in this Schedule or such Part in respect of Province Changes or Value Engineering Proposals.

4.2 Changes Not to Correct Errors in Cost Estimates

Neither the Design-Builder nor the Province will use a Value Engineering 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.

4.3 Disputes

Any Dispute between the parties arising in connection with any matter in respect of a Province Change, Change Directive or Value Engineering Proposal will be resolved in accordance with the Dispute Resolution Procedure.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 11: CHANGES

Commercial in Confidence
Execution

APPENDIX 11A
CHANGE IN COSTS TEMPLATE

The Design-Builder will complete and submit the template below in accordance with Section 2.5 [Design-Builder's Estimate of Change in Costs] of this Schedule. A worked example follows the Change in Costs Template and is provided for information purposes only.

Item	Description	Unit	Quantity	Rate	Total	Totals	Schedule 11 Reference and Notes
A1	Design Costs with a 3.0 multiplier (if applicable)	LS	1		\$		Section 2.5(a)(i)
A2	Design Costs of Subcontractor using a lower rate (if applicable)	LS	1		\$		Section 2.5(a)(i)
A3	Design Costs Mark-up	LS	1		\$		Section 2.5(a)(i)
A4	Total Design Costs (A1 + A2)					\$	
B1	Construction Costs	LS	1		\$		Section 2.5(a)(ii)
B2	Construction Costs (Lower-Tier Subcontractor)	LS	1		\$		Section 2.5(a)(ii)
B3	Construction Costs Mark-up	LS	1		\$		Section 2.5(a)(ii)
B4	Total Construction Costs (B1 + B2)					\$	
C	Site and Project Management Costs B4 * 5%		5% ^{1, 2}	\$		\$	Section 2.5(a)(iii) ¹ If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Site and Project Management Costs. ² If Province Change results in delay to critical path of Project Work, Site and Project Management Costs may also include additional costs attributable to site and project management arising directly as a result of such delay.
D	Profit and Overhead Costs (B4 + C) * 15%		15%	\$		\$	Section 2.5(a)(iv)
	Total Items C, D					\$	
E	Total Items A4, B4, C, D					\$	

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

**Commercial in Confidence
Execution**

SCHEDULE 11: CHANGES

Appendix 11A: Change in Costs Template

- 2 -

Item	Description	Unit	Quantity	Rate	Total	Totals	Schedule 11 Reference and Notes
F	Insurance and Bonding Costs I * 2%		2% ¹	\$		\$	Section 2.5(a)(v) ¹ If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Insurance and Bonding Costs.
G	Warranty Costs (if any) I * 0.5%		0.50% ¹	\$		\$	Section 2.5(a)(vi) ¹ If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Warranty Costs.
H	Risk and Contingency Costs ¹ I * 5%		5% ²	\$		\$	Section 2.5(a)(vii) ¹ Risk and Contingency Costs to be \$0 if Change in Costs to be paid for on time and materials basis. ² If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Risk and Contingency Costs.
I	Total Change in Costs (without Mark-up) ¹			E /92.5% * 100%		\$	¹ This value does not include the Design Costs Markup and the Construction Costs Mark-up.
A3	Design Costs Mark-up					\$	
A4	Construction Costs Mark-up					\$	
J	Total Change in Costs ¹ (I + A3 + B3)					\$	¹ This value includes the Design Costs Markup and the Construction Costs Mark-up.

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

**Commercial in Confidence
Execution**

SCHEDULE 11: CHANGES

Appendix 11A: Change in Costs Template

- 3 -

Change in Costs (Example Only)

Item	Description	Unit	Quantity	Rate	Total	Totals	Schedule 11 Reference and Notes
A1	Design Costs with a 3.0 multiplier (if applicable)	LS	1		\$10,000		Section 2.5(a)(i)
A2	Design Costs of Subcontractor using a lower rate (if applicable)	LS	1		\$10,000		Section 2.5(a)(i)
A3	Design Costs Mark-up	LS	1		\$1,500		Section 2.5(a)(i)
A4	Total Design Costs (A1 + A2)					\$20,000	
B1	Construction Costs	LS	1		\$50,000		Section 2.5(a)(ii)
B2	Construction Costs (Lower-Tier Subcontractor)	LS	1		\$50,000		Section 2.5(a)(ii)
B3	Construction Costs Mark-up	LS	1		\$7,500		Section 2.5(a)(ii)
B4	Total Construction Costs (B1 + B2)					\$100,000	
C	Site and Project Management Costs B4 * 5%		5% ^{1, 2}	\$100,000		\$5,000	Section 2.5(a)(iii) ¹ If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Site and Project Management Costs. ² If Province Change results in delay to critical path of Project Work, Site and Project Management Costs may also include additional costs attributable to site and project management arising directly as a result of such delay.
D	Profit and Overhead Costs (B4 + C) * 15%		15%	\$105,000		\$15,750	Section 2.5(a)(iv)
	Total Items C, D					\$20,750	
E	Total Items A4, B4, C, D					\$140,750	

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT**

**Commercial in Confidence
Execution**

SCHEDULE 11: CHANGES

Appendix 11A: Change in Costs Template

- 4 -

Item	Description	Unit	Quantity	Rate	Total	Totals	Schedule 11 Reference and Notes
F	Insurance and Bonding Costs I * 2%		2% ¹	\$152,162.16		\$3,043.24	Section 2.5(a)(v) ¹ If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Insurance and Bonding Costs.
G	Warranty Costs (if any) I * 0.5%		0.50% ¹	\$152,162.16		\$760.81	Section 2.5(a)(vi) ¹ If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Warranty Costs.
H	Risk and Contingency Costs ¹ I * 5%		5% ²	\$152,162.16		\$7,608.11	Section 2.5(a)(vii) ¹ Risk and Contingency Costs to be \$0 if Change in Costs to be paid for on time and materials basis. ² If the total Change in Costs exceeds \$3 million, the Design-Builder's reasonable and substantiated costs attributable to Risk and Contingency Costs.
I	Total Change in Costs (without Mark-up) ¹			E /92.5% * 100%		\$152,162.16	¹ This value does not include the Design Costs Markup and the Construction Costs Mark-up.
A3	Design Costs Mark-up					\$1,500	
A4	Construction Costs Mark-up					\$7,500	
J	Total Change in Costs ¹ (I + A3 + B3)					\$161,162.16	¹ This value includes the Design Costs Markup and the Construction Costs Mark-up.

**SCHEDULE 12
INDIGENOUS REQUIREMENTS**

PART 1 INDIGENOUS REQUIREMENTS	1
1.1 General Requirements.....	1
1.2 Indigenous Participation Plan	2
1.3 Indigenous Coordinator	4
1.4 [Not Used].....	5
1.5 Failure to Meet Indigenous Requirements.....	6
1.6 Indigenous Contracts Incentive Payment.....	7
1.7 Indigenous Requirements Reporting.....	7
PART 2 OTHER INDIGENOUS MATTERS.....	7
2.1 Cooperation with Consultation	7
2.2 Other Agreements with Indigenous Groups	7
2.3 Acknowledgement by the Province	8

PART 1
INDIGENOUS REQUIREMENTS

1.1 General Requirements

The Design-Builder will 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 will provide to the Identified Indigenous Groups during the period from the Effective Date to the Substantial Completion Date in relation to the Project Work, a total value of contracts of _____ (the “**Minimum Indigenous Contracts Requirement**”). Lists of businesses associated with the Identified Indigenous Groups (together, the “**Qualified Indigenous Resources**”) will be provided to the Design-Builder and updated from time to time, and contracts entered into with any Qualified Indigenous Resource at the time of entering into such contract will count towards the Minimum Indigenous Contracts Requirement. The Design-Builder will use all reasonable efforts to provide contracting opportunities on an equitable basis to each Identified Indigenous Group for which Qualified Indigenous Resources have been so identified, provided that, in the event that the Design-Builder, notwithstanding using all such reasonable efforts, is unable to achieve such an equitable allocation of realized contracting opportunities, the Design-Builder may enter into contracts with Qualified Indigenous Resources of any Identified Indigenous Group in its discretion.
- (b) The Design-Builder will 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 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) of this Schedule.
- (c) To inform the development of the Indigenous Participation Plan in accordance with Section 1.2 [Indigenous Participation Plan] of this Schedule, the Design-Builder will meet monthly, at minimum, with the Identified Indigenous Groups, as facilitated by the Province, until the Indigenous Participation Plan has been developed and accepted in accordance with Section 1.2 [Indigenous Participation Plan] of this Schedule.
- (d) The Design-Builder (including its relevant Subcontractors) will attend and participate in any business-to-business or other workshops or meetings with economic development organizations initiated by the Province in relation to the Indigenous Requirements.
- (e) The Design-Builder (including its relevant Subcontractors) will engage with the Identified Indigenous Groups in a respectful manner that upholds the relationship between the Province and the Identified Indigenous Groups.
- (f) The Design-Builder will:
 - (i) within 90 days of the Effective Date, or within 90 days of the employment of a new Key Individual, at its own cost, ensure that all Key Individuals receive Indigenous cultural sensitivity and/or awareness training, provided by a firm approved by the Province for Indigenous training delivery; and

- 2 -

- (ii) ensure that the Key Individuals provide or cause to be provided, to all persons employed or retained to perform the Project Work, Indigenous cultural sensitivity and/or awareness training at a level and in substance that is appropriate to that person's position and the Design-Builder's obligations under this Schedule.
- (g) In addition to the requirements set out in Section 1.1(a) of this Schedule, and in recognition of the Province's support and strong promotion of efforts by its contractors to facilitate Indigenous training, mentorship and/or other development opportunities with the Identified Indigenous Groups, the Design-Builder will work with the Identified Indigenous Groups to explore employment opportunities and additional 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 will make commercially reasonable efforts to reach mutual agreement with the respective Identified Indigenous Groups for the provision of any such employment opportunities and additional contract opportunities in support of the Project Work, and details of all such efforts will be included in each monthly report submitted to the Province's Representative pursuant to Section 1.7 [Indigenous Requirements Reporting] of this Schedule.

Unless otherwise required by the Province, the Province will be responsible for leading the engagement with Identified Indigenous Groups.

1.2 Indigenous Participation Plan

- (a) The Design-Builder will develop 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 and the Design-Builder's Target Value of Indigenous Contracts Opportunities as contemplated in accordance with Section 1.2(c)(i) of this Schedule. The Indigenous Participation Plan will be submitted to the Province's Representative in accordance with the Consent Procedure within 90 days of the Effective Date.
- (b) The Design-Builder will update the Indigenous Participation Plan as required and annually, at a minimum, submit all proposed amendments or updates to the Indigenous Participation Plan to the Province's Representative in accordance with the Consent Procedure.
- (c) The Indigenous Participation Plan will describe, at a minimum:
 - (i) the proposed target value of Indigenous contracting opportunities (the "**Design-Builder's Target Value of Indigenous Contracts Opportunities**") which the Design-Builder proposes to deliver to Qualified Indigenous Resources from the Identified Indigenous Groups, which Design-Builder's Target Value of Indigenous Contracts Opportunities will be equal to or greater than the Minimum Indigenous Contracts Requirement;
 - (ii) how the Design-Builder has engaged or will engage Identified Indigenous Groups in relation to the development of the Indigenous Participation Plan, including how input has been considered in the development of the Indigenous Participation Plan;
 - (iii) the identification of the capacities and priority areas for types of contract opportunities for each Identified Indigenous Group, based on the priority areas identified by each Identified Indigenous Group;

- 3 -

- (iv) the identification of potential applicable contract opportunities for each Identified Indigenous Group;
- (v) how the Design-Builder intends to work with the Identified Indigenous Groups and the Province to ensure successful implementation of the requirements set out in Schedule 6 [Environmental Obligations], including consulting, coordinating and working with Identified Indigenous Groups;
- (vi) how the Design-Builder intends to comply with its obligations under Sections 1.1(a) and 1.1(g) of this Schedule, 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 and ensuring that the Identified Indigenous Groups are provided with sufficient scope details and time to effectively respond to contracting opportunities);
- (vii) 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(b) and 1.1(c) of this Schedule;
- (viii) the specific decision-making and procurement processes and how those processes will be applied to achieve success related to entering into contracts with Qualified Indigenous Resources to not only meet the Minimum Indigenous Contracts Requirement in accordance with Section 1.1(a) of this Schedule, but to meet the Design-Builder's Target Value of Indigenous Contracts Opportunities;
- (ix) a milestone schedule, broken down by Contract Year, for the attainment of the Design-Builder's Target Value of Indigenous Contracts Opportunities;
- (x) the process by which employment opportunities and additional contract opportunities as contemplated in Section 1.1(g) of this Schedule will be identified and awarded;
- (xi) how the Design-Builder will liaise and meet regularly, which at a minimum will be annually, with the Identified Indigenous Groups to identify changes to the priorities and capacities for types of contract opportunities and employment opportunities for each Identified Indigenous Group, based on the areas identified by each Identified Indigenous Group;
- (xii) how the Design-Builder will incorporate Identified Indigenous Group input into specific identified Design elements which have been identified as being of interest to Identified Indigenous Groups at the meetings referred to in Sections 1.1(b) and 1.1(c) of this Schedule, and the nature, scope and extent of Identified Indigenous Group input that will be accommodated into such Design elements;
- (xiii) a format of a monthly report to be submitted to the Province's Representative reporting on the following items:

- 4 -

- (A) 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 the Design-Builder's Target Value of Indigenous Contracts Opportunities, with reference to the priority areas identified for each Identified Indigenous Group in accordance with Section 1.2(c)(iii) of this Schedule, and the efforts made by the Design-Builder to achieve an equitable allocation of realized contracting opportunities among the Identified Indigenous Groups in accordance with Section 1.1(a) of this Schedule;
 - (B) explanations for any variances between the status of the Design-Builder's realized achievements referenced in Section 1.2(c)(xiii)(A) of this Schedule and the planned achievements as identified in the Indigenous Participation Plan,
 - (C) the status of the achievement of employment opportunities and additional contract opportunities identified in accordance with Section 1.2(c)(x) of this Schedule; and
 - (D) any remedial actions or improvements or updates to the Indigenous Participation Plan that may be necessary to achieve the Indigenous Requirements; and
- (xiv) a format of a final report to be submitted to the Province's Representative prior to Total Completion which:
- (A) summarizes all contracts entered into with the Identified Indigenous Groups throughout the Project, both on an aggregate basis and reported separately for each Identified Indigenous Group; and
 - (B) sets out the Design-Builder's achievement in respect of the Minimum Indigenous Contracts Requirement and the Design-Builder's Target Value of Indigenous Contracts Opportunities.

1.3 Indigenous Coordinator

- (a) The Indigenous Coordinator will be a dedicated, full time resource and will be a Key Individual subject to the requirements of Section 3.3 [Key Individuals] of this Agreement.
- (b) The Design-Builder's Indigenous Coordinator will have experience and/or education in the following:
 - (i) a Bachelor's degree in Indigenous Relations, geography, archaeology, anthropology, political science, public administration, forestry, natural resources, regional planning, business administration or related field;
 - (ii) a minimum of five years recent demonstrated experience in:
 - (A) establishing and maintaining productive working relationships with Indigenous groups; and

- 5 -

- (B) working with Indigenous groups to provide contracting, employment and/or training opportunities; and
 - (iii) an equivalent combination of education and related experience may be considered.
- (c) The Indigenous Coordinator will have excellent organizational and communication skills, and proven skill and experience in:
 - (i) building relationships with Indigenous groups in British Columbia;
 - (ii) planning, coordinating and implementing Indigenous procurement and employment opportunities on infrastructure projects;
 - (iii) developing and maintaining productive working relationships with Indigenous communities in relation to employment, contracting and participation on project delivery, including conflict resolution; and
 - (iv) project management and procurement on infrastructure construction projects.
- (d) Without limiting the generality of the foregoing, the job specification and responsibilities of the Indigenous Coordinator will include the following:
 - (i) establishing and maintaining productive working relationships with the Identified Indigenous Groups;
 - (ii) liaising with the Province's Representative and jointly participating in meetings with the Identified Indigenous Groups;
 - (iii) working with the Identified Indigenous Groups regarding contracting, employment and training opportunities;
 - (iv) working with the Environmental Manager in accordance with the requirements of Schedule 6 [Environmental Obligations];
 - (v) developing, administering and managing the day-to-day implementation of the Indigenous Participation Plan;
 - (vi) facilitating the delivery of Indigenous cultural sensitivity and/or awareness training to all Key Individuals;
 - (vii) undertaking tracking and reporting in relation to the implementation of the Indigenous Participation Plan and the Indigenous Requirements; and
 - (viii) updating the Indigenous Participation Plan in collaboration with the Identified Indigenous Groups.

1.4 [Not Used]

- 6 -

1.5 Failure to Meet Indigenous Requirements

- (a) The Design-Builder acknowledges that the achievement of the Minimum Indigenous Contracts Requirement is crucial to the purpose and objectives of the Indigenous Requirements and that if the Design-Builder fails to meet the Minimum Indigenous Contracts Requirement, 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, and may suffer losses and damages associated with the Project Work that are difficult to quantify in advance and that are reflected in the payment set out in Section 1.5(b)(ii) of this Schedule.
- (b) 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 9 [Performance Mechanism], in the event that the Design-Builder fails to meet:
 - (i) any milestone for the attainment of the Design-Builder's Target Value of Indigenous Contracts Opportunities as set out in the Indigenous Participation Plan, the Design-Builder and the Province will meet to determine an appropriate remedial strategy to address such failure, provided that, at the option of the Province, the Design-Builder will, 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
 - (ii) the Minimum Indigenous Contracts Requirement on or before the Substantial Completion Date, such failure will be a Non-Compliance Event and the Design-Builder will pay to the Province in respect thereof a NCE (Cash) Payment determined in accordance with the following formula:

$$NCECP = x [OV - AV]$$

where:

NCECP = the NCE (Cash) Payment

OV = the value of the Minimum Indigenous Contracts Requirement

AV = the achieved value of the Indigenous contracting opportunities delivered to Qualified Indigenous Resources from the Identified Indigenous Groups, calculated as the aggregate of the actual payments made by the Design-Builder and relevant Subcontractors directly to Qualified Indigenous Resources for performance of a portion of the Project Work, as determined by the Province's Representative,

and provided that **NCECP** will be zero where **AV** is greater than or equal to **OV**.

- (c) Despite anything else in this Section 1.5, and without limiting the generality of Section 17.7 [Waiver] of this Agreement and Section 1.3(f) of Schedule 9 [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(b)(ii) of this Schedule if and to the extent that the Design-Builder demonstrates to the

- 7 -

satisfaction of the Province's Representative that it has made all reasonable efforts to meet the Minimum Indigenous Contracts Requirement and that the reasons for the Design-Builder's failure to meet the Minimum Indigenous Contracts Requirement were beyond the Design-Builder's control.

1.6 Indigenous Contracts Incentive Payment

In the event that the Achieved Value of the Minimum Indigenous Contracts Requirement for the period from the Effective Date to the Substantial Completion Date calculated as set out in Section 1.5(b)(ii) of this Schedule (the "**Achieved Value**") exceeds the Minimum Indigenous Contracts Requirement, the Design-Builder will be entitled to an incentive payment (the "**Indigenous Contracts Incentive Payment**"), payable in accordance with Section 2.2 [Obligation to pay Indigenous Contracts Incentive Payments] of Schedule 10, as follows:

Achieved Value	Indigenous Contracts Incentive Payment
-----------------------	---

1.7 Indigenous Requirements Reporting

The Design-Builder will submit to the Province's Representative in accordance with the Review Procedure:

- (a) on a monthly basis from the Effective Date until the Total Completion Date, the monthly report referred to in Section 1.2(c)(xiii) of this Schedule; and
- (b) on or before the Total Completion Date, the final report referred to in Section 1.2(c)(xiv) of this Schedule,

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 will, 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 will observe and cause all of its Subcontractors and any other person for whom the Design-Builder is in law responsible to observe the

- 8 -

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 will 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 Effective Date will 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 13
ESG AND WORKFORCE REQUIREMENTS**

PART 1 INTERPRETATION	1
1.1 Definitions	1
PART 2 ESG REQUIREMENTS.....	2
2.1 ESG Requirements.....	2
2.2 ESG Strategy Plan	2
2.3 ESG Report.....	3
PART 3 HIRING REQUIREMENTS AND INCENTIVE PAYMENTS	4
3.1 Apprenticeship	4
3.2 Equity.....	5
PART 4 WORKFORCE MATTERS.....	6
4.1 Labour Events	6
4.2 Posting	6
4.3 Job Fairs.....	6
4.4 Labour Committee	6
4.5 Labour Agreements.....	7
4.6 Respect in the Workplace	7
4.7 GBA Plus Training	9

**PART 1
INTERPRETATION**

1.1 Definitions

In this Schedule, in addition to the definitions set out in Schedule 1 [Definitions and Interpretation]:

- (a) **“Apprentice”** means an individual working in a Red Seal trades-related or technical (non-administrative) occupation, who is registered with an apprenticeship authority as an apprentice.
- (b) **“Apprenticeship Ratio”** has the meaning given in Section 3.1(a) of this Schedule.
- (c) **“Apprenticeship Requirement”** has the meaning given in Section 3.1(a) of this Schedule.
- (d) **“Equity Group”** means:
 - (i) women;
 - (ii) Indigenous persons;
 - (iii) youth (ages 16 to 24); and
 - (iv) other equity groups traditionally underrepresented in the construction industry, such as people with disabilities, visible minorities, and members of the 2SLGBTQIA+ community and any other groups as may be recognized by the Province from time to time, acting reasonably.
- (e) **“Equity Ratio”** has the meaning given in Section 3.2(a) of this Schedule.
- (f) **“Equity Requirement”** has the meaning given in Section 3.2(a) of this Schedule.
- (g) **“ESG Report”** has the meaning given in Section 2.2(a) of this Schedule.
- (h) **“ESG Representative”** has the meaning given in Section 2.2(a)(i) of this Schedule.
- (i) **“ESG Requirements”** has the meaning given in Section 2.1 of this Schedule.
- (j) **“ESG Strategy Plan”** has the meaning given in Section 2.2(a) of this Schedule.
- (k) **“ESG Tracked Subcontractor”** has the meaning given in Section 2.2(a)(iv) of this Schedule.
- (l) **“Indigenous”** is an inclusive term referring to all First Nations, Metis and Inuit peoples.
- (m) **“Journeyperson”** means an individual working in a Red Seal trades-related or technical (non-administrative) occupation who is certified by an apprenticeship authority as a journeyperson.

- 2 -

**PART 2
ESG REQUIREMENTS**

2.1 ESG Requirements

The Design-Builder will comply with, observe, satisfy and perform all of the obligations and requirements set out in this Schedule (the “**ESG Requirements**”).

2.2 ESG Strategy Plan

The Design-Builder will:

- (a) develop, implement and update a plan in respect of the environment, social and governance factors relevant to the Project Work (the “**ESG Strategy Plan**”) meeting the requirements of this Section 2.2 and this Agreement, including the following:
 - (i) the appointment of a representative of the Design-Builder (the “**ESG Representative**”) to be responsible for:
 - (A) administering the ESG Strategy Plan;
 - (B) submitting information to the Province in accordance with this Schedule detailing how the Design-Builder is meeting its obligations under the ESG Strategy Plan and this Schedule; and
 - (C) liaising with the Province’s Representative on all matters relating to the ESG Strategy Plan for the duration of the Project;
 - (ii) a process, strategy and schedule for achieving the Apprenticeship Requirement and the Equity Requirement;
 - (iii) a process for updating, revising and/or re-submitting the ESG Strategy Plan to the Province’s Representative, if required; and
 - (iv) the identification of the Subcontractors which the Design-Builder will track and report upon for the purposes of the ESG Report, the Apprenticeship Ratio and the Equity Ratio (the “**ESG Tracked Subcontractors**”), which will consist of all Subcontractors unless the Design-Builder, in its discretion, chooses to limit such Subcontractors to only those Subcontractors:
 - (A) with a Subcontract value over an identified threshold, which threshold will be selected by the Design-Builder and will not be greater than \$100,000; and
 - (B) which have a physical presence at the Project Site of a least an identified threshold, which threshold will be selected by the Design-Builder and will not be greater than 500 hours;
- (b) submit, no later than 45 days after the Effective Date, the ESG Strategy Plan to the Province in accordance with the Consent Procedure; and

- 3 -

- (c) participate in, and ensure the ESG Representative attends, a kickoff meeting organized by the Province regarding the ESG Strategy Plan.

2.3 ESG Report

The Design-Builder will:

- (a) submit to the Province, within five Business Days after the end of each calendar month, in accordance with the Review Procedure, a report (an "**ESG Report**") in a form to be provided by the Province and summarizing the craft workforce demographic composition for the Design-Builder and the ESG Tracked Subcontractors for the immediately preceding calendar month, including:
 - (i) the number of craft workers;
 - (ii) the number of craft hours;
 - (iii) the number of craft workers and craft hours worked by:
 - (A) residents of British Columbia;
 - (B) women;
 - (C) Indigenous persons;
 - (D) youth (ages 16 to 24); and
 - (E) other equity groups traditionally underrepresented in the construction industry, such as people with disabilities, visible minorities, and members of the 2SLGBTQIA+ community and any other groups as may be recognized by the Province from time to time, acting reasonably;
 - (iv) the number of Apprentices and Journeypersons within the craft workforce;
 - (v) the number of hours worked by Apprentices and Journeypersons; and
 - (vi) any remedial actions or adjustments to the ESG Strategy Plan proposed by the Design-Builder;
- (b) submit to the Province, within 30 days of Total Completion, a final report in a form to be developed in collaboration with the Province which:
 - (i) summarizes the demographic composition of the craft workforce over the Term;
 - (ii) summarizes:
 - (A) the apprenticeship employment opportunities over the Term; and
 - (B) the employment opportunities for Equity Groups over the Term,

- 4 -

and the realization of such opportunities, including a comparison to the accepted ESG Strategy Plan; and

(iii) includes the final:

(A) Apprenticeship Ratio; and

(B) Equity Ratio,

each for the period from the Effective Date to the Total Completion Date (including, if required, an estimate for any hiring between the date of such final report and Total Completion); and

(c) provide to the Province such other documentation and information in respect of the ESG Strategy Plan as the Province may reasonably request.

PART 3 HIRING REQUIREMENTS AND INCENTIVE PAYMENTS

3.1 Apprenticeship

(a) The Design-Builder will provide apprenticeships so as to achieve a ratio (the “**Apprenticeship Ratio**”), calculated as:

(i) the total apprenticeship hours for all Apprentices employed by the Design-Builder and the ESG Tracked Subcontractors from the Effective Date to the Total Completion Date,

divided by:

(ii) the total hours worked by all Apprentices and Journeypersons for all Project Work carried out by the Design-Builder and the ESG Tracked Subcontractors from the Effective Date to the Total Completion Date,

of not less than 10% (the “**Apprenticeship Requirement**”).

(b) No NCE Points, Default Points or NCE (Cash) Payments will be assigned to or payable by the Design-Builder pursuant to Schedule 9 [Performance Mechanism] in the event that the Apprenticeship Ratio is less than the Apprenticeship Requirement, nor will such circumstance constitute a breach of the Design-Builder’s obligation in Section 3.1(a) of this Schedule.

(c) If the Apprenticeship Ratio is greater than or equal to the Apprenticeship Requirement, the Province will pay to the Design-Builder an incentive payment (the “**Apprenticeship Incentive Payment**”) following Total Completion in accordance with Section 2.3 [Obligation to pay Apprenticeship Incentive Payment] of Schedule 10, as follows:

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 13: ESG AND WORKFORCE REQUIREMENTS

Commercial in Confidence
Execution

- 5 -

Apprenticeship Ratio	Apprenticeship Incentive Payment

3.2 Equity

- (a) The Design-Builder will provide employment opportunities to Equity Groups so as to achieve a ratio (the “**Equity Ratio**”), calculated as:
- (i) the total hours from the Effective Date to the Total Completion Date, of all Project Work carried out by craft workers employed by the Design-Builder and the ESG Tracked Subcontractors who are members of any of the four categories of Equity Group, provided that if an individual is a member of more than one category of Equity Group, such individual’s hours will not be double counted,
- divided by:
- (ii) the total hours from the Effective Date to the Total Completion Date, of all Project Work carried out by craft workers employed by the Design-Builder and the ESG Tracked Subcontractors,
- of not less than (the “**Equity Requirement**”).
- (b) No NCE Points, Default Points or NCE (Cash) Payments will be assigned to or payable by the Design-Builder pursuant to Schedule 9 [Performance Mechanism] in the event that the Equity Ratio is less than the Equity Requirement, nor will such circumstance constitute a breach of the Design-Builder’s obligation in Section 3.2(a) of this Schedule.
- (c) If the Equity Ratio is greater than or equal to the Equity Requirement, the Province will pay to the Design-Builder an incentive payment (the “**Equity Incentive Payment**”), following Total Completion in accordance with Section 2.4 [Obligation to pay Equity Incentive Payment] of Schedule 10, as follows:

Equity Ratio	Equity Incentive Payment

- 6 -

**PART 4
WORKFORCE MATTERS**

4.1 Labour Events

Without limiting any of the requirements of Part 8 [Supervening Events] of this Agreement, the Design-Builder will:

- (a) in the event of any labour disputes, whether at the Project Site or elsewhere, that will or may delay performance of the Project Work, provide:
 - (i) within 12 hours after the commencement of such labour dispute, notice to the Province's Representative of such labour dispute;
 - (ii) within two Business Days after the commencement of such labour dispute, a detailed report on such labour dispute including, to the extent known to the Design-Builder, the cause of the dispute, the employer and employees affected or involved, the actions being taken to end the dispute and the known or probable effect on the Project Work and Project Schedule;
 - (iii) supplemental information with respect to such labour dispute promptly after the Design-Builder receives, creates or becomes aware of such supplemental information; and
 - (iv) such further reports or updates as the Province may reasonably request; and
- (b) promptly advise the Province of any current or pending labour negotiations pending or threatened labour disputes that could interfere with the progress of the Project Work and advise and update the Province on all developments with respect to such in the negotiations or dispute.

4.2 Posting

The Design-Builder will post employment opportunities for the Project as may be directed by the Province from time to time, acting reasonably, on:

- (a) the Website;
- (b) websites of local employment agencies; and
- (c) other publications or websites.

4.3 Job Fairs

The Design-Builder will participate in job fairs from time to time as requested by the Province, acting reasonably.

4.4 Labour Committee

The Design-Builder will:

- 7 -

- (a) be a member of and participate on a committee that includes representatives of other contractors (which may include Subcontractors, if required by the Province) who are working on the Project at the Project Site, and the Province for the purpose of consulting, and, as appropriate, reaching agreements, on labour matters that may arise at the Project Site; and
- (b) adhere to the 'Terms of Reference' for the committee as established by the Province as may be amended, supplemented or restated from time to time in the Province's discretion.

4.5 Labour Agreements

If the Design-Builder or a Subcontractor becomes a party to a collective agreement or other labour agreement that is applicable to the Project Work with a union then the Design-Builder or Subcontractor, as applicable, will have agreements with such union(s), and the Design-Builder will provide the Province with a copy of such agreement(s), with respect to the performance of the Project Work as required to give effect to the following terms:

- (a) any collective agreement between the Design-Builder and Subcontractors and a union representing workers performing any Project Work will be for a term that is equal to or longer than the currency of this Agreement;
- (b) if strikes, lockouts, slowdowns or any other interference or interruption to the performance of labour productivity, including work-to-rule action (each, a "**Labour Disruption**") occurs in the construction sector in British Columbia during the currency of this Agreement, and originates off-site, any Project Work performed will not be affected by such Labour Disruption;
- (c) any non-affiliation clause in a collective agreement between the Design-Builder and Subcontractors and a union is waived by that union, and accordingly union members will not be precluded from working at the Project Site, or in proximity to the Project Site, alongside non-union workers or workers of other unions and the union will not interfere in any way with non-union workers or workers of other unions, and no union or worker will refuse to handle or install any material, equipment or components or to honour hot cargo edicts, or otherwise during the currency of this Agreement;
- (d) the union, and any person acting on behalf of the union, will not initiate, pursue or endorse any activity for the purpose of recruitment or representation of employees, contractors or consultants represented by other trade unions, including changes in representation or raids, with respect to any employee, contractor or consultant working on the Project; and
- (e) if and to the extent the Design-Builder and Subcontractors have commitments to engage Indigenous persons there will be no objection to preferential hiring of such Indigenous persons.

4.6 Respect in the Workplace

- (a) The Design-Builder will establish, implement and submit to the Province's Representative pursuant to the Review Procedure, by no later than 30 days after the Effective Date, a respect in the workplace plan that complies with the requirements of this Section 4.6 (the "**Respect in the Workplace Plan**"), and will ensure, and cause its Subcontractors to

- 8 -

ensure, that all employees of the Design-Builder and its Subcontractors carrying out the Project Work (including supervising and management personnel) (together, the "**Covered Employees**") comply with the requirements of the Respect in the Workplace Plan at all times while engaging in any activities, related to the Project.

- (b) The Respect in the Workplace Plan will:
 - (i) include a comprehensive respectful workplace policy that seeks to foster a workplace that is free of racism and discrimination, and that promotes a culturally safe and respectful environment;
 - (ii) prohibit any Covered Employee from engaging in any form of violence, harassment, intimidation, bullying, or any other disparaging or demeaning conduct (including by way of verbal communications, written materials, or gestures) towards any other person for any reason, including based on any union affiliation or lack of union affiliation; and
 - (iii) detail within the respectful workplace policy:
 - (A) standards that each Covered Employee is required to comply with;
 - (B) a complaints process in the event of an allegation of breach by a Covered Employee of such policy;
 - (C) a comprehensive Indigenous awareness training program developed with input and engagement from Identified Indigenous Groups, including as set out in Schedule 12 [Indigenous Requirements];
 - (D) a requirement for each newly hired Covered Employee to participate in not less than four hours of respectful workplace training and four hours of Indigenous awareness training prior to accessing the Project Site (pre-access) or upon hire, unless otherwise approved by the Province;
 - (E) detail the training procedures that each Covered Employee will be required to partake in and the method for tracking such participation; and
 - (F) set out a procedure that the Design-Builder will be required to follow to report any allegations of breach of the respectful workplace policy to the Province's Representative in a manner that respects privacy and confidentiality.
- (c) The Design-Builder will not commence any Construction until the respectful workplace policies and training procedures set out in the Respect in the Workplace Plan have been fully implemented by the Design-Builder in accordance with the Respect in the Workplace Plan.
- (d) The Design-Builder may submit requested updates to the programs from time to time to the Province pursuant to the Review Procedure, in which case the Design-Builder will require all Covered Employees described above to participate in such updated training programs.

- 9 -

- (e) The Province may at any time audit the Respect in the Workplace Plan and its implementation, including inspecting the Design-Builder's training log and requesting information on the Design-Builder's investigations of any allegations of breach of the respectful workplace policy received by the Province in a manner that respects privacy and confidentiality.
- (f) The Design-Builder will consult with the Province regarding training content outlined in this Section 4.6.
- (g) Notwithstanding the preceding paragraphs of this Section 4.6, Covered Employees who are present at the Project Site solely for purposes of making deliveries (maximum one delivery/week); or will be present at the Project Site for less than three days in any 30 day period, do not need to complete the training requirements of this section, provided that such Covered Employees are escorted by other Covered Employees who have completed the applicable respectful workplace and Indigenous awareness training.

4.7 GBA Plus Training

- (a) The Design-Builder will ensure that:
 - (i) each Key Individual;
 - (ii) each person in a human resources role; and
 - (iii) each person in a Communications and Engagement role,working on or delivering services to the Project, will complete, at the Design-Builder's expense, the GBA Plus Course, and the Design-Builder will submit the applicable certificates of completion for the GBA Plus Course to the Province prior to that individual commencing the performance of work or delivery of services related to the Project.
- (b) In each subsequent Contract Year following the Effective Date, the Design-Builder will ensure that each person required to complete the GBA Plus Course in accordance with Section 4.7(a) of this Schedule will complete up to 2 hours of additional GBA Plus training, as directed by the Province.

**SCHEDULE 14
COMPENSATION ON TERMINATION**

PART 1 COMPENSATION ON TERMINATION OTHER THAN FOR DESIGN-BUILDER DEFAULT	1
1.1 Obligation to Pay Non-Default Termination Sum	1
1.2 Calculation of Non-Default Termination Sum.....	1
1.3 Date for Payment of Non-Default Termination Sum.....	1
PART 2 COMPENSATION ON TERMINATION FOR DESIGN-BUILDER DEFAULT	1
2.1 Obligation to Pay Compensation on Design-Builder Default.....	1
2.2 Components of Design-Builder Default Termination Sum	1
2.3 Timing of Calculation of Design-Builder Default Termination Sum	3
2.4 Calculation of Design-Builder Default Termination Sum	3
2.5 Date for Payment of Design-Builder Default Termination Sum	3
PART 3 GENERAL PROVISIONS.....	4
3.1 No Compensation to Extent of Insurance	4
3.2 Adjustment for Net Balance.....	5
3.3 Rights of Set-Off.....	5
3.4 Full and Final Settlement	5
3.5 Calculation of Compensation.....	6
3.6 Condition Precedent to Payment.....	7

**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) of this Agreement, or if either the Design-Builder or the Province terminates this Agreement pursuant to Section 8.6(a) or 8.7(a)(iv) of this Agreement, or if the Design-Builder terminates this Agreement pursuant to Section 13.3(a) or Section 13.3(b) of this Agreement, the Province will 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 any adjustment in accordance with Part 3 [General Provisions] of this Schedule.

1.2 Calculation of Non-Default Termination Sum

The “**Non-Default Termination Sum**” will be an amount equal to the aggregate of the Design-Builder Breakage Costs.

1.3 Date for Payment of Non-Default Termination Sum

The Province will 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 will be paid on or before the payment date referred to in Section 1.3(a) of this Schedule and any remainder will 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(a), 12.3(b), 12.3(c)(ii), 12.3(d) and 12.4 [Termination for Failure to Remedy According to Program] of this Agreement, the Design-Builder will pay to the Province or the Province will pay to the Design-Builder, as determined by this Part 2, 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 will be an amount calculated by reference to the following amounts:

- (a) the aggregate, without duplication, of:

- 2 -

- (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 4.1(c) of Schedule 10 [Payment] 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 4.2(c) of Schedule 10 [Payment] 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 which remain unpaid as at the Termination Date, to the extent that such sums have not subsequently been paid.

- 3 -

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 will 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 4.1(e) of Schedule 10 [Payment] applies, the calculation of the Design-Builder Default Termination Sum will:
 - (i) treat any amount retained by the Province in accordance with Section 4.1(e) of Schedule 10 [Payment] (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 will 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 will be an amount equal to the excess and will 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 will be an amount equal to the excess and will 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 will be zero and no amount will be payable by the Design-Builder to the Province by the Province to the Design-Builder pursuant to this Part 2.

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, will 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

- 4 -

- (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 will be paid on or before the payment date referred to in Section 2.5(a) of this Schedule and any remainder will 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 will 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 will 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

- (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

- 5 -

- (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 6.17(b), (c), (d) and (e) of this Agreement 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 will be:

- (a) increased by any net balance owing by the Province or BCTFA pursuant to Section 14.6(c) of this Agreement; or
- (b) reduced by any net balance owing by the Design-Builder to the Province or BCTFA pursuant to Section 14.6(c) of this Agreement.

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 will be reduced by any amount the Province is entitled to set off under Section 1.4 [Province's Right of Set Off] of Schedule 10 (provided this right of set off will not apply to an amount payable by the Design-Builder to the Province pursuant to Section 14.6(c) of this Agreement 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) of this Agreement).
- (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 compensation on termination is payable by the Province under this Schedule, or for any other reason, the Design-Builder will 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:

- 6 -

- (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;

will 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) of this Schedule, the Design-Builder will 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) of this Schedule, 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) of this Schedule, any liability of the Province or BCTFA to make a payment pursuant to Section 4.2(c) of Schedule 10 [Payment].

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) of this Agreement, in respect of a termination of this Agreement:
 - (i) to which Section 1.1 [Obligation to Pay Non-Default Termination Sum] of this Schedule applies, the Design-Builder will 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 will provide to the Province's Representative notice of such amount and the details of the calculation of each component thereof; or

- 7 -

- (ii) to which Section 3.1 [Obligation to Pay Compensation on Design-Builder Default] of this Schedule applies, the Province will 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 will 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 will 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.
- (d) Where the applicable party confirms its disagreement with the calculation of the amount of compensation payable, the matter will 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 will be a condition precedent to any payment by the Province to the Design-Builder of any compensation on termination that

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 14: COMPENSATION ON TERMINATION

Commercial in Confidence
Execution

- 8 -

the Design-Builder will have complied in all material respects with its obligations under Sections 14.8 [Transfer of Assets], and 14.9(b) to (e) inclusive, of this Agreement.

**SCHEDULE 15
COMMUNICATIONS AND ENGAGEMENT**

PART 1 COMMUNICATIONS AND ENGAGEMENT.....	1
1.1 Communications and Engagement Obligations.....	1
1.2 Communications and Engagement Management.....	1
1.3 Communications Deliverables.....	2
1.4 Construction Communications and Engagement Plan.....	2
1.5 Performance Measures.....	4
PART 2 DESIGN-BUILDER COMMUNICATIONS PERFORMANCE MEASURES	5
2.1 Communications Working Group:.....	5
2.2 Evaluation and Reporting	6
PART 3 CONSTRUCTION COMMUNICATIONS PERFORMANCE MEASURES	6
3.1 General Communication	6
3.2 Issues Management.....	9
3.3 Crisis Communication	10
PART 4 INTERESTED PARTY ENGAGEMENT PERFORMANCE MEASURES	10
4.1 Engagement Events.....	10
PART 5 MEDIA AND GOVERNMENT RELATIONS PERFORMANCE MEASURES.....	11
5.1 No Media Relations Activities.....	11
5.2 Media Relations Support	11
5.3 Media Releases	11
5.4 Governmental Authority Liaison Support	12
5.5 No Public Announcements	12

**PART 1
COMMUNICATIONS AND ENGAGEMENT**

1.1 Communications and Engagement Obligations

The Design-Builder will:

- (a) carry out Construction notifications in accordance with Article 3 [Traffic Management Communications] of Part 3 of Schedule 4; and
- (b) support the Province with, in accordance with this Schedule:
 - (i) engagement with Interested Parties;
 - (ii) enquiry-response management;
 - (iii) crisis communications and issues management; and
 - (iv) media and government relations,

(together, the “**Communications and Engagement Obligations**”), all as required to ensure that the public communications and engagement for the Project achieves the desired outcome of involving and informing all Interested Parties concerning the value, benefits and progress of the Project and minimizing public impacts by considering the needs of Interested Parties and appropriately responding to questions and concerns about Construction, all in accordance with the “Key Messages” document provided by the Province to ensure consistent and aligned messaging for areas within the Design-Builder's responsibility, and with the Design-Builder's activities in connection with such public communications and engagement being carried out under the control and with the oversight of the Province as set out in this Schedule.

1.2 Communications and Engagement Management

In carrying out the Communications and Engagement Obligations, the Design-Builder will:

- (a) maintain an appropriate level of resources to meet the Communications and Engagement Obligations, including having available throughout the Term resources with 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;

- 2 -

- (b) support and contribute to a positive working relationship between and among the Province and all Interested Parties; and
- (c) exhibit a high degree of professionalism and courtesy.

1.3 Communications Deliverables

Table 1.3 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 in this Table 1.3, Parts 2, 3, 4 and 5 of this Schedule set out circumstances under which certain deliverables will be submitted to the Province's Representative in accordance with the requirements provided in such Parts, and the applicable performance measures.

Table 1.3

Plan	Section of this Schedule	Due Date	Review Procedure or Consent Procedure
Construction Communications and Engagement Plan (First Submission)	1.4	First submission no later than 60 days following the Effective Date	Consent Procedure
Construction Communications and Engagement Plan (Updates)	1.4	As needed. Required for annual review until Total Completion Date	Review Procedure

1.4 Construction Communications and Engagement Plan

The Design-Builder will develop, implement, maintain and update in accordance with this Schedule a plan (the "**Construction Communications and Engagement Plan**") which will be in effect until the Total Completion Date. The Construction Communications and Engagement Plan will describe the Design-Builder's strategy for achieving the Communications and Engagement Obligations and will include, as a minimum, the following:

- (a) a description of the Design-Builder's team, including the number of personnel proposed, roles, responsibilities and experience of each team member, and how the personnel will be managed and utilized;
- (b) an organizational chart showing the proposed relationship among the Design-Builder's team, the Design-Builder's Representative and senior Design-Builder managers;
- (c) a description of how the Design-Builder will coordinate its activities with the Province, including responding to requests from the Province;
- (d) a description of the Design-Builder's communication activities with respect to Construction notifications, and how those activities interface with the Public Information Plan prepared in accordance with Section 6.2.3 [Public Information Plan] of Part 3 of Schedule 4;

- 3 -

- (e) a description of the Design-Builder's enquiry-response activities outlining, as a minimum, how the Design-Builder will:
 - (i) manage and respond to enquiries, suggestions and complaints with respect to the Project;
 - (ii) electronically and accurately record, track and report out on enquiries and response with respect to the Project; and
 - (iii) meet any FOIPPA, CASL and Provincial privacy and security requirements;
- (f) a description of the Design-Builder's crisis communications activities outlining, as a minimum, the following information:
 - (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 designating a key contact person for crisis communication and 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 communications activities interface with the Incident Management Plan prepared in accordance with Section 6.2.2 [Incident Management Plan] of Part 3 of Schedule 4; and
- (g) a description of how the Design-Builder will meet its obligations for engagement with Interested Parties 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) 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 Interested Parties on issues and concerns arising out of Construction, including notification and timing of Construction, noise, hours of work and construction updates;
 - (iii) plan and attend Province-directed Engagement Events as the Province deems necessary or desirable, and provide all meeting materials that may reasonably be required;

- 4 -

- (iv) immediately notify the Province of any issues or potential issues to facilitate timely resolution;
- (v) in consultation with the Province, develop and implement strategies to track, address, mitigate and minimize any issues or potential issues;
- (vi) respond to emerging issues or potential issues identified by the Province within the timeframe specified by the Province; and
- (vii) apply the principles of GBA Plus to the Communications and Engagement Obligations.

1.5 Performance Measures

- (a) The Tables in each of Part 2 [Design-Builder Communications Performance Measures], Part 3 [Construction Communications Performance Measures], Part 4 [Interested Party Engagement Performance Measures] and Part 5 [Media and Government Relations Performance Measures] of this Schedule set out:
 - (i) performance measures to be met by the Design-Builder in relation to communications and engagement;
 - (ii) the timing for each such performance measure, where applicable; and
 - (iii) whether any deliverables included within such performance measures are required to be submitted under the Review Procedure or the Consent Procedure.
- (b) In respect of any performance measure set out in such Tables with a designation of “Major” or “Severe” in the column entitled “Performance Mechanism Index”, such designation will inform the basis on which NCE Points will be assigned in accordance with Appendix 9A [Assignment of NCE Points] to Schedule 9, and NCE Points may be assigned in accordance with Section 6.1 [Nonconformity Reporting Process] of Schedule 7 for any other performance measures set out in such Tables.
- (c) Any timing requirements in the tables in Part 2 [Design-Builder Communications Performance Measures], Part 3 [Construction Communications Performance Measures], Part 4 [Interested Party Engagement Performance Measures] and Part 5 [Media and Government Relations Performance Measures] of this Schedule will be in addition to, and will not replace, any other timing requirements provided in this Agreement.

- 5 -

PART 2
DESIGN-BUILDER COMMUNICATIONS PERFORMANCE MEASURES

Table 2

	Performance Measure	Timing	Performance Mechanism Index
2.1	Communications Working Group:		
	(a) The Design-Builder will convene, organize and maintain a group (the “ Communications Working Group ”) that will meet regularly with the Province in accordance with this Section 2.1. The Design-Builder representation on the Communications Working Group will comprise communications and engagement staff from the Design-Builder including 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 an Interested Party-focused approach to the Project and Construction management and mitigation of impacts due to Construction;		
	(b) The Design-Builder will convene an initial meeting of the Communications Working Group;	No later than 30 days following the Effective Date	
	(c) The Design-Builder will convene regular meetings of the Communications Working Group;	Bi-weekly until Design-Builder has demobilized from Project Site	
	(d) the Design-Builder will present a 3-month look ahead calendar identifying planned Project activities that warrant action under this Schedule and proposed related communications and engagement actions, and with such calendar to be consistent with the schedule of proposed Closures provided by the Design-Builder pursuant to Section 6.1(o) of Part 3 of Schedule 4;	At every second bi-weekly meeting (at least monthly)	
	(e) the Design-Builder will report on the status of enquiry-response activities for the Project, including as a minimum, the number of enquiries, the substance of the enquiries and responses, the status of responses to enquiries, and the completeness and timeliness of content updates;	At every meeting (bi-weekly)	
	(f) the Design-Builder will report on the status of the notifications of Construction activities and traffic impacts for the Project, 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 (bi-weekly)	

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 15: COMMUNICATIONS AND ENGAGEMENT

Commercial in Confidence
Execution

- 6 -

	Performance Measure	Timing	Performance Mechanism Index
	(g) the Design-Builder will prepare an agenda for the meetings that will allow for information sharing, discussion of matters of interest to Interested Parties, and identification of and response to emerging issues; and	For each meeting (bi-weekly)	
	(h) the Design-Builder will prepare and distribute meeting notes following each meeting.	Within 7 days of each meeting	
2.2	Evaluation and Reporting		
	The Design-Builder's Quality Audits of the Communications and Engagement Obligations will include audits of the Design-Builder's performance, which will include, among other audit items, the following information:	In accordance with the Design-Builder's Quality Audit Plans and as indicated below	
	(a) assessment of performance in relation to the Construction Communications and Engagement Plan and associated activities, including recommendations for how the Design-Builder will incorporate improvements into the next annual update of the plan.	Annually	

PART 3
CONSTRUCTION COMMUNICATIONS PERFORMANCE MEASURES

Table 3

	Performance Measure	Timing	Performance Mechanism Index
3.1	General Communication		
3.1.1	Project Identity and Graphic Design: The Design-Builder will 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
3.1.2	Website: The Design-Builder will:		
	(a) provide to the Province up-to-date traffic advisories with current traffic information in the template provided by the Province that can be applied to the Project website maintained by the Province (the " Website ");	Weekly	Major
	(b) provide to the Province Construction updates, in a format that can be applied to the Website;	Weekly	
	(c) provide to the Province Construction Schedule updates, including key milestones, in the template provided by the Province that can be applied to the Website;	Monthly	
	(d) submit such content described in Section 3.1.2(a) through 3.1.2(c) of this Schedule to the Province pursuant to the Consent Procedure; and		

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 15: COMMUNICATIONS AND ENGAGEMENT**

**Commercial in Confidence
Execution**

- 7 -

	Performance Measure	Timing	Performance Mechanism Index
	(e) ensure that material provided considers and appropriately accommodates the needs of users with visual, hearing and motor skill challenges.	For each submission	
3.1.3	Social Media: The Design-Builder will:		
	(a) provide suggestions for social media posts and 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	Proactively and as requested by Province	
	(b) prohibit staff, Subcontractors and any other personnel or businesses associated with the Design-Builder from posting original content about the Project to social media. For clarity, these entities may note their role on the Project on social media and refer to social media content already posted by the Province, but may not post photos or share Project details that have not already been made publicly available by the Province.	At all times, even after Total Completion	Major
3.1.4	Enquiry-Response: The Design-Builder will:		
	(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; and	As soon as possible, but in no event later than 1 hour after receipt of the enquiry	Major
	(iii) other enquiries related to Construction;	98% within 3 days; 100% within 5 days	
	(b) forward enquiries other than those described in Section 3.1.4(a) of this Schedule to the Province;	Within 1 day	
	(c) ensure that responses provided by the Design-Builder explain how the subject matter of the enquiry will be addressed;		
	(d) 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 will provide live access to the current status to both the Design-Builder and the Province);	Within 30 days of the Effective Date	Major

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 15: COMMUNICATIONS AND ENGAGEMENT**

**Commercial in Confidence
Execution**

- 8 -

	Performance Measure	Timing	Performance Mechanism Index
	(e) keep updated in the electronic tracking system, all fields required to satisfy all tracking and reporting requirements, which will 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	
	(f) ensure the electronic tracking 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		
	(g) submit such information described in Section 3.1.4(a) of this Schedule to the Province pursuant to the Review Procedure.		
3.1.5	Project Construction Phone Line: The Design-Builder will:		
	(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) forward public enquiries about the Project to the Province in accordance with the timeframes specified in Section 3.1.4(b) 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	
	(c) submit the proposed training protocol described in Section 3.1.5(b) of this Schedule to the Province pursuant to the Review Procedure.		
3.1.6	Project Information Signs: The Design-Builder will:		
	(a) 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	Minimum of 14 days prior to scheduled installation, erection or removal	

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 15: COMMUNICATIONS AND ENGAGEMENT**

**Commercial in Confidence
Execution**

- 9 -

	Performance Measure	Timing	Performance Mechanism Index
	(b) install, relocate and remove Province-supplied Project information signage as directed by the Province.	Within 1 week of Province request and receipt of signs	
3.1.7	Photography and Videography: To record and demonstrate progress of the Project from start of Construction to the Substantial Completion Date, the Design-Builder will provide to the Province, on a royalty-free basis for use by the Province:		
	(a) high resolution photos for publications, advertising, presentations and public websites;	At least quarterly	
	(b) professional quality, high resolution photos, graphics and images for publications, advertising, presentations and public websites;	At Substantial Completion and one other time as directed by the Province	
	(c) aerial photography to demonstrate progress of construction along the entire Project Site; and	At least quarterly	
	(d) access and assistance for any photographers, videographers or media personnel designated by the Province.	On request of Province	
3.2	Issues Management		
	At all times until the Total Completion Date, the Design-Builder will:	As identified	
	(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	
	(c) in consultation with the Province and pursuant to the Review Procedure, develop and implement strategies to:		
	(i) track, address, mitigate and minimize any issues or potential issues;		
	(ii) share information about any issues or potential issues with emergency responders or Interested Parties;		
	(iii) work with the Province to develop messages regarding the Design-Builder's response to any issues or potential issues and communicate them to Interested Parties; and		
	(iv) report to the Province on progress/success of mitigation measures with respect to any issues or potential issues;		
	(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	

**HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 15: COMMUNICATIONS AND ENGAGEMENT**

**Commercial in Confidence
Execution**

- 10 -

	Performance Measure	Timing	Performance Mechanism Index
	(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.	Prior to mobilizing to Project Site and thereafter within 1 day of any change	
3.3	Crisis Communication		
	At all times until the Total Completion Date the Design-Builder will: (a) provide assistance to the Province in the Province's development of any supplemental communication plans and strategies;		
	(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 4
INTERESTED PARTY ENGAGEMENT PERFORMANCE MEASURES**

Table 4

	Performance Measure	Timing	Performance Mechanism Index
4.1	Engagement Events		
	The Design-Builder will participate in activities and events held by the Province with Interested Parties (together, " Engagement Events "), which will include sharing of design, traffic management plans and measures to mitigate impacts of Construction and may be small group sessions or an open house, depending on concerns raised by Interested Parties during Construction.	As required by the Province	

- 11 -

PART 5
MEDIA AND GOVERNMENT RELATIONS PERFORMANCE MEASURES

Table 5

	Performance Measure	Timing	Performance Mechanism Index
5.1	No Media Relations Activities		
	The Design-Builder will not undertake any activities relating to media relations except where requested by the Province.		Severe
5.2	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/individual that is most suitable to respond to the enquiry;	Within 1 hour of receiving request from Province	
	(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	
	(c) provide all information and data regarding the status of the Project, any traffic incidents, emergencies or other occurrences and any other information and data the Province may request in order to appropriately respond to media enquiries;	Within the timeframes requested by Province	
	(d) make available a designated media spokesperson as requested by the Province; and	Within the timeframes requested by Province	
	(e) make technical and subject matter experts available to the Province's media relations personnel as required for the purposes of responding to technical matters related to media requests.	Within the timeframes requested by Province	
5.3	Media Releases		
	The Province, in its sole discretion, will determine when media releases are required and will develop and distribute them. At all times until the Total Completion Date, the Design-Builder will, as requested by the Province, provide supporting information for such notices.	As requested by Province	Major

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 15: COMMUNICATIONS AND ENGAGEMENT

Commercial in Confidence
Execution

- 12 -

	Performance Measure	Timing	Performance Mechanism Index
5.4	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 will: (a) 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	
	(b) participate in meetings as and when requested by the Province.	As requested by Province	
5.5	No Public Announcements		
	Neither the Design-Builder nor any of its Subcontractors will issue or disseminate any media release, public announcement or public disclosure relating to the Project without the Province's prior written consent.		Severe

**SCHEDULE 16
DISPUTE RESOLUTION PROCEDURE**

PART 1 GENERAL.....	1
1.1 Confidentiality	1
1.2 No Joinder.....	1
1.3 Limitation Defences.....	1
1.4 Evidence of No Double Recovery	1
PART 2 COMMENCEMENT OF DISPUTE RESOLUTION PROCEDURE	1
2.1 Notice of Dispute	1
2.2 Limitation for Initiating a Dispute	2
2.3 Ongoing Disclosure Obligations.....	2
PART 3 NEGOTIATIONS	2
3.1 Negotiations by Senior Management Executives	2
3.2 Referral of Dispute to Referee Panel or Arbitration Following Negotiations	3
PART 4 REFEREE PANEL PROCEDURE	3
4.1 Commencement of Referee Panel Procedure.....	3
4.2 Appointment of Referees and Referee Panel	3
4.3 Referee Project Site Visits	5
4.4 Appointment of Single Referee Panel Member	5
4.5 No Conflict for Referee Panel Members	5
4.6 Written Submissions	6
4.7 Response to the Written Submission	6
4.8 Referee Panel Review	7
4.9 Decision of Referee Panel.....	8
4.10 Confidentiality of Referee Panel.....	9
4.11 Costs of Referee Panel Review	9
4.12 Referee Panel Decision Final and Binding	9
PART 5 ARBITRATION PROCEDURE.....	9
5.1 Referral to Arbitration	9
5.2 Arbitration Procedure	10
5.3 Inadmissibility of Prior Decisions	11
PART 6 COURT PROCEEDINGS.....	11
6.1 Court Proceedings.....	11

Appendix 16A Referee Panel Member Agreement

**PART 1
GENERAL**

1.1 Confidentiality

Any disagreement, claim or Dispute arising under this Agreement and any Dispute Resolution Procedure carried out in accordance with this Schedule and all information relating to each will be kept private and confidential and will be treated as Confidential Information.

1.2 No Joinder

No proceedings to resolve any Dispute arising out of or relating to this Agreement in accordance with this Schedule will 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 Limitation Defences

The parties acknowledge and agree that the running of time in relation to a particular disagreement or claim 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 a Dispute Notice is issued in accordance with Section 2.1 [Notice of Dispute] of this Schedule until such time as the Dispute Resolution Procedure pursuant to this Schedule has concluded provided that the running of time in relation to prescribed time periods and limits under the Dispute Resolution Procedure will not be suspended.

1.4 Evidence of No Double Recovery

Upon request by the Province, the Design-Builder will disclose and certify to the Province in relation to any disagreement, claim or Dispute:

- (a) all amounts recovered or to which the Design-Builder is entitled to recover under Required Insurance or other insurance that is not Required Insurance but that the Design-Builder has in fact taken out and maintained, including amounts held by the Province; and
- (b) all amounts recovered or to which the Design-Builder is entitled to recover under Material Subcontracts, and to which Material Subcontractors have recovered or are entitled to recover from Subcontractors.

**PART 2
COMMENCEMENT OF DISPUTE RESOLUTION PROCEDURE**

2.1 Notice of Dispute

- (a) Any party (the “**Initiating Party**”) may initiate the Dispute Resolution Procedure with respect to a claim or disagreement (a “**Dispute**”) relating to or in connection with this Agreement by delivering to the other party or parties a notice of Dispute (the “**Dispute Notice**”) subject to the terms set out in this Schedule.

- 2 -

- (b) The Dispute Notice will contain a summary of the matter in dispute, including the particulars of the matter in dispute, the relief sought, a breakdown of any costs or delay impacts claimed, if applicable, the provisions of this Agreement relied upon and a request that the Dispute Resolution Procedure of this Schedule be commenced.
- (c) If there is any information or evidence that the party delivering the Dispute Notice intends to rely on in support of its position that has not previously been provided to the other party, such information will be provided with the Dispute Notice.

2.2 Limitation for Initiating a Dispute

Subject to any other shorter time or limitation period set out in this Agreement, if the Design-Builder wishes to contest, dispute or challenge any matter arising out of or in relation to any claim, request or submission by the Design-Builder, including in relation to any Province Change, Supervening Event, any matter relating to payment or extension of time or any determination by the Province that the Design-Builder is not prohibited by this Agreement from contesting, disputing or challenging, and the Province has given written notice denying or refusing such claim, request, or submission, the Design-Builder will deliver a Dispute Notice within 90 days after such written notice by the Province and if the Design-Builder fails to deliver a Dispute Notice within such 90 days, the Design-Builder hereby waives its rights in relation to such claim, request or submission and is deemed to accept the Province's denial or refusal of such claim, request or submission and is deemed to release the Province from and against all liability in relation thereto.

2.3 Ongoing Disclosure Obligations

- (a) Each of the Province and the Design-Builder agrees that it will at all times, provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate the evaluation and resolution of any disagreement, claim or Dispute, both before and after initiation of the Dispute Resolution Procedure.
- (b) If a party in receipt of a Dispute Notice, believes in its sole discretion, that it requires additional documents or other information from the Initiating Party to consider the Dispute, it may at any time require the Initiating Party to provide classes or categories of documents or other information, and the Initiating Party will provide those documents or other information as soon as reasonably possible upon request.

PART 3 NEGOTIATIONS

3.1 Negotiations by Senior Management Executives

Upon receipt of a Dispute Notice pursuant to Section 2.1 [Notice of Dispute] of this Schedule each of the parties will refer such Dispute to a senior management executive with the authority to negotiate a settlement of such Dispute for that party (the “**Senior Management Executives**”). The parties' Senior Management Executives will make bona fide efforts to resolve by negotiation such Dispute within 45 days of receipt of the Dispute Notice. If the Senior Management Executives agree upon a resolution of the Dispute, such resolution will be memorialized in a written settlement agreement mutually acceptable to the parties and will be binding on the parties.

- 3 -

3.2 Referral of Dispute to Referee Panel or Arbitration Following Negotiations

- (a) If the parties are unable to resolve a Dispute by negotiation pursuant to Section 3.1 [Negotiations by Senior Management Executives] of this Schedule within 30 days of the submission of a Dispute Notice (the “**Negotiation Period**”), then such Dispute will be resolved by a Referee Panel pursuant to Part 4 [Referee Panel Procedure] of this Schedule or by arbitration pursuant to Part 5 [Arbitration Procedure] of this Schedule in accordance with the following terms:
 - (i) where the parties have each waived in writing their right to have a Dispute resolved by a Referee Panel, the Dispute will be resolved by arbitration pursuant to Part 5 [Arbitration Procedure] of this Schedule; and
 - (ii) in all other cases, the Dispute will be resolved in the first instance by the Referee Panel pursuant to Part 4 [Referee Panel Procedure] of this Schedule, subject to the parties’ right to have the matter reconsidered by an arbitrator pursuant to Part 5 [Arbitration Procedure] of this Schedule.
- (b) Any of the parties may refer a Dispute for resolution to the Referee Panel or to arbitration, if applicable, in accordance with this Section 3.2 by issuing a Referee Panel Dispute Notice pursuant to Part 4 [Referee Panel Procedure] of this Schedule or an Arbitration Notice pursuant to Part 5 [Arbitration Procedure] of this Schedule, as applicable.

PART 4 REFEREE PANEL PROCEDURE

4.1 Commencement of Referee Panel Procedure

If the parties are unable to resolve a Dispute in the manner contemplated in Section 3.1 [Negotiations by Senior Management Executives] of this Schedule then a party may by written notice to the other party and the Legal Referees (the “**Referee Panel Dispute Notice**”) require the Dispute to be resolved on, an expedited basis by a qualified Referee Panel or, where the parties agree, by a single Referee, in accordance with the procedure set out in this Part 4 [Referee Panel Procedure] of this Schedule (the “**Referee Panel Procedure**”). The Referee Panel Dispute Notice:

- (a) will contain a brief summary of the matter in Dispute, the relief being sought, any cost and schedule impacts claimed, and the relevant provisions of the Agreement in issue; and
- (b) may not include reference to any matter or issue not set out or contemplated in the Dispute Notice or otherwise provided in writing to the other party during the Negotiation Period.

4.2 Appointment of Referees and Referee Panel

- (a) Disputes referred to the Referee Panel Procedure for resolution will be resolved by a panel of three experts (the “**Referee Panel**”). The Referee Panel will consist of two independent and impartial referees who are barristers and solicitors duly licensed to practice law in the Province of British Columbia (the “**Legal Referees**”), and a third

- 4 -

independent and impartial referee selected from an appointed roster of no less than two alternate referees (the “**Alternate Referees**”), who may be:

- (i) an expert with demonstrated experience and expertise in design or construction work, or both; and
 - (ii) a quantity surveyor who is a member of the Canadian Institute of Quantity Surveyors or a person possessing equivalent skills and qualifications.
- (b) Within 120 days of the Effective Date, the parties will jointly appoint the Legal Referees and the Alternate Referees in the following manner:
 - (i) Within 30 days of the Effective Date, each party will submit in writing to the other party, the names of no more than three candidates for each Legal Referee and Alternate Referee position who are independent of the parties and immediately available to perform the role of a Legal Referee or an Alternate Referee, as the case may be; and
 - (ii) The parties will make *bona fide* efforts to confirm each of the Legal Referees and the Alternate Referees and if for any reason all of the Legal Referees and the Alternate Referees have not been appointed within 120 days of the Effective Date, then either party may apply to VanIAC to appoint any or all of the Legal Referees and the Alternate Referees from the lists of potential Legal Referees and Alternate Referees submitted by each of the parties or, if a party fails to submit a list of potential Legal Referees or Alternate Referees within 10 Business Days of such application, VanIAC will appoint any or all of the Legal Referees and the Alternate Referees, as the case may be, who will meet the qualifications set out in Section 4.2(a) of this Schedule.
- (c) Within 10 Business Days of receiving a Referee Panel Dispute Notice, the Legal Referees will jointly nominate one of the Alternate Referees based on the qualifications and expertise that the Legal Referees determine are required to resolve the Dispute set forth in the Referee Panel Dispute Notice, and will notify the parties of their nomination.
- (d) If any of the appointed Referees resigns, dies, becomes conflicted, or whose appointment to act as a Referee has otherwise ceased, the parties will in good faith and in a reasonable manner agree on a replacement Referee with the same or similar qualifications and professional expertise to that of the Referee who has resigned, died, become conflicted or whose appointment has otherwise ceased.
- (e) If the parties cannot agree on a replacement Referee pursuant to Section 4.2(d) of this Schedule within a reasonable time, either party may apply to VanIAC for appointment of such replacement Referee, in which case VanIAC will appoint a replacement Referee member from lists of potential replacement Referees submitted by each of the parties or, if a party fails to submit a list of potential replacement Referees within 10 Business Days of such application, VanIAC will appoint a replacement Referee with similar qualifications and professional experience as the Referee who has resigned, died, become conflicted or whose appointment has otherwise ceased.

- 5 -

- (f) The parties will enter into an agreement (a “**Referee Panel Member Agreement**”) with each Referee, engaging the specified individual to act as a Referee generally in the form attached as Appendix 16A [Referee Panel Member Agreement] to this Schedule, such agreement to be entered into no later than 10 Business Days after the Referee's appointment and the appointment will be subject to the terms of the Referee Panel Member Agreement.
- (g) If VanIAC refuses, or is unable or unwilling to make an appointment under this Section 4.2, the appointment will be made by a Justice of the Supreme Court of British Columbia upon the application of any of the parties.

4.3 Referee Project Site Visits

The appointed Referees will complete an initial Project Site visit within 30 days of the appointment of the Referees and every six months thereafter, or such other frequency as agreed by the parties. Referees will not attend at the Project Site unless accompanied by the Province's Representative and the Design-Builder's Representative.

4.4 Appointment of Single Referee Panel Member

- (a) The parties may agree in writing to have a sole, specific Referee resolve a particular Dispute.
- (b) Upon the Referee Panel receiving a notice executed by both parties indicating the parties' agreement to have a specified Referee resolve a Dispute, the specified Referee will thereafter take conduct of the Dispute.
- (c) Where a single Referee is appointed by the parties in accordance with this Section 4.4, the provisions of this Schedule, including Sections 4.5 through 4.12 of this Schedule, will apply *mutatis mutandis* as though the single Referee were standing in the place of the Referee Panel.

4.5 No Conflict for Referee Panel Members

- (a) Unless the parties otherwise agree, no person will be nominated, appointed, or continue to act as a Referee who, or any of whose partners, shareholders, unitholders, or Affiliates, 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.
- (b) The parties will cause each Referee appointed pursuant to this Agreement, as part of the documentation required to engage the Referee, to sign a statement declaring that the Referee knows of no circumstance likely to give rise to justifiable doubts as to their independence or impartiality and that the Referee agrees to disclose any such circumstance to the parties should such circumstance arise after that time.

- 6 -

4.6 Written Submissions

Within 15 Business Days of receipt of a Referee Panel Dispute Notice, the Initiating Party will issue a written submission (the “**Claim Submission**”) to the other party (the “**Responding Party**”) and to the Referee Panel. The Claim Submission:

- (a) will not exceed 15 single-sided letter sized pages, single-spaced and printed in no less than 11 point font, provided that such limits will not apply to:
 - (i) any factual appendices or exhibits reasonably required in support of the Claim Submission, provided that such appendices or exhibits do not exceed 120 pages in the aggregate; or
 - (ii) any Claim Submission in respect of which the Referee Panel or the Responding Party has expressly agreed to be exempt from such limits;
- (b) will contain a summary of the matters in Dispute and the position of the Initiating Party with respect to those matters, provided that all such matters and positions were set out in the Dispute Notice or provided in writing to the Responding Party during the Negotiation Period;
- (c) will contain the remedy or relief sought by the Initiating Party, particulars of any impacts claimed, including a detailed breakdown of any costs or schedule delay impacts claimed, if applicable, provided that any such detailed breakdowns were set out in the Dispute Notice or provided in writing to the Responding Party during the Negotiation Period;
- (d) will contain reference to the specific provision(s) of this Agreement relied on by the Initiating Party in relation to its position, provided all such positions and provisions were included in the Dispute Notice or provided in writing to the Responding Party during the Negotiation Period; and
- (e) will be accompanied by all documentary evidence and legal authorities on which the Initiating Party relies in support of its position, provided that the Claim Submission does not include any documentary evidence, legal authorities or positions not raised in the Dispute Notice or provided to the Responding Party during the Negotiation Period.

4.7 Response to the Written Submission

Within 15 Business Days following receipt of the Claim Submission, the Responding Party will submit a submission in response to the Claim Submission to the Initiating Party and the Referee Panel (the “**Response Submission**”). The Response Submission:

- (a) will not exceed 15 single-sided letter sized pages, single-spaced and printed in no less than 11 point font, provided that such limits will not apply to:
 - (i) any factual appendices or exhibits reasonably required in support of the Response Submission, provided that such appendices or exhibits do not exceed 120 pages in the aggregate; or

- 7 -

- (ii) any Response Submission in respect of which the Referee Panel or the Initiating Party has expressly agreed to be exempt from such limits;
- (b) will include a summary of the Responding Party's position in response to the Disputing Party's Claim Submission;
- (c) will contain the remedy or relief sought by the Responding Party or, where applicable, the Responding Party's position with respect to any costs, schedule adjustments, or other remedy or relief claimed by the Initiating Party;
- (d) will contain reference to any provision(s) of this Agreement relied on by the Responding Party in relation to its position; and
- (e) will be accompanied by all documentary evidence and legal authorities on which the Responding Party relies in support of its position.

Where the Responding Party is in receipt of more than one Claim Submission from the same Initiating Party within a 15 Business Day period, the 15 Business Days for providing a Response Submission in respect of each subsequent Claim Submission received will not start to run until the Response Submission to the previous Claim Submission has been submitted by the Responding Party.

4.8 Referee Panel Review

- (a) Subject to Section 4.8(b) of this Schedule, within 15 Business Days following receipt of the Response Submission, the Referee Panel will:
 - (i) determine the matters to be resolved;
 - (ii) determine what further documents will need to be produced and by what date;
 - (iii) determine if any additional evidence will be required and, if required, how such evidence will be obtained and a date for submission, provided that the Referee Panel process will not include the provision of any oral evidence or any expert evidence, whether written or oral, unless agreed by the parties; and
 - (iv) make any other determinations required to allow the Referee Panel to conduct its investigation and render a decision with respect to the Dispute, in accordance with the terms in this Part 4 [Referee Panel Procedure] of this Schedule.
- (b) The Referee Panel will 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 additional submissions and documents from the parties, and impose deadlines for the receipt of such submissions or documents;
 - (ii) require a party to supply or prepare for examination by the Referee Panel and the other parties any additional document or written information or evidence the Referee Panel considers necessary and provide any process associated therewith;

- 8 -

- (iii) proceed with the Referee Panel Procedure notwithstanding any failure or refusal of a party to comply with the provisions of this Part 4 [Referee Panel Procedure] or with the Referee Panel's directions or determinations or to attend any meeting or hearing, but only after giving such party reasonable notice that the Referee Panel intends to do so;
- (iv) convene meetings of the parties to have the parties discuss the matters in Dispute in the presence of the Referee Panel;
- (v) provide a process for the parties to communicate with the Referee Panel;
- (vi) undertake one or more site visits in connection with a Dispute, which site visits will be undertaken in the presence of the parties; and
- (vii) seek advice from any other qualified independent professional advisors in respect of the Dispute, including from an Alternate Referee not sitting on the Referee Panel,

all with the objective of devising and adopting the simplest, least expensive, and most expeditious manner of determining the Dispute and so as to comply with the period for determination set out in Section 4.8(c) of this Schedule.

- (c) The parties will request that the Referee Panel complete its investigation and determination of the Dispute within 10 weeks of its receipt of the Response Submission.
- (d) The parties agree they will not unreasonably delay or impede the Referee Panel in completing its investigation and determination with respect to any Dispute and the parties acknowledge that the resolution process by the Referee Panel is intended to be based on an investigative process directed by the Referee Panel.

4.9 Decision of Referee Panel

- (a) The Referee Panel will render a unanimous decision as soon as possible and, in any event but subject to Section 4.9(b) of this Schedule, will render a decision no later than 10 weeks after the Referee Panel has received the Response Submission.
- (b) If the Referee Panel reasonably believes that additional time is required to make a determination, the Referee Panel will notify the parties within 15 Business Days of the Response Submission that it requires a specified extension of time beyond the period set out in Section 4.9(a) of this Schedule to make a determination and the reason the extension is required. If the Referee Panel gives notice of an extension in accordance with this Section, the Referee Panel will render a unanimous decision within the extension period stipulated.
- (c) The Referee Panel will give written reasons or a written summary of reasons for the Referee Panel's unanimous decision.
- (d) Where the Referee Panel cannot reach a unanimous decision, the Referee Panel will notify the parties of its inability to achieve a unanimous decision no later than 10 weeks after the Referee Panel has received the Response Submission or such other period if

- 9 -

extended in accordance with Section 4.9(b) of this Schedule, without providing any details with respect to the conflicting opinions of the Referee Panel members.

4.10 Confidentiality of Referee Panel

The parties will cause each member of the Referee Panel, as part of the documentation required to retain the Referee, to agree to keep all information about a 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 Referee Panel in accordance with Section 4.8(b)(vii) of this Schedule, on an as-needed basis.

4.11 Costs of Referee Panel Review

Notwithstanding any other provision of this Agreement, the parties will each bear their own costs of the Referee Panel Procedure, including all legal fees and expenses and their respective share of all fees and expenses of the Referee Panel members in accordance with the terms of the Referee Panel Member Agreement.

4.12 Referee Panel Decision Final and Binding

The Referee Panel's award or determination will be final and binding on the parties, and the parties will comply with the award or determination, unless the Dispute is referred to arbitration in accordance with this Schedule, and each of the parties expressly waive all rights of appeal in connection with a Referee Panel's decision except as expressly provided in this Schedule.

PART 5 ARBITRATION PROCEDURE

5.1 Referral to Arbitration

- (a) A party may commence arbitration proceedings in respect of a Dispute by giving a written notice (the "**Arbitration Notice**") to the other party requiring that the Dispute be resolved by arbitration proceedings pursuant to this Part 5 in one of the following circumstances:
 - (i) if a Dispute is not resolved by negotiation within the Negotiation Period in the manner contemplated in Section 3.1 [Negotiations by Senior Management Executives] of this Schedule and the parties have each waived in writing their right to have a Dispute resolved by a Referee Panel;
 - (ii) within 30 days of a unanimous decision by the Referee Panel pursuant to Section 4.9 [Decision of Referee Panel] of this Schedule and:
 - (A) the amount in Dispute awarded or not awarded by the Referee Panel is more than \$2 million; or
 - (B) the determination of the Referee Panel involves issues of contract interpretation that will in the reasonable view of a party have a material impact on that party in excess of \$2 million; or

- 10 -

- (iii) within 30 days of receipt of notification from the Referee Panel pursuant to Section 4.9(d) of this Schedule that the Referee Panel is unable to reach a unanimous decision with respect to a Dispute.
- (b) The parties agree that any Dispute referred to arbitration by any party pursuant to Section 5.1(a) of this Schedule will be resolved by binding arbitration administered by VanIAC pursuant to the VanIAC Rules, except to the extent of conflicts between the VanIAC Rules and the provisions of this Agreement, in which case the provisions of this Agreement will prevail.

5.2 Arbitration Procedure

- (a) An arbitration may be commenced by any of the parties in the circumstances set out in Section 5.1(a) of this Schedule by issuing a Notice to Arbitrate in accordance with the VanIAC Rules. The Notice to Arbitrate will contain all of the information required by the VanIAC Rules. In addition, the Notice to Arbitrate will, to the extent relevant to a Dispute be accompanied by, as applicable:
 - (i) the parties' written waiver of their right to have the applicable Dispute resolved by the Referee Panel Procedure pursuant to Section 3.2(a)(i) of this Schedule; or
 - (ii) the notification of the Referee Panel to the parties of the Referee Panel's inability to reach a unanimous decision.
- (b) Within 20 Business Days of the commencement of the arbitration in accordance with Section 5.1(a) of this Schedule, the parties will make bona fide efforts to agree on a single arbitrator. If the parties are unable to do so, a single arbitrator will be appointed by VanIAC at the request of any of the parties in accordance with the VanIAC Rules.
- (c) The parties agree and acknowledge that the place and legal seat of any arbitration will be Vancouver, British Columbia, Canada.
- (d) Any award issued by the arbitrator will be final and binding on the parties, may be filed in any Court, and may be enforced by a party as a final judgment in such Court. The parties expressly waive, to the maximum extent permitted by law, any right of appeal of any award, including appeals based on questions of law, questions of fact, questions of mixed law and fact, or otherwise.
- (e) The parties will request that the arbitrator render a final award as soon as reasonably practicable after the commencement of an arbitration, taking into consideration the size, nature and complexity of the matters in issue and the parties' intent to achieve a just, timely and cost effective determination.
- (f) Unless the parties otherwise agree, no person may be nominated, appointed or continue to act as arbitrator who, or any of whose partners, shareholders, unitholders or Affiliates, 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;

- 11 -

- (ii) the Project on behalf of the Province; or
- (iii) is a present or former Referee.

5.3 Inadmissibility of Prior Decisions

If a party is entitled to refer a Dispute to arbitration pursuant to Section 5.1 [Referral to Arbitration] of this Schedule, then all decisions and determinations of the Referee Panel will be confidential and inadmissible in an arbitration of such Dispute.

PART 6 COURT PROCEEDINGS

6.1 Court Proceedings

Notwithstanding any other provision of this Schedule, no party will 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) of this Agreement. In the event that a party initiates such a proceeding, it will not be deemed to be an infringement or a waiver of the Dispute Resolution Procedure set forth in this Schedule and will not affect the relevant powers reserved to a Referee Panel or arbitrator, as applicable. Any proceeding initiated pursuant to this Section 6.1 will be notified without delay to the Referee Panel, arbitrator, and VanIAC, as applicable.

**APPENDIX 16A
REFEREE PANEL MEMBER AGREEMENT**

BETWEEN:

**[NAME AND ADDRESS OF REFEREE PANEL MEMBER]
(the “Referee Panel Member”)**

AND:

**HIS MAJESTY THE KING IN RIGHT OF THE PROVINCE OF BRITISH
COLUMBIA
(the “Province”)**

AND:

**KEA FRASER VALLEY CONNECTORS
(the “Design-Builder”)**

We write to confirm your appointment as a Referee Panel Member under the Design-Build Agreement (the “**Design-Build Agreement**”) dated • among the Province, BC Transportation Financing Authority and the Design-Builder. The terms of your appointment are as contained in Part 4 [Referee Panel Procedure] of Schedule 16 to the Design-Build Agreement and as attached in Schedule A hereto (the “**Agreement**”). All capitalized terms have the meaning given to them in the Design-Build Agreement unless otherwise defined in this Agreement.

We confirm our agreement for you to review the Dispute(s) described in any Referee Panel Dispute Notice in accordance with the provisions of the Design-Build Agreement, and to perform the functions of a member of the Referee Panel as described in Part 4 [Referee Panel Procedure] of Schedule 16 to the Design-Build Agreement. A copy of the Design-Build Agreement is enclosed for reference.

We confirm that your daily/hourly rate for fees is as set out in Schedule B to this Agreement. In addition to your invoiced fees, approved travel expenses will be reimbursed at the rates described in Schedule C to this Agreement.

Please confirm your agreement to the terms as set out in this letter by signing a copy of the enclosed letter and returning copies to each of the undersigned representatives of the Province and the Design-Builder.

Yours truly,

Authorized Signatory of the Province

Date

Authorized Signatory of the Design-Builder

Date

Referee Panel Member

Date

SCHEDULE A
REFEREE PANEL MEMBER AGREEMENT SERVICE TERMS

THE PROVINCE, THE DESIGN-BUILDER AND THE PANEL MEMBER AGREE AS FOLLOWS:

1. Appointment

- 1.1. The Province and the Design-Builder hereby appoint the Referee Panel Member to act as a member of the Referee Panel in accordance with the terms of this Agreement and to fulfill the role of an expert referee as set out in Part 4 [Referee Panel Procedure] of Schedule 16 to the Design-Build Agreement.
- 1.2. The Referee Panel Member hereby accepts the appointment and acknowledges receipt of a complete copy of the Design-Build Agreement.
- 1.3. The Referee Panel Member will designate [●] (the "**Referee Panel Member Designate**") to perform the responsibilities and obligations of the Referee Panel Member as set forth in this Agreement.
- 1.4. The appointment of the Referee Panel Member and the Referee Panel Member Designate and any rights, responsibilities and obligations arising out of the Design-Build Agreement, or this Agreement may not be assigned, re-designated, or transferred in any way.

2. Conflict of Interest and Bias

- 2.1. The Referee Panel Member has disclosed to the Province and the Design-Builder and will promptly disclose on a continuing basis throughout the term of this Agreement any facts or circumstances that may give rise to any actual conflict of interest or any perception of a conflict of interest on the part of the Referee Panel Member or any other facts or circumstances which may call into question the independence of the Referee Panel Member or raise any risk of perception on the part of either the Province or the Design-Builder that the Referee Panel Member is not free from potential conflict of interest or bias.
- 2.2. If the Referee Panel Member becomes aware of facts or circumstances that the Referee Panel Member believes may impact the Referee Panel Member's ability to perform the Referee Panel Member's obligations independently and free of conflict of interest or bias, whether real or perceived, the Referee Panel Member will request the parties terminate the Referee Panel Member's appointment under this Agreement and the Design-Builder and Province agree to terminate the appointment of the Referee Panel Member pursuant to Section 11.1(c) of this Agreement.
- 2.3. If either the Design-Builder or the Province become aware of facts or circumstances that the Design-Builder or Province, as applicable, reasonably believes may impact the independence of the Referee Panel Member or may give rise to a real or perceived conflict of interest or bias (the "**Concerned Party**"), the Concerned Party will give notice to the other parties, and subject to both of the other parties to this Agreement raising an objection within three Business Days of the notice, the Referee Panel Member appointment will be terminated in accordance with Section 11 [Termination] of this Agreement. If both of the other parties to this Agreement raise an objection

- 2 -

to the notice provided by the Concerned Party, then the Concerned Party may apply to a neutral third party, to be agreed upon by all parties, for a determination as to whether the Concerned Party's concerns are reasonably held, and the parties agree to be bound by the determination of such third party and if the concerns are found to be reasonably held, the Concerned Party may terminate the Referee Panel Member's appointment.

3. Duties

- 3.1. The Referee Panel Member will promptly, professionally, faithfully and diligently perform all duties and discharge all responsibilities and obligations assigned to the Referee Panel Member as specified in this Agreement and in Part 4 [Referee Panel Procedure] of Schedule 16 to the Design-Build Agreement.
- 3.2. Without prejudice to the generality of Section 3.1 of this Agreement, the Referee Panel Member will, together with any other members of the Referee Panel, determine the process for the resolution of any dispute referred to it in accordance with the provisions set out in Section 4.8(b) of Schedule 16 [Dispute Resolution Procedure] to the Design-Build Agreement.
- 3.3. The Referee Panel Member will, upon the written request of either party, attend or facilitate meetings between the Province and the Design-Builder and/or third parties as may be required and take such other steps as may be agreed between the Province and the Design-Builder and reasonably required of the Referee Panel Member in connection with the functions of the Referee Panel Member pursuant to this Agreement.
- 3.4. If the Referee Panel Member or Referee Panel Member Designate is a member of a professional or regulatory body, the Referee Panel Member or Referee Panel Member Designate will comply with its obligations as a member of such professional or regulatory body in the performance by the Referee Panel Member of its obligations pursuant to this Agreement.
- 3.5. The Referee Panel Member represents and warrants to each of the Province and the Design-Builder that it has the necessary time, resources, professional qualifications, skill, expertise and experience in order to fulfill the obligations undertaken by the Referee Panel Member as set out in or as contemplated by this Agreement.

4. Cooperation

- 4.1. The Province and the Design-Builder will cooperate with each other and with the Referee Panel in order to facilitate the efficient and timely performance by the Referee Panel and the Referee Panel Member of the obligations of the Referee Panel Member under this Agreement.

5. Communications

- 5.1. Except for matters of a purely administrative nature, the Referee Panel Member will not communicate orally with either the Province or the Design-Builder, or their representatives, respecting any matters arising out this Agreement unless both parties or their respective representatives are a party to the communication.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 16: DISPUTE RESOLUTION PROCEDURE
Appendix 16A: Expert Referee Agreement

Commercial in Confidence
Execution

- 3 -

- 5.2. The Referee Panel Member will provide copies of any written communications sent to a party or received by the Referee Panel Member from a party, to the other party.

6. Notices

- 6.1. Any notices or other documentation required to be given under this Agreement will be given in writing to the respective parties by delivery to the addresses for service shown in this Agreement or such other addresses as notified by the parties from time to time.

7. Evidence

- 7.1. The parties acknowledge that the Referee Panel is not bound by the strict rules of evidence.

8. Confidentiality

- 8.1. The Referee Panel Member will hold in strict confidence and will not publish, release, use or disclose (or permit any of the forgoing) to any person, any documents, information or material in whatever form provided to or received by the Referee Panel Member or to which the Referee Panel Member gains access in the course of performing the duties or discharging the responsibilities of the Referee Panel Member under or in connection with this Agreement, without the prior written consent of both the Province and the Design-Builder, unless such disclosure is required by court order or otherwise required by law.
- 8.2. Without prejudice to any other rights or remedies that the Province and/or the Design-Builder may have, the Referee Panel Member agrees that damages may not be an adequate remedy for a breach of this Section 8 and that the Province and the Design-Builder will each be entitled to the remedies of injunction, specific performance or other equitable relief for any threatened or actual breach of the terms of this Section 8.
- 8.3. The Referee Panel Member will implement and maintain procedures to ensure that any information supplied to, obtained by, produced, or which comes to the knowledge of the Referee Panel Member as a result of this Agreement is kept and maintained in strictest confidence.
- 8.4. Without restricting the generality of this Section 8, the Referee Panel Member will comply with such reasonable directions as the Province and the Design-Builder may, from time to time, jointly make and implement with respect to ensuring confidentiality.

9. Conflict

- 9.1. The Referee Panel Member will not, before or after the expiration or sooner termination of this Agreement, perform a service for or provide advice to any person, firm or corporation, or engage in any activity, where the performance of the service, the provision of the advice or the performance of the activity, in the reasonable opinion of the Province or the Design-Builder, gives rise to or may give rise to an actual or perceived conflict of interest with the obligations of the Referee Panel Member to either the Province or the Design-Builder under this Agreement, including without limitation, where the performance of the service, the provision of the advice, or the performance of the activity, will or may:

- 4 -

- (a) undermine or compromise, in the reasonable opinion of either the Province or the Design-Builder, the ability of the Referee Panel Member to discharge its obligations under and in accordance with the terms of this Agreement; or
- (b) call into question, during the term of this Agreement, the independence of the Referee Panel Member or raise any risk of perception on the part of either the Province or the Design-Builder that the Referee Panel Member is not free from potential conflict of interest or bias.

10. Fees and Disbursements

- 10.1. The Province and the Design-Builder will each pay the Referee Panel Member for performing the Referee Panel Member services under this Agreement in accordance with Schedule B [Fee Schedule] to this Agreement.
- 10.2. In the event of termination of this Agreement, the Province and the Design-Builder will each promptly reimburse the Referee Panel Member for one half of all reasonable fees and disbursements of the Referee Panel Member incurred prior to the effective date of termination of this Agreement.
- 10.3. Total payments to the Referee Panel Member under this Agreement will not exceed \$[●].

11. Termination

- 11.1. This Agreement, and the appointment of the Referee Panel Member may be terminated:
 - (a) by a Concerned Party pursuant to the terms set out in Section 2.3 of this Agreement;
 - (b) pursuant to a non-renewal in accordance with Section 12.3 of this Agreement;
 - (c) by agreement of the Province and the Design-Builder immediately upon notice in writing to the Referee Panel Member at any time or in accordance with the circumstances set out in Section 2.1 of this Agreement;
 - (d) by the Referee Panel Member by giving thirty days written notice to the Province and the Design-Builder.
- 11.2. The Referee Panel Member will not be entitled to any payment or other compensation whatsoever as a result of or in connection with the termination of this Agreement in any of the cases under Section 11.1 of this Agreement and the Referee Panel Member's entitlement as a result of any such termination will be limited to payment in accordance with the terms of Section 10.2 of this Agreement.

12. Term of Agreement

- 12.1. Subject to the terms of this Agreement, the term of this Agreement will commence on the latest date of execution on the first page of this letter Agreement and expire on [●].

- 5 -

- 12.2. This Agreement may be renewed at the option of the Province and the Design-Builder, in their sole discretion, for up to **[number and length of terms to be confirmed]** by notice in writing to the Referee Panel Member with such renewal to be upon the same terms as this Agreement except for this provision for renewal.
- 12.3. Unless the option to renew is exercised, this Agreement and the appointment of the Referee is and is deemed to be terminated on the expiry date and the Referee Panel Member's entitlement as a result of this termination is limited to payment in accordance with Section 10.2 of this Agreement.

13. Several Obligations

- 13.1. The obligations of the Province and the Design-Builder pursuant to this Agreement are several only.

14. General

- 14.1. References and Headings – The references "hereunder", "herein" and "hereof" refer to the provisions of this Agreement and references to Sections and herein refer to Sections of this Agreement. The division of this Agreement and the headings of the Sections, and any other headings, captions or indices herein are inserted for convenience of reference only and will not be used in any way in construing or interpreting any provision hereof.
- 14.2. Singular/Plural and Derivatives – Whenever the singular or masculine or neuter is used in this Agreement, it will be interpreted as meaning the plural or feminine or body politic or corporate, and vice versa, as the context requires. Where a term is defined herein, a derivative of such term will have a corresponding meaning unless the context otherwise requires.
- 14.3. Including – The word "including", when following any general term or statement, and whether or not it is followed by such words as "without limitation", is not to be construed as limiting the general term or statement to the specific items or matters set forth or to similar items or matters, and the general term or statement will be interpreted to refer to all other items or matters that could reasonably fall within the broadest possible scope of the general term or statement.
- 14.4. Mandatory Provisions – The words "will" and "shall" as used in this Agreement are synonymous with each other and used interchangeably herein to designate a mandatory requirement or obligation, as applicable.
- 14.5. Statutory References – Any reference to a statute of any governmental authority will include and will be deemed to be a reference to such statute and to the regulations or orders made pursuant thereto and all amendments made thereto and in force from time to time, and to any statute, regulation or order that may be passed which has the effect of supplementing the statute so referred to or the regulations or orders made pursuant thereto.
- 14.6. Date for Performance – If the date for the performance of any obligation hereunder or the date for the delivery of any notice or the provision of any approval or consent contemplated hereunder falls on a day that is not a Monday to Friday inclusive excluding days which are statutory

- 6 -

holidays in the Province of British Columbia ("**Business Day**") then such date will be deemed to be the next following Business Day.

- 14.7. 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.
- 14.8. Currency – All dollar amounts referred to in this Agreement are in Canadian dollars.
- 14.9. Jurisdiction of the Province – Nothing in this Agreement will be construed as an agreement by the Province to restrict, limit or otherwise fetter in any manner the Province's ability to introduce, pass, amend, modify, replace, revoke or otherwise exercise any rights or authority regarding legislation, regulations, policies or any other authority of the Province.
- 14.10. 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 will be interpreted in a manner which results 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.
- 14.11. 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.
- 14.12. Time of Essence – Time is of the essence of this Agreement, provided that the time for doing or completing any matter provided for herein may be extended or abridged by an agreement in writing signed by the parties or by their respective solicitors who are hereby expressly appointed in this regard.
- 14.13. Entire Agreement – This Agreement is the entire agreement between the parties pertaining to the matters provided herein, and supersedes all prior agreements, negotiations and discussions, whether oral or written, of the parties. This Agreement will not be amended except in a written instrument executed by all of the parties or their solicitors on their behalf and stated to be an amendment to this Agreement.

- 7 -

- 14.14. Governing Law – This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein. The parties agree to submit to the exclusive jurisdiction of the courts of the Province of British Columbia with respect to any dispute relating to this Agreement.
- 14.15. No Implied Waiver – The failure of any party to insist at any time upon the strict performance of any covenant or agreement herein or to exercise any option, right, power or remedy contained in this Agreement will not be construed as a waiver or a relinquishment thereof for the future. No payment or receipt by a party of a lesser amount than due under this Agreement will be deemed to be other than on account of the earliest payment due hereunder, nor will any endorsement or statement on any cheque or any letter accompanying any cheque or payment due under this Agreement be deemed an accord and satisfaction, and the parties may accept such cheque or payment without prejudice to the party's right to recover the balance of such payment or pursue any other remedy permitted herein.
- 14.16. Execution – This Agreement may be executed by the parties and transmitted by facsimile or other electronic means and if so executed and transmitted, this Agreement will be for all purposes as effective as if the parties had delivered an executed original Agreement.
- 14.17. Financial Administration Act – The Design-Builder and the Referee Panel Member acknowledge that they are aware of the provisions of the *Financial Administration Act* (British Columbia).
- 14.18. Counterparts – This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, but all of which together will constitute one and the same document.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 16: DISPUTE RESOLUTION PROCEDURE
Appendix 16A: Referee Panel Member Agreement

Commercial in Confidence
Execution

SCHEDULE B
FEE SCHEDULE

Payments to the Referee Panel Member will be based on the following:

Referee Panel Member Name	Hourly Rate (\$)
[●]	\$(●)

Approved travel expenses will be reimbursed at the rates described in the Schedule of Reimbursable Travel attached to Schedule C.

The Province and the Design-Builder will each pay half of all fees and reasonable disbursements incurred by the Referee Panel Member for performing the services under this Agreement and in accordance with the terms of the Design-Build Agreement.

Following engagement of the Referee Panel Member by delivery of a Referee Panel Dispute Notice by either the Province or the Design-Builder, the Referee Panel Member will submit a monthly invoice to each of the Province and the Design-Builder at the addresses set out below. Each invoice will be for half of the fees and disbursements incurred by the Referee Panel Member in relation to the services performed under this Agreement in the preceding month. The invoices will include all relevant backup including reports on tasks completed, hourly rates and hours and dates worked.

Payment will be due within 30 (thirty) days of receipt and acceptance of an invoice by the Province and the Design-Builder, respectively.

Invoices will be submitted electronically to the below email addresses.

Province Email: [●]

and

Design-Builder Email: [●]

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 16: DISPUTE RESOLUTION PROCEDURE
Appendix 16A: Referee Panel Member Agreement

Commercial in Confidence
Execution

SCHEDULE C
SCHEDULE OF REIMBURSABLE TRAVEL EXPENSES

[NTD: Insert reimbursable travel expenses.]

**SCHEDULE 17
RECORDS AND REPORTS**

PART 1 RECORDS	1
1.1 Design-Builder Records.....	1
1.2 Management of Records	1
1.3 Records Management Protocol	2
1.4 Retention of Records	3
1.5 Procedure on Termination.....	4
1.6 Province Access to Records.....	4
1.7 Copies	4
 PART 2 REPORTS AND INFORMATION	 5
2.1 Required Reports	5
2.2 Number and Time	5
2.3 Form.....	5
2.4 Further Information.....	5
2.5 Objections to Reports.....	5
2.6 Revisions to Reports	5
2.7 Tax Verification Letter	6

**PART 1
RECORDS**

1.1 Design-Builder Records

The Design-Builder will produce, maintain and update in accordance with this Agreement and the Records Management Protocol all records, both primary copies and backup copies, whether in hard copy or electronic, 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 (collectively, the “**Records**”).

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:
 - (i) accurate, complete, legible, readily identifiable, readily retrievable, reliable, authentic, secure;
 - (ii) uploaded and preserved in electronic form in the Province's electronic documents and records management system; and
 - (iii) 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 will be prepared and recorded using software systems agreed to by the Province.
- (e) The Design-Builder will 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 will cooperate to develop documentation to support each party's compliance requirements under Laws, including the *Excise Tax Act* (Canada).

- 2 -

- (g) The Design-Builder will 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 will 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 the Project and to have reasonable and timely access to the Project Site and to any documentation, files, systems and programs relevant for the purpose of audit.

1.3 Records Management Protocol

- (a) Within 90 days following the Effective Date, the Design-Builder will 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:
 - (A) the Design-Builder's Quality Management System and Quality Documentation and Schedule 7 [Quality Management]; and
 - (B) the Ministry Record Management Protocol and the Program Document Management Plan;
 - (ii) the Records Management Protocol will 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 will 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 will 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 will keep all Records in safekeeping in such a manner as to ensure the integrity of the Records and at a location within Canada that is satisfactory to and approved by the Province;

- 3 -

- (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 will 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 will be disposed of only in accordance with disposition standards for secure disposal established by the Province, the Ministry or by the Province's Corporate Information and Records Management Office;
 - (ix) the Design-Builder will 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 will keep on the Project Site at all times during Construction one copy of all drawings for such Construction;
 - (xi) the Design-Builder will 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 will not disclose any of the Records or contents thereof except subject to and in accordance with the provisions of this Agreement, including Section 15.1 [Confidentiality].
- (b) The Design-Builder will:
- (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.
- (c) The Design-Builder will comply with, and will 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 will be complied with by the Design-Builder), all Records will 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:

- 4 -

- (i) all as-built drawings will be retained for at least ten years following Total Completion; and
 - (ii) all Records relating to the subject matter of any dispute between the parties must be retained for at least ten 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 will 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 will so notify the Province and, if the 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, will 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) of this Agreement, the Design-Builder will, 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, will 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

- (a) The Design-Builder will 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 will enable efficient "read-only" access to and retrieval of specific records when performing record searches.
- (b) All Records will 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 will 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 will 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.

- 5 -

**PART 2
REPORTS AND INFORMATION**

2.1 Required Reports

The Design-Builder will 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 will 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 will 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 will 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 will at any time and from time to time 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 will as soon as practicable issue revised versions of each affected Report and such revised Report will for all purposes of this Agreement take the place of the original Report.

- 6 -

2.7 Tax Verification Letter

- (a) The Design-Builder will provide, within 30 days following the Effective Date, a current tax verification letter issued by the Province of British Columbia's Ministry of Finance verifying that the Design-Builder meets its applicable British Columbia corporate income tax filing obligations and provincial sales tax filing and payment obligations.
- (b) At any time and from time to time thereafter, upon the Province's request, the Design-Builder will provide a current tax verification letter issued by the Province of British Columbia's Ministry of Finance verifying that the Design-Builder and each Partner meets its respective applicable British Columbia corporate income tax filing obligations and provincial sales tax filing and payment obligations.

**SCHEDULE 18
PRIVACY PROTECTION**

PART 1 GENERAL PROVISIONS	1
1.1 Definitions	1
1.2 Interpretation.....	1
1.3 Purpose.....	2
1.4 Acknowledgements.....	2
1.5 Privacy Training	2
1.6 Inspection of Personal Information.....	2
1.7 Compliance with FOIPPA and Directions.....	2
1.8 Termination of Agreement.....	3
PART 2 PERSONAL INFORMATION REQUIREMENTS	3
2.1 Personal Information – Access and Collection	3
2.2 Accuracy of Personal Information	4
2.3 Requests for Access to Personal Information	4
2.4 Correction of Personal Information	4
2.5 Protection of Personal Information.....	4
2.6 Storage of and Access to Personal Information	5
2.7 Retention of Personal Information.....	5
2.8 Use of Personal Information	5
2.9 Disclosure of Personal Information	5
2.10 Metadata.....	5
PART 3 NOTICE REQUIREMENTS	6
3.1 Notice of Third-Party Requests for Disclosure.....	6
3.2 Notice of Unauthorized Disclosure.....	7
3.3 Notice of Non-Compliance	7

**PART 1
GENERAL PROVISIONS**

1.1 Definitions

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) “**Privacy Impact Assessment**” means an assessment to determine if a current or proposed system, project, program or activity meets or will meet the requirements of Part 3 - Protection of Privacy of FOIPPA.
- (d) “**service provider**” means a person retained under a contract to perform services for a public body; and
- (e) “**Third Party Hosting Provider**” means a third party that provides a platform or hosting service through which the Design-Builder delivers the services under this Agreement and to whom Personal Information is not accessible and as such, for the purposes of this Schedule, is not considered a subcontractor.

1.2 Interpretation

- (a) In this Schedule, references to sections by number are to sections of this Schedule unless otherwise specified in this Schedule.
- (b) 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 the requirements of FOIPPA applicable to them.
- (c) This Schedule will supersede and replace any Privacy Protection Schedule attached to any previous agreement between the Province and the Design-Builder dealing with the same subject matter as this Agreement.
- (d) The obligations of the Design-Builder in this Schedule will survive the termination of this Agreement.
- (e) If a provision of this Agreement (including any direction given by the Province under this Schedule) conflicts with a requirement of FOIPPA, including any regulation made under FOIPPA, the conflicting provision of this Agreement (or direction) will be inoperative to the extent of the conflict.
- (f) The Design-Builder must comply with the provisions of this Schedule despite any conflicting provision of this Agreement or the law of any jurisdiction outside Canada.

- 2 -

1.3 Purpose

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.

1.4 Acknowledgements

The Design-Builder acknowledges and agrees that:

- (a) it is a service provider and, as such, the requirements and restrictions established by Part 3 of FOIPPA apply to the Design-Builder in respect of Personal Information; and
- (b) unless this Agreement otherwise specifies, all Personal Information in the custody of the Design-Builder or a Third Party Hosting Provider is and remains under the control of the Province.

1.5 Privacy Training

- (a) The Design-Builder must ensure that each person in a management role working on or delivering services to the Project will complete, at the Design-Builder's expense, the Privacy Course prior to that individual commencing the performance of work or delivery of services related to the Project.
- (b) The Design-Builder will ensure that each person required to complete the Privacy Course in accordance with Section 1.5(a) of this Schedule will re-take the Privacy Course within two months of the individual's two-year anniversary of their last completion of the Privacy Course so long as the person is engaged to perform work on or deliver services to the Project.

1.6 Inspection of Personal Information

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 at no cost to the Province.

1.7 Compliance with FOIPPA and Directions

- (a) The Design-Builder must in relation to Personal Information comply with:
 - (i) the requirements of FOIPPA applicable to the Design-Builder as a service provider, including any regulation made under FOIPPA; and

- 3 -

- (ii) any direction given by the Province under this Schedule.
- (b) 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.
- (c) The Design-Builder will cooperate with the Province and will provide the Province with such information as may be reasonably requested by the Province to:
 - (i) assist the Province in confirming the Design-Builder's compliance with this Schedule; and
 - (ii) address privacy-related issues or concerns identified by the Province, including providing information with respect to Privacy Impact Assessments.
- (d) The Design-Builder will ensure that there is a designated and appropriately qualified person at all times responsible for the management of all obligations set out in this Schedule and for liaison with the Province in connection with all matters relating thereto.

1.8 Termination of Agreement

In addition to any other rights of termination which the Province may have under this Agreement or otherwise at law, the Province may, pursuant to and in accordance with Section 13.1(g) of this Agreement, terminate this Agreement upon any failure of the Design-Builder to comply with this Schedule in a material respect.

PART 2

PERSONAL INFORMATION REQUIREMENTS

2.1 Personal Information – Access and Collection

- (a) Unless this Agreement otherwise specifies or the Province otherwise directs in writing, the Design-Builder may only access, collect or create Personal Information that relates directly to and is necessary for the performance of the Design-Builder's obligations, or the exercise of the Design-Builder's rights, under this Agreement.
- (b) The Design-Builder must collect Personal Information directly from the individual the information is about unless:
 - (i) the Province provides Personal Information to the Design-Builder;
 - (ii) this Agreement otherwise specifies; or
 - (iii) the Province otherwise directs in writing.
- (c) Where the Design-Builder collects Personal Information directly from the individual the information is about, the Design-Builder must tell that individual:
 - (i) the purpose for collecting it;
 - (ii) the legal authority for collecting it; and

- 4 -

- (iii) the title, business address and business telephone number of the individual designated by the Province to answer questions about the Design-Builder's collection of Personal Information.

2.2 Accuracy of Personal Information

Where Personal Information is collected by the Design-Builder directly from the individual the information is about, the Design-Builder must make every reasonable effort to ensure the accuracy and completeness of any such information to be used by the Design-Builder or the Province to make a decision that directly affects that individual.

2.3 Requests for Access to Personal Information

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.

2.4 Correction of Personal Information

Where Personal Information is collected by the Design-Builder directly from the individual the information is about, the Design-Builder will comply with Sections 2.4(a) to (d), inclusive, of this Schedule, as applicable:

- (a) 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 at the Design-Builder's cost.
- (b) When issuing a written direction under Section 2.4(a) of this Schedule, the Province must advise the Design-Builder of the date the correction request was received by the Province in order that the Design-Builder may comply with Section 2.4(c) of this Schedule.
- (c) Within 5 Business Days of correcting or annotating any Personal Information under Section 2.4(a) of this Schedule, 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 received by the Province, the Design-Builder disclosed the information being corrected or annotated.
- (d) 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 unless this Agreement expressly requires the Design-Builder to provide such access, and provide the name or title and contact information of an official of the Province to whom such requests are to be made to the person making the request.

2.5 Protection of Personal Information

Without limiting any other provision of this Agreement, the Design-Builder must protect Personal Information by making reasonable security arrangements against such risks as unauthorized access,

- 5 -

collection, use, disclosure or disposal, including without limitation by ensuring that the integrity of the Personal Information is preserved. Without limiting the general nature of the foregoing sentence, the Design-Builder will ensure that all Personal Information is securely segregated from any information owned by the Design-Builder or third parties to prevent unintended mixing of Personal Information with other information or access to Personal Information by unauthorized persons and to enable Personal Information to be identified and separated from the information of the Design-Builder or third parties.

2.6 Storage of and Access to Personal Information

- (a) Unless the Province otherwise directs in writing or as otherwise set out in this Schedule, the Design-Builder must not store Personal Information outside Canada or permit access to Personal Information from outside Canada.
- (b) The Design-Builder will not authorize or assist a Third Party Hosting Provider to access any Personal Information without the prior written approval of the Province.
- (c) Without limiting any other provision of this Agreement, the Design-Builder will implement and maintain an access log documenting all access to Personal Information, including a list of all persons that access any Personal Information. The Design-Builder will provide a copy of the access log to the Province upon request.

2.7 Retention of Personal Information

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.

2.8 Use of Personal Information

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. For clarity, unless this Agreement otherwise specifies or the Province otherwise directs in writing, the Design-Builder must not anonymize, aggregate or otherwise alter or modify Personal Information, including by converting Personal Information into non-Personal Information, or analyze Personal Information (whether by manual or automated means) for any purpose, including for the purpose of developing insights, conclusions or other information from Personal Information.

2.9 Disclosure of Personal Information

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.

2.10 Metadata

Where the Design-Builder has or generates metadata as a result of services provided to the Province, and where that metadata is Personal Information, the Design-Builder will:

- (a) not use it or disclose it to any other party except where this Agreement otherwise specifies; and

- 6 -

- (b) remove or destroy individual identifiers from the metadata, if practicable.

**PART 3
NOTICE REQUIREMENTS**

3.1 Notice of Third-Party Requests for Disclosure

- (a) In this Section, "third-party request for disclosure" means a subpoena, warrant, order, demand or request from an authority inside or outside of Canada for the unauthorized disclosure of personal information to which FOIPPA applies.
- (b) If in relation to Personal Information the Design-Builder:
 - (i) receives a third-party request for disclosure;
 - (ii) 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 third-party request for disclosure; or
 - (iii) has reason to suspect that an unauthorized disclosure of Personal Information has occurred in response to a third-party request for disclosure,subject to Section 3.1(c) of this Schedule, the Design-Builder must immediately notify the Province.
- (c) If the Design-Builder receives a third-party request for disclosure described in Section 3.1(b)(i) or (ii) of this Schedule but is unable to notify the Province as required by Section 3.1(b) of this Schedule, the Design-Builder must instead:
 - (i) use its best efforts to direct the party making the third-party request for disclosure to the Province;
 - (ii) provide the Province with reasonable assistance to contest the third-party request for disclosure; and
 - (iii) take reasonable steps to challenge the third-party request for disclosure, including by presenting evidence with respect to:
 - (A) the control of Personal Information by the Province as a "public body" under FOIPPA;
 - (B) the application of FOIPPA to the Design-Builder as a service provider to the Province;
 - (C) the conflict between FOIPPA and the third-party request for disclosure; and
 - (D) the potential for the Design-Builder to be liable for an offence under FOIPPA as a result of complying with the third-party request for disclosure.

- 7 -

3.2 Notice of Unauthorized Disclosure

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, the Design-Builder must immediately notify the Province.

3.3 Notice of Non-Compliance

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.

**SCHEDULE 19
CLOUD SECURITY**

1.	Definitions	1
2.	Applicability	1
3.	Industry Best Practice	1
4.	Compliance and Certifications.....	2
5.	Attestation of Compliance and Certification of Services.....	2
6.	Access Control	2
7.	Authentication.....	3
8.	Security Awareness.....	3
9.	Log Generation and Retention	3
10.	Investigations Support and Security Investigations	4
11.	Network Time Protocol.....	4
12.	Vulnerability Scan/Penetration Testing	4
13.	Configuration and Patch Management.....	4
14.	Business Continuity, Disaster Recovery, and Backup Plans	5
15.	Incident Response and Management	5
16.	Notifications of Breaches.....	5
17.	Notifications of Changes.....	5
18.	Asset Management and Disposal	5
19.	Physical Security.....	5
20.	Threat and Risk Assessments.....	6
21.	Security Screening	6
22.	Supply Chain.....	6
23.	Encryption.....	6
24.	Isolation Controls and Logical Isolation of Data	7
25.	Technical Controls	7
26.	Use of Province Systems	7
27.	Security Contact.....	7

1. Definitions

In this Schedule:

- (a) **“Cloud Services”** means services made available to users on demand via the Internet that are characterised by resource pooling, rapid elasticity and measured services with broad network access, including Software as a Service, Platform as a Service and Infrastructure as a Service, as such terms are understood pursuant to definitions provided by the National Institute of Standards and Technology (NIST).
- (b) **“Industry Best Practice”** means best practices commonly recognized in the IT industry from time to time and applicable to the protection and security of sensitive information of a nature similar to Protected Information against unauthorised access, disclosure or use, or any unauthorized attempts to access, disclose or use such information.
- (c) **“Protected Information”** means any and all of:
 - (i) “personal information” as defined in FOIPPA;
 - (ii) information and records of information the Design-Builder is required to treat as confidential under this Agreement; and
 - (iii) records, the integrity or availability of which are to be preserved by the Design-Builder under this Agreement, which in the case of records not falling within (i) or (ii), are marked by the Province as “Protected Information” or the Province otherwise instructs the Design-Builder that the record is “Protected Information” under this Agreement.
- (d) **“Province Information”** means information of the Province, including without limitation any Protected Information, that is disclosed to the Design-Builder, accessed by the Design-Builder or collected by the Design-Builder in relation to the Services and includes any information derived therefrom.
- (e) **“Services”** means the services provided by the Design-Builder to the Province under this Agreement and includes, if applicable, any Cloud Services.
- (f) **“Systems”** means any systems, subsystems, equipment, devices, infrastructure, networks, hardware and software used in connection with the Services, including for managing, operating or providing the Services.

2. Applicability

For greater clarity, unless otherwise specified in this Agreement, the terms and conditions of this Schedule apply to the provision of all Services by the Design-Builder, Subcontractors and their respective personnel. Any reference to the Design-Builder herein will include all Subcontractors, Design-Builder personnel and Subcontractor personnel, as applicable.

3. Industry Best Practice

The Design-Builder must have in place and maintain security controls to protect Protected Information that conform to commonly accepted industry norms that a prudent operator providing similar

- 2 -

services would have implemented. Without limitation, the Design-Builder will perform its obligations under this Schedule in a manner that best conforms to Industry Best Practice.

4. Compliance and Certifications

Compliance and certification requirements will depend on the type of service provided by the Design-Builder.

- (a) For Cloud Services, the Design-Builder must at all times satisfy at least one of the following security standards:
 - (i) compliance requirements identified for a Cloud Service Provider, in the Government of Canada Security Control Profile for Cloud-Based GC IT Services for Protected B, Medium Integrity and Medium Availability (PBMM);
 - (ii) compliance requirements identified for a Cloud Service Provider, in the US Federal Risk and Authorization Management Program (FedRAMP) for moderate impact information systems;
 - (iii) certification with ISO/IEC 27001 based on requirements for a Cloud Service Provider controls in ISO/IEC 27017:2015; or
 - (iv) certification with Cloud Security Alliance (CSA) – Level 2 CSA STAR.
- (b) For all other Services that are not Cloud Services, the Design-Builder must satisfy:
 - (i) certification with ISO/IEC 27001 based on requirements for Information Technology controls in ISO/IEC 27002:2013; or
 - (ii) applicable Province IM/IT standards accessible at <https://www2.gov.bc.ca/gov/content/governments/services-for-government/policies-procedures/im-it-standards>.

5. Attestation of Compliance and Certification of Services

To verify compliance with, as applicable, Section 4(a) of this Schedule (with respect to Cloud Services) or Section 4(b) of this Schedule (with respect to non-Cloud Services), the Design-Builder must provide the Province with satisfactory evidence, by way of independent third-party attestation from a reputable information systems auditor, that any Services provided by the Design-Builder or used by the Design-Builder in connection with the Services satisfy and comply with at least one of the security standards set forth in, as applicable, Section 4(a) of this Schedule (with respect to Cloud Services) or Section 4(b) of this Schedule (with respect to non-Cloud Services).

6. Access Control

With respect to the access, by any Design-Builder personnel, to any part of the Design-Builder's Systems that may contain Province Information, the Design-Builder must:

- (a) implement access control policies and procedures that address onboarding, off-boarding, transition between roles, regular access reviews, limitations and usage control of administrator privileges, and inactivity timeouts;

- 3 -

- (b) identify and segregate conflicting duties and areas of responsibility, such as separation of duties;
- (c) maintain a current and accurate inventory of computer accounts;
- (d) review the inventory of computer accounts on a regular basis to identify dormant, fictitious or unused accounts;
- (e) enforce principles of “least privilege” and “need to know”;
- (f) review user access rights on a regular basis to identify excessive privileges; and
- (g) enforce a limit of logon attempts and concurrent sessions.

7. Authentication

Where the Design-Builder manages user authentication controls for Design-Builder personnel, the Design-Builder must:

- (a) enforce minimum password complexity, such as requiring passwords to be case sensitive, or requiring passwords to contain a minimum of eight characters and a combination of upper-case letters, lower-case letters, numbers, and/or special characters;
- (b) require regular change of passwords at predetermined intervals, and which limit reuse; and
- (c) require multi-factor authentication for privileged access.

8. Security Awareness

The Design-Builder must

- (a) ensure that all persons employed or retained to perform the Services receive security awareness training, annually and supervision at a level and in substance that is appropriate to that person’s position and the Design-Builder’s obligations under this Schedule; and
- (b) not permit any person the Design-Builder hires or uses to access or obtain any Protected Information unless that person is contractually bound to the Design-Builder in writing to keep Protected Information confidential on terms no less protective than the terms applicable to the Design-Builder under this Agreement.

9. Log Generation and Retention

The Design-Builder must:

- (a) generate and retain logs that are sufficiently detailed to determine who did what and when for a period of 90 days online;
- (b) provide real time access to logs;
- (c) provide the technical capability to forward the logs to the Province; and

- 4 -

- (d) correlate, monitor, and alert on logs.

10. Investigations Support and Security Investigations

The Design-Builder must:

- (a) retain investigation reports related to a security investigation for a period of 2 years after the investigation is completed or provide to the Province for retention;
- (b) provide reasonable investigative support to the Province;
- (c) maintain chain of custody for evidence;
- (d) support e-discovery; and
- (e) maintain legal holds to meet needs of investigations and judicial requests.

11. Network Time Protocol

Systems used by the Design-Builder or any Subcontractor in the provision of Services must synchronise time with a stratum-2 (or higher time) reliable source.

12. Vulnerability Scan/Penetration Testing

The Design-Builder must conduct regular:

- (a) vulnerability scans;
- (b) web application scans; and
- (c) penetration tests.

13. Configuration and Patch Management

The Design-Builder must:

- (a) have an information security policy based on recognized industry standards;
- (b) apply system hardening methods in securing the Design-Builder Systems;
- (c) logically isolate and encrypt Province Information;
- (d) ensure workstations and servers used in management and provisioning of the Services are patched and secured with anti-malware protection;
- (e) remedy vulnerabilities in a timely manner according to criticality;
- (f) patch all Systems and software regularly according to Industry Best Practices; and
- (g) use secure coding practices when developing applications and application programming interfaces.

- 5 -

14. Business Continuity, Disaster Recovery, and Backup Plans

The Design-Builder must:

- (a) have a business continuity plan and a disaster recovery plan;
- (b) conduct backups of critical data; and
- (c) review and test business continuity, disaster recovery, and backup plans and procedures regularly.

15. Incident Response and Management

The Design-Builder must:

- (a) have an incident management plan and an incident response plan; and
- (b) review and test both incident management and incident response plans annually.

16. Notifications of Breaches

The Design-Builder must notify the Province within 24 hours of the Design-Builder's identification of a breach or incident that has affected, or may affect, Province Information.

17. Notifications of Changes

The Design-Builder must notify the Province of any changes to the Design-Builder's security policies, procedures or agreements that may materially lower the security of Province Information.

18. Asset Management and Disposal

The Design-Builder must

- (a) maintain an inventory of Province Information assets;
- (b) use secure methods when disposing of Province Information assets, and
- (c) maintain records of Province Information asset disposals.

19. Physical Security

The Design-Builder must:

- (a) develop, document, and disseminate a physical and environmental protection policy;
- (b) regularly review and update its current physical and environmental protection policy and procedures; and
- (c) review physical access logs at least once monthly.

- 6 -

20. Threat and Risk Assessments

The Design-Builder must:

- (a) conduct threat and risk assessments on any part of the Design-Builder's Systems that is new, or has been materially changed since the last threat and risk assessment was conducted; and
- (b) support the Province in completing security threat and risk assessments.

21. Security Screening

The Design-Builder must:

- (a) screen all Design-Builder personnel prior to the Design-Builder authorizing access to Province or Design-Builder Systems;
- (b) conduct criminal record checks on all Design-Builder personnel who have access to any Province or Design-Builder Systems;
- (c) make a reasonable determination of whether the individual constitutes an unreasonable security risk taking into consideration the duties of the individual, the type and sensitivity of information to which the individual may be exposed, and all applicable laws; and
- (d) require all Design-Builder personnel to proactively disclose criminal offences to the Design-Builder unless prohibited by applicable law.

22. Supply Chain

The Design-Builder must ensure that its suppliers and Subcontractors involved in the provision of Services meet or exceed the standards set forth in this Schedule.

23. Encryption

The Design-Builder must:

- (a) implement and maintain encryption of Province Information while at rest and in transit;
- (b) offer the Province the technical capability of cryptographic key management to allow the Province to manage encryption keys in relation to Province Information at rest and in transit;
- (c) not hold or have access to encryption keys if such encryption keys are managed by the Province to encrypt Province Information at rest or in transit; and
- (d) not provide encryption keys used to secure Province Information to a third party or the ability to break such encryption.

- 7 -

24. Isolation Controls and Logical Isolation of Data

The Design-Builder must:

- (a) implement and maintain the logical isolation of Province Information, even in the case of equipment or technology failure;
- (b) implement, where supported by available technology, the logical isolation of audit records related to Province Information and activities, even in the case of equipment or technology failure; segregate tenancy traffic from management network traffic; and
- (c) not use Protected Information for test or development purposes without the written approval of the Province.

25. Technical Controls

The Design-Builder must:

- (a) implement firewalls, web application firewalls, distributed denial of service, and intrusion prevention systems to control traffic flow to and from the Design-Builder's Systems; and
- (b) secure remote access to the Design-Builder's Systems by Design-Builder personnel and contractors.

26. Use of Province Systems

Use of Province Systems by the Design-Builder or its personnel (including Subcontractors) must be restricted to activities necessary for provision of the Services. The Province reserves the right to not make any particular Province facility, system, network or device available to the Design-Builder unless the Design-Builder or its individual personnel (as applicable) agree to any additional terms and conditions acceptable to the Province.

27. Security Contact

If not set out elsewhere in this Agreement, the Design-Builder must provide the contact information for the individual who will coordinate compliance by the Design-Builder on matters relating to this Schedule.

**SCHEDULE 20
DESIGN-BUILDER OWNERSHIP INFORMATION**

1. Design-Builder Ownership Information
 - (a) The Design-Builder is a British Columbia general partnership, of which the two partners are Kiewit Infrastructure BC ULC and Emil Anderson Construction (EAC) Inc. and which was formed by a partnership agreement dated June 12, 2024.
 - (b) Kiewit Infrastructure BC ULC is a British Columbia corporation incorporated on August 31, 2018, all the shares of which are owned by
 - (d) Emil Anderson Construction (EAC) Inc. is a British Columbia corporation incorporated on March 27, 2003, all the shares of which are owned by

**SCHEDULE 21
KEY INDIVIDUALS**

	Title	Date for Appointment	Name of Key Individuals Appointed at Effective Date
1.	Design-Builder's Representative	Effective Date	
2.	Design Manager	Effective Date	
3.	Construction Manager	Effective Date	
4.	Quality Director	Effective Date	
5.	Environmental Manager	Effective Date	
6.	Traffic Manager	Effective Date	
7.	Indigenous Coordinator	Effective Date	

**SCHEDULE 22
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 will deliver each of the following documents in accordance with Section 2.11 [Execution and Delivery of Project Documents] of this Agreement, in such form and substance as will be satisfactory to the Province:

- (a) this Agreement executed by the Design-Builder;
- (b) a Letter of Adherence to the Project Labour Agreement, in the form attached to the Project Labour Agreement and executed by the Design-Builder as an Employer (as defined in the Project Labour Agreement);
- (c) the Bonds;
- (d) any Material Subcontracts entered into as of the Effective Date;
- (e) the Guarantee;
- (f) insurance binders, including certificates of insurance and 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;
- (g) a certificate of an officer of each Partner of the Design-Builder certifying true copies of the following:
 - (i) all constating documents of such Partner;
 - (ii) the partnership agreement of the Design-Builder;
 - (iii) incumbency of the officers of such Partner;
 - (iv) resolution of the board of directors of such Partner authorizing the execution and delivery of all Project Documents to which the Design-Builder is a party; and
 - (v) any resolutions of the Partners authorizing the execution and delivery of all Project Documents to which the Design-Builder is a party;
- (h) a certificate of an officer of the Guarantor certifying true copies of the following:
 - (i) all constating documents of the Guarantor;
 - (ii) incumbency of the officers of the Guarantor; and

- 2 -

- (iii) resolution of the board of directors of the Guarantor authorizing the execution and delivery of the Guarantee;
- (i) a certificate of good standing or equivalent of the Design-Builder, each Partner and the Guarantor;
- (j) an original initial Works Schedule, including Critical Path Schedule, which meets the requirements provided in Section 3.3 [Works Schedule] of Schedule 3 and is in all respects consistent with the Project Schedule;
- (k) the 180-Day Lookahead Schedule pursuant to Section 3.5(a) of Schedule 3 [Design and Construction General Requirements];
- (l) a tax verification letter, valid as of the Effective Date, issued by the Province of British Columbia's Ministry of Finance verifying that each of the Partners meets its respective applicable British Columbia corporate income tax filing obligations and provincial sales tax filing and payment obligations; and
- (m) 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 will deliver each of the following documents in accordance with Section 2.12 [Execution and Delivery of Project Documents] of this Agreement, in such form and substance as will be satisfactory to the Design-Builder:

- (a) this Agreement, executed by the Province and BCTFA;
- (b) a certificate of fact of the Associate 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 this Agreement; and
 - (ii) a certificate of the Ministry of Transportation and Infrastructure pursuant to section 4 of the *Transportation Act* (British Columbia);
- (c) 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;
- (d) a notice appointing the Province's Representative pursuant to Section 3.1(a) of this Agreement; and
- (e) such other documents as the parties may agree, each acting reasonably.

**SCHEDULE 23
BONDS**

PART 1 BONDS.....	1
1.1 Bonds	1
Appendix 23A Specimen Bonds	

PART 1
BONDS

1.1 Bonds

- (a) The Design-Builder will purchase and deliver to the Province the Bonds in accordance with Section 2.11 [Execution and Delivery of Project Documents] of this Agreement and will 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 will 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 will, if required by the surety, obtain the written consent of the surety to any amendment of this Agreement and will, 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 will post and maintain copies of the labour and materials payment Bond at the Project Site.

**APPENDIX 23A
SPECIMEN BONDS**

SPECIMEN - PERFORMANCE BOND

NO. _____ **One Hundred Forty Three Million Eighty Thousand and Five Hundred Dollars (\$143,080,500)**

KNOW ALL PERSONS BY THESE PRESENTS, that KEA FRASER VALLEY CONNECTORS 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 HIS MAJESTY THE KING IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA AS REPRESENTED BY THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE, as Obligor, hereinafter called the Obligor, in the amount of One Hundred Forty Three Million Eighty Thousand and Five Hundred Dollars (\$143,080,500), 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 Obligor, dated the [24th] day of July, 2024 for the HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT 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 will 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 will be void; otherwise it will remain in full force and effect, subject, however, to the following conditions:

- (1) Whenever the Principal will be, and declared by the Obligor to be, in default under the contract, the Surety or Co-Sureties as the case may be will
 - (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 Obligor 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 will be between the Surety and Co-Sureties as the case may be and the completing contractor, and
 - (ii) the selection of such completing contractor will be subject to the approval of the Obligor,
 - (c) if the work is taken out of the Principal's hands and the Obligor, 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 Obligor 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 Obligor, and the liability of the Surety or Co-Sureties as the case may be under this Bond will remain unchanged provided, however, and without restricting the generality of the foregoing, upon the completion of the Contract to the satisfaction of the Obligor, any Contract moneys earned by the Principal or holdbacks related thereto held by the Obligor may be paid to the Surety or Co-Sureties as the case may be by the Obligor.
- (2) The Surety or Co-Sureties as the case may be will not be liable for a greater sum than the amount specified in this Bond.
- (3) No suit or action will be instituted by the Obligor 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 will 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-

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 23: BONDS
Appendix 23A: Specimen Bonds

Commercial in Confidence
Execution

- 2 -

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 will 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 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 July, 2024.

**[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 Design-Builder

SEAL

For the Surety Attorney-in-fact

SEAL

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 23: BONDS
Appendix 23A: Specimen Bonds

Commercial in Confidence
Execution

- 3 -

SPECIMEN - LABOUR AND MATERIAL PAYMENT BOND

NO. _____ **One Hundred Forty Three Million Eighty Thousand and Five Hundred Dollars (\$143,080,500)**

Note: This Bond is issued simultaneously with another Bond in favour of the Obligee conditioned for the full and faithful performance of the contract.

KNOW ALL PERSONS BY THESE PRESENTS THAT KEA FRASER VALLEY CONNECTORS 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 HIS MAJESTY THE KING IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA AS REPRESENTED BY THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE, as Obligee, hereinafter called the Obligee, for the use and benefit of the Claimants, their and each of their heirs, executors, administrators, successors and assigns, in the amount of One Hundred Forty Three Million Eighty Thousand and Five Hundred Dollars (\$143,080,500) 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 Obligee, dated the [24th] day of July, 2024 for the HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT 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 will 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 will be null and void; otherwise it will 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, will 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 will 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 Obligee, 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 Obligee 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 Obligee or by joining the Obligee as a party to such proceeding, then such act, action or proceeding, will be taken on the understanding and basis that the Claimants, or any of them, who take such act, action or proceeding will indemnify and save harmless the Obligee against all costs, charges and expenses or liabilities incurred thereon and any loss or damage resulting to the Obligee 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 Obligee to sue on and enforce the provisions of this Bond.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 23: BONDS
Appendix 23A: Specimen Bonds

Commercial in Confidence
Execution

- 4 -

3. No suit or action will be commenced hereunder by any Claimant:
- (a) unless such Claimant will 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 will 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 will 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 will 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 will 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 will 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) will 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.

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 23: BONDS
Appendix 23A: Specimen Bonds

Commercial in Confidence
Execution

- 5 -

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 July, 2024

**[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 24
LETTERS OF CREDIT**

PART 1 LETTERS OF CREDIT	1
1.1 Replacement Letters of Credit	1
Appendix 24A Form of Letter of Credit	

**PART 1
LETTERS OF CREDIT**

1.1 Replacement Letters of Credit

If:

- (a) the Design-Builder fails to replace any Letter of Credit within ten Business Days after the downgrading of the institution issuing or confirming such Letter of Credit below the level specified in Appendix 24A [Form of Letter of Credit]; or
- (b) the institution issuing or confirming any Letter of Credit notifies the Province that such Letter of Credit will not be renewed in accordance with its terms and the Design-Builder has not (by the date which is ten Business Days prior to the date of termination or expiry of such Letter of Credit) made arrangements satisfactory to the Province, in its discretion, that will result in such Letter of Credit being replaced with effect from the date of its termination or expiry with a Letter of Credit that satisfies (in the discretion of the Province) the requirements specified in Appendix 24A [Form of Letter of Credit],

the Province will be entitled to make a demand for the full principal amount of such Letter of Credit and deposit the proceeds of such demand in an account in the name of the Province, in which event the Province will thereafter be entitled to withdraw funds from such account in any circumstance in which the Province would otherwise have been entitled in accordance with this Agreement to make a demand under such Letter of Credit, provided that, if, at any time after the Province has made such a demand for the full principal amount of such Letter of Credit, the Design-Builder delivers a replacement Letter of Credit to the Province that satisfies (in the discretion of the Province) the requirements specified in Appendix 24A [Form of Letter of Credit] to this Schedule, the Province will pay the Design-Builder the amount, as at the date of delivery of such replacement Letter of Credit, standing to the credit of such account (save that the Province will be entitled to retain for its own account any interest that has accrued to such account).

**APPENDIX 24A
FORM OF LETTER OF CREDIT**

[NTD: Letters of Credit are to be issued by a Canadian chartered bank with offices in Vancouver, or any other bank or financial institution with offices in Vancouver acceptable to the Province. Any Letter of Credit will be callable at the issuing institution's counter in Vancouver.]

[Name and address of Issuing Bank in Vancouver, BC]

[Date]

**HIS MAJESTY THE KING IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA**

[Address]

[Attention]

(the “Beneficiary”)

Re: Design-Build Agreement dated July 24, 2024 between the Beneficiary, BC Transportation Financing Authority and KEA Fraser Valley Connectors (the “**Applicant**”) in respect of the Highway 1 – 264th Street Interchange Project.

By order of our client, the Applicant, we hereby issue our Irrevocable Standby Letter of Credit No. _____ (this “**Standby Letter of Credit**”) in an amount not to exceed in the aggregate CAD\$ to the Beneficiary, effective immediately and expiring on _____ (the “**Expiry Date**”).

We, **[Name of Bank]** (the “**Issuing Bank**”), at our offices shown above in Vancouver, British Columbia, Canada (the “**Offices**”), will immediately pay to you under this Standby Letter of Credit any amount or amounts claimed, not to exceed in the aggregate CAD\$, upon presentation of a sight draft, appropriately completed, in the form of Annex 1 hereto (the “**Sight Draft**”) being made upon us at our counter during normal business hours, and upon presentation of the original or certified copy of this Standby Letter of Credit and any amendments hereto.

Partial and multiple drawings are permitted.

If the Holder's Sight Draft, appropriately completed and the original or certified copy of this Standby Letter of Credit and any amendments hereto are received by us at the Offices on or before the Expiry Date, we will immediately notify the Applicant of the receipt of such Sight Draft without enquiring whether you have a legitimate claim between yourself and the Applicant.

After the Expiry Date has elapsed, no draw will be honoured by us save to any Sight Draft presented by the Holder according to the requirements of this Standby Letter of Credit prior to the Expiry Date.

All banking charges are for the account of the Applicant.

It is a condition of this Standby Letter of Credit that it will be deemed automatically extended from year to year for successive one year periods from the Expiry Date (each anniversary of the Expiry Date thus becoming the new “**Expiry Date**”), but not beyond _____, unless we notify the Holder in writing at least 60 days prior to the then applicable Expiry Date that we irrevocably elect not to consider this Standby Letter of Credit renewed for such further period. Such notice must be sent by

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 24: LETTERS OF CREDIT
Appendix 24A: Form of Letter of Credit

Commercial in Confidence
Execution

- 2 -

registered mail or hand delivered, each with proof of delivery, to the Holder at the address set forth above or such other address designated by the Holder from time to time.

IT IS A CONDITION OF THIS STANDBY LETTER OF CREDIT THAT IT IS TRANSFERABLE AND MAY BE TRANSFERRED IN ITS ENTIRETY, BUT NOT IN PART, AND MAY BE SUCCESSIVELY TRANSFERRED BY THE THEN CURRENT HOLDER TO A TRANSFEREE. TRANSFER OF THIS STANDBY LETTER OF CREDIT TO SUCH TRANSFEREE WILL BE EFFECTED UPON PRESENTATION TO US AT THE OFFICES OF THE ORIGINAL OF THIS STANDBY LETTER OF CREDIT AND ANY AMENDMENTS HERETO ACCOMPANIED BY A REQUEST DESIGNATING THE TRANSFEREE IN THE FORM ATTACHED HERETO AS ANNEX 2 APPROPRIATELY COMPLETED. All future amendments under this Standby Letter of Credit are to be advised directly to the transferee without the consent of, or notice to, any prior Holder and all future correspondence and notifications in respect of this Standby Letter of Credit are to be sent to the transferee and not to any prior Holder.

In this Standby Letter of Credit, “**Holder**” means either (i) if no transfer has occurred, the Beneficiary or (ii) if a transfer has occurred, the last transferee under the above provision.

This Standby Letter of Credit is subject to and governed by the ISP98.

This Standby Letter of Credit will be interpreted and governed by the laws of British Columbia and the federal laws of Canada applicable therein.

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 24: LETTERS OF CREDIT
Appendix 24A: Form of Letter of Credit

Commercial in Confidence
Execution

- 3 -

SIGHT DRAFT

To: [Name of Issuing Bank]
[Address of Offices]

Re: [name of Issuing Bank]’s Standby Letter of Credit No. [●] dated [●] (the “**Standby Letter of Credit**”) issued in favour of [●] on behalf of [●] (the “**Applicant**”)

We refer to the Standby Letter of Credit. Terms defined in the Standby Letter of Credit have the same meaning when used in this Sight Draft.

We hereby request payment of CAD\$[●] ([●] Canadian Dollars).

Payment should be made to the following account:

Name: [●]
Account Number: [●]
Bank: [●]

We hereby confirm that the undersigned is entitled to present the Standby Letter of Credit for payment in accordance with the terms and conditions of the Design-Build Agreement between the Beneficiary and the Applicant in respect of the Project.

Yours truly,
[Name of Holder]

By: _____
Authorized Signatory

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 24: LETTERS OF CREDIT
Appendix 24A: Form of Letter of Credit

Commercial in Confidence
Execution

- 4 -

REQUEST DESIGNATING THE TRANSFEREE

To: [Name of Issuing Bank]
[Address of Offices]

Re: [name of Issuing Bank]’s Standby Letter of Credit No. [●] dated [●] (the “**Standby Letter of Credit**”) issued in favour of [●] on behalf of [●] (the “**Applicant**”)

We refer to the Standby Letter of Credit. Terms defined in the Standby Letter of Credit have the same meaning when used in this Request Designating the Transferee.

For value received, we request you to transfer the Standby Letter of Credit to the following transferee:

[Name of Transferee]
[Full Address of Transferee]

We enclose herewith the original Standby Letter of Credit together with any amendments thereto.

Please forward the transfer amendment and all future amendments, correspondence and notifications under the Standby Letter of Credit to the transferee designated above to the attention of [●].

[**Name of Holder**]

By: _____
Authorized Signatory

**SCHEDULE 25
PROPOSAL EXTRACTS**

HIGHWAY 1 – 264TH STREET INTERCHANGE PROJECT
DESIGN-BUILD AGREEMENT
SCHEDULE 25: PROPOSAL EXTRACTS

Commercial in Confidence
Execution

APPENDIX 25A
KEY PLAN DRAWING

See attached.

