

Table of Contents

1	NICOLA	1
1.01	Definitions	1
1.02	Arrestor Bed Maintenance – Box Canyon and Hamilton Hill	3
1.03	Highway Crossing Infrastructure	4
1.04	Invasive Plants Management	6
1.05	Multi-Lane Snow Removal - Coquihalla Highway	8
1.06	Reaction Ferry Vessel Operations and Maintenance – Lytton	10
1.07	Reaction Ferry Vessel Operation - Lytton	11
1.08	Reaction Ferry Vessel Maintenance - Lytton	13
1.09	Dock and Ramp System Maintenance Lytton	16
1.10	Ferry Facility Maintenance - Lytton	18
1.11	Rest Area Facility Maintenance – Coquihalla Lakes, Britton Creek, Loon Lake and Zopkios	32
1.12	Salt Containment Infrastructure Maintenance	33
1.13	Snow Avalanche Response – 15100 Fraser Canyon Avalanche Area	36
1.14	Snow Avalanche Response - 25200 Coquihalla Avalanche Area	37
1.15	Snow Shed Maintenance – Great Bear Snow Shed	38
1.16	Traffic Management and Patrol – Snowshed Hill	40
1.17	Wildlife Exclusion System Maintenance	41

1 NICOLA

1.01 Definitions

In these Local Area Specifications, capitalized terms will have the corresponding meanings as set out in Article 1 of this Agreement and Section 1 of this Schedule 1 (“Specifications”), and as set forth below:

“**Building**” means all buildings and structures situated on the Site.

“**Charter**” means the bare boat charter in Appendix A. In the event of any conflict as between this Local Area Specification and the Charter, this Local Area Specification shall prevail.

“**Dock**” means the platform, including all its components utilized in loading and off-loading vessels including the Reaction Ferry together with all tie-up docks and landings.

“**Equipment**” means all chattels owned by the Province situated on the Site and used for the maintenance and operation of the Reaction Ferry Vessel and the Ferry Facility.

“**Ferry Facility**” means the Buildings and grounds, fixtures and Equipment situated on the Site, including but not limited to the Dock, Ramp System, Tower and anchorages, and used in the operation of the Reaction Ferry Vessel as referenced in the Safety Management System.

“**Ferry Service**” means all services and obligations to be performed by the Contractor in relation to the operation of the Reaction Ferry Vessel as a transportation service including the operation of the Reaction Ferry Vessel for passengers and vehicles, all repair and maintenance obligations in respect of the Reaction Ferry Vessel, and Ferry Facility, reporting, communication and notification obligations of the Contractor, and all other obligations and services to be performed by the Contractor and set forth in this Local Area Specification and its appendices and the SMS and the Charter.

“**Final Condition Inspection**” means an inspection completed by the Province of the detailed inventory and condition of the Reaction Ferry Vessel, the Ferry Facility and Equipment on the Site.

“**Initial Condition Inspection**” means an inspection completed by the Province of the detailed inventory and condition of the Reaction Ferry Vessel, the Ferry Facility and Equipment on the Site.

“**Invasive Plants**” means any invasive alien plant species that has the potential to pose undesirable or detrimental impacts on humans, animals or ecosystems.

“**Main Track Wire Rope**” means the large steel-braided cable that is connected to a Tower on each side of the river within the Site and attached to the Reaction Ferry Vessel.

“**Parking Lot**” means that part of the grounds used for parking vehicles.

“Ramp System” is a three-part system allowing traffic to load and unload onto the Reaction Ferry Vessel. The first part is a fixed ramp which transitions from the roadway into the water. The second part is a movable wedge transition for Highway Users travelling from the fixed ramp to the ferry ramp and the third is part of the Reaction Ferry Vessel that is raised and lowered for each landing.

“Reaction Ferry Vessel” is a vessel, including all its components connected to the Main Track Wire Rope and uses the water’s current to propel across the river, by which a grant of Charter was given to the Contractor by the Province and the BCTFA, said Charter appended hereto in Appendix A.

“Reaction Ferry Dock” is a dock including all of its components on both shores from the Highway transition to the Reaction Ferry Vessel and includes the Ramp System and Dock.

“Safety Management System (SMS)” is a document prepared by the Contractor and accepted by the Province that supports the safe practices using detailed policies and procedures.

“Salt Containment Infrastructure” means a storage facility, including all of its components that is used for the storage and loading/unloading salt for winter maintenance operations including, but not limited to the salt shed, fabric/steel roofing, pit floor, evapotranspiration liner, containment pad, and skirt.

“Site” means the location where the Reaction Ferry Vessel operates including the land where the Ferry Facility and the Towers are situated, including without limitation the land immediately surrounding the Buildings, the Docks, Ramp Systems, the Parking Lot and any access roads.

“Tower” means the steel constructed frameworks that support the Main Track Wire Rope, wind line and ball line and anchored into the ground.

1.02 Arrestor Bed Maintenance – Box Canyon and Hamilton Hill

1.02.1 Outcome

To provide a safe, functional and available resistance lane for runaway vehicles.

1.02.2 Routine Maintenance Services

PM1.02.2-1 Respond to an arrestor bed incident as follows:

Performance Criteria	Response
a) Remove vehicles and items that are not part of the infrastructure	immediately
b) Repair and replace damaged infrastructure	immediately
c) Loosen affected bed aggregate to 50 centimetres for an 81 centimetre depth arrestor bed and to 45 centimetres for a 50 centimetre depth arrestor bed and return to original cross section	immediately

PM1.02.2-2 Maintain arrestor bed aggregate as follows:

Performance Criteria	Response
a) Loosen bed aggregate to 60 centimetres for a 100 centimetre depth arrestor bed and to 50 centimetres for an 81 centimetre depth arrestor bed and to 40 centimetres for a 50 centimetre depth arrestor bed	annually
b) Wash bed aggregate to eliminate fines impeding free drainage	annually

PM1.02.2-3 Monitor the arrestor bed for frozen crusts during periods of freezing rain or extreme freeze thaw cycles as required.

PM1.02.2-4 Eradicate frozen crusts immediately and restore functionality of the arrestor bed.

1.02.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 (“Specifications”).

Additional materials and/or procedures requirements are as follows:

- a) When replacing aggregates, materials must be consistent with the size and type of existing aggregates; and
- b) Remain at the site(s) until the functionality of the arrestor bed has been restored and the site(s) are safe and available for Highway Users.

1.03 Highway Crossing Infrastructure

1.03.1 Outcome

To provide safe passage of pedestrians and animals underneath or beside a Highway.

1.03.2 Routine Maintenance Services

PM1.03.2-1 Respond immediately to restrict all access to Highway Crossing Infrastructure, as directed by the Province.

PM1.03.2-2 Repair or replace immediately, as directed by the Province, any damaged or deteriorated Highway Crossing Infrastructure that has been structurally compromised, as determined by the Province.

PM1.03.2-3 Repair or replace within 3 months, any damaged or deteriorated Highway Crossing Infrastructure that has not been structurally compromised, as determined by the Province.

PM1.03.2-4 Remove Debris immediately from the surfaces of floors, pedestrian paths or stairways.

PM1.03.2-5 Remove Accumulations, surface contaminants and chemicals by June 30th of each calendar year from all surfaces.

PM1.03.2-6 Remove Debris within 1 month that impedes the passage of animals in animal accessed Highway Crossing Infrastructure.

1.03.3 Quantified Maintenance Services

PM1.03.3-1 Repair within 24 hours damaged or deteriorated surfaces on underpass floors, pedestrian paths or stairways.

PM1.03.3-2 Repair within 6 months other damaged or deteriorated surfaces.

Specific Requirements:

- a) Maintain Highway Crossing Infrastructure within Rest Areas in accordance with the response of the adjacent Highway Classification.

1.03.4 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional material and/or procedures requirements are as follows:

- a) Use materials in accordance with the same type and quality on the existing Highway Crossing Infrastructure.

1.03.5 Routine Maintenance Services Cap

\$50,000 – for each occurrence, the cost to repair or replace Highway Crossing Infrastructure.

1.03.6 Warranty

Refer to Section 3 of this Schedule 1 (“Specifications”).

1.04 Invasive Plants Management

1.04.1 Outcome

To minimize the introduction and spread of Invasive Plants on Highways and Gravel Pits.

1.04.2 Routine Maintenance Services

PM1.04.2-1 Meet annually, with the agency conducting Invasive Plant management for the Province, during development of the Quantified Maintenance Services to coordinate planned activities.

PM1.04.2-2 Inspect all Gravel Pits and material sources annually to ensure they are free of Invasive Plants.

PM1.04.2-3 Report Invasive Plant conditions to the agency conducting Invasive Plant management for the Province, as follows:

Performance Criteria	Response
a) Prior to the disturbance of knotweed species that restricts Sight Distance or creates a condition that is unsafe or has the potential to become unsafe	immediately
b) Any Invasive Plant infestations on Highways and Gravel Pits	2 d

Notes:

1) Only the exposed, active areas of the Gravel Pits are to be considered.

1.04.3 Quantified Maintenance Services

PM1.04.3-1 Seed specific areas of exposed soils exceeding 1 metre up the Shoulder sideslope and the backslope due to ditch maintenance.

Notes:

1) The Standard Specifications for Highway Construction describes the revegetation requirements including, but not limited to blending, seed analysis and application timing.

1.04.4 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 (“Specifications”).

Additional materials and/or procedures requirements are as follows:

a) Comply with the Best Practices for Managing Invasive Plants on Roadsides;

- b) Incorporate Invasive Plant management when planning and performing Quantified Maintenance Services;
- c) Seed side-cast ditch materials;
- d) Seek approval from the Province if disturbance of knotweed species is required;
- e) The Contractor may submit a plan for approval by the Province for the use of herbicides, as a control measure for knotweed or other Invasive Plants;
- f) Herbicides are to be applied by a certified pesticide applicator;
- g) Do not use gravel materials contaminated with Invasive Plants, unless a rectification process is submitted and approved by the Province; and
- h) Report Invasive Plants to the agency conducting Invasive Plant management for the Province online or using the Province's smartphone application or the provincial toll-free service.

1.04.5 Warranty

Refer to Section 3 of this Schedule 1 ("Specifications").

1.05 Multi-Lane Snow Removal - Coquihalla Highway

1.05.1 Outcome

To provide enhanced highway snow removal exceeding the performance measures in General Specifications 3.01 of this Schedule 1 (“Specifications”) related to the response to Winter Accumulations and Compact on the Coquihalla Highway.

1.05.2 Routine Maintenance Services

PM1.05.2-1 Remove Winter Accumulations that exceeds 4 centimetres in height from all Travelled Lanes.

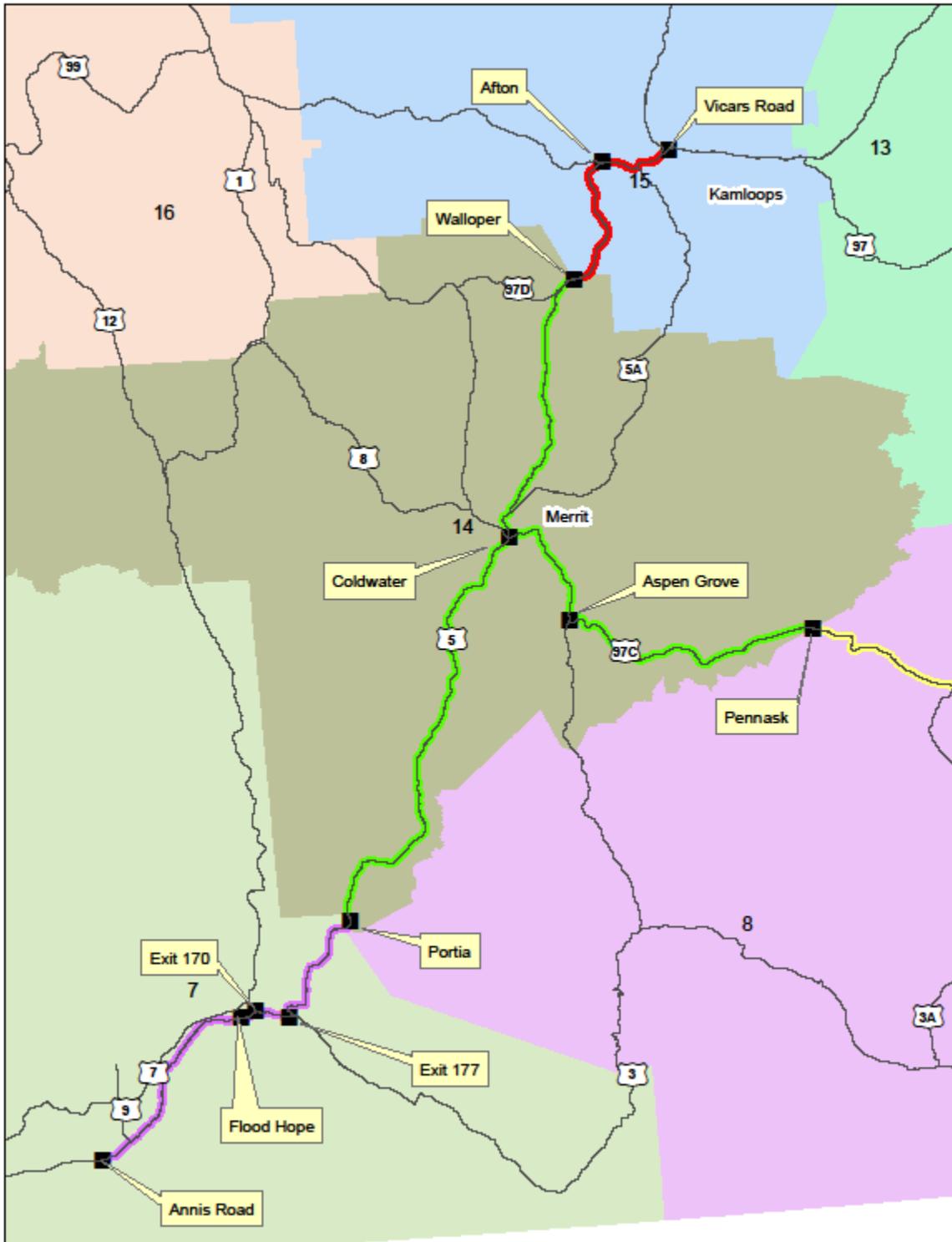
Notes:

- 1) The sections of Highway for enhanced snow removal in Service Area 14 are shown in Appendix A.

1.05.3 Materials and/or Procedures

- a) Refer to Subsection 1.6 of this Schedule 1 (“Specifications”).

Appendix A



1.06 Reaction Ferry Vessel Operations and Maintenance – Lytton

1.06.1 Rules and Regulations

The Contractor shall comply with all applicable laws, bylaws, orders, directions, ordinances and regulations of any competent governmental authority, including without limitation Transport Canada, the Canada Shipping Act and the Navigation Protection Act.

1.06.2 Grant of Licence

The Province grants the Contractor a licence of occupation over the Site, which includes the Equipment, machinery, accessories, and improvements thereon, for the purpose of conducting the Ferry Service pursuant to this Local Area Specification for the Term of the Highway Maintenance Agreement.

1.06.3 Safety Management System

The generic SMS provided by the Province to the Contractor will be completed by the Contractor with site specific information. The Contractor's SMS is to be delivered for the Province's review and acceptance 30 days prior to commencement.

1.06.4 Inspection and Return of the Ramp System and Ferry Facility

The Contractor represents and warrants to the Province and agrees within the Province as follows:

- a) That the Contractor has and shall be deemed to have been afforded the opportunity prior to executing the Agreement to inspect and examine the Site and Ferry Facility and the Contractor shall be deemed to have inspected and examined the same and to have satisfied itself with respect thereto; and
- b) That the Contractor has and shall have satisfied itself in all respect prior to executing this Agreement as to the Site and Ferry Facility including the condition, situation, status, quality, fitness and standard thereto.

Upon the expiration of the Term or sooner termination of this Agreement, the Ferry Facility and grounds shall be in the same condition as at the time of executing the Agreement, reasonable wear and tear excepted.

Upon the expiration of the Term or sooner termination of this Agreement, the parties shall conduct a property inspection and inventory of the grounds and Ferry Facility.

1.07 Reaction Ferry Vessel Operation - Lytton

1.07.1 Outcome

To provide a safe and efficient on-demand Reaction Ferry Vessel service for Highway Users.

1.07.2 Routine Maintenance Services

PM1.07.2-1 Operate the Reaction Ferry Vessel in accordance with the Safety Management System.

PM1.07.2-2 Provide daily Ferry Service on demand 24 hours per day, 7 days a week.

PM1.07.2-3 Stop Ferry Service immediately then notify the Province, if conditions are unsafe or have the potential to become unsafe for Highway Users, and return the ferry to service when conditions permit.

PM1.07.2-4 Communicate ferry operational status with the public and Province as follows:

Performance Criteria	Response
a) Post notices on-site and notify public of ferry service interruptions exceeding 30 minutes and notify the Province	immediately
b) Post notices on Drive BC of any ferry closure that is estimated to exceed 4 hours and when the ferry is back in service	immediately
c) Notify the Province after denying access to a Highway User that may create a condition that is unsafe or has the potential to become unsafe to Highway Users or the ferry infrastructure	30 minutes
d) Change ferry operation sign tabs to indicate operational status	immediately

PM1.07.2-5 Provide reports to the Province as follows:

Performance Criteria	Response
a) Report describing the incident and justification for denying access to a Highway User	24 h
b) Reports as defined in the Safety Management System	1 st week of each month
c) Revised Safety Management Systems	30 d after commencement of the Highway Maintenance Agreement and as amendments are completed

1.07.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures requirements are as follows:

- a) Comply with the Safety Management System.
- b) Comply with the Province's Incident Response Management website that contains current policies and procedures supporting incident response for Highways;
- c) Update and maintain the Safety Management System including, but not limited to contact names / numbers, operational changes and current conditions at the Site, as approved by the Province;
- d) Work in cooperation with regulatory agencies, and first responders and the Province when responding to emergencies, as directed by the Province.
- e) Do not deny access to Highway Users during the on-demand schedule except if an individual fails to comply with the operational requirements of the ferry and if providing access could result in danger to other Highway Users, the individual or damage to the infrastructure;
- f) Dock the Reaction Ferry Vessel at the home port after normal operating hours; and
- g) Supply all materials required for the safe operation of the Reaction Ferry Vessel including, but not limited to, safety Equipment, office and cleaning supplies, crew requirements, communications systems, personal flotation devices, tools and fuel.

1.08 Reaction Ferry Vessel Maintenance - Lytton

1.08.1 Outcome

To provide a safe and efficient Ferry Service.

1.08.2 Routine Maintenance Services

PM1.08.2-1 Respond immediately to conditions that are unsafe or have the potential to become unsafe.

PM1.08.2-2 Respond immediately to any damage or deterioration of electrical and mechanical systems including the components, that are necessary to ensure the safe and efficient operation of the Reaction Ferry Vessel.

PM1.08.2-3 Notify the Province immediately of any deficiencies detected on the Main Track Wire Rope.

PM1.08.2-4 Inspect, maintain and complete repairs in accordance with the Safety Management System.

PM1.08.2-5 Maintain, repair, or replace damaged or deteriorated Reaction Ferry Vessel components as follows:

Performance Criteria	Response
a) Steering paddles	4 h
b) Electrical and mechanical systems including its components and luminaires on the Reaction Ferry Vessel, Towers and safety boat that are not unsafe or have the potential to become unsafe for Highway Users	1 d
c) Steering or apron cables	1 d
d) Ferry deck and apron	1 d
e) Railings and fencing	7 d
f) Tower components, including but not limited to anchors, sheaves, winches and wind line	7 d
g) Conduct megger testing of on board electrical system	annually
h) All other components	7 d

PM1.08.2-6 Protect the Reaction Ferry Vessel from potential hazards and extreme conditions and remove the ferry if necessary, as directed by the Province and return the ferry to service, as directed by the Province.

PM1.08.2-7 Replace damaged or deteriorated Reaction Ferry Vessel components, Reaction Ferry Vessel wire ropes including, but not limited to the Main Track Wire Rope, sheaves and associated components.

PM1.08.2-8 Perform inspections and provide reports in accordance with the frequencies established in the Safety Management System, unless otherwise directed by the Province.

PM1.08.2-9 Notify the public 7 days in advance, if planned work must take place outside of normal operating hours, indicating the reason and duration for the service interruption.

PM1.08.2-10 Return the Reaction Ferry Vessel to the Province at the end of the Term in substantially the same condition or better as at the commencement of the Highway Maintenance Agreement, as documented in the Initial and Final Condition Inspections.

Specific Requirements:

- a) Respond to Reaction Ferry Vessel Maintenance in accordance with the following General Specifications of this Schedule 1 (“Specifications”), always subject to PM1.08.2-5:

Performance Criteria	General Specifications	
	Section	Specification Title
a) Damaged or deteriorated ferry decks and aprons	6.01	Bridge Deck Maintenance
b) Damaged or deteriorated Reaction Ferry Vessel components	6.07	Structure Minor Coating
c) Damaged or deteriorated decks or aprons	6.01	Bridge Deck Maintenance
d) Damaged or deteriorated Reaction Ferry Vessel railings and fence systems	6.12	Bridge Railing Maintenance
e) Damaged or deteriorated Bailey and Acrow components	6.06	Bailey and Acrow Maintenance
f) Damage or deterioration that threatens the structural stability or integrity of the Reaction Ferry Vessel	7.02	Major Event

Notes:

- 1) The specific requirements (a) include possible Quantified Maintenance Services.

1.08.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 (“Specifications”).

Additional materials and/or procedures requirements are as follows:

- a) Comply with the Safety Management System;
- b) Schedule maintenance activities outside of normal operating hours to minimize delays to the public; and
- c) Inspection, non-destructive testing and cleaning of the Main Track Wire Rope will be conducted by an independent third party and certified by a Professional Engineer, retained by the Contractor.

1.08.4 Routine Maintenance Services Cap

\$35,000 – for each occurrence the cost to repair or replace Reaction Ferry Vessel components.

1.09 Dock and Ramp System Maintenance Lytton

1.09.1 Outcome

To provide safe and functional Docks, Ramp System and Parking Lots.

1.09.2 Routine Maintenance Services

PM1.09.2-1 Respond immediately to damage or conditions that threatens the operation or stability of the Docks or Ramp Systems and/or causes conditions that are unsafe or have the potential to become unsafe for Highway Users.

PM1.09.2-2 Inspect, maintain and complete repairs, prior to the Reaction Ferry Vessel being put into annual service, of any damage or deterioration to the Docks and Ramp Systems in accordance with the Safety Management System.

PM1.09.2-3 Maintain, repair or replace Docks, Ramp Systems, and Parking Lot(s) as follows:

Performance Criteria	Response
a) Lubricate all bearings, cables, cable saddles, travellers, sheaves, blocks and other movable/mechanical components	when required
b) Adjust Docks and Ramp Systems for water level, or remove from water in case of emergencies	4 h
c) Adjust Docks and Ramp System counterweight systems	when required
d) Damaged or deteriorated Dock and Ramp System Decks	24 h
e) Routine removal or placement of Docks and Ramp Systems	2 d

PM1.09.2-4 Remove Docks and Ramp Systems from the water and embankments during extreme high-water conditions and flooding or Debris quantities that are unsafe or have the potential to become unsafe and prior to winter ice conditions, and return to service as directed by the Province.

PM1.09.2-5 Notify the public 7 days in advance, if planned work must take place during normal operating hours, indicating the reason and duration for the service interruption.

PM1.09.2-6 Remove Winter Accumulations from all Travelled Lanes and vehicle accessible portions of the Docks, Ramp Systems and Parking Lots in accordance with PM3.01.2-1 (a) of the General Specifications in this Schedule 1 "Specifications".

Specific Requirements:

- a) Respond to Dock and Ramp System Maintenance in accordance with the following General Specifications of this Schedule 1 (“Specifications”), always subject to PM1.09.2-3:

Performance Criteria	General Specifications	
	Section	Title
a) Damaged or deteriorated Parking Lots	1.01 1.05	Asphalt Pavement Maintenance Surface and Shoulder Graveling
b) Accumulations on pavement or concrete surfaces	1.07	Surface Cleaning
c) Winter Accumulations at Parking Lots, Docks and Ramp Systems	3.01	Highway Snow Removal
d) Slippery conditions at Parking Lots, Docks and Ramp Systems	3.02	Snow and Ice Bonding Prevention and Control
e) Litter	4.03	Litter Collection and Graffiti Removal Maintenance
f) Damaged or deteriorated Docks and Ramp Systems	6.01 6.07 6.08	Bridge Deck Maintenance Structure Minor Coating Concrete Structure Maintenance
g) Damaged or deteriorated Dock railings	6.12	Bridge Railing Maintenance
h) Damage that threatens the stability of the Dock and Ramp System	7.02	Major Event

- b) Maintain Docks, Ramp Systems and Parking Lots in accordance with the response of the adjacent Highway.

Notes:

- 1) The specific requirements (a) include possible Quantified Maintenance Services.

1.09.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 (“Specifications”).

Additional materials and/or procedures requirements are as follows:

- a) Comply with the Safety Management System;
- b) Schedule maintenance activities outside of normal operating hours to minimize delays to the public; and
- c) All material must be of the same type and quality as existing material.

1.09.4 Routine Maintenance Services Cap

\$10,000 – for each occurrence, the cost to repair or replace the shore based Ramp System.

1.10 Ferry Facility Maintenance - Lytton

1.10.1 Outcome

To provide a safe, clean and well maintained Ferry Facility.

1.10.2 Routine Maintenance Services

PM1.10.2-1 Maintain the Ferry Facility as follows:

Performance Criteria	Response
a) External Building components (including but not limited to exterior walls, foundations, roof, windows and doors) are cleaned and maintained	Monthly or more often when required
b) Interior Building components (including but not limited to walls, ceilings, floors, fittings and fixtures) are cleaned and maintained	Monthly or more often when required
c) Rodent and pest control	immediately
d) Report acts of vandalism and misuse of the Ferry Facility to the Police authority and the Province	immediately
e) Remove Winter Accumulations and ice from the outer entrance doors, pedestrian accessed areas and walkways	24 h
f) Remove Debris from areas surrounding the facility and clean walkways	daily
g) Remove and dispose of litter	daily
h) Inspect smoke detectors, fire extinguishers and emergency lighting	monthly
i) Clean, varnish and seal picnic table components	May 1 annually

PM1.10.2-2 Repair or replace damaged or deteriorated Ferry Facilities as follows:

Performance Criteria	Response
a) Smoke detectors, fire extinguishers and emergency lighting	immediately
b) Fuel storage systems	immediately
c) Water systems, septic systems, heat/cooling systems and Building electrical systems	immediately
d) External Building components (including but not limited to exterior walls, foundations, roof, windows and doors)	7 d
e) Interior Building components (including but not limited to walls, ceilings, floors, fittings and fixtures)	7 d
f) Redecorate and refurbish the ferry Buildings including but not limited to interior walls, exterior walls, roof, doors, ceiling and floors	annually

1.10.3 Materials and/or Procedures

- a) Comply with the Safety Management System;
- b) Supply all materials required to operate, clean, maintain and repair the Ferry Facility including, but not limited to electricity and fuel for lighting and heating; and

- c) The Contractor is required to follow a least life cycle cost approach that encourages preventative maintenance with the appropriately timed replacement of Ferry Facility components, as would be followed by a prudent owner.

1.10.4 Routine Maintenance Services Cap

\$10,000 – for each occurrence, the cost to repair or replace a structure, heating system, water system, or sewer system.

Appendix A

BARE-BOAT CHARTER

This agreement is dated for reference this @ day of @, 201@.

BETWEEN

**BC TRANSPORTATION FINANCING AUTHORITY,
a company continued under the *Transportation Act*,
with the following address:
c/o The Ministry of Transportation and Infrastructure**

@
@
@

(the “BCTFA”)

AND:

@
having an office at
@
@

(the “Contractor”)

WHEREAS:

- A. The BCTFA is the owner of the Reaction Ferry Vessel; and
- B. The Contractor has entered into the Highway Maintenance Agreement and as a condition of same has agreed to be bound by the terms of this agreement; and
- C. The BCTFA grants authority to the Province to act on BCTFA's behalf.

NOW THEREFORE WITNESSETH that in consideration of the premises and the good and valuable consideration, the receipt and sufficiency of which the parties hereto acknowledge, the parties agree as follows, that is to say:

Definitions

In this agreement, the following definitions shall apply:

“**Highway Maintenance Agreement**” means that certain agreement entered into between the parties hereto and Her Majesty the Queen in right of the Province of British Columbia, as represented by the Minister of Transportation and Infrastructure (the “Province”) of even date with respect to the operation of the Ferry Service;

“**Contact Person**” means the contact person set out in section 16.1 of this Agreement;

“**Event of Reaction Ferry Vessel Loss**” has the meaning set out in section 12 of this Agreement;

“Ferry Facility” means the Highway Maintenance facility which is utilized to operate the Ferry Service, and includes the land and areas shown within the broken-line boundaries on the plans of terminal areas, buildings, marine installations, roads, Equipment, and accessories, all as set out in Schedule 4 of the Highway Maintenance Agreement;

“Ferry Service” has the same meaning ascribed to it in the Highway Maintenance Agreement, Local Area Specification @;

“Main Track Wire Rope” means the large steel-braided cable that is connected to a tower on each side of the river, attached to the Reaction Ferry Vessel;

“Reaction Ferry Vessel” means that certain vessel, owned by the BCTFA, including all its components connected to the Main Track Wire Rope and uses the water’s current to propel across the river, bearing official number @ and the name @;

“Replacement Reaction Ferry Vessel” has the meaning set out in section 12.3 of this Agreement;

“Term” means the Term as provided in the Highway Maintenance Agreement;

1. GRANT

- 1.1 The BCTFA hereby grants to the Contractor and the Contractor hereby accepts from the BCTFA a charter of the Reaction Ferry Vessel, including all equipment, machinery, accessories and appurtenances, but without supply of master and crew.
- 1.2 The Contractor shall have quiet enjoyment of the Reaction Ferry Vessel, subject to the rights of the BCTFA hereunder.

2. CHARTER PERIOD

- 2.1 This charter shall be for the Term and shall, notwithstanding any other provision herein, automatically terminate upon the early termination or expiry of the Highway Maintenance Agreement.

3. USE OF THE REACTION FERRY VESSEL

- 3.1 The Reaction Ferry Vessel shall be used only for the provision of the Ferry Service across the @ River, between @ and @.
- 3.2 The Reaction Ferry Vessel shall be used for no other purpose except as required in an emergency or as otherwise specifically authorized in writing by the BCTFA.

4. CHARTER FEE AND OTHER PAYMENT

- 4.1 Upon and subject to the terms and conditions set out herein, the Contractor shall pay to the BCTFA, in advance, as consideration for the charter of the Reaction Ferry Vessel as herein provided, the sum of \$5.00 (exclusive of taxes) for the Term.
- 4.2 The Contractor shall be responsible for all other payments associated with the operation

and possession of the Reaction Ferry Vessel, including but not limited to the master and crew remuneration, licensing fees, fuel, maintenance, alterations, taxes, dues, insurance, assessments, fines, service and supply contracts, and replacement or repair of equipment, machinery, accessories and improvements associated with the Reaction Ferry Vessel.

- 4.3 The Contractor acknowledges that charter of the Reaction Ferry Vessel as herein provided shall be, subject to the terms and conditions of the Local Area Specification in Schedule 16 of the Highway Maintenance Agreement, fiscally carefree to the BCTFA.

5. TITLE TO THE REACTION FERRY VESSEL

- 5.1 The Reaction Ferry Vessel shall at all times remain the property of the BCTFA and shall continue to be registered in the name of the BCTFA throughout the Term and any renewal thereof.
- 5.2 The Contractor shall at all times protect and defend, at its own cost and expense, the title of the BCTFA from and against all encumbrances, charges, claims and liens, except as may arise through the acts of the BCTFA, and the Contractor shall keep the Reaction Ferry Vessel and this Agreement free and clear from all such encumbrances, charges, claims and liens.
- 5.3 The Contractor shall forthwith give the BCTFA notice of any alleged security interest, encumbrance, charge, claim or lien regarding the Reaction Ferry Vessel or this Agreement of which the Contractor may become aware and of the Contractor's intended course of action with respect thereto.
- 5.4 In the event that the Contractor fails to discharge or satisfy any such security interest, encumbrance, charge, claim or lien in a timely fashion, as the BCTFA in its sole discretion may determine, then the BCTFA may (but shall not be obliged to), in addition to any other remedy to which it is entitled, pay the amount required to obtain a discharge of any such security interest, encumbrance, charge, claim or lien, in the name of the Contractor, and any amount so paid together with all disbursements and legal costs in respect of such process on a solicitor and own client basis, shall forthwith be due and payable by the Contractor to the BCTFA and may, at the direction of the BCTFA be deducted from the Service Fee payable under the Highway Maintenance Agreement.

6. DELIVERY

- 6.1 Delivery of the Reaction Ferry Vessel under this Agreement shall be deemed to have been made and this charter shall commence on the first day of the Term.
- 6.2 The Contractor accepts the Reaction Ferry Vessel on an "as is" basis and acknowledges that neither the BCTFA nor the Province have made representations or warranties with respect to the condition of the Reaction Ferry Vessel; and, in particular, but not so as to limit the foregoing, no representations or warranties as to the Reaction Ferry Vessel's seaworthiness, type, design, operation, merchantability, fitness for purpose, or suitability for use.

7. OPERATION

- 7.1 The Contractor shall have full use and control of the Reaction Ferry Vessel for the purpose of operating the Ferry Service according to the terms of this Agreement and the Highway Maintenance Agreement.
- 7.2 The Contractor shall operate the Reaction Ferry Vessel in a safe and efficient manner and in accordance with all applicable laws.
- 7.3 The Reaction Ferry Vessel is the responsibility of the Contractor and the Contractor assumes the entire risk of loss of or damage to the Reaction Ferry Vessel from any cause whatsoever, including loss of or damage to the hull, machinery, spare parts, equipment, accessories, supplies and additions and accessories incorporated therein or affixed thereto, notwithstanding the Routine Maintenance Services Cap pursuant to PM1.01.6.4 and for certainty the Contractor shall obtain such insurance required pursuant to Section 11.1 and comply with Article 12 herein.

8. ASSIGNMENT

- 8.1 The Contractor shall not assign or mortgage, pledge or otherwise charge this agreement or sublet, licence or lend all or any part of the Reaction Ferry Vessel without the prior written consent of the BCTFA, which consent may be unreasonably or arbitrarily withheld by the BCTFA.
- 8.2 Each of the following shall be deemed to be an assignment of this Agreement requiring the BCTFA's prior written consent which may be unreasonably or arbitrarily withheld by the BCTFA:
- (a) If the Contractor is a corporation but none of its shares are traded on any public stock exchange or in any public stock market, any change of control of such corporation during the Term, by operation of law or by the sale, bequest, or other disposition of its shares or securities; and
 - (b) If the Contractor is a partnership, the cessation at any time during the Term by any person who at the time of the execution of this Agreement owns a partner's interest (other than through death) to own such partner's interest, or a material change in the ownership, in the opinion of the BCTFA, of such partner's interest.
- 8.3 Upon request of the BCTFA from time to time, a Contractor that is a corporation or partnership shall make available to the BCTFA for inspection or copying or both, all books and records of the Contractor which, alone or with other data, in the case of the Contractor that is a corporation, identify the ownership of all of the shares and securities of the partners of the Contractor and their respective interests in the partnership, all from the commencement of the Term or the date of earlier execution of this agreement up to the date such books and records are made available to the BCTFA.

9. MAINTENANCE

- 9.1 During the term, the Contractor shall, at the Contractor's sole expense, at all times maintain and preserve, or cause to be maintained or preserved, the Reaction Ferry

Vessel in good running order and repair in accordance with the specifications in the SMS and in the Local Area Specification in Schedule 16 of the Highway Maintenance Agreement@@@, so that the Reaction Ferry Vessel shall be, insofar as due diligence can ensue, tight, staunch, strong and well and sufficiently tackled, apparelled, furnished, equipped and in every respect seaworthy and in good operating condition; and will keep or cause to be kept, the Reaction Ferry Vessel and its machinery, appurtenances and spare parts, in shipshape condition.

9.2 Without limiting the generality of the foregoing, the Contractor shall:

- (a) comply with any and all laws, bylaws, orders, regulations, standards, and rules applicable to the use, maintenance and operation of the Reaction Ferry Vessel, and if such laws, bylaws, orders, regulations, standards, and rules, require alteration to the Reaction Ferry Vessel, the Contractor shall, promptly, upon becoming aware of any such required alteration, give written notice to the BCTFA of any such required alteration and the applicable law, bylaw, order, regulation, standard or rule, or any of them as the case may be;
- (b) operate, service, repair, alter, modify and maintain the Reaction Ferry Vessel so as to keep the Reaction Ferry Vessel;
 - (i) in all respects seaworthy, and in a condition and state of operation, service, and maintenance that complies at all times with all laws, including the *Canada Shipping Act*, and bylaws, orders, regulations, standards, and rules of any competent governmental authority applicable to the Reaction Ferry Vessel, to the Ferry Service and to this Agreement;
 - (ii) in the operating condition in which it was delivered as at the date of this Agreement, ordinary wear and tear excepted;
 - (iii) in a clean and tidy state; and
 - (iv) pay all charges, costs, and expenses incurred in so doing;
- (c) obtain, acquire, keep and maintain all records, log-books and any other documentation required by the *Canada Shipping Act* and by any other laws, bylaws, orders, regulations, standards, and rules of any competent governmental authority, in respect of the Reaction Ferry Vessel;
- (d) upon written request from the BCTFA, deliver to the BCTFA copies of any and all marine surveys, and inspection certificates related to the Reaction Ferry Vessel, and any or all records (including supporting documents), log-books and other documentation referred to in sub-section 9.2(f);
- (e) permit the BCTFA at all reasonable times to inspect, examine, review, and copy any and all records, log-books and any other documentation that has been kept, produced, prepared, received or acquired by the Contractor in connection with the Reaction Ferry Vessel and pursuant to the *Canada Shipping Act* or any other laws, bylaws, orders, regulations, standards, and rules of any competent governmental authority;

- (f) not permit advertising, announcements or signage of any kind whatsoever to be displayed from, affixed to or painted on the Reaction Ferry Vessel without the prior written consent of the BCFA; and
- (g) ensure that all safety devices and equipment, including life saving devices and equipment, and fire fighting equipment, life rings, inflatable life rafts, life jackets and life jacket lockers are provided and maintained at all times on and in connection with the Reaction Ferry Vessel as required by the laws, including the *Canada Shipping Act*, bylaws, orders, regulations, standards, and rules of any competent governmental authority.

10. PARTS REPLACEMENT, ALTERATIONS, MODIFICATIONS, ADDITIONS

- 10.1 If any part, instrument, appurtenance, accessory, machinery or other equipment of whatever nature which is or may from time to time be incorporated or installed in or attached to the Reaction Ferry Vessel and which may from time to time become worn out, lost, stolen, destroyed, damaged beyond repair or permanently rendered unfit for use for any reason whatsoever (hereafter call the "Replaced Part" or the "Parts") then the Contractor at its own cost and expense shall promptly provide and install replacement parts (hereinafter called the "Replacement Part or the "Replacement Parts").
- 10.2 The Replacement Parts shall be free and clear of any security interests, liens or other encumbrances and shall be in as good operating condition as, and shall have a value, utility, quality and specifications at least equal or similar to, the Replaced Parts, and the Replacement Parts shall be deemed to be in the condition, maintenance and repair required by the terms hereof.
- 10.3 All Replaced Parts at any time removed from the Reaction Ferry Vessel shall remain the property of the BCTFA no matter where located, until such time as such Replacement Parts have been provided and installed.
- 10.4 Immediately upon the installation of the Replacement Part in or on the Reaction Ferry Vessel as above provided:
- (a) title to such Replacement Part shall vest in the BCTFA;
 - (b) such Replacement Part shall be deemed to be part of the Reaction Ferry Vessel, and become subject to this Agreement; and
 - (c) title to the Replaced Part shall vest in the Contractor, without any warranty or representation whatsoever.
- 10.5 In addition to its obligations to install Replacement Parts in or on the Reaction Ferry Vessel, the Contractor may, at its own cost and expense, from time to time make such alterations and modifications in and additions to the Reaction Ferry Vessel (hereinafter such additional parts are called the "Additional Part" or the "Additional Parts") as the Contractor may deem desirable in the proper conduct of its business, or whether required in order to meet the requirements or standards of any applicable laws,

ordinances, regulations, requirements, standards and rules applicable to the use, maintenance and operation of the Reaction Ferry Vessel, provided that:

- (a) no such alteration, modification or addition diminishes the value, utility or condition of the Reaction Ferry Vessel below the value, utility or condition of the Reaction Ferry Vessel immediately prior to such alteration, modification or addition;
 - (b) the Reaction Ferry Vessel then has the seaworthiness, utility and condition required to be maintained by the terms of this Agreement;
 - (c) any and all such alterations, modifications or additions shall be at the sole cost of the Contractor; and
 - (d) the BCTFA has given it prior written approval, which approval shall not be unreasonably withheld.
- 10.6 Title to any and all Additional Parts shall vest in the BCTFA if the same is or are a component of the Reaction Ferry Vessel, free and clear of any security interest, lien or other encumbrance, and any and all such Additional Parts become subject to this Agreement and be deemed part of the Reaction Ferry Vessel.
- 10.7 The Contractor shall, on the earlier of the date 60 days prior to the expiration of the Term and a date within 10 days following the termination of this Agreement for any reason whatsoever, notify the Province and BCTFA in writing of any alteration, modification or addition to the Reaction Ferry Vessel or of any property damage or loss not constituting an Event of Reaction Ferry Vessel Loss which would, in the Contractor's reasonable opinion, impair or negatively impact upon the value, utility or condition of the Reaction Ferry Vessel. If, in the BCTFA's opinion, any such modification, alteration, or addition has impaired or negatively impacted upon the value, utility or condition of the Reaction Ferry Vessel, the Reaction Ferry Vessel shall be restored by the Contractor at the Contractor's expense to a condition in which, in the opinion of the BCTFA, the Reaction Ferry Vessel shall have the value, utility or condition which it would have had if such alteration, modification, addition, property damage or loss had not occurred. Restoration shall be carried out by the Contractor at the sole expense of the Contractor prior to the return of the Reaction Ferry Vessel to the BCTFA.

11. INSURANCE

- 11.1 The Contractor shall obtain and keep in good standing insurance on the Reaction Ferry Vessel with loss payable to the BCTFA as described in @ to the Highway Maintenance Agreement and will comply with any obligations on the Contractor with respect to insurance as set out in such Schedule.

12. EVENT OF REACTION FERRY VESSEL LOSS

- 12.1 If the Reaction Ferry Vessel is lost, stolen, destroyed, damaged beyond economic repair or to an extent resulting in an insurance settlement with respect thereto on the basis of a total or constructive total loss, or expropriated or confiscated in circumstances beyond the reasonable control of the Contractor by any authority for any reason, or is rendered unfit for normal use for any reason other than because the Reaction Ferry Vessel has become, or is deemed by the Contractor to have become, obsolete (hereinafter individually referred to as an "Event of Reaction Ferry Vessel Loss"), the Contractor shall notify the Province and the Contractor's insurers in writing of the Event of Reaction Ferry Vessel Loss as soon as is practicable but not later than 5 days after the date of the Event of Reaction Ferry Vessel Loss (that date being hereinafter called the "Event of Reaction Ferry Vessel Loss Date") or such shorter time as may be required pursuant to the applicable policy insurance.
- 12.2 If an Event of Reaction Ferry Vessel Loss occurs, the Contractor shall pay to the BCTFA the full insurable value of the Reaction Ferry Vessel.
- 12.3 Upon payment of the full insurable value of the Reaction Ferry Vessel as hereinbefore provided, this Agreement shall terminate with respect to the Reaction Ferry Vessel and the BCTFA may, at its sole discretion, replace the Reaction Ferry Vessel by delivering to the Contractor another Reaction Ferry Vessel (the "Replacement Reaction Ferry Vessel") for the purpose of the performance of the Ferry Service, and upon delivery of the Replacement Reaction Ferry Vessel by the BCTFA to the Contractor, the term "Reaction Ferry Vessel" in this Agreement shall include the Replacement Reaction Ferry Vessel unless the context otherwise requires, and with respect to the Replacement Reaction Ferry Vessel, the BCTFA and the Contractor agree to be bound by the terms and conditions of this Agreement.

13. INSPECTION AND SURVEY OF THE REACTION FERRY VESSEL

- 13.1 The Contractor represents and warrants to the BCTFA and agrees with the BCTFA as follows:
- (a) that the Contractor has and shall be deemed to have been afforded the opportunity prior to executing this Agreement to inspect and examine the Reaction Ferry Vessel and that the Contractor shall be deemed to have inspected and examined the same and to have satisfied itself with respect thereto; and
 - (b) that the Contractor has and shall be deemed to have satisfied itself in all respects prior to executing this Agreement as to the Reaction Ferry Vessel including as to the condition, situation, status, quality, fitness and standard of the Reaction Ferry Vessel.

14. RETURN OF REACTION FERRY VESSEL

- 14.1 Upon the expiration of the Term or sooner termination of this Agreement, the Contractor at its sole cost and expense shall deliver the Reaction Ferry Vessel to the BCTFA at a location designated by the BCTFA.

- 14.2 The Reaction Ferry Vessel shall be in the same condition as when it was delivered to the Contractor, reasonable wear and tear excepted.
- 14.3 On redelivery of the Reaction Ferry Vessel, the parties shall do the following:
- (a) conduct an inventory of the Reaction Ferry Vessel; and
 - (b) conduct a marine off-hire condition survey by an independent qualified marine surveyor, appointed by the BCTFA at the BCTFA's cost.
- 14.4 Upon receipt by the Contractor and the BCTFA of the off-hire survey report, the Contractor shall at its sole cost and expense remedy any and all defects and damages set out in the survey report other than those existing at the time of delivery of the Reaction Ferry Vessel as provided in the on-hire survey at the time and that were not rectified by the BCTFA and except for defects attributable to reasonable wear and tear.

15. NOTICE

- 15.1 Unless otherwise provided for in this Agreement, any notice, request, report, demand or other document desired or required to be given under this Agreement, shall be in writing and may be given by personal delivery to the party to whom it is to be given, by facsimile transmission form or by mailing in Canada with postage prepaid addressed,

if to the BCTFA or the Province (or both of them):

Ministry of Transportation and Infrastructure
 PO Box 9850, Stn Prov. Gov't
 940 Blanshard Street
 Victoria, B.C.
 V8W 9T5

Attention: @
 Fax: (250) 356-@

If to the Contractor:

@
 @
 @
 @

Attention: @
 Fax: @

and any such notice, request, report, demand or other document so mailed shall be deemed given to and received by the addressee on the third business day after the mailing of the same except in the event of disruption of postal services in Canada in which case any such notice, request, report, demand, or other document shall be deemed given to and received by the addressee when actually delivered to the particular

address set out above, and such notice, request, report, demand or other document transmitted by facsimile shall be conclusively deemed validly given to and received by the intended recipient when transmitted if transmitted to the above-referenced facsimile numbers.

- 15.2 Either party may, from time to time, advise the other by notice in writing of any change of address or facsimile number of the party giving such notice and, from and after the giving of such notice, the address or facsimile number therein specified shall, for purposes of this Agreement, be deemed to be the address or facsimile number of the party giving such notice.

16. ASSUMPTION OF RISK

- 16.1 Except as may be expressly provided herein and in the Highway Maintenance Agreement, the Reaction Ferry Vessel is in all respects solely the responsibility of the Contractor and the Contractor assumes the entire risk of loss or damage to the Reaction Ferry Vessel from any cause whatsoever, including without limitation loss of or damage to the hull, machinery, spare parts, equipment, accessories, supplies and additions and accessories incorporated therein or affixed thereto.

17. INDEMNITY PROVISIONS

- 17.1 The Contractor will indemnify and save harmless the BCTFA and the Province, their servants, directors, officers, employees, deputies, delegates, representatives and agents (together, the "Indemnitees"), from and against all claims, demands, losses, damages, costs, liabilities, expenses, fines, penalties, assessments and levies, including without limitation fees of solicitors and other professional advisors, made against or incurred, suffered or sustained by any of the Indemnitees at any time or times (whether before or after the expiration or termination of this Agreement or the Highway Maintenance Agreement) where the same or any of them are based upon or arise out of:
- (a) any breach, violation or non-performance by the Contractor of any covenant, condition or term in this Agreement; or
 - (b) any bodily injury, death or property damage or loss of use thereof occurring or happening in, on or off the Ferry Facility in any way relating to this Agreement;
 - (c) any fines, penalties or expenses levied or charged against the Indemnitees or the Contractor by any governmental authority, court or board pursuant to any law, by-law or regulation for the protection of the environment as a result of the use and occupation of the activities of the Contractor on, or in any way related to, the Reaction Ferry Vessel, or
 - (d) any act or omission taken or maintained or the exercise of any rights by the Contractor (or others for whom the Contractor is responsible at law) pursuant to any provisions of this Agreement.
- 17.2 The indemnity contained in this Article will survive the expiration or earlier termination of this Agreement and the Highway Maintenance Agreement.

18. MISCELLANEOUS

- 18.1 Any public announcement relating to this Agreement shall be arranged by the BCTFA in consultation with the Contractor.
- 18.2 The Contractor shall treat as confidential and shall not, without the prior written consent of the BCTFA, publish, or disclose or permit to be published or disclosed either before or after the expiration or sooner termination of this Agreement, any information supplied to, obtained by, or which comes to the knowledge of the Contractor as a result of this agreement except insofar as such publication, or disclosure is required by law or is necessary to enable the Contractor to fulfill the obligations of the Contractor under this Agreement.
- 18.3 This Agreement and the Highway Maintenance Agreement and related documents constitute the entire agreement between the parties in respect of the subject matter of this agreement and no understandings, representations or agreements, oral or otherwise, exist between the parties with respect to the subject matter of this Agreement.
- 18.4 Each of the parties shall, upon the reasonable request of the other, make, do, execute or cause to be made, done or executed all further and other lawful acts, deeds, things, devices, documents, instruments and assurances whatever for the better or more perfect and absolute performance of the terms and conditions of this Agreement.
- 18.5 Public disclosure of this Agreement shall be governed by the Freedom of Information and Protection of Privacy Act, R.S.B.C. 1996, c. 165.
- 18.6 This Agreement shall enure to the benefit of and be binding upon the BCTFA and its assigns and the Contractor and its successors and permitted assigns.
- 18.7 No waiver by either party of a breach or default by the other party in the observance, performance or compliance of any of its obligations under this Agreement shall be effective unless it is in writing and no such waiver shall be deemed or construed to be a waiver of any other breach or default and failure or delay on the part of a party to complain of an act or failure of the other party or to declare such other party in default, irrespective of how long such failure or delay continues, shall not constitute a waiver by such party of any of its rights against the other.
- 18.8 If any provision of this Agreement or the application thereof to any person or circumstance is invalid or unenforceable to any extent, the remainder of this Agreement and the application of such provision to any other person or circumstance shall not be affected or impaired thereby and shall be valid and enforceable to the extent permitted by law
- 18.9 This Agreement may only be amended by a further written agreement executed by the parties.
- 18.10 Time is and shall be in all respects of the essence of this Agreement.
- 18.11 BCTFA grants to the Province the full right and authority to act on BCTFA's behalf in respect of any and all matters affecting this Agreement.

19. INTERPRETATION

- 19.1 The headings or captions in this Agreement are inserted for convenience only and do not form a part of this Agreement and in no way define, limit, or alter or enlarge the scope or meaning of any provision of this Agreement.
- 19.2 In this Agreement, “person” includes a corporation, firm, association and any other legal entity and wherever the singular or masculine is used it shall be construed as if the plural, the feminine or the neuter, and shall wherever the plural or the feminine or the neuter is used it shall be construed as the singular or masculine, as the case may be, had been used where the context or the parties so require.
- 19.3 In this Agreement, the words “including” and “includes”, when following any general term or statement, are 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, but rather as permitting the general term or statement to refer to all other items or matters that could reasonably fall within the broadest possible scope of the general term or statement.
- 19.4 All dollar amounts expressed in this Agreement refer to lawful currency of Canada, exclusive of all applicable taxes.
- 19.5 This Agreement shall be governed by and construed and interpreted in accordance with the laws of the Province of British Columbia.

The parties have executed this Agreement as of the date first written above.

BC Transportation Financing Authority

 @
 Executive Financial Officer and Corporate Secretary

@ Ltd.

 @@@
 President

 (Name)

 (Title)

1.11 Rest Area Facility Maintenance – Coquihalla Lakes, Britton Creek, Loon Lake and Zopkios

1.11.1 Outcome

To provide enhanced maintenance for the Coquihalla Lakes Rest Areas (northbound and southbound), Britton Creek Rest Area, Loon Lake Rest Area and the Zopkios brake check, exceeding the performance measures in General Specification 4.04 of this Schedule 1 (“Specifications”).

1.11.2 Routine Maintenance Services

PM1.11.2-1 Maintain Rest Area facilities between the hours of 0900 and 1800 daily and from the hours of 0900 to 2000 on the Friday and Monday of statutory holiday weekends, from May 15th to October 15th as follows:

Performance Criteria	Response
a) External building components (including but not limited to exterior walls, foundations, roof, windows and doors) are cleaned and maintained	daily
b) Walkways are cleaned and weeds removed	hourly
c) Plumbing fixtures including the surfaces of toilets, dispensers and sinks are cleaned	hourly
d) Litter is collected within the building / grounds and dispose	hourly
e) External and internal building components are inspected	hourly
f) Water systems are maintained and functioning	hourly
g) Septic systems (including but not limited to tanks/fields, sani-pumps and toilets) are maintained and functioning	hourly
h) Heating/cooling systems and building electrical systems are maintained and functioning	hourly
i) All required supplies are available	hourly

PM1.11.2-2 Remove or cover marks and graffiti immediately on interior and exterior walls.

PM1.11.2-3 Record and initial the time of all hourly inspections on a maintenance check sheet.

1.11.3 Materials and/or Procedures

- a) Post the maintenance check sheet within the Rest Area facility in a public accessible area, with a contact phone number for the Contractor at each Rest Area and the brake check facility.

1.12 Salt Containment Infrastructure Maintenance

1.12.1 Outcome

To provide for the safe handling and storage of salt and Winter Abrasives on provincial land and monitor, maintain, repair and replace provincially owned Salt Containment Infrastructure.

1.12.2 Routine Maintenance Services

- PM1.12.2-1** Off-load salt onto an evapotranspiration liner or containment pad, if available and/or store immediately within the salt shed.
- PM1.12.2-2** Retrieve and return to the salt shed immediately, any salt spillage over the top of skirt that lines the inside of the salt shed.
- PM1.12.2-3** Remove immediately, any salt or salt contaminated material on the pit floor to a depth of 40 centimetres for use with Winter Abrasives when processing.
- PM1.12.2-4** Notify the Province immediately of any damage to the containment pond, including but not limited to the liner, berm or fencing.
- PM1.12.2-5** Temporarily repair damaged or deteriorated salt shed components immediately, that permits water infiltration.
- PM1.12.2-6** Permanently repair within 8 weeks, any temporarily repaired steel/fabric salt shed components that permits water infiltration.
- PM1.12.2-7** Permanently repair within 2 weeks, any temporarily repaired wooden salt shed components that permits water infiltration.
- PM1.12.2-8** Inspect and document the condition of Salt Containment Infrastructure as follows:

Performance Criteria	Response
f) Evapotranspiration water/brine levels	daily or more often when required
g) Water in the containment pond to prevent over-flowing	daily or more often when required
h) Steel/fabric salt sheds including, but not limited to, the steel structural components including base plates, wire cross-bracing, fabric roof, fabric lashing, winches and vents, lock-blocks and protective skirt	bi-annually in the spring and fall or in accordance with the manufacturer's specifications and recommendations, whichever is more frequent
i) Wooden salt shed including but not limited to structural condition and weatherproof exterior	annually
j) Salt shed apron and containment pad surfaces	annually
k) Evapotranspiration liner surface absorption	daily or more often when required

PM1.12.2-9 Maintain the superstructure of steel/fabric salt sheds as follows:

Performance Criteria	Response
a) Remove grime and encrusted salt off the salt shed's steel interior	annually
b) Lubricate winches	annually
c) Re-tension-web and fabric roof lashing	annually
d) Re-tighten fastening bolts	annually
e) Remove surface rust	annually

PM1.12.2-10 Repair or replace Salt Containment Infrastructure as follows:

Performance Criteria	Response
a) Damaged or deteriorated containment pond components, including but not limited to the liner, berm or fencing	immediately
b) Loss of absorption for a compact surface where water is ponding on the evapotranspiration liner	immediately
c) Saturation or overflow of evapotranspiration water/brine	when required
d) Damaged or deteriorated wooden salt shed components	within 2 weeks of the bi-annual inspection or as noted in PM1.11.2-8
e) Damaged or deteriorated steel/fabric salt shed components	within 8 weeks of the bi-annual inspection or as noted in PM 1.11.2-8 if salt and/or Winter Abrasive with salt is present or prior to when the salt and/or Winter Abrasive with salt is scheduled to be stored
f) Cracked, chipped edges, pot holes, settling/ponding, or base failure of surfaces	General Specifications 1.01, 1.06 and 1.10 of this Schedule 1 ("Specifications") for a Class 4 Highway

PM1.12.2-11 Replace annually, the top 10 centimetres of salt contaminated material on the evapotranspiration surface with free draining material and use the removed salt contaminated material for Winter Abrasives processing.**Notes:**

- 1) The Province inspection H-form is to be used for inspections of steel/fabric salt sheds;
- 2) PM1.11.2-10 (f) includes possible Quantified Maintenance Services; and
- 3) Salt shed locations are provided in Appendix A of Schedule 13 ("Gravel Licence").

1.12.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures requirements are as follows:

- a) Load salt and/or Winter Abrasive containing salt on a containment pad or the evapotranspiration liner surface;
- b) Store salt and/or Winter Abrasive containing salt at a height below the top 30 centimetres of the skirt within a steel/fabric salt shed and ensure the top of the lock block wall remains free of salt accumulation;
- c) Park heavy equipment used for loading salt or Winter Abrasive containing salt, on the containment pad, evapotranspiration liner or within the salt shed;
- d) Prevent spillage onto the pit floor when transporting salt;
- e) Store Winter Abrasive containing salt under cover or on a containment pad or on an evapotranspiration liner, if supplied;
- f) Use a spill proof apron for salt hoppers to contain salt and facilitate retrieval;
- g) Store salt contaminated material for future use with Winter Abrasives on a containment pad or evapotranspiration liner or in a salt shed;
- h) Prevent salt contaminated materials from being tracked from the containment pad or evapotranspiration liner and use a containment pond for disposal, if one exists on site;
- i) Maintain an open catchment area adjacent to the salt shed exterior walls to accommodate unobstructed snow shedding off the structure;
- j) Remove snow from the roof of steel/fabric salt shed and adjust the roof tension after the snow accumulation has been removed in accordance with the manufacturer's specifications and recommendations;
- k) Reseal exposed surfaces following the removal of surface rust with zinc-rich primer/paint;
- l) Maintain and repair damaged or deteriorated salt shed components in accordance with the manufacturer's specifications and recommendations;
- m) Use engineered designs for all repairs, modifications or replacement to steel/fabric salt shed structural components including, but not limited to the fabric roof, prepared by a Professional Engineer, retained by the Contractor; and
- n) Securely lock gates and post signage to prevent unauthorized access to fenced containment ponds.

1.12.4 Routine Maintenance Services Cap

\$50,000 – for each occurrence, the cost to repair or replace a salt shed.

1.13 Snow Avalanche Response – 15100 Fraser Canyon Avalanche Area

1.13.1 Outcome

To provide an enhanced snow avalanche response exceeding the performance measures in General Specification 3.04 of this Schedule 1 (“Specifications”) to minimize Highway closures and facilitate the safe and orderly flow of traffic.

1.13.2 Routine Maintenance Services

PM1.13.2-1 Commence removal of snow avalanche deposits immediately upon being notified by the Province from the Highway at a minimum removal rate of 1800 m³ per hour within a designated avalanche area, with uninterrupted service until the deposits are removed.

PM1.13.2-2 Commence the removal of snow deposits within 12 hours upon being notified by the Province from catchment areas, static defence structures and safety structures at a minimum removal rate of 1200 m³ per hour within a designated avalanche area, with uninterrupted service until the deposits are removed.

PM1.13.2-3 Provide one personnel continuously 24 hours per day, to patrol and provide avalanche occurrence observations to the Province, when the avalanche hazard forecast level is moderate or higher.

1.13.3 Materials and/or Procedures

- a) Comply with the District Avalanche Traffic Plan SA 7 and SA 14.

1.14 Snow Avalanche Response - 25200 Coquihalla Avalanche Area

1.14.1 Outcome

To provide an enhanced snow avalanche response exceeding the performance measures in General Specification 3.04 of this Schedule 1 (“Specifications”) to minimize Highway closures and facilitate the safe and orderly flow of traffic.

1.14.2 Routine Maintenance Services

PM1.14.2-1 Commence removal of snow avalanche deposits immediately upon being notified by the Province from the Highway at a minimum removal rate of 1800 m³ per hour within a designated avalanche area, with uninterrupted service until the deposits are removed.

PM1.14.2-2 Commence the removal of snow deposits within 12 hours upon being notified by the Province from catchment areas, static defence structures and safety structures at a minimum removal rate of 1200 m³ per hour within a designated avalanche area, with uninterrupted service until the deposits are removed.

PM1.14.2-3 Commence the removal of snow deposits within 12 hours upon being notified by the Province from the catchment area for Path 49.9 at a minimum removal rate of 900 m³ per hour with uninterrupted service until the deposits are removed.

PM1.14.2-4 Provide one personnel continuously 24 hours per day, to patrol and provide avalanche occurrence observations to the Province, when the avalanche hazard forecast level is moderate or higher.

1.14.3 Materials and/or Procedures

- a) Comply with the District Avalanche Traffic Management Plan SA 7 and SA 14.

1.15 Snow Shed Maintenance – Great Bear Snow Shed

1.15.1 Outcome

To provide for the safe and efficient operation of the Great Bear Snow Shed.

1.15.2 Routine Maintenance Services

PM1.15.2-1 Notify the Province immediately of any mechanical system or electrical system failures.

PM1.15.2-2 Maintain, repair or replace damaged or deteriorated mechanical systems immediately.

PM1.15.2-3 Maintain, repair or replace structural components in accordance with the following General Specifications of this Schedule 1 (“Specifications”):

Performance Criteria	General Specifications Schedule 1 (“Specifications”)	
	Section	Specification Reference
a) Damaged or deteriorated concrete deck	6.01	Bridge Deck Maintenance
b) Damaged or deteriorated bridge bearings (grout packs)	6.05	Bridge Bearing Maintenance
c) Damaged or deteriorated gates and railing	6.12	Bridge Railing Maintenance

PM1.15.2-4 Maintain, repair or replace damaged or deteriorated electrical house building components as follows:

Performance Criteria	Response
a) Temporarily repair to restore functionality to damaged doors or locks	immediately
b) Permanently repair doors or locks	30 d
c) External building components (including but not limited to exterior walls, foundations, roof, windows and doors) are cleaned and maintained	annually or more often when required
d) Interior building components (including but not limited to walls, ceilings, floors, and fixtures) are cleaned and maintained	annually or more often when required

PM1.15.2-5 Inspect, maintain and document the condition and maintenance of mechanical systems, every 6 months or in accordance with the manufacturer’s specifications and recommendations, whichever is more frequent.

PM1.15.2-6 Test the mechanical systems every 2 months.

PM1.15.2-7 Activate the drain heating by October 15th of each calendar year or as directed by the Province.

PM1.15.2-8 Deactivate the drain heating by April 15th of each calendar year or as directed by the Province.

PM1.15.2-9 Remove Winter Accumulations from the pull-out areas at each of the snow shed's four corners and at accesses to the snow shed mechanical systems and the Ottomite electrical house, in accordance with PM3.03.2-3 (a) of the General Specification of this Schedule 1 ("Specifications"):

Notes:

- 1) The Ottomite electrical house is included as part of the snow shed and is located approximately 180 metres north of the snow shed;
- 2) The Contractor is not responsible for electrical maintenance of the high voltage systems; and
- 3) PM1.15.2-4 includes possible Quantified Maintenance Services.

1.15.3 Materials and/or Procedures

Refer to Section 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures requirements are as follows:

- a) The response for permanent repairs to doors or locks begins when the Contractor detected or was made aware of the requirement for the temporary repair;
- b) Retain the documented inspections on site with the mechanical systems;
- c) Coordinate maintenance work that impacts electrical components with the Province's electrical contractor;
- d) Ensure Debris is removed from Ditches and watercourses on the slope side on top of the snow shed; and
- e) Ensure water does not come in contact with the electrical lighting during cleaning.

1.15.4 Routine Maintenance Service Cap

\$50,000 - for each occurrence, the cost to repair or replace building components or the cost to repair or replace structural components or the cost to repair or replace systems.

1.16 Traffic Management and Patrol – Snowshed Hill

1.16.1 Outcome

To provide enhanced traffic management exceeding the performance measures in General Specifications 5.03 of this Schedule 1 (“Specifications”) related to ensuring the safety of Highway Users along Snowshed Hill on Highway 5.

1.16.2 Routine Maintenance Services

PM1.16.2-1 Conduct a pre-winter meeting to review the Coquihalla Management Protocol with the Province, regulatory agencies and police authorities, by September 15th of each calendar year.

PM1.16.2-2 Commence traffic management and station stand by tow vehicles when Weather Events of greater than 15 centimetres of snowfall are forecasted or anticipated over a 12 hour period or when chain up signs are activated or immediately upon notification from the Province, in accordance with the Coquihalla Management Protocol.

Notes:

- 2) The Snowshed Hill is on Highway 5, approximately 30 kilometres north of Hope, extending from the Box Canyon chain-up to the Zopkios interchange.

1.16.3 Materials and/or Procedures

- b) Comply with the Coquihalla Management Protocol;
- c) Update the Coquihalla Management Protocol by September 30th of each calendar year;
- d) Maintain a current contact list of all parties involved in implementing the Coquihalla Management Protocol; and
- e) Provide tandem axle heavy wrecker tow vehicles equipped with the following:
 - Basic first aid equipment;
 - Safety flares;
 - Brooms, shovels, jumper cables and other equipment as directed by the province;
 - Spill kit including 20 litres of liquid absorbing compound, sponge pads and booms; and
 - Fire extinguisher.

1.17 Wildlife Exclusion System Maintenance

1.17.1 Outcome

To provide a safe, fully functioning Wildlife Exclusion System.

1.17.2 Routine Maintenance Services

- PM1.17.2-1** Temporarily repair any damaged or deteriorated Wildlife Exclusion Systems immediately to ensure they function as designed.
- PM1.17.2-2** Notify the Province within 24 hours of any temporary repair to the Wildlife Exclusion System.
- PM1.17.2-3** Remove Debris and other items immediately, which are not part of the Highway by intention that decreases the effective height of the Wildlife Exclusion System.
- PM1.17.2-4** Remove Accumulations and other items, within 15 days which are not part of the Highway by intention, that are within 45 centimetres from the underside of the Ungulate Guard rails.
- PM1.17.2-5** Repair within 15 days, damaged or deteriorated Ungulate Guards
- PM1.17.2-6** Repair gaps that exceed 15 centimetres between fences and the ground surface.
- PM1.17.2-7** Inspect and document by May 31st of each calendar year, the condition of the Wildlife Exclusion Systems including, but not limited to the posts, base, braces, mesh, tension, staples and clamps, fence tie-ins, gates, tines and springs and locks and accessibility of passageways.
- PM1.17.2-8** Remove deadfall on the fence by September 30th of each calendar year.
- PM1.17.2-9** Commence removal of Winter Accumulations within 30 minutes upon being notified by the Province, to provide vehicle access to Wildlife Exclusion Systems.

1.17.3 Quantified Maintenance Services

- PM1.17.3-1** Repair within 7 days any damaged or deteriorated one way gates, human and vehicle access gates, jump outs, mesh, posts and passageways.
- PM1.17.3-2** Remove brush prior to inspections, within 3 metres of the fence that exceeds 10 centimetres in height.
- PM1.17.3-3** Restore the original height of the Wildlife Exclusion System if the height of the fence is compromised.

1.17.4 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 (“Specifications”).

Additional materials and/or procedures requirements are as follows:

- a) Use materials in accordance with the same type and quality on the Wildlife Exclusion System;
- b) Deadfall waste is not to be piled higher than 60 centimetres in height and not located within 3 metres of the fence;
- c) The effective height of fencing is 2.44 metres; and
- d) The effective height of a jump out is 1.75 to 2 metres, measured from the corner of the jump out.