AMENDMENT 001

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THE FOLLOWING AMENDMENT TO THE TENDER DOCUMENTS IS EFFECTIVE IMMEDIATELY.
THE AMENDMENT SHALL FORM A PART OF THE CONTRACT DOCUMENTS.

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ADDENDUM NO.1

ADDITIONS:

Please add the following document:

1. Significance of Environmental Effects Determination (attached below)

SPECIFICATIONS:

1. Delete the original specification **Section 35 20 23 – Dredging** in its entirety and replace it with revised **Section 35 20 23 – Dredging** (Attached below)

CLARIFICATION QUESTIONS:

QUESTION 1: 1. Can dredge material be disposed of at the local dump or will it be required to go to Goose Bay. i.e. Is there any particular contaminate that we should be concerned about?

RESPONSE 1: Contaminant levels were well below the guidelines meaning it is acceptable to go to a landfill. See attached DRAFT Significance of Environmental Effects Determination (SEED) document which includes a response from the province indicating that waste dredge material can go to any landfill that will accept it.

QUESTION 2: Is the dredging class A or B ?

RESPONSE 2: See attached new Specification Section 35 20 23. As per 1.15 MEASUREMENT FOR PAYMENT, the dredging class is considered to be Class B which is defined in 1.3 DEFINITIONS.

QUESTION 3 What exactly are you looking for with regards to the crib seating? Excavate to -4.0 and place crib or over excavate and install a .5 m rock mattress??

RESPONSE 3: The intent is to excavate and place cribs directly on hard bottom (scribe cribs if necessary to ensure full support is provided under the timbers) at minimum cribseat elevation of -4.0m, as indicated on the drawings. Hard bottom is assumed to be encountered near or before cribseat elevation shown. No requirement to over-excavate below -4.0m if hard bottom already encountered.

QUESTION 4: With regards to the placing of the wheel Guard. Is it acceptable to pre install on the precast at 2.4 m lengths and fasten only to the coping or will you require longer lengths with the 19mmx775mm drift bolt installed into timber cribwork

RESPONSE 4: Wheelguard to be installed as indicated on the drawings/specification into the cribwork with minimum lengths indicated.

END OF DOCUMENT

By submission of its tender, the tenderer confirms that it has read and understands the requirements expressed in all addenda and has included all costs of these requirements in its Total Tender Amount.

All other terms & conditions remain unchanged.

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PART 1 - GENERAL

1.1 DESCRIPTION

.1 This Section specifies the general requirements and execution for dredging and cribseat excavation. Suitable excavated material to be re-used and backfilled against the new structures. All unsuitable excavated material and surplus suitable material to be disposed of at an approved waste disposal facility. Suitability of existing material to be re-used is at discretion of the Departmental Representative.

1.2 RELATED SECTIONS

.1 Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

.2 Section 31 53 13 - Timber Cribwork.

1.3 DEFINITIONS

.1 Dredging: excavating, transporting and disposing of underwater materials.

.2 Cribseat Excavation: excavating, transporting and disposing of above and below water materials.

.3 Class “A” material: solid rock requiring drilling and blasting to loosen, and boulders or rock fragments of individual volumes 5.0 m^3 or more.

.4 Class “B” material: loose or shale rock, silt, sand, quick sand, mud, shingle, gravel, clay, sand, gumbo, boulders, hardpan and debris of individual volumes less than 5.0 m^3.

.5 Obstructions: material other than Class “A”, having individual volumes of 5.0 m^3 or more.

.6 CMPM: cubic metres place measurement. SQM: area in square metres projected horizontal. CMSM: cubic meters scow measurement.

.7 Debris: pieces of wood, wire rope, scrap steel, pieces of concrete and/or other waste materials.

.8 Grade: plane above which material is to be dredged.

PART 1 - GENERAL (CONT'D)

1.3 DEFINITIONS (CONT'D)

.9 Estimated quantity:
.1 Volume of material calculated to be above grade and within specified side slopes unless otherwise specified.
.2 Areas in square metres of material calculated horizontally to exist above grade and within dredge limits, unless otherwise specified.

.10 Side slope: inclined surface or plane from subgrade at side limit of dredging area to intersect original ground line outside of side limit and to be expressed as ratio of horizontal to vertical.

.11 Chart Datum: permanently established plane from which soundings or tide heights are referenced, usually Lowest Normal Tide (LNT).

.12 Coordinates:
.1 U.T.M.: universal transverse mercator projection.
.2 M.T.M.: modified transverse mercator projection.
.3 U.T.M. or M.T.M. Coordinates: plane rectangular coordinates used in grid system in which grid network is applied to U.T.M. or M.T.M. projection. Horizontal control information as indicated.

.13 Minimum Mode: mode of operation of hydrographic survey equipment where minimum sounding over length of travel between position updates will be retained in memory. Soundings taken in this mode may be shallower than actual bottom elevations due to variations in water depths due to wave action.

.14 Matrix Block: each dredge area is presented as number of 1.2 x 3.0 m long blocks. Dependent on position of sounding, block may have 0 to 4 soundings contained within it.

.15 Least of Minimum Plan: hydrographic survey plan in which least sounding in grouping of matrix blocks is plotted.

.16 Instanteous Mode: mode of operation of hydrographic survey equipment where only sounding observed at predetermined distance interval is retained in memory.

.17 Average of Instanteous Plan: hydrographic survey plan in which average sounding in appropriate grouping of matrix blocks is plotted.

.18 Lowest Normal Tide (LNT): plane so low that tide will seldom fall below it.

PART 1 - GENERAL (CONT'D)

1.3 DEFINITIONS (CONT'D)

.19 Cleared Area: area of dredging accepted as achieving the required grade and verified by a PWGSC survey.

.20 Suitable Material: material excavated from cribseat excavation and dredging. This material that meets requirements of rock fill material shall be re-used as backfill against the new wharf structures as approved by the Departmental Representative.

.21 Unsuitable Material: material excavated from the cribseat excavation and dredging, that does not meet the requirements of rock fill material, shall be disposed of at an approved disposal site.

1.4 REGULATORY REQUIREMENTS

.1 There are strict environmental procedures that must be followed during the Work.

.2 Comply with municipal, provincial and national codes and regulations relating to project.

.3 Mark floating equipment with lights in accordance with the provisions of the Canada Shipping Act Collision Regulations and Notices to Mariners.

1.5 WASTE MANAGEMENT AND DISPOSAL

.1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

.2 Contaminated sediments must be disposed of as required by Authorities having jurisdiction.

.3 Metals, wood and recyclable materials removed during the dredging activities must be diverted to appropriate recycling facilities.

PART 1 - GENERAL (CONT'D)

1.6 SCHEDULING

.1 Submit to Departmental Representative, within 2 weeks after acceptance of bid, schedule of work including time periods during which each operation involved in Work will be undertaken. At time of submission of schedule, meet with Departmental Representative to review schedule.

.2 Adhere to schedule and take immediate action to correct any slippage by effectively altering existing dredging operations or mobilizing other equipment. Notify Departmental Representative of corrective action to be taken.

1.7 LOCATION

.1 Work comprises dredging of areas as indicated on the drawings.

1.8 INTERFERENCE TO NAVIGATION

.1 Be familiar with vessel movements and fishery activities in area affected by dredging operations. Plan and execute Work in manner that will not interfere with fishing operations, marine operations and construction activities at wharf site, or access to wharves by land or water.

.2 Departmental Representative will not be responsible for loss of time, equipment, material or any other cost related to interference with moored vessels in harbour or due to other Contractor's operations.

.3 Keep the Marine Communications and Traffic Services' Centre, Fisheries and Oceans Canada, informed of dredging operations in order that necessary Notices to Mariners will be issued.

1.9 DATUM, WATER GAUGES AND TARGETS

.1 Elevations used in this specification and contract drawings are in metres referred to Canadian Hydrographic Services Survey datum.

.2 Areas to be dredged are to be referenced to vertical bench marks for each location of dredging as indicated.

PART 1 - GENERAL
(CONT'D)

1.10 FLOATING PLANT

.1 Dredges or other floating plants to be employed on this Work, to be of Canadian registry, make or manufacture, or, must receive certificate of qualification from Industry Canada, Aerospace, Defence and Marine Branch and this certificate to accompany bid submission.

.2 Requests for certification in format of form PWGSC-TPSGC 2843 (2020-11) attached to the Bid and Acceptance Form to be directed to: Director, Space & Marine Directorate, Room: 709C, CD, Howe Building, 235 Queen Street, Ottawa, Ontario, K1A0H5, tele: (343) 291-3647, email: ic.marineteam.ic@canada.ca, and to be received there not less than 14 days prior to bid closing.

1.11 INSPECTION OF SITE

.1 Contractor to visit site of Work and become thoroughly familiar with extent and nature of Work and conditions affecting Work before bidding.

.2 The Contractor will be responsible for making his own interpretation of soil conditions at any location.

.3 The Contractor shall take the necessary steps to become fully familiar with potential inclement weather conditions in this area.

1.12 SITE INFORMATION

.1 There are no previous geotechnical reports available for this site.

.2 Results of most recent soundings are included on the drawings. This data will be used for all calculations for quantity purposes. If the contractor wishes to perform own survey, a written notice must be submitted to the Departmental Representative (at least 7 days' notice) so PWGSC can verify the sounding survey before the commencement of any work.

.3 Results of prior soundings and/or geotechnical investigations are made available for bidding purposes only. It should be noted that this information may differ from site condition. Take this into consideration when submitting bid.

.4 Take necessary steps to become fully familiar with potential inclement weather and sea conditions in this area.

PART 1 - GENERAL (CONT'D)

1.13 SURVEY REQUIREMENTS

.1 Provide, at own expense, survey vessel, equipment and crew as required to set up and maintain control for location of dredge limits and to sound areas immediately after dredging to verify grade depths. Areas are to be sounded at a minimum 1.5 m x 1.5 m UTM grid to approval of Departmental Representative.

1.14 SURVEYS AND ACCEPTANCE OF WORK

.1 After acceptance of bid, Contractor has 14 days to accept sounding survey in contract.

.2 No area will be dredged prior to Departmental Representative and Contractor's mutual acceptance of pre-design survey for that area.

.3 Post-dredge survey will be undertaken by Departmental Representative upon completion of dredging. Survey will confirm if dredging is completed as specified and whether area can be considered cleared area.

.4 Contractor to re-dredge as necessary to remove all material within dredge areas which is found to be above grade.

.5 One additional survey will be undertaken at Canada's cost, for those areas not meeting acceptance criteria for dredging. All additional surveys required to clear areas will be undertaken by the Departmental Representative at Contractor's cost.

1.15 MEASUREMENT FOR PAYMENT

.1 Harbour Dredging: Dredging of Class "B" materials (below L.N.T.) will be measured in cubic metres, in-place measurement [CMPM], determined from existing seabed elevation established from the current sounding survey down to grade depth elevation within limits specified on the drawings. The pay limits for dredging is the outside face of the launchway as indicated on Sheet C2 of the drawings down to -4.0m. Quantities will be determined from a sounding survey performed by the PWGSC Survey Crew after dredging survey is completed by using electronic sounding and DGPS positioning equipment. No payment will be made for over-dredging. PWGSC will conduct an interim and final survey. The Contractor will formally request at least seven (7) days in advance that the final after-dredging survey be performed upon completion of dredging. The timing of the survey may be dependent on weather and other circumstances. If the survey and inspection shows that all material has not been removed, the Contractor is to re-dredge to obtain grade depth. The Contractor will perform a sounding survey, using a method approved by the Departmental Representative to verify that the

PART 1 - GENERAL (CONT'D)

1.15 MEASUREMENT FOR PAYMENT (CONT'D)

.1 (cont'd)
specified dredge depth has been obtained. The Departmental Representative will then preform a third survey for final verification of dredge depth. This third sounding survey and any subsequent surveys will be at the cost of the Contractor.

.2 All dredging slope pay limits to be 1.5H:1.0V, unless specifically indicated otherwise. Dredge limit slopes are for measurement for payment purposes only. Contractor to dredge in such a manner as to ensure stability of slopes. The Contractor is cautioned to make their own assessment of volume of material that may have to be removed outside the pay limits shown on the drawings, as there will be no additional payment for dredging outside the pay limits on the drawings.

.3 No separate measurement for payment will be made for cribseat excavation of Class "B" materials required to bring the launchway cribseat elevation to the depths indicated on the drawings. Include all costs associated with excavation for cribseat, outside the Harbour Dredge limits, incidental to the unit price for treated timber cribwork.

.4 All operations in connection with the field positioning of dredging equipment will be considered incidental to the work and will not be measured separately for payment.

.5 There will be no additional payment for delays incurred during fishing seasons. Contractor should contact the Harbour Authority to determine schedule of operations.

.6 There will be no additional payment for the Contractor's survey vessel, equipment and crew or diving services.

.7 There will be no additional payment for delays caused by vessel traffic.

.8 There will be no additional payment for the backfilling of suitable excavated material. Include the cost for temporary storage, placement and compaction of the suitable excavated material to complete the work as specified in the lump sum price arrangement.

.9 There will be no additional payment for disposal of unsuitable and surplus dredge/excavated material, using water tight boxes at locations specified or as directed by the Departmental Representative.

.10 There will be no additional payment for down time.

PART 1 - GENERAL (CONT'D)

1.15 MEASUREMENT FOR PAYMENT (CONT'D)

.11 The contractor will be responsible for levelling and cleaning up of the disposal site after all the material has been disposed and there will be no additional payment.

.12 There will be no additional payment for mobilization and demobilization of dredging/excavation equipment.

.13 Contractor to obtain and supply Departmental Representative with all applicable approvals for proposed dredge/excavated material disposal site prior to starting any dredging.

.14 Payment will include disposal of dredge/excavated material to an approved waste disposal facility as approved by the Departmental Representative.

.15 Removal of infilling material will not be measured for payment.

.16 Removal of obstructions, authorized by Departmental Representative, will not be measure separately for payment and will be included incidental to dredging.

PART 2 - PRODUCTS

2.1 DREDGING EQUIPMENT

.1 Contractor to determine required equipment necessary to dredge material specified and to dispose of dredged material to an approved waste disposal facility.

PART 3 - EXECUTION

3.1 GENERAL

.1 Mark floating equipment with lights in accordance with the provisions of the Canada Shipping Act Collision Regulations and maintain radio watch on board.

.2 Place and maintain buoys, markers and lights required to define work and disposal areas.

PART 3 - EXECUTION (CONT'D

3.1 GENERAL (CONT'D)

.3 Lay out Work from control points and baselines established by Departmental Representative. Be responsible for accuracy of Work relative to established bench marks and baseline. Provide and maintain electronic position fixing and distance measuring equipment, laser transits and such other equipment as normally required for accurate dredging control.

.4 Establish and maintain water level gauges and/or tide boards in order that proper depth of dredging can be determined. Locate gauges and/or tide boards so as to be clearly visible.

.5 Establish and maintain on-land targets for location and definition of designated dredge area limits. Targets to be suitable for control of dredging operations and locating soundings. Remove targets on completion of Work.

.6 Dredge to depths required to reach grade depth, as indicated on the drawings. Required final dredge depths to be agreed on with Departmental Representative.

.7 Remove materials above specified grade depth, within limits indicated. Material removed from below grade depth or outside specified area is not part of Work.

.8 Remove shoaling which occurs as result of Work at no expense to Canada. Where shoaling occurs, Contractor to return the sea bottom elevations outside the footprint of the work to its original preconstruction elevations as determined by the pre-construction survey. This includes all areas over or near all dredge operation, excavation, and rock placement activities including barge work, dump scow routing to shore, temporary access infilling, transfer to shore operations as well as areas covered by silt plumes. As a minimum, sea bottom elevations will be compared by PWGSC survey crew after completion of Contractors work and their confirmation of the above restoration for all areas within 15 meters of any of the above activities.

.9 Remove material cast-over on surrounding area and dispose of it as dredged material. Do not cast-over material unless authorized by Departmental Representative.

.10 Remove infilling in dredge areas which occurs prior to acceptance by Departmental Representative.

.11 Immediately notify Departmental Representative upon encountering object which might be classified as obstruction. By-pass object after clearly marking its location and continue Work.

PART 3 - EXECUTION (CONT'D

3.1 GENERAL (CONT'D)

.12 Installation of temporary dredges roads for dredging will not be permitted.

.13 Dredging from existing wharves will not be permitted.

.14 Dredging from new crib construction will not be permitted.

3.2 DISPOSAL OF DREDGED MATERIAL

.1 Dispose of all dredged material by depositing it at an approved waste disposal facility, and placing in such a manner as approved by the Departmental Representative and conforming to municipal, provincial and federal requirements.

.2 Trucks used to haul dredged material must have watertight boxes. Contractor is responsible for obtaining and payment of dumping permit fees if applicable.

3.3 DREDGING IN VICINITY OF STRUCTURES

.1 Dredging in the vicinity of existing structures may be required to facilitate construction of new structures. The contractor is solely responsible for protection of all existing structures and shall determine what measures need to be taken during construction activities.

3.4 RE-DREDGING

.1 Re-dredge unsatisfactory work and verify depths with additional soundings or sweeping to approval of Departmental Representative.

3.5 CO-OPERATION AND ASSISTANCE TO DEPARTMENTAL REPRESENTATIVE

.1 Co-operate with Departmental Representative on inspection of Work and provide assistance requested.

.2 On request of Departmental Representative, furnish use of such boats, equipment, labour and materials forming ordinary and usual part of dredging plant as may be reasonably necessary to inspect and supervise Work.

IMPACT ASSESSMENT ACT - SIGNIFICANCE OF ENVIRONMENTAL EFFECTS DETERMINATION (SEED) FORM
BASIC OR NON-BASIC PROJECT

The purpose of this form is to summarize and document the significant adverse environmental effects of a project as per s.82 of the *Impact Assessment Act* (IAA). Consult the Basic/Non-Basic Project Requirements (s 3.6 of Departmental Procedure) for details and follow the SEED Guidelines (Entry Instructions & Linkages to PATH Record Keeping and IAA Registry). All completed and signed SEED documents shall be uploaded to PATH and the SCHED drive.

GENERAL INFORMATION

1. Project Title: Launchway and Laydown Area Construction, Charlottetown, Labrador	
2. Proponent: Fisheries and Oceans Canada-Small Craft Harbours (DFO-SCH)	
3. Other Contacts: Public Services and Procurement Canada (PSPC)	**4. Role of each contact:** OGD Consultant
5. Source (Contact): Paul Curran, Regional Engineer, DFO-SCH	
6. Received Date or Assessment Start Date:	
7. PATH No(s).:	**8. DFO File No:**
9. TC File No.: TC File No: ATL0063 **10. CNWA No:** 2021-205838	**11. Canadian Impact Assessment Registry Reference No.:**

PROJECT DESCRIPTION AND JUSTIFICATION

12. Project Location: The Project site is located in the community of Charlottetown on the southeast coast of Labrador, in White Bear Arm. Site coordinates are 52°46'45.14"N and 56° 7'24.22"W and it is accessible via local roads from provincial route 514. A map and photos of the project location are provided an Appendix A.

13. Project Summary: This project consists of the construction of a launchway and a boat storage/laydown area. Prior to construction there will be some site cleanup required to remove existing groins, native timber and the underwater remnants of an old slipway. A new laydown area will be constructed adjacent to the existing gravel road consisting of treated timber cribwork (including two concrete filled cribs) reinforced concrete pre-cast slabs, slab-on-grade, and treated dimension timber. Armour stone will be placed on the slopes of the new infrastructure. To facilitate the placement of new cribwork and to provide adequate draft for the new launchway, some dredging will be required.

Completion of this work will ensure the safe launching, retrieving and storage of local fishing vessels. The project will enable the harbour to play its role in the community's socio-economic development and contribute to the activity of the regional economy.

14. Review of Alternatives: N/A

PROJECT REVIEW

15. Rationale for the Application of Section 82 of IAA:

Project is on federal land and;

☒ DFO-SCH is proposing the project, as the proponent

☐ DFO-SCH is proposing to issue *Fisheries Act* Authorization, *Species at Risk Act* Permit or other regulatory approval

☐ DFO-SCH is proposing to provide financial assistance to another party to enable the project to proceed

☐ DFO-SCH is proposing to grant a license or interest in federal land to enable the project to proceed

☐ Other

16. Primary Authority and Rationale for Involvement: DFO-SCH is the proponent

17. Other Authorities and Rationale for Involvement: Transport Canada – Navigation Protection Program - *Canadian Navigable Waters Act* and Environmental Programs and Indigenous Relations – s.82 of the IAA review

18. Other Contacts and Nature of Response:

Fisheries and Oceans Canada – Fish and Fish Habitat Protection Program (DFO FFHPP)

DFO FFHPP will review the project and provide advice regarding the Implementation Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat. A determination will be made on whether or not the project is likely to result in the death of fish and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*.

Newfoundland and Labrador Department of Environment, Climate Change and Municipalities, Water Resources Management Division (NLDECCM WRMD) – SCH will apply for a Permit to Alter a Body of Water for dredging and infilling components of the project.

Service NL (SNL) - SCH will apply for approval for the disposal of dredged material at an approved landfill.

19. Nature of Project:

☐ Building and Property Development
☐ Mines and Minerals
☒ Ports and Harbours
☐ Oil and Gas
☐ Highways and Roads
☐ Water Management
☐ Recreation and Tourism
☐ Remediation and conservation
☐ Maintenance Activities (fences, walls)
☐ Nuclear Energy
☐ Bridges
☐ Waste Management
☐ Agriculture
☐ Forestry
☐ Airport and Airfields
☐ Dams and Reservoirs
☐ Railways
☐ Hydroelectric Energy
☐ Alternative Energy
☐ Other, not otherwise specified

20. Scope of Project and the Assessment (details of the project subject to review):

Project Description

Construction/Installation
The scope of work for this project consists of the construction of a launching ramp and a boat storage/laydown area. Prior to construction there will be some site cleanup required to remove existing groins, timber and the remnants of an old slipway. This will include removal of armour stone, native timber, an underwater concrete block, various debris within the project footprint, and clearing and grubbing of a small shoreline area.

A new laydown area measuring approximately 2675m^2 will be constructed along the edge of the existing gravel road extending outward into the water. Armour stone will be placed on the slopes of the laydown area and along the sides of the new launchway.

A new 6.1m wide x 36.2m long launchway will be constructed from treated timber cribwork (including two concrete filled cribs), reinforced concrete pre-cast slabs, slab-on-grade, and treated dimension timber. The launchway will extend outward from the new laydown area.

This scope of work be done using heavy equipment such as excavators, dump trucks, loaders and graders working from land.

Completion of this work will ensure the safe launching, retrieving and storage of local fishing vessels. The project will enable the harbour to play its role in the community's socio-economic development and contribute to the activity of the regional economy.

Dredging
To facilitate the placement of new cribwork and to provide adequate draft for the new launchway, some excavation will be required. The seabed will be dredged to a depth of -4.0m LNT to achieve the required depth which would see the removal of approximately 230m^3 of dredge material. Dredged material will be reused in construction, where possible, and any excess will be disposed of at an approved facility.

This scope of work will likely be done using heavy equipment such as excavators and dump trucks working from land.

Schedule

The proposed work is expected to commence Spring 2022, pending funding and approvals. The work is expected to be completed within 30 weeks.

Operation / Maintenance
DFO-SCH's Environmental Management Plan (EMP) and site-specific Emergency Response Plans cover operational aspects of environmental management at Small Craft Harbour facilities and constitute the basis for the environmentally responsible management of harbour operations (i.e., fuelling, waste disposal, activities at the property and on the water). The proposed physical works will adhere to these environmental management standards established by DFO-SCH. The proposed project is intended to improve continued operations at the Charlottetown SCH facility.

Maintenance of the Small Craft Harbours infrastructure will be conducted on an as-needed basis and will undergo separate impact assessment and legislative review as future stand-alone project(s).

Environmental effects resulting from the operation and maintenance of the proposed physical works are not considered further in this assessment.

Abandonment / Decommissioning
There is currently no plan to decommission or abandon the Charlottetown SCH laydown and launchway. The very nature of the proposed project is intended to ensure the viability and safety of the harbour facility primarily for local fisheries and navigation.

At the time of decommissioning, DFO-SCH will develop a site specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and DFO policies. The decommissioning of facilities would undergo separate impact assessment and legislative review as future stand-alone project.

Environmental effects resulting from the abandonment or decommissioning of the proposed physical works or the SCH facility are not considered further in this assessment.

Accidents and Malfunctions

Accidents and malfunctions have the potential to occur when undertaking a physical activity. Potential environmental effects resulting from accidents and malfunctions over the course of the proposed project are, therefore, considered in this assessment.

ENVIRONMENTAL SETTING

20. Environment Description:

Physical Environment

The project is located in the community of Charlottetown on the southeast coast of Labrador, in White Bear Arm at coordinates 52°46'45.14"N and 56° 7'24.22"W. This new site is approximately 550m North Northeast of the existing SCH facilities comprised of two sites. One site includes a marginal wharf, three floating docks, a boat launch and, a gravel access road which extends out to a single crib. The second site consists of two wharves and a concrete launchway which sits adjacent to a locally owned and operated shrimp plant. Commercial and recreational fishing activities operate out of the facility. The surrounding shoreline consists primarily of pebble-cobble material. The general surrounding area is well developed with marine infrastructure and a is low to moderate slope with a sparse cover of native grass and native shrub. Sand, gravel, and cobble with small areas of bedrock outcrops are predominant along the shoreline outside the project limits. Anthropogenic features of the Project site includes several rock groins with native timber boat runners and the site also borders a gravel road. A topographic map and site photos are provided in Appendix A.

Canadian Climate Normals (1981-2010) for the Cartwright weather station (53° 42' 30" N, 57° 02' 06" W) indicate that the project area receives an average of 616.8 mm of rain and 462 cm of snow annually. Extreme precipitation events of up to 88.9 mm and extreme snow depths of 351 cm have been recorded. Temperatures range from an extreme minimum of -37.8°C to an extreme maximum of 36.1°C. The daily average temperature for the Cartwright weather station is 0.0°C.

Biological Environment

Fauna within the project area is limited to near shore fish species such as cunner, tomcod, winter flounder, and lobster. Due to the rocky habitats, lobster is likely to occur near the project site. While marine mammals such as seals and whales are common in the general area, their presence in the immediate project site is unlikely. There are no scheduled salmon rivers or known terrestrial wildlife habitats in the immediate vicinity of the project. There are a variety of small mammals and songbirds found in the general area. Seagulls, crows, turrs, puffins, eagles, hawks, and osprey are common throughout southern Labrador's coastal habitats, including the general project site.

Charlottetown is located in the Paradise River Ecoregion that covers a portion of the southeastern corner of Labrador. This Atlantic Ocean-influenced boreal ecoregion is marked by foggy, cool summers and short, relatively moderate winters along the coast and colder inland.

The area is dominated by stands of balsam fir and black spruce with an understory of feathermoss on moist upland slopes. Dry sites are dominated with black spruce, kalmia health and lichens. Disturbed areas te4nd to be dominated by black spruce, paper birch and aspen. The ecoregion ranges from sea level to about 350 masl in elevation and is composed predominantly of granite rocks. Eskers and river terraces are the common types of fluviolglacial landforms in

the region. Characteristic wildlife includes caribou, moose, lynx, black bear, and red fox. Fishing and recreation are dominant activities in this region.

Species at Risk (Aquatic and Terrestrial)

A search of the Atlantic Canada Conservation Data Centre (ACCDC) database was conducted on October 27, 2021 that produced a list of rare / unique species (i.e., plants and animals) observed within a 5 km buffer zone (standard ACCDC procedure) of the site of the proposed work. All species were cross-referenced with Schedule 1 of the Species at Risk Act (SARA). Results showed the following Schedule 1 Species at Risk:

- Boreal Felt Lichen, *Erioderma pedicellatum* (Special Concern),
- Red Crossbill, *Loxia curvirostra* (Endangered),
- Rusty Blackbird, *Euphagus carolinus* (Special Concern), and
- Newfoundland Marten, *Martes americana* (Threatened).

The boreal population of boreal felt lichen is endemic to Newfoundland and Labrador. The boreal felt lichen habitat needs are believed to mainly be associated with coniferous trees in a very restricted type of cool moist suboceanic habitat. The mature forest habitat in which the boreal felt lichen is found is characterized by distinct herbaceous flowering plants and cryptogam species.

This subspecies of Red Crossbill is endemic to eastern Canada. There have been sporadic reports of this subspecies in other Atlantic provinces but it is likely that they are restricted to the island of Newfoundland. Red Crossbill habitat needs are believed to be mainly associated with conifer forests, with the highest numbers of observations occurring in the older, mature forests of western Newfoundland.

Approximately 70% of the world's population of Rusty Blackbirds is in Canada, including about 40 000 birds in the Atlantic Provinces. Rusty Blackbird are associated with forest wetlands, including slow-moving streams, peat bogs, sedge meadows, and ponds, dominated by conifer forest and scrub edges. In the winter, they occur in damp woodlands and cultivated fields.

The subspecies of Newfoundland Marten is found only on the Island of Newfoundland. Marten appear to prefer habitat with a structure associated with an over-mature forest. There they find older trees with a number of dying or dead trees scatted on the forest floor or leaning on other trees. They appear to prefer thick shady woods with a dense canopy and may avoid large openings or clearings. For denning and nesting sites, marten use hollow trees, stumps, logs and rock crevices.

A search of the Government of Canada Open Maps database was conducted on October 27, 2021 that produced a list of rare/unique species (i.e., plants and animals) with distribution ranges near the site of the proposed work. All species were cross-referenced with Schedule 1 of the Species at Risk Act (SARA). Results showed the following Schedule 1 Species at Risk with distribution ranges that are within 5 km of the project site:

- Wolverine, *Gulo gulo* (Eastern population) (Special Concern),
- Short–eared Owl, *Asio flammeus* (Special Concern),
- Polar Bear, *Ursus maritimus* (Special Concern),
- Bank Swallow, *Riparia riparia* (Threatened),
- Harlequin Duck, *Histrionicus histrionicus* (Special Concern),
- Red–necked Phalarope, *Phalaropus lobatus* (Special Concern).

In North America, Wolverines are found in coniferous forests in undisturbed wilderness, far from human presence. Wolverines occur in greater densities where food is abundant and habitats are diverse.

Polar Bears are coastal Labrador inhabitants and belong to the Davis Strait sub-population. The primary habitat for polar bear is sea ice as it provides the seasonal platform from which bears hunt, travel, mate, and, in some areas, den.

The Bank Swallow will nest primarily in lowland areas along ocean coasts, rivers, streams, lakes, reservoirs and wetlands. In coastal areas, nesting habitat is found in wind eroded banks, cliffs, and bluffs, and in vertical faces created by storms and tidal action. Nesting may also occur in artificially-created sites such as sand and gravel quarries and road cuts. The Bank Swallow will typically excavate its nest in crumbly, alluvial soils. Foraging occurs on open water and in wetlands, grasslands,

riparian woodlands, agricultural areas, shrublands and sometimes in upland wooded areas. Habitats used during spring and fall migration includes various open and water-associated habitats. Little is known about wintering habitat.

Short-eared owls are considered breeding migrants in Newfoundland and Labrador but on average they are an uncommon summer resident. The Short-eared Owl makes use of a wide variety of open habitats, including arctic tundra, grasslands, peat bogs, marshes, sand-sage concentrations and old pastures. It also occasionally breeds in agricultural fields. Preferred nesting sites are dense grasslands, as well as tundra with areas of small willows.

The Harlequin Duck is a small subarctic sea duck and the eastern population winter off the coast of Newfoundland and Labrador. This species will primarily breed in fast flowing rivers in Québec and Newfoundland and Labrador. Wintering habitat consists of rocky coastline, subtidal ledges, and exposed headlands. Harlequin Ducks are tolerant of moderate levels of disturbance but they will abandon a site when the disturbance becomes chronic. Most of the breeding locations for this species in eastern Canada are remote and free from human disturbance.

The Red–necked Phalarope is a small shorebird that occurs in all across Canada as either breeders or migrants. This species breeds in freshwater environments and spends much of its non-breeding season at sea. During migration, Red-necked Phalaropes are primarily pelagic, but may also stop over on inland wetlands or other non-riverine water bodies. Observations of stopover sites include estuaries, salt marshes, bays, inlets, pools, ponds, lakes, ditches, irrigated rice fields, intertidal lagoons, sewage and evaporation ponds, sandy shores, and prairie sloughs.

A search of the DFO Aquatic Species at Risk database was conducted on October 18, 2021 which produced a list of aquatic species at risk and the presence of their critical habitat potentially found within a 1km buffer (standard NASAR procedure) of the site of the proposed work. No critical habitats for aquatic species at risk were identified in this buffer zone. Results showed that the project site is within the defined distribution range of the following aquatic species at risk:

- Blue Whale (Atlantic population - Endangered),
- Fin Whale (Atlantic population - Special Concern),
- Leatherback Sea Turtle (Atlantic population - Endangered),
- Northern Wolffish (Threatened), and
- Spotted Wolffish (Threatened).

Human Environment

Charlottetown is a small town situated on the Southeast coast of Labrador with a population of approximately 300 residents. Charlottetown is an indigenous Nunatukavut community. The harbour is utilized by 39 transient vessels that are primarily engaged in the shrimp, turbot and cod fisheries.

OTHER CONSIDERATIONS

21. Adverse Impact on the rights of Indigenous People of Canada:

PSPC and Transport Canada carried out an Indigenous Assessment on behalf of DFO-SCH at Charlottetown in accordance with DFO-SCH's Preliminary Duty to Consult Assessment Guide. This Guide is intended to provide basic information to DFO-SCH and to assist its Program Managers in making informed, prudent decisions that take into account statutory and other legal obligations, as well as policy objectives, related to Indigenous and treaty rights. The Supreme Court of Canada has held that the Crown has a duty to consult and, where appropriate, accommodate when the Crown contemplates conduct that might adversely impact potential or established Indigenous or treaty rights. While there may be other reasons to undertake consultations (e.g., good governance, policy-based, etc.), three elements are required for a legal duty to consult to arise:

1. There is contemplated or proposed Crown conduct.
2. The Crown has knowledge of potential or established Indigenous or treaty rights.
3. The potential or established Indigenous or treaty rights may be adversely impacted by the Crown.

Based on a preliminary assessment conducted by PSPC, on behalf of DFO-SCH and in conjunction with Transport Canada, the legal duty to consult does exist in this case as; the Crown identifies Charlottetown as an Indigenous Nunatukavut community; there are potential or established Indigenous or treaty rights that may be adversely impacted by the Crown in completing the Charlottetown project. A consultation letter was sent to the community on April 14th to hear and understand the views of the Nunatukavut on this matter. Kathleen Simms, the Environmental Analyst for the Nunatukavut Community Council did reach out for additional information on the project. The requested information was provided and there has since been no correspondence on the project.

22. Indigenous knowledge provided in respect of the project:

Given the small scale, the temporal and spatial bounds and the current environmental setting of the proposed works, Indigenous Knowledge was not sought for this project.

23. Community knowledge provided in respect of the project:

Given the small scale, the temporal and spatial bounds and the current environmental setting of the proposed works, public consultation beyond that already discussed (Section 21) was not deemed warranted. Any available community knowledge is discussed in the applicable Environmental Description setting (Section 20).

24. Summary of public notification:

The project was posted to the public Navigation Protection Project Registry on January 11, 2022 and the public *Impact Assessment Act* Registry on January 7, 2022. Both notices were posted for the required 30-day public comment period. No comments were received during that time.

ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

25. Evaluation of Environmental Effects and Determination of Significance:

Methodology

The environmental effects evaluation methodology used in this form focuses the evaluation of those environmental components of greatest concern. Other concerns identified should also added on to the existing form. The Valued Components (VCs) most likely to be affected by the project as described are indicated in *Table 1: Potential Project / Environment Interactions Matrix*. VCs were selected based on ecological importance to the existing environment, the relative sensitivity of environmental components to project influences and their relative social, cultural or economic importance. The potential impacts resulting from the interactions are also identified in Table 1 as positive or negative in nature.

Gender-based Analysis Plus (GBA+) provides a framework to describe the full scope of potential positive and negative effects under the *Impact Assessment Act*. The application of GBA+ to impact assessment seeks to understand, describe and, where possible, mitigate adverse impacts on diverse populations. GBA+ is an analytical tool that will be utilized during the undertaking of this assessment as per the guidance provided by the IAA on *Gender-based Analysis Plus in Impact Assessment*. As such, the intention is to ensure that, as applicable, multiple community-relevant, diverse subgroups have been considered and proposed mitigation, where relevant, clearly addresses any issues identified.

The VC interactions identified in Table 1 must be supplemented with a determination of significance for each resulting effect in order to assign adequate measures to mitigate a negative effect if negative and, if possible, enhance a positive effect. The significance of project-related impacts is determined in consideration of the impact's frequency, duration, and geographical extent as well as magnitude relative to natural or background levels, and whether they are reversible in nature. These criteria are described in *Table 2: Assessment Criteria for Determination of Significance*.

A description of each potential effect, its' projected significance and assigned mitigation measures are detailed in Table 3 of Section 26.

The evaluation of effects, the determination of significance of the environmental effects and assignment of mitigation measures are all based on:

- information provided by the proponent;
- a review of project related activities;

- an appraisal of the environmental setting, and identification of resources at risk;
- the identification of potential impacts within the temporal and spatial bounds;
- community / indigenous knowledge;
- professional judgement of the assessor; and
- specialist advice/knowledge from experts.

Scoping

This environmental effects evaluation considers the full range of project / environment interactions and the environmental factors that could be affected by the project as defined above and the significance. The proposed project is anticipated to commence within the aforementioned timeframe; however, this timeline is subject to approvals and funding. As such, the temporal scope for the proposed project cover a 5-year period from the time of this assessment in order to account for this uncertainty. This assessment should, therefore, be considered accurate until October 20, 2026 unless a review of the information presented in this assessment prior to the end of the 5-year period prompts a re-assessment to ensure accuracy (e.g., legislative changes, changes in physical, biological, socio-economic features, input from ongoing Indigenous consultations, etc.).

As previously noted, physical activities such as maintenance, repair, replacement, or decommissioning of the proposed physical works are subject to their own stand-alone assessment at the time of need, therefore, are not considered further in this assessment.

Environmental effects of the project on navigation are taken into consideration as part of the SEED only when the effects are indirect, i.e. resulting from a change in the environment affecting navigation. Direct effects on navigation are not considered in the SEED, but any measures necessary to mitigate direct effects will be included as terms and conditions associated with work approved or permitted pursuant to the *Canadian Navigable Waters Act* (*CNWA*).

The coastal environment surrounding this marine based project does not provide the appropriate habitat for the Boreal Felt Lichen, Red Crossbill, Rusty Blackbird or the Newfoundland Marten, so there is no negative interaction expected between these species and the project. The effects of the project on these species are not considered further in this assessment.

Review of the habitat preferences for the Wolverine, Short–eared Owl, Bank Swallow, Harlequin Duck and Red–necked Phalarope shows that the environment surrounding this marine based project within in a residential area does not provide the appropriate habitat for these species. There is no negative interaction expected between the species and the project and therefore the effects of the project on this list of species are not considered further in this assessment.

Project activities will be conducted with all equipment working from land and with minimal dredging in a nearshore environment. There is no negative interaction expected between the project and the listed aquatic species at risk. The effects of the project on these species are not considered further in this assessment.

Table 1: Potential Project / Environment Interactions Matrix

Valued Components (VCs)	*Section 7(1)(a) (Environmental Legislation)*			*Section 7(1)(c) and (d) (Indigenous Interests)*				*Other Impacts & Due Diligence*											
Project Phase / Physical Work/Activity	*Fish (Fisheries Act)*	*SARA*	*Birds (MBCA)*	*Physical and Cultural Heritage*	*Land and Resource Use for Traditional Purposes*	*Structure, Site, or Thing of HAPA Significance*	*Health, Social or Economic Conditions*	*Physical and Cultural Heritage*	*Structure, Site, or Thing of HAPA Significance*	*Health, Social or Economic Conditions*	*Water (marine, ground, surface, drainage, water levels, flow etc.)*	*Wetlands*	*Terrestrial Species* and Habitat*	*Aquatic Species* and Habitat*	*Terrestrial Soils*	*Marine Sediments*	*Air Quality*	*Sensory Disturbance (air/water, noise and vibration)*	*Others (i.e. land/landscapes)*
Wharf Reconstruction, Charlottetown, NL																			
Construction/Installation	-	-					-			-	-			-		-	-	-	
Dredging	-	-					-			-	-			-		-	-	-	
Accidents / Malfunctions	-	-					-			-	-			-		-			

*Non-Species at Risk
HAPA = Historical, Archaeological, Paleontological or Architectural
N/A = Not Applicable
"+" = potential positive interaction; "-" = potential negative interaction; "+/-"= potential positive and negative interactions.

Table 2: Assessment Criteria for Determination of Significance

Magnitude	Magnitude, in general terms, may vary among issues, but is a factor that accounts for size, intensity, concentration, importance, volume and social or monetary value. It is rated as compared with background conditions, protective standards or normal variability.	
	Small	Relative to natural or background levels
	Moderate	Relative to natural or background levels
	Large	Relative to natural or background levels
Reversibility	Reversible	Effects can be reversed
	Irreversible	Effects are permanent
Geographic Extent	Immediate	Confined to project site
	Local	Effects beyond immediate project site but not regional in scale
	Regional	Effects on a wide scale
Duration	Short-term	Between 0 and 6 months in duration
	Medium-term	Between 6 months and 2 years
	Long-term	Beyond 2 years
Frequency	Once	Occurs only once
	Intermittent	Occurs occasionally at irregular intervals
	Continuous	Occurs on a regular basis and regular intervals

26. Potential Environmental Effects and Mitigation Measures for the Project:

Table 3: Description and Significance of Potential Environmental Effects and Recommended Mitigation Measures

Potential Environmental Effects	Mitigation Measures
Valued Component: Fish	

Construction/Installation:
• Sedimentation as a result of construction activities may negatively affect fish and quality of potential fish habitat within the Project site. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.*
• Disturbance of fish species from equipment use in the marine environment. Significance: *Moderate, Reversible, Local, Short-term, and Intermittent.*
• Project activities will result in the destruction of potential fish habitat. *Significance: Moderate, Reversible, Immediate, Medium-term, and Once.*
 	
Dredging:
• Sedimentation as a result of construction activities may negatively affect fish and quality of potential fish habitat within the Project site. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.*
• Marine sediments are impacted with PHCs and PAHs. Improper handling of impacted sediment has the potential to negatively impact fish and fish habitat. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent*
• Disturbance of fish species from equipment use in the marine environment. Significance: *Moderate, Reversible, Local, Short-term, and Intermittent.*
• Temporary alteration of fish habitat from the removal of benthic sediments within the dredge footprint. Significance: *Moderate, Reversible, Immediate, Medium-term, and Once.*
• Project activities will result in the destruction of potential fish habitat. *Significance: Moderate, Reversible, Immediate, Medium-term, and Once.*
 	
Accidents/Malfunctions:
• Release of hazardous materials and/or heavy machinery fuel/fluids into waterway. *Significance: Moderate, Reversible, Immediate, Short-term, and Once.*
	• Limit the duration of in-water works to only activity related to the project elements so that it does not diminish the ability of fish to carry out one or more of their life processes (spawning, rearing, feeding, migrating).
	• Conduct in-water undertakings and activities during periods of low tide and low wind/wave conditions.
	• Implement erosion and sedimentation controls as needed to avoid the introduction of sediment into any waterbody during all phases of work
	  ○ Install effective erosion and sediment control measures prior to beginning work in order to stabilize all erodible areas;
	  ○ Regularly inspect and maintain the erosion and sediment control measures and structures during all phases of the project;
	  ○ Regularly monitor the watercourse for signs of sedimentation during all phases of the project and take corrective action;
	  ○ Keep the erosion and sediment control measures in place until all disturbed ground has been permanently stabilized;
	  ○ Remove all exposed, non-biodegradable sediment control materials once the site is stabilized;
	  ○ Schedule work to avoid wet, windy, and rainy periods that may result in high flow volumes and/or increase erosion and sedimentation;
	• Operate machinery on land in stable, dry areas or from stable floating platforms.
	• All materials placed in or near water should be clean and free of fines or any other deleterious substance and of sufficient size to resist displacement by wave action. Dredge material may be re-used for the laydown area provided it is placed/capped within a rock berm to avoid sedimentation.
	• Armour stone should be blocky, angular shape and comprised of mixed gradation so that the smaller rock fill the voids between the larger rock to provide compaction and stability.
	• Rock material should not be end dumped; rather, it should be placed on station using an excavator or similar equipment.
	• When works are completed, shoreline and approaches should be restored to original condition.
	• Be aware of AIS species in the area and take precautions with respect to any vessel traffic and gear movement between affected and unaffected areas to prevent introductions and spread:
	  ○ All equipment used in water should be cleaned, drained and dried on land before and after use for the purposes of preventing the introduction or spread of aquatic invasive/non-indigenous species; and
	  ○ Report any AIS and non-indigenous species to DFO at 1-855-862-1815 or AISEAE.XNFL@dfo-mpo.gc.ca .
	• Cement will be poured and formed away from the shoreline to reduce the potential of runoff or an accidental release of concrete mixture to the marine environment.

	• On site, crews must have emergency spill clean-up equipment adequate for the activity involved, and it must be on site. Spill equipment will include, as a minimum, at least one 250 L (i.e., 55 gallon) overpack spill kit containing items to prevent a spill from spreading; absorbent booms, pillows, and mats; rubber gloves; and plastic disposal bags. All spills or leaks must be promptly contained, cleaned up, and reported to the 24-Hour Environmental Emergencies Report System (1-800-565-1633). Note that this applies to spills to the aquatic environment or anything on land over 70 litres (L). • Dredged material must be transported in water tight trucks, containers or other suitable means to prevent leakage during transport.
Valued Component: SARA	
Construction/Installation: • Construction activities at the site or natural events (e.g., rainfall) could result in disruption of endangered species. Significance: Small, Reversible, Immediate, Short-term, and Intermittent. • Project activities may result in the damaging or destruction of the residence of an endangered species. Significance: Moderate, Reversible, Immediate, Medium-term, and Once.	• All work to be conducted in accordance with the *Species at Risk Act*, which outlines that no protected species, their residence and critical habitat be moved or obstructed during the construction or operation phase of the project. • Species listed under the Species at Risk Act shall not be approached throughout the construction or operation phase of the project. • All construction materials shall be removed from the site upon project completion.
Valued Component: Health, Social or Economic Conditions	
Construction/Installation: • Potential for safety hazards to workers during construction activities. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* ***Dredging:*** • Potential for safety hazards to workers during dredging. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Marine sediments may be impacted with PHCs and PAHs. Improper handling of impacted sediment has the potential to negatively impact human health. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* ***Accidents/Malfunctions:*** • Accidental release of PHC and PAH impacted sediment. Improper handling/cleanup of impacted sediment has the potential to negatively impact human health. *Significance: Moderate, Reversible, Immediate, Short-term, and Once*.	• Site access must be restricted to authorized personnel only. • Project employees will be equipped with the proper Personal Protective Equipment for Project tasks, and work will comply with provincial occupational health and safety regulations. • Develop a response plan that is to be implemented in the event of an accidental sediment release or spill of a deleterious substance and keep an emergency spill kit on site with staff trained in its use. ○ On site, crews must have emergency spill clean-up equipment adequate for the activity involved, and it must be on site. Spill equipment will include, as a minimum, at least one 250 L (i.e., 55 gallon) overpack spill kit containing items to prevent a spill from spreading; absorbent booms, pillows, and mats; rubber gloves; and plastic disposal bags. All spills or leaks must be promptly contained, cleaned up, and reported to the 24-Hour Environmental Emergencies Report System (1-800-565-1633). Note that this applies to spills to the aquatic environment or anything on land over 70 litres (L). • Weather conditions are to be assessed on a daily basis to determine the risk of extreme weather in the project area. Avoid work during periods which Environment and Climate Change Canada has issued rainfall or wave warning for the work area.
Valued Component: Water (marine, ground, surface, drainage, water levels, flow, etc.)	
Construction/Installation: • Sedimentation as a result of construction activities may negatively affect water quality at the immediate Project site. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Construction activities taking place near the shoreline may result in runoff/erosion. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.*	• Reduce duration of in-water work wherever possible. • Construction activities that involve in-water work will be conducted during periods of low flow, or at low tide, to further reduce the potential for effects on water quality. • An Erosion and Sediment Control Plan will be developed for the site that minimizes risk of sedimentation to the marine environment. • Construction material and debris are not to become waterborne. Do not dispose of any materials or waste into marine environment.

• Construction-related refuse may be deposited in the waterbody, decreasing marine water quality. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Disturbance of fish species from equipment use in the marine environment. Significance: *Moderate, Reversible, Local, Short-term, and Intermittent.* ***Dredging:*** • Sedimentation as a result of dredging may negatively affect water quality at the immediate Project site. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Construction-related refuse may be deposited in the waterbody, decreasing marine water quality. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* ***Accidents/Malfunctions:*** • Release of hazardous materials and/or heavy machinery fuel/fluids into waterway. *Significance: Moderate, Reversible, Immediate, Short-term, and Once.*	• Cement will be poured and formed away from the shoreline, to reduce the potential of runoff or an accidental release of concrete mixture to the marine environment. • Any hazardous materials produced as a result of this project are to be transported off-site for disposal/treatment at an approved waste handling facility, pursuant to applicable provincial and federal regulations/legislation. • All equipment to be used in or over the marine environment is to be free from leaks or coating of hydrocarbon-based fluids and/or lubricants harmful to the environment. Hoses and tanks are to be inspected on a regular basis to prevent fractures and breaks. • On site, crews must have emergency spill clean-up equipment adequate for the activity involved, and it must be on site. Spill equipment will include, as a minimum, at least one 250 L (i.e., 55 gallon) overpack spill kit containing items to prevent a spill from spreading; absorbent booms, pillows, and mats; rubber gloves; and plastic disposal bags. All spills or leaks must be promptly contained, cleaned up, and reported to the 24-Hour Environmental Emergencies Report System (1-800-565-1633). Note that this applies to spills to the aquatic environment or anything on land over 70 litres (L). • All materials placed in or near water should be clean and free of fines or any other deleterious substance and of sufficient size to resist displacement by wave action. Dredge material may be re-used for the laydown area provided it is placed/capped within a rock berm to avoid sedimentation. • Rock material should not be end dumped; rather, it should be placed on station using an excavator or similar equipment. • When works are completed, shoreline and approaches not included in the project footprint should be restored to original condition. • Dredged material must be transported in water tight trucks, containers or other suitable means to prevent leakage during transport. • Vessels (including barges) should be compliant with all Canada Shipping Act, 2001 requirements for inspection, which includes certification of the vessel and adequate training and appropriate certificate of competency for the operators. • Ensure that all vessels will have procedures in place to ensure safeguards against marine pollution: awareness training of all employees, means of retention of waste oil on board and discharge to shore based reception facilities, capacity of responding to and clean-up of accidental spill caused by vessels involved in any particular project
Valued Component: Aquatic Species and Habitat	
Construction/Installation: • Sedimentation as a result of construction activities may negatively affect aquatic species and quality of potential aquatic habitat within the Project site. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Smothering of sessile and slow-moving benthic species during infilling and placement of armour stone within the project footprint. Significance: *Small, Irreversible, Immediate, Short-term, and Intermittent.* • Disturbance of aquatic species from equipment use in the marine environment. Significance: *Moderate, Reversible, Local, Short-term, and Intermittent.* • Permanent loss of habitat used by aquatic species within the Project area. Significance: *Small, Irreversible, Immediate, Long-term, Once.* ***Dredging:***	• Reduce duration of in-water work wherever possible. • Construction activities that involve in-water work will be conducted during periods of low flow, or at low tide, to further reduce the potential for effects on aquatic species and habitat. • An Erosion and Sediment Control Plan will be developed for the site that minimizes risk of sedimentation to the marine environment. • Construction material and debris are not to become waterborne. Do not dispose of any materials or waste into marine environment. • Any hazardous materials produced as a result of this project are to be transported off-site for disposal/treatment at an approved waste handling facility, pursuant to applicable provincial and federal regulations/legislation. • Cement will be poured and formed away from the shoreline, to reduce the potential of runoff or an accidental release of concrete mixture to the marine environment.

• Sedimentation as a result of dredging activities may negatively affect aquatic species and quality of potential aquatic habitat within the Project site. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Marine sediments are impacted with PHCs and PAHs. Improper handling of impacted sediment has the potential to negatively impact aquatic species and habitat. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent* • Disturbance of aquatic species from equipment use in the marine environment. Significance: *Moderate, Reversible, Local, Short-term, and Intermittent.* • Temporary alteration of aquatic habitat from the removal of benthic sediments within the dredge footprint. Significance: *Moderate, Reversible, Immediate, Medium-term, and Once.* • Permanent loss of habitat used by aquatic species within the Project area. Significance: *Small, Irreversible, Immediate, Long-term, Once.* ***Accidents/Malfunctions:*** • Release of hazardous materials and/or heavy machinery fuel/fluids into waterway. *Significance: Moderate, Reversible, Immediate, Short-term, and Once.*	• Excess dredged spoils are to be transported to an approved waste disposal site. • All equipment to be used in or over the marine environment is to be free from leaks or coating of hydrocarbon-based fluids and/or lubricants harmful to the environment. Hoses and tanks are to be inspected on a regular basis to prevent fractures and breaks. • On site, crews must have emergency spill clean-up equipment adequate for the activity involved, and it must be on site. Spill equipment will include, as a minimum, at least one 250 L (i.e., 55 gallon) overpack spill kit containing items to prevent a spill from spreading; absorbent booms, pillows, and mats; rubber gloves; and plastic disposal bags. All spills or leaks must be promptly contained, cleaned up, and reported to the 24-Hour Environmental Emergencies Report System (1-800-565-1633). Note that this applies to spills to the aquatic environment or anything on land over 70 litres (L). • All materials placed in or near water should be clean and free of fines or any other deleterious substance and of sufficient size to resist displacement by wave action. Dredge material may be re-used for the laydown area provided it is placed/capped within a rock berm to avoid sedimentation. • Rock material should not be end dumped; rather, it should be placed on station using an excavator or similar equipment. • When works are completed, shoreline and approaches should be restored to original condition. • Dredged material must be transported in water tight trucks, containers or other suitable means to prevent leakage during transport.
Valued Component: Marine Sediments	
Construction/Installation: • Construction activities at the site or natural events (e.g., rainfall) could result in erosion/sedimentation events. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Exposed soils may erode. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* ***Dredging:*** • Dredging activities at the site or natural events (e.g., rainfall) could result in erosion/sedimentation events. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Exposed dredge spoils may erode. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Marine sediments are impacted with PHCs and PAHs. Improper handling/ transportation and disposal of dredge spoils has the potential to surrounding soils. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* ***Accidents/Malfunctions:*** • Release of hazardous materials and/or heavy machinery fuel/fluids into waterway. *Significance: Moderate, Reversible, Immediate, Short-term, and Once.*	• Reduce duration of in-water work wherever possible. • Construction activities that involve in-water work will be conducted during periods of low flow, or at low tide, to further reduce aggregation of marine sediment. • An Erosion and Sediment Control Plan will be developed for the site that minimizes risk of sedimentation to the marine environment. • Construction material and debris are not to become waterborne. Do not dispose of any materials or waste into marine environment. • Cement will be poured and formed away from the shoreline, to reduce the potential of runoff or an accidental release of concrete mixture to the marine environment. • Any hazardous materials produced as a result of this project are to be transported off-site for disposal/treatment at an approved waste handling facility, pursuant to applicable provincial and federal regulations/legislation. • Excess dredged spoils are to be transported to an approved waste disposal site. • All equipment to be used in or over the marine environment is to be free from leaks or coating of hydrocarbon-based fluids and/or lubricants harmful to the environment. Hoses and tanks are to be inspected on a regular basis to prevent fractures and breaks. • On site, crews must have emergency spill clean-up equipment adequate for the activity involved, and it must be on site. Spill equipment will include, as a minimum, at least one 250 L (i.e., 55 gallon) overpack spill kit containing items to prevent a spill from spreading; absorbent booms, pillows, and mats; rubber gloves; and plastic disposal bags. All spills or leaks must be promptly contained, cleaned up, and reported to the 24-Hour Environmental Emergencies Report System (1-800-565-1633). Note that this applies to spills to the aquatic environment or anything on land over 70 litres (L). • All materials placed in or near water should be clean and free of fines or any other deleterious substance and of sufficient size to resist displacement by wave action.

	• Rock material should not be end dumped; rather, it should be placed on station using an excavator or similar equipment. When works are completed, shoreline and approaches should be restored to original condition. • Dredged material must be transported in water tight trucks, containers or other suitable means to prevent leakage during transport.
Valued Component: Air Quality	
Construction/Installation: • Construction activities may result in nuisance effects due to an increase in dust. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* ***Dredging:*** • Dredging activities may result in nuisance effects due to an increase in dust. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Marine sediments are impacted with PHCs and PAHs. Levels of PHCs in dredge sediments may result in a hydrocarbon odor. Improper storage and disposal of dredge spoils may result in unpleasant odours and provide annoyance to facility users, nearby residents, and visitors to the site. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.*	• Where feasible, mitigation measures, such as dust suppressors, will be implemented to reduce the potential for increased dust during project activities. • All construction materials shall be removed from the site upon project completion • Project activities must be carried out during times acceptable to local authorities and smaller, less disruptive equipment will be used where possible. • Construction equipment will be turned off when not in use, where practical, to minimize idling.
Valued Component: Sensory Disturbance (air/water, noise, and/or vibration)	
Construction/Installation: • Construction activities may result in nuisance effects due to an increase in dust and noise, and the use of heavy equipment. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.* • Dredging activities may result in nuisance effects due to an increase in noise and dust, and the use of heavy equipment in water. *Significance: Small, Reversible, Immediate, Short-term, and Intermittent.*	• Project activities must be carried out during times acceptable to local authorities and smaller, less disruptive equipment will be used where possible. • Where feasible, mitigation measures, such as dust suppressors, will be implemented to reduce the potential for increased dust during Project activities. • Machinery used for the Project should be well muffled to reduce noise for local residents, and local municipality construction by-laws will be adhered to. • All construction materials shall be removed from the site upon project completion. • Construction equipment will be turned off when not in use, where practical, to minimize idling.

27. Description of any Significant Adverse Environmental Effects of the project (after considering the application of mitigation measures):

Although the potential exists for short-term and/or medium-term environmental effects during the project, with the implementation of recommended mitigation measures no significant adverse effects are anticipated.

28. Cumulative Effects:

The proposed project under assessment is not projected to have any cumulative effects taking into consideration past and potential likely future projects. There are no other predicated effects that may result from the proposed activities. Project specific mitigation outlined in this assessment (Section 26) will be followed as well as proper safety procedures as per applicable municipal, provincial and federal regulations.

29. Climate Change/Sustainability:

Weather conditions should be assessed on a daily basis to determine the potential risks on the project activities. The Contractor is encouraged to consult Environment Canada's local forecast so that the construction work can be scheduled accordingly.

30. *Fisheries Act, Species at Risk Act and/or Migratory Birds Convention Act* permits or authorizations and general follow-up of the Mitigation Measures*:*

N/A

REFERENCES

31. References*:*

Environment and Climate Change Canada (ECCC). 2021. Canadian Climate Normals 1981-2010. Cartwright Climate Station, Newfoundland and Labrador. Accessed October 20, 2021. Canadian Climate Normals 1981-2010 Station Data - Climate - Environment and Climate Change Canada (weather.gc.ca)

Important Bird Areas Canada (2020) Map Viewer. Accessed October 22, 2021. http://www.ibacanada.ca/mapviewer.jsp?lang=en

Fisheries and Oceans Canada (DFO). 2021. Aquatic Species at Risk. Aquatic species at risk map query tool. Accessed October 21, 2021. https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.htm

Environment and Climate Change Canada (ECCC). 2016. Recovery Strategy for the Wolverine (*Gulo gulo*), Eastern population, in Canada. *Species at Risk Act* Recovery Strategy Series. Accessed October 22, 2021. https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/rs_wolverine_eastern_population_e_final.pdf

Environment and Climate Change Canada (ECCC). 2021. Open Government Data. Atlantic Colonial Waterbird Database. Accessed October 22, 2021. https://open.canada.ca/data/en/dataset/87bf8597-4be4-4ec2-9ee3-797f5eafbd97

Government of Canada. 2021. Species at Risk Public Registry. Species search. Accessed October 19, 2021. https://species-registry.canada.ca/index-en.html#/species?sortBy=commonNameSort&sortDirection=asc&pageSize=10

Newfoundland Department of Fisheries, Forestry, and Agriculture. 2020. Newfoundland (Island) Caribou Management Areas. Accessed October 19, 2021. https://www.gov.nl.ca/ffa/public-education/wildlife/hunting/caribou/

Government of Canada 2021. Social Sciences and Humanities Research Council of Canada. Newfoundland and Labrador Heritage Web Site. Ecoregions of Labrador. Accessed October 26, 2021. https://www.heritage.nf.ca/browser/theme/511?params=theme%2F511&page=2

Schmelzer, I. & Brazil, J, Chubbs, T., French, S., Hearn, B., Jeffery, R., LeDrew, L., Martin, H., McNeill, A., Nuna, R., Otto, R., Phillips, F., Mitchell, G, Pittman, G., Simon, N., Yetman, G. (2004). Recovery strategy for three Woodland caribou herds (Rangifer tarandus caribou; Boreal population) in Labrador. Department of Environment and Conservation, Government of Newfoundland and Labrador, Corner Brook. Accessed on October 26, 2021. https://www.gov.nl.ca/ffa/files/wildlife-endangeredspecies-recovery-strategy-feb2005-corrections.pdf

Newfoundland Department of Environment and Conservation, Wildlife Division. Newfoundland & Labrador Species at Risk – Polar Bear (*Ursus maritimus*). Accessed on October 19, 2021. https://www.gov.nl.ca/ffa/files/wildlife-endangeredspecies-polar-bear.pdf

Newfoundland Department of Environment and Conservation, Wildlife Division. Newfoundland & Labrador Species at Risk –Short-eared Owl (*Asio flammeus*). Accessed on October 19, 2021. https://www.gov.nl.ca/ffa/files/wildlife-endangeredspecies-short-eared-owl-information-sheet.pdf

Newfoundland Department of Environment and Conservation, Wildlife Division. Newfoundland & Labrador Species at Risk – Harlequin Duck (*Histrionicus histrionicus*) Accessed on October 19, 2021. https://www.gov.nl.ca/ffa/files/wildlife-endangeredspecies-harlequin-duck-information-sheet.pdf

Environment and Climate Change Canada (ECCC). 2007. Management Plan for the Harletuin Duck (*Histrionicus histrionicus)* Eastern Population, in Atlantic Canada and Quebec. Species at Risk Act Management Plan Series. Accessed October 22, 2021.https://www.sararegistry.gc.ca/virtual_sara/files/plans/mp_harlequin_duck_0207_e.pdf

COSEWIC. 2014. COSEWIC assessment and status report on the Red-necked Phalarope *Phalaropus lobatus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. Accessed on October 22, 2021. https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports/red-necked-phalarope-2014.html#_02_2

Newfoundland Department of Environment and Conservation, Wildlife Division. Newfoundland & Labrador Species at Risk –Red Crossbill (*Loxia curvirostra percna*). Accessed on October 19, 2021. https://www.gov.nl.ca/ffa/files/wildlife-endangeredspecies-red-crossbill.pdf

Environment and Climate Change Canada (ECCC). 2018. Management Plan for the Short-eared Owl (*Asio flammeus*). Species at Risk Act Management Plan Series. Accessed October 22, 2021. https://www.bing.com/search?q=short+eared+owl+recovery+strategy&form=ANNH01&refig=8b153aea57a64e3b97d1f9af8db46792

York, J, Dale, A, Mitchell, J, Nash, T, Snook, J, Felt, L, Dowsley, M and Taylor, M. (2015). Labrador polar bear traditional ecological knowledge final report. Torngat Wildlife Plants and Fisheries Secretariat Ser. 2015/03 + 118 + iv p. Accessed on October 22, 2021. https://www.torngatsecretariat.ca/home/files/cat6/2015-labrador_polar_bear_traditional_ecological_knowledge_final_report.pdf

Environment and Climate Change Canada (ECCC). 2021. Species Profile – Short-eared Owl. Accessed October 22, 2021.https://wildlife-species.canada.ca/species-risk-registry/species/speciesDetails_e.cfm?sid=60

CONCLUSION

32. Conclusion on Significance of Adverse Environmental Effects (Sections 82-83):

The federal authorities have evaluated the project in accordance with Section 82 of the *Impact Assessment Act*, 2019. On the basis of this evaluation, the departments have determined that the project is not likely to cause significant adverse environmental effects with mitigation and therefore can proceed using mitigation measures as outlined.

Prepared by: _____ **Date:** _____

Name: Natasha Legge

Title: Environmental Specialist, Public Services and Procurement Canada

Prepared by: _____ **Date:** _____

Name: Cathy Martin

Title: Senior Environmental Specialist, Public Services and Procurement Canada

Approved by: _____ **Date:** _____

Name: Tara Wight

Title: Regional Environmental Advisor, DFO – Small Craft Harbours

DECISION

33. Fisheries and Oceans Canada – Small Craft Harbours

☒ **The project is not likely to cause significant adverse environmental effects, and DFO-SCH may exercise its power, duty or function.**

☐ **The project is likely to cause significant adverse environmental effects, and DFO-SCH has decided not to exercise its power, duty or function.**

☐ **The project is likely to cause significant adverse environmental effects, and DFO-SCH will refer the project to the Governor in Council to determine if the significant adverse environmental effects are justified in the circumstances**

Approved by: _____ **Date:** _____

Name: Paul Curran

Title: Regional Engineer, DFO – Small Craft Harbours

34. Transport Canada

Project Title:	Launchway and Laydown Area – Charlottetown, Labrador	
TC File No.:	ATL0063	
NPP File No.:	2021-205838	
Environmental Review Decision:		
Reviewed by:	**Melissa Ginn** *Regional Environmental Advisor* *Environmental Programs and Indigenous Relations*	
Signature:		**Date:**
Mailing Address:	10 Barter's Hill, St. John's, NL	
Tel:	709-351-3200	
Fax:	709-772-3072	
Email:	melissa.ginn@tc.gc.ca	
Approved By:	**J. Jason Flanagan** *A/Regional Manager* *Environmental Programs and Indigenous Relations*	
Signature:		**Date:**

APPENDIX A
Map & Aerial Photographs of Project Location

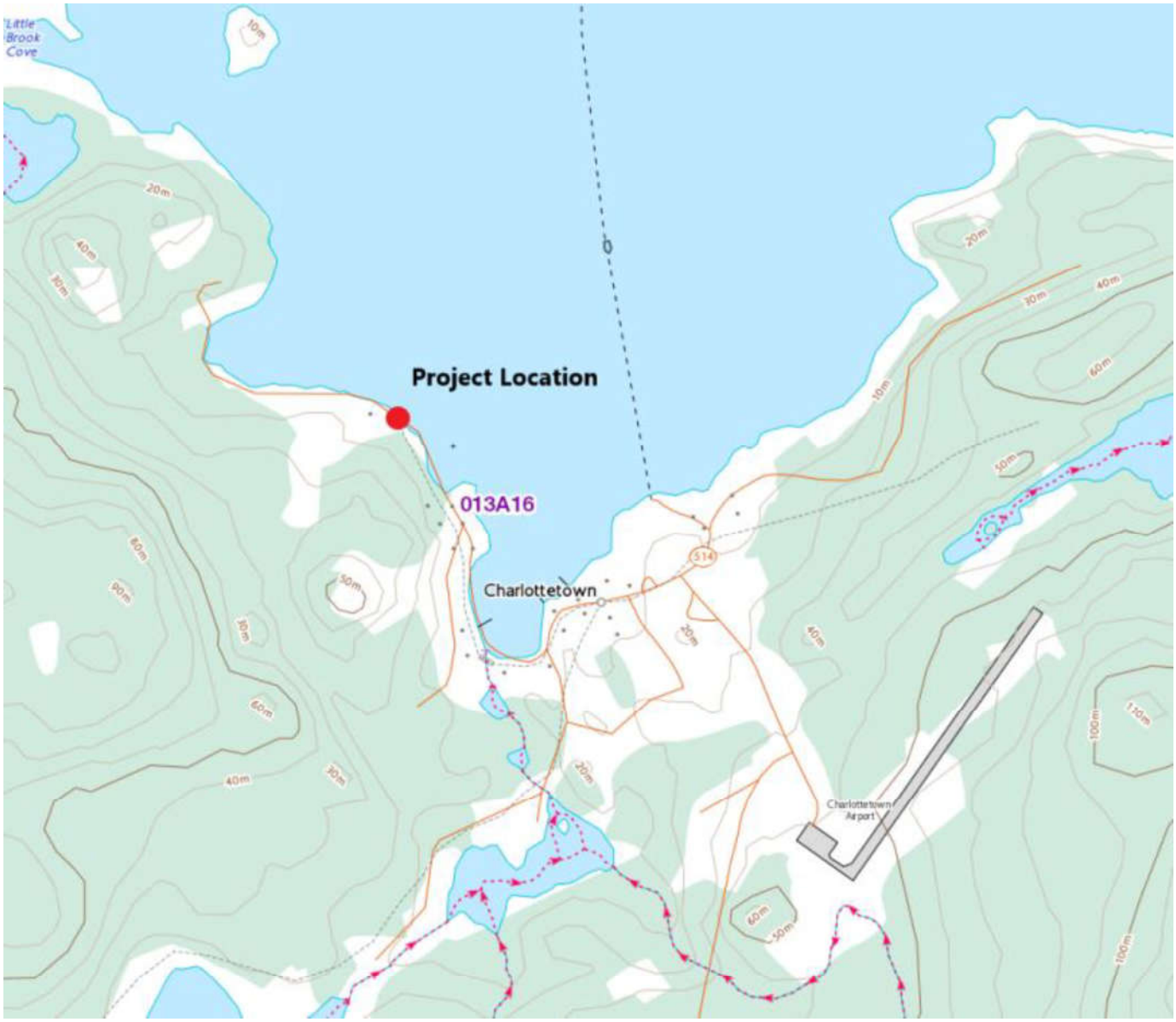
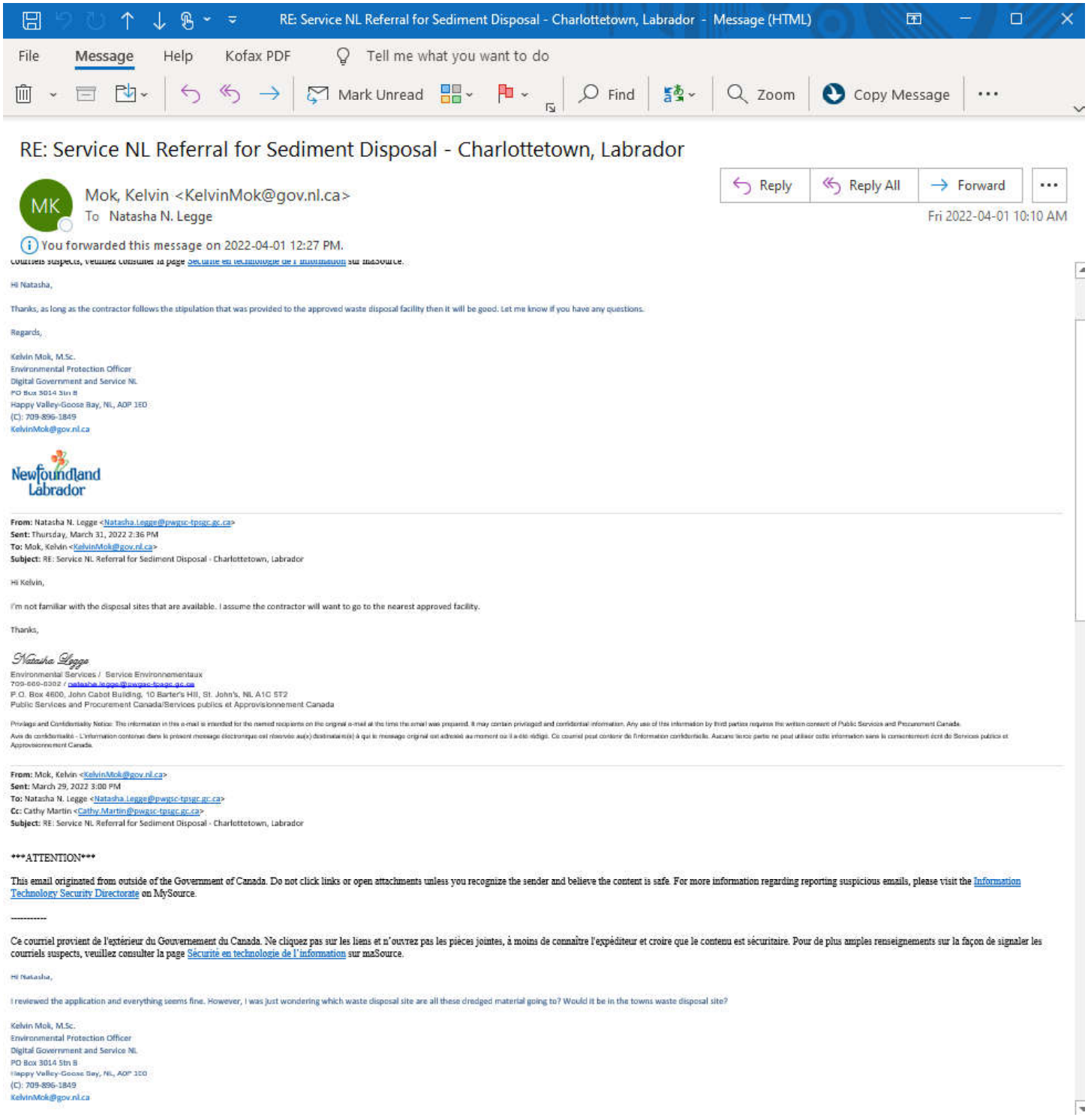


Figure 1 Topo Map of Project Location.

Figure 2 Aerial Photograph of Project Location in Charlottetown, NL.

Figure 3 Google Earth Photograph of Project Location in Charlottetown, NL.

APPENDIX B
Regulatory Approvals



RE: Service NL Referral for Sediment Disposal - Charlottetown, Labrador - Message (HTML)

File Message Help Kofax PDF Tell me what you want to do

Mark Unread Find Zoom Copy Message

RE: Service NL Referral for Sediment Disposal - Charlottetown, Labrador

Reply Reply All Forward

MK Mok, Kelvin <KelvinMok@gov.nl.ca>
To Natasha N. Legge
Fri 2022-04-01 10:10 AM

You forwarded this message on 2022-04-01 12:27 PM.

courriels suspects, veuillez consulter la page Sécurité en technologie de l'information sur maSource.

Hi Natasha,

Thanks, as long as the contractor follows the stipulation that was provided to the approved waste disposal facility then it will be good. Let me know if you have any questions.

Regards,

Kelvin Mok, M.Sc.
Environmental Protection Officer
Digital Government and Service NL
PO Box 3014 Stn B
Happy Valley-Goose Bay, NL, A0P 1E0
(C): 709-896-1849
KelvinMok@gov.nl.ca

Newfoundland Labrador

From: Natasha N. Legge <Natasha.Legge@pwgsc-tpsgc.gc.ca>
Sent: Thursday, March 31, 2022 2:36 PM
To: Mok, Kelvin <KelvinMok@gov.nl.ca>
Subject: RE: Service NL Referral for Sediment Disposal - Charlottetown, Labrador

Hi Kelvin,

I'm not familiar with the disposal sites that are available. I assume the contractor will want to go to the nearest approved facility.

Thanks,

Natasha Legge
Environmental Services / Service Environnementaux
709-660-6302 / natasha.legge@pwgsc-tpsgc.gc.ca
P.O. Box 4600, John Cabot Building, 10 Barter's Hill, St. John's, NL A1C 5T2
Public Services and Procurement Canada/Services publics et Approvisionnement Canada

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From: Mok, Kelvin <KelvinMok@gov.nl.ca>
Sent: March 29, 2022 3:00 PM
To: Natasha N. Legge <Natasha.Legge@pwgsc-tpsgc.gc.ca>
Cc: Cathy Martin <Cathy.Martin@pwgsc-tpsgc.gc.ca>
Subject: RE: Service NL Referral for Sediment Disposal - Charlottetown, Labrador

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Hi Natasha,

I reviewed the application and everything seems fine. However, I was just wondering which waste disposal site are all these dredged material going to? Would it be in the towns waste disposal site?

Kelvin Mok, M.Sc.
Environmental Protection Officer
Digital Government and Service NL
PO Box 3014 Stn B
Happy Valley-Goose Bay, NL, A0P 1E0
(C): 709-896-1849
KelvinMok@gov.nl.ca

Fisheries and Oceans Canada | Pêches et Océans Canada

P.O. Box 5667
St. John's, NL
A1C 5X1

January 28, 2022

Your file *Votre référence*

Our file *Notre référence*

21-HNFL-00678

Paul Curran
Small Craft Harbours
Fisheries and Oceans Canada
80 East White Hills Road
St. John's, NL A1C 5X1

Subject: Infill and Launchway, Charlottetown – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat

Dear Mr. Curran:

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on December 9, 2021. We understand that you propose to:

- Infill a 3885m^2 area with gravel fill and armour stone scour/erosion protection along the slopes and sides of the launchway;
- Create a 6.1m by 36.2m launchway comprised of four timber cribs topped with concrete; and
- Dredge a 625m^2 area in front of the launchway to a maximum depth of 4m to ensure proper clearance for launching vessels.

Our review considered the following information:

- A request for review form with associated schematics; and
- Additional information on project footprint received December 13 (Legge/Collins-DFO)

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.; and

Canada

- The introduction of aquatic species into regions or bodies of water frequented by fish where they are not indigenous, which is prohibited under section 10 of the *Aquatic Invasive Species Regulations*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures listed below:

- Limit the duration of in-water works to only activity related to the above noted project elements so that it does not diminish the ability of fish to carry out one or more of their life processes (spawning, rearing, feeding, migrating)
- Conduct in-water undertakings and activities during periods of low tide
- Implement erosion and sedimentation controls as needed to avoid the introduction of sediment into any waterbody during all phases of work
    - Install effective erosion and sediment control measures prior to beginning work in order to stabilize all erodible areas
    - Regularly inspect and maintain the erosion and sediment control measures and structures during all phases of the project
    - Regularly monitor the watercourse for signs of sedimentation during all phases of the project and take corrective action
    - Keep the erosion and sediment control measures in place until all disturbed ground has been permanently stabilized
    - Remove all exposed, non-biodegradable sediment control materials once the site is stabilized
    - Schedule work to avoid wet, windy, and rainy periods that may result in high flow volumes and/or increase erosion and sedimentation
- All materials placed in or near water should be clean, free of fines, concrete or any other deleterious substance and of sufficient size to resist displacement by wave action
- Armour stone should be blocky, angular shape and comprised of mixed gradation so that the smaller rock fill the voids between the larger rock to provide compaction and stability
- Operate machinery on land in stable dry areas, or from stable floating platforms
- Rock material should not be end dumped; rather, it should be placed on station using an excavator or similar equipment
- Material used to fill a timber crib structure should never be removed directly from any watercourse or shoreline to be used as ballast
- Minimize the amount of dredged material removed by only dredging to the area and depth required

- Dredged material should be stabilized on land or at an approved disposal and dumping site
- When works are completed, shoreline and approaches should be stabilized and restored to original condition
- Be aware of AIS species in the area and take precautions with respect to any vessel traffic and gear movement between affected and unaffected areas to prevent introductions and spread (https://www.dfo-mpo.gc.ca/species-especes/ais-eae/index-eng.html)
    - All equipment used in water should be cleaned, drained and dried on land before and after use for the purposes of preventing the introduction or spread of aquatic invasive/non-indigenous species
    - Report any AIS and non-indigenous species to DFO at 1-855-862-1815 or AISEAE.XNFL@dfo-mpo.gc.ca.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations*.

It is also your *Duty to Notify* DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to (http://www.dfo-mpo.gc.ca/pnw-ppe/contact-eng.html).

We recommend that you notify this office as well as the nearest Conservation and Protection (C&P) office at least 10 days before starting your project and that a copy of this letter be kept on site while the work is in progress. **It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.**

Please note that the advice provided in this letter will remain valid for a period of 1 year from the date of issuance. If you plan to execute your proposal after the expiry of this letter, we recommend that you contact the Program to ensure that the advice remains up-to-date and accurate. Furthermore, the validity of the advice is also subject to there being no change in the relevant aquatic environment, including any legal protection orders or designations, during the 1 year period.

If you have any questions with the content of this letter, please contact Dwayne Reddick at (709) 693-3354, or by email at dwayne.reddick@dfo.mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Dwayne Reddick Digitally signed by Dwayne Reddick
Date: 2022.01.28 11:06:11 -03'30'

Dwayne Reddick
A/ Senior Biologist – Regulatory Review
Fish and Fish Habitat Protection Program

Cc.: Cathy Martin, Public Services and Procurement Canada
Natasha Legge, Public Services and Procurement Canada