Lazy Head Marine Terminal Project

Plain Language Summary

Carver Mineral Resources, Inc.

15 October 2026



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1. Part A: Introduction and General Information

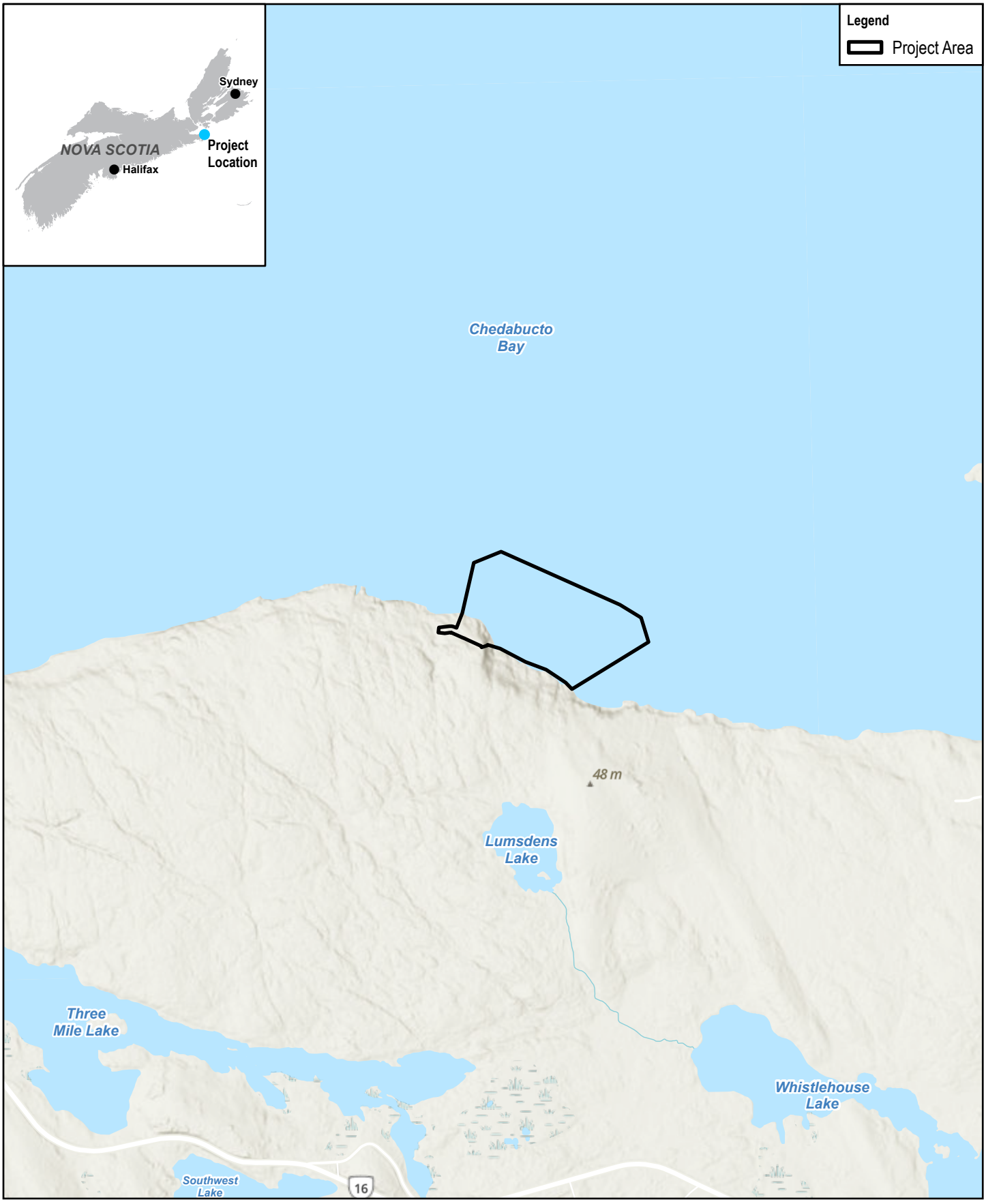
1.1 Project Name, Sector and Location

The name of the undertaking is the Lazy Head Marine Terminal Project (the Project), which includes construction and operation of a marine terminal in Chedabucto Bay for export of aggregate for construction and wind industry rock, produced by a granite aggregate quarry to be developed adjacent to the marine terminal. The quarry is subject to a provincial Environmental Assessment by the province of Nova Scotia (NS), pursuant to its *Environment Act* and *Environmental Assessment Regulations*. Under the NS Act and Regulations, "a pit or quarry larger than 4 ha in area for extracting building or construction stone" is designated as a Class I undertaking. For this Initial Project Description (IPD), the Project involves the marine terminal and excludes the quarry.

The Project is located in Lazy Head, NS, a coastal cape in the Municipality of the District of Guysborough (MODG) (Figure 1.1-1), located approximately 4.3 kilometres (km) west of the Town of Canso. The Project is 3.0 km northwest of Hazel Hill and 3.8 km northeast of Fox Island Main. Primary access to the Project Area (PA), which covers an area of approximately 22.8 hectares (ha), is via Route 16 (Marine Drive), the region's principal provincial highway, with local access via Fox Island Main Road.

The Project includes a marine study area (MSA) encompassing the zone targeted for construction of the marine terminal along with the adjacent marine habitat, totalling 21.3 ha, and a 195-metre (m) access road extending from the landside processing plant finish product piles to the marine terminal. The MSA was sized to provide flexibility for siting of the marine terminal during early planning; the actual terminal footprint will be smaller than the MSA boundary. Together the MSA and the marine terminal access road comprise the PA as shown on Figure 1.1-2.

For the IPD, the marine terminal access road refers only to the access road extending from the landside processing plant finish product stockpiles to the marine terminal. The general Project access road from Route 16 is part of the quarry development and will be assessed under the provincial Environmental Assessment process.



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Metres

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 CSRS
Grid: NAD 1983 CSRS UTM Zone 20N

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CARVER MINERAL RESOURCES INC.
LAZY HEAD MARINE TERMINAL PROJECT

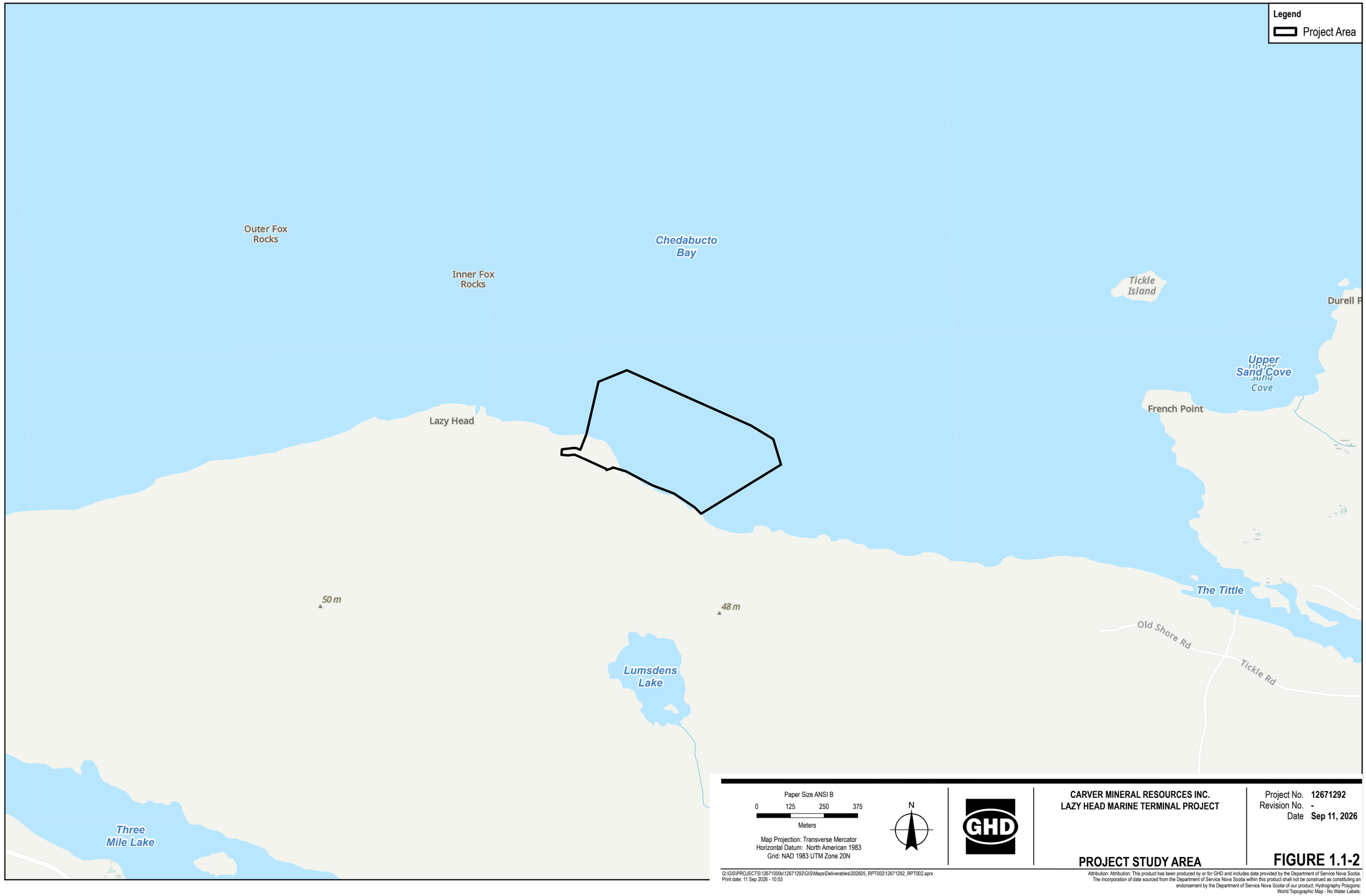
Project No. **12671292**
Revision No. **-**
Date **Sep 11, 2026**

PROJECT LOCATION

FIGURE 1.1-1

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Attribution: Hydrography Polygons:
Islands:
World Topographic Map - No Water Labels:
World Hillshade: Esri, NASA, NGA, USGS; Project Area layer provided by Morien Resources Corp. and modified by GHD.



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CARVER MINERAL RESOURCES INC.
LAZY HEAD MARINE TERMINAL PROJECT

Project No. **12671292**
Revision No. **-**
Date **Sep 11, 2026**

PROJECT STUDY AREA

FIGURE 1.1-2

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1.2 Project Schedule

Construction of the marine terminal is expected to span two years, following which the Project is expected to begin operation. The marine terminal is expected to operate for approximately 85 years. Closure is expected to take approximately one year. The Project life is 88 years.

A breakdown of Project activities is shown on Figure 1.2-1, with an assumption that all applicable permits and approvals will be obtained prior to the start of activities. The closure phase timeline may be adapted as required based on conditions at the time of closure.

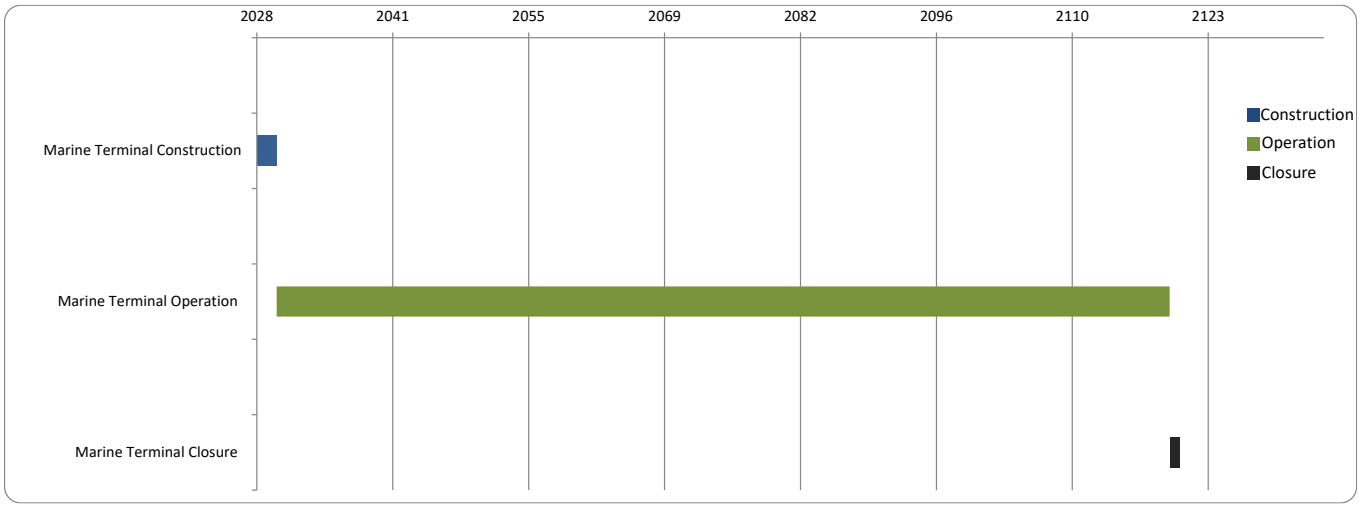


Figure 1.2-1 Project Schedule

1.3 Proponent Information

Item	Detail
Proponent	Carver Mineral Resources, Inc., subsidiary of Carver Companies, LLC, acting through wholly-owned Canadian subsidiary, 4754251 Nova Scotia Limited. https://www.carvercompanies.com/carver-canada/
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Permitting Contact	Dawson Brisco President and CEO dbrisco@morienres.com Morien Resources Corp. (agent for the Proponent) https://morienres.com/
Supporting Consultant	Callie Andrews Business Group Leader – Impact Assessment callie.andrews@ghd.com GHD Ltd. 120 Western Parkway, Suite 110 Bedford, Nova Scotia Canada B4B 0V2 https://www.ghd.com

1.4 Engagement

Carver is committed to working openly with regulators, the Mi'kmaq of Nova Scotia, stakeholders, and the public. To help with this, Carver hired Morien as its agent, who works alongside Strum Consulting and GHD to lead engagement activities. So far, they have organized meetings with Rightsholders and stakeholders, given technical presentations, and hosted two community open houses (October 2025 and March 2026).

Since October 2025, Morien has run a Project website (https://www.lazyhead.ca/) that shares information about the Project, Carver, Morien, and upcoming events. The site is updated regularly.

To allow for a structured forum of engagement between the Project and the local community, Morien, on behalf of Carver, established a Community Liaison Committee (CLC) in May 2026, with an initial meeting held in September 2026, that will continue to meet through construction and operation. The CLC includes members from the community, the MODG, Morien, and Carver. The CLC will meet to share updates, hear feedback, and address concerns, acting as a steady link between the Project and the community.

1.4.1 Summary of Engagement with Government Departments, Agencies and Regulators

1.4.1.1 Overview

Carver is committed to open and transparent communication with federal, provincial, and municipal governments, as well as agencies and regulators, throughout the life of the Project. Federal and provincial agencies have been kept informed during planning and design through regular updates.

Discussions have focused on different topics depending on the level of government:

– Federal and provincial regulators: Project concept, schedule, environmental baseline surveys, and Crown land.

Municipal government: community support and awareness, answers to community questions (such as water use, hunting, and fishing), community benefits, public engagement, support for Seabreeze Campground & Cottages, and fisheries engagement.

Engagement with government officials will continue through construction and operation.

1.4.1.2 Government Departments, Agencies and Regulator Engagement

Carver, Morien, and its consultants have met with government entities and regulatory officials representing federal, provincial, and municipal jurisdictions (Table 1.4-1) to open lines of communication about the Project and ensure all regulatory requirements are met.

Table 1.4-1 Regulatory Engagement Details

Department/Agency/Regulatory Body	Engagement Details
Impact Assessment Agency of Canada (IAAC)	August 2025 – Correspondence to clarify terminology and Project scoping. September - October 2025 – Provided Project introduction / overview and discussed potential Impact Assessment. April 2026 – Provided Project update and discussed Project scoping and permit submission timelines. July 2026 – Provided Project overview presentation to federal agencies, including IAAC. September 2026 – Project update and discussions regarding Project permitting (e.g., FAA) and engagement.

Department/Agency/Regulatory Body	Engagement Details
Fisheries and Oceans Canada (DFO)	April 2026 – Project introduction and discussions regarding the *Fisheries Act* Authorization (FAA) and proposed offsetting. July 2026 – Follow up discussion on Canso Ledges – Sugar Harbour Islands Marine Protected Area. September 2026 – Project update and discussions regarding FAA and offsetting.
InvestNS	June - July 2025 – Provided Project introduction / overview and discussed Project scoping. November 2025 – Provided Project update and introduction to new staff.
Environment and Climate Change (ECC) – EA Branch	June - September 2025 – Provided Project introduction and updates, including Project status, status of baseline studies, and timing for submission.
Department of Natural Resources (DNR)	December 2024 – Provided Project introduction and overview. May 2025 – Provided Project introduction and updates on Project layout. Discussed Project schedule and employment opportunities. March 2026 – Provided a status update on the Project and discussed permit submission timelines. June 2026 – Meeting to discuss Crown Land Lease and to provide a Project update.
DNR – Land Administration Division	October 2024 – Provided Project introduction and discussed initial Project scoping. October 2025 – Discussed Project updates and scoping.
NS Department of Energy	May - October 2025 – Provided Project introduction and ongoing updates on Project scope, layout, and status. March 2026 – Provided a Project update and reviewed overall Project permitting.
MODG	January - February 2025 – Provided Project introduction and ongoing updates on initial Project scoping to attending MODG staff and councillors. April 2025 – Provided update on the Project in an email. May - June 2025 – Provided Project introduction to MODG staff and councillors. August 2025 – Provided Project introduction to MODG Director of Economic Development in a phone call. October 2025 – Presentation to MODG staff and Council to provide an update on the Project and engagement initiatives. Held discussion on establishment of community funds and benefits. March 2026 – Provided Project update presentation to MODG staff and Council. April 2026 – Provided Project update to MODG staff and council on Project status. August 2026 – Provided Project update, and discussed upcoming offshore geotechnical drilling program and community bulletins.

1.4.1.3 Key Issues and Concerns Raised by Government Departments, Agencies and Regulators

Key areas of interest identified through engagement are detailed in Table 1.4-2.

Table 1.4-2 Key Issues and Concerns Raised by Government Departments, Agencies, and Regulator Engagement

Relevant Project Component - Issue or Concern	Action
Proximity of the Project to the proposed Canso Ledges- Sugar Harbour Islands Marine Protected Area	Carver will continue to engage with DFO regarding the location of the Project within the proposed Canso Ledges – Sugar Harbour Islands Marine Protected Area.
Impact of underwater noise from construction and vessel traffic causing fish avoidance, behavioural disruption, and interference with communication and predator/prey detection	Section 5.1.1.2 identifies proposed mitigation measures for fish and fish habitat, including the commitment to conduct hydroacoustic monitoring, as required and determined in consultation with DFO. In addition, Carver will develop a Marine Mammal Detection and Response Plan to manage underwater noise impacts on the marine environment. The Plan will set noise thresholds and foresee the use of qualified marine mammal observers to monitor the nearby area during periods of noisy activities. The Plan will also include the commitment to continuously monitor underwater noise and halt all activities immediately in the event that noise exceeds the set thresholds. The Proponent is committed to ongoing engagement with DFO through the FAA process.
The Project is located outside of the eastern limit of the Cape Breton Compulsory Pilotage Area (Zone D)	Although the marine terminal is located outside the Cape Breton Compulsory Pilotage Area, all vessels calling at the terminal will be guided by qualified pilots through the Lazy Head Pilotage Association, which will oversee pilot recruitment, training, procedures, and vessel movements. Pilots will hold appropriate marine certifications and complete Project-specific training. Prior to operations, a comprehensive navigation simulation study will be conducted to evaluate vessel transits, berthing operations, environmental operating limits, potential tug requirements, and navigation aid needs. The results will inform terminal operating procedures and be shared with Transport Canada and the Atlantic Pilotage Authority. Any required navigation aids will be installed before operations commence, and a Terminal Marine Operations Manual will be developed to establish vessel operating procedures, environmental limits, communications protocols, emergency response measures, and fishing vessel interaction requirements specific to the Project. To maintain navigation safety and coordination with marine users, a Navigation Safety Committee will be established with representation from local fishers, harbour authorities, municipal government, the Lazy Head Pilotage Association, and the Proponent. The Committee will oversee and annually review protocols for vessel routing, communications, advance notice of vessel movements, and management of fishing gear interactions. Together, these measures will support safe vessel operations and ongoing collaboration with local marine stakeholders.

1.4.2 Summary of Engagement with the Mi’kmaq of Nova Scotia

1.4.2.1 Overview

The Mi'kmaq are the founding people of Nova Scotia and have lived in the region for more than 11,000 years. Today, they live throughout the province, including in 13 Mi'kmaq communities (OLA, 2015). The Project is located within the Mi'kmaq territory of Eskikewa'kik, meaning "skindresser's territory" (MDCC, 2025a).

The Mi'kmaq of Nova Scotia hold established Aboriginal and Treaty rights, which are shared communally among all members of the Mi'kmaq Nation. These include the right to fish for a "moderate livelihood" under the Peace and Friendship Treaties, as well as rights to hunt, fish, and gather for traditional purposes. For consultation, 11 of the 13 communities are represented by Kwilmu'kw Maw-klusuaqn (KMK), while Millbrook First Nation and Sipekne'katik First Nation represent themselves. The Nova Scotia Native Council represents Mi'kmaq and Aboriginal people living off reserve.

The closest Mi'kmaq communities to the Project are Potlotek First Nation (45 km northeast) and Paqtnkek-Niktuek Reserve (52 km northwest). Nearby Mi'kmaq placenames include Siplo'kaqnek, Qamso'q, and Maqtewatqek, which correspond to Durells Island, Canso, and Black Point near Highway 316 (T’an Weji-sqalia’tiek, No Date).

To engage with the Mi'kmaq of Nova Scotia, Morien has notified them of the Project, shared information, met with Kwilmu'kw Maw-klusuaqn, and commissioned a Mi'kmaq Ecological Knowledge Study (MEKS) with Membertou Geomatics Solutions and an Archaeological Resource Impact Assessment (ARIA) completed by Cultural Resource Management Group Limited (CRM Group). The engagement process is documented in Table 1.4-3, following the *Proponents' Guide* (OLA, 2012).

Table 1.4-3 Engagement with the Mi’kmaq of Nova Scotia

First Nation Group	Dates, Activities, Comments
Millbrook First Nation	June, October and December 2025 – Provided Project introduction / update and maps. June 2026 – Provided draft IPD sent for review and comment. July 2026 – Followed up on status of draft IPD review. October 2026 – Provided Project update and continued discussion on FAA and proposed fisheries offsetting program.
Paq’tnkek First Nation	October 2025 – Meeting held at Paq’tnkek office to provide a Project overview and inform on early Project scoping. December 2025 – Provided a Project update and outlined the permitting process.
Sipekne’katik First Nation	June 2025 – Providing Project introduction, map, and offer to meet. July 2025 – Meeting held at the Sipekne’katik office to discuss Project details and receive feedback. July - August 2025 – Correspondence sent on the Sipekne’katik Governance Initiative (SGI) process commitments. October 2025 – Email sent extending an invitation to the October open house; however, Council was unable to attend. Follow-up emails were sent requesting a meeting with community to discuss the Project. January 2026 – Meeting held at the Sipekne’katik office to provide Project updates and next steps in engagement. April 2026 – Provided Project update and discussion on advancement through SGI process.

First Nation Group	Dates, Activities, Comments
	April 2026 – Correspondence concerning a list of criteria for Sipekne'katik to consider regarding the acquisition of private land to support the Project's Crown Land Exchange. April 2026 – Provided Project update and discussed FAA and offsetting scoping. June 2026 – Provided draft IPD for review and comment. August 2026 – Provided MEKS and ARIA for review and comment. September 2026 – Discussion on draft IPD regarding MEKS and ARIA. October 2026 – Provided Project update and continued discussion on FAA and proposed fisheries offsetting program.
Kwilmu'kw Maw-klusuaqn	June - August 2025 – Provided Project introduction, updates, and maps. August 2025 to February 2026 – Continued correspondence to provide Project updates, meet engagement commitments, and notify KMK of EA/IPD registration timing. February 2026 – Provided a Project update on all 2025 activities and 2026 scheduling plan. March 2026 – Meeting to discuss the draft Memorandum of Understanding (MOU), and associated Proponent-funded annual budget. April 2026 – Presentation to KMK and Assembly of Chiefs, and continued discussions with KMK regarding the MOU, a Mutual Benefits Agreement (MBA), and next steps. Provided Project update and discussed FAA and offsetting scoping. August 2026 – Provided ARIA, MEKS, and IPD for review and comment. October 2026 – Provided Project update and continued discussion on FAA and proposed fisheries offsetting program.

1.4.2.2 Key Issues and Concerns Raised by the Mi'kmaq of Nova Scotia

Key areas of interest identified through engagement with the Mi'kmaq of Nova Scotia are detailed in Table 1.4-4.

Table 1.4-4 Key Issues and Concerns Raised by the Mi'kmaq of Nova Scotia

Relevant Project Component - Issue or Concern	Action
Partnership opportunities	Carver and Morien executed a MOU with the Assembly of Nova Scotia Mi'kmaw Chiefs (Assembly) on June 1, 2026. The MOU establishes a formal framework between the Assembly and Carver to negotiate an MBA for the full life of the Project. The MOU also commits Carver to funding KMK's engagement capacity in regard to its assessment of the Project.
Impacts to Indigenous fishers	Carver will identify any Indigenous fishers who could be affected by the Project and will work directly with them to understand potential impacts and develop suitable measures to address them together.

Relevant Project Component - Issue or Concern	Action
Aquatic Invasive Species from marine terminal operation	Aquatic Invasive Species (AIS) will be evaluated and considered during the FAA. DFO assess AIS under the *Fisheries Act*, *Species at Risk Act* (SARA) and AIS Regulations. The AIS Regulations are intended to prevent the introduction and spread of AIS in Canadian waters by prohibiting the import, possession, transport, release, and introduction of listed invasive species, and by requiring authorization before introducing aquatic species into waters where they are not naturally found. The AIS Regulations will be used to implement appropriate prevention methods. In addition, all third party contracted vessels carrying ballast water will be required to comply with all relevant ballast water management regulations, including the *Canadian Ballast Water Regulations*, federal regulations under the *Canada Shipping Act*, and associated international requirements, where applicable.

1.4.2.3 Ongoing Engagement

Carver is committed to ongoing, meaningful engagement and economic reconciliation with the Mi'kmaq of Nova Scotia, and will share regular updates and invite feedback throughout the life of the Project. Morien, acting on Carver's behalf, will continue to engage with the Mi'kmaq of Nova Scotia by sharing information and providing opportunities to raise concerns or comments, from the start of activities through to Project closure.

Memorandum of Understanding

Carver, Morien, and the Assembly of Nova Scotia Mi'kmaw Chiefs (the Assembly) signed an MOU on June 1, 2026. It sets up a formal framework for engagement, capacity support, and the negotiation of a Mutual Benefits Agreement covering the full life of the Project.

Under this agreement, Carver will fund KMK so it has the capacity to review and engage on the Project. Both parties also commit to negotiating a Mutual Benefits Agreement, expected to cover economic participation, employment and training, environmental stewardship, and consultation arrangements through construction, operation, and closure.

The MOU does not replace the Crown's duty to consult the Mi'kmaq of Nova Scotia under the Mi'kmaq-Canada-Nova Scotia Consultation Terms of Reference. It works alongside that process to support meaningful participation in Project planning and decision-making.

Sipekne’katik Governance Initiative

In August 2025, Carver joined the Sipekne'katik Governance Initiative with Sipekne'katik First Nation. This community-based process, developed by Sipekne'katik First Nation, guides how proponents engage with the community on projects within its traditional territory and ensures that potential effects on Mi'kmaq interests are understood and considered.

The Initiative follows a structured, step-by-step process, including an introduction to the Project, joint scoping of issues, a workplan with capacity funding, and community-based review and dialogue. The depth of engagement reflects the nature of the Project and the environmental, cultural, social, and economic matters important to Sipekne'katik First Nation.

Like the Memorandum with the Assembly, the Initiative does not replace the Crown's duty to consult but works alongside it to support meaningful participation in Project planning and decision-making.

1.4.3 Summary of Engagement with Stakeholders

1.4.3.1 Overview

Morien, on behalf of Carver, and its consultants have been involved in engagement activities with the local community and stakeholders to ensure the community was made aware of the Project and given ample opportunity to receive information, ask questions, and share local knowledge.

Two open houses were held on October 21, 2025, and March 10, 2026. Attendance at the open houses for the Project is provided in Table 1.4-5.

Table 1.4-5 Attendance at Open Houses

Open House Number	Date	Location	Number of Public Attendees	Exit Surveys Completed
1	October 21, 2025	Hazel Hill & Area Community Centre	60	6
2	March 10, 2026	Hazel Hill & Area Community Centre	34	6
Total			94	12

Note: Attendance totals reflect only those attendees who signed in upon entering the venue. Actual attendance at both open houses was understood to have been higher, as sign-in was optional.

A dedicated phone number and email address were set up for community members and the public to contact the Project team with questions, comments, or concerns. These were shared through flyers, posters, the Project website, mail, email, and at in-person meetings.

Open House 1 introduced the Project and gathered community feedback to inform the design, whereas Open House 2 shared fieldwork results, effects assessment, proposed mitigation measures, monitoring programs, and updates on ongoing engagement. At both events, sign-in sheets were provided for follow-up, and exit surveys allowed participants to give anonymous feedback.

Engagement with the public and stakeholders will continue through the pre-planning, construction, and operation phases of the Project. Table 1.4-6 summarizes key issues and concern raised through engagement with the public and stakeholders.

Table 1.4-6 Engagement with the Public and Stakeholders

Community Group/Stakeholder	Engagement Details
Atlantic Pilotage Authority (APA)	September - October 2025 – Provided Project overview with a focus on under keel clearance as well as associated tug and pilot support for berthing vessels.
Guysborough County Inshore Fishermen's Association (GCIFA)	June 2025 – Provided a Project introduction with a focus on impacts to fisheries. Discussed initial Project scoping and upcoming bathymetry survey. October 2025 – Discussed establishing Project benefits funds and provided invitation to the open house. November 2025 – Provided update on the Project scoping and overall layout. December 2025 - January 2026 – Discussions on the marine terminal layout and scoping update. March 2026 – Provided overall Project update, including marine terminal layout and design. April - May 2026 – Discussed Project timing as well as FAA and offsetting scoping. July – September 2026 – Engagement and coordination on Carver's geotechnical offshore drill program.
Nova Scotia Power Inc.	September 2025 – Provided Project introduction and initiated conversations regarding power requirements at the Project. June 2026 – Discussions on the Project's anticipated electrical load and next steps to conducting a preliminary assessment.

Community Group/Stakeholder	Engagement Details
Seabreeze Campground	June - August 2025 – Provided Project introduction, initial Project scoping, discussed accommodation proposal and collaboration between the Project and Seabreeze Campground. September 2025 – Meeting to discuss the environmental baseline programs and next steps for the Project. October 2025 - August 2026 – Meetings to discuss the upcoming drilling program, Project updates, and discussions on the long-term collaboration agreement between the Project and Seabreeze Campground.
Members of the public	May 2025 – Correspondence with local residents to introduce the Project, and discussions on local employment opportunities for the Project. October 2025 – Door knocking campaign in local communities of Hazel Hill, Tickle Road, Three Mile Lake, and Fox Island Main to discuss the Project and answer any questions from community members. October 2025 - Advertisement mail-outs to 249 addresses along rural routes from Guysborough to Queensport, 430 addresses in Canso and along rural routes in Eagle Valley Cottages, Durell's Island, Tickle Road, and Hazel Hill regarding the October open house. November 2025 – Correspondence with local residents requesting Project information, including fisheries impacts, community funds, and details about the CLC. November 2025 – Community bulletin mail-out local residents informing on the details and timing for an upcoming helicopter-supported drill program at the Project. February 2026 – Advertisement mail-outs to 249 addresses along rural routes from Guysborough to Queensport, 430 addresses in Canso and along rural routes in Eagle Valley Cottages, Durell's Island, Tickle Road, and Hazel Hill about the March 10 open house. July 2026 – Posted and distributed community bulletin on the upcoming offshore geotechnical drill program. Distribution of bulletins was assisted by MODG staff, MODG councillors and GCIFA.

1.4.3.2 Key Issues and Concerns Raised by Stakeholders

Issues and concerns raised by the public as expressed in meetings and from in-person and written feedback have been grouped into broader categories.

Key issues raised by stakeholders regarding the marine terminal include the loss of commercial fishing grounds and the impact to associated navigation of commercial fishers in Chedabucto Bay.

1.4.3.3 Ongoing Engagement

Carver is committed to continuing to work to address any concerns raised by stakeholders and members of the public over the duration of the Project's life in a meaningful and transparent way. Additionally, a CLC has been established and will meet at regular intervals throughout the life of the Project, until such a time that it is deemed unnecessary.

Discussions are currently ongoing regarding the execution of a Community Benefits Agreement (CBA) between MODG and the Proponent. The CBA is expected to be in place before construction is initiated for the Project.

1.5 Regional Studies and Assessments

The Proponent is not aware of any publicly available regional studies or assessments relevant to the Project. A MEKS has been completed for the Project. The Proponent is not aware of any publicly available Indigenous-led assessments related to the Project.

1.6 Strategic Assessments

The Strategic Assessment of Climate Change (SACC) (2020) is a federal policy from Environment and Climate Change Canada (ECCC) that ensures climate change is considered in federal impact assessments under the *Impact Assessment Act* (IAA). It will apply to the Project if it undergoes a federal impact assessment. Since the Project is expected to operate beyond 2050, a post-2050 net-zero plan may be required. Key elements of the SACC, including the quantification of greenhouse gas (GHG) emissions, identification of mitigation measures, and a high-level assessment of climate change resilience, are addressed in Section 5.5 of the IPD.

The Proponent is not aware of any additional strategic assessments that are publicly available or applicable to the Project.

2. Part B: Project Information

2.1 Purpose and Need for the Project

The purpose of the Project is to export high-quality granite aggregate and wind industry rock from Lazy Head, NS, and transport it via an on-site marine terminal.

The Project aims to supply high growth infrastructure markets in eastern North America, including offshore wind energy projects and the construction market of the eastern United States (U.S.), where long-term aggregate supply constraints are emerging.

2.1.1 Potential Benefits

The Project is expected to provide strong economic benefits locally, provincially, and nationally by creating jobs, supporting economic growth, and generating significant tax revenue for governments. The key benefits and estimated economic and employment impacts summarized below relate to the combined Lazy Head aggregate and marine terminal development, rather than the marine terminal alone. The terminal provides the marine export infrastructure required to realize these benefit. Key benefits include:

- About $2.26 billion (B) added to Nova Scotia's gross domestic product over the life of the Project, with $1.22 B contributed to the Guysborough region.
- Approximately 25,232 full-time equivalent (FTE) years of employment across Canada over the life of the Project, including about 19,184 jobs in NS and 11,590 jobs in the Guysborough region.
- A construction peak of about 447 FTE jobs in NS, and a sustained operating level of about 203 FTE jobs.
- About $702 million (M) in total tax revenue (federal, provincial, and municipal) over the life of the Project, averaging $7.6 M per year.
- About $3.25 B in total Project spending over its life, including $284 M in initial construction capital and about $33.7 M per year in operating spending at full production.
- Approximately $510,000 per year in direct community contributions at full production through the Community Development Fund and Community Wellness Fund. Additional commitments include community funding before operation begins, annual student bursaries, co-op placements, local hiring, purchasing opportunities, and locating the Project’s administrative office and employee training programs within the Guysborough region.

2.1.2 Funding

Carver will fund the Project in full through private financing and equity contributions. The Project does not require public or government funding to proceed, and its viability does not depend on it.

Given the Project's role in supplying armour stone to NS's proposed offshore wind development, a joint federal and provincial priority, it may be eligible for federal or provincial programs that support this sector. Any such funding would supplement Carver's private financing and is not a condition of the Project proceeding.

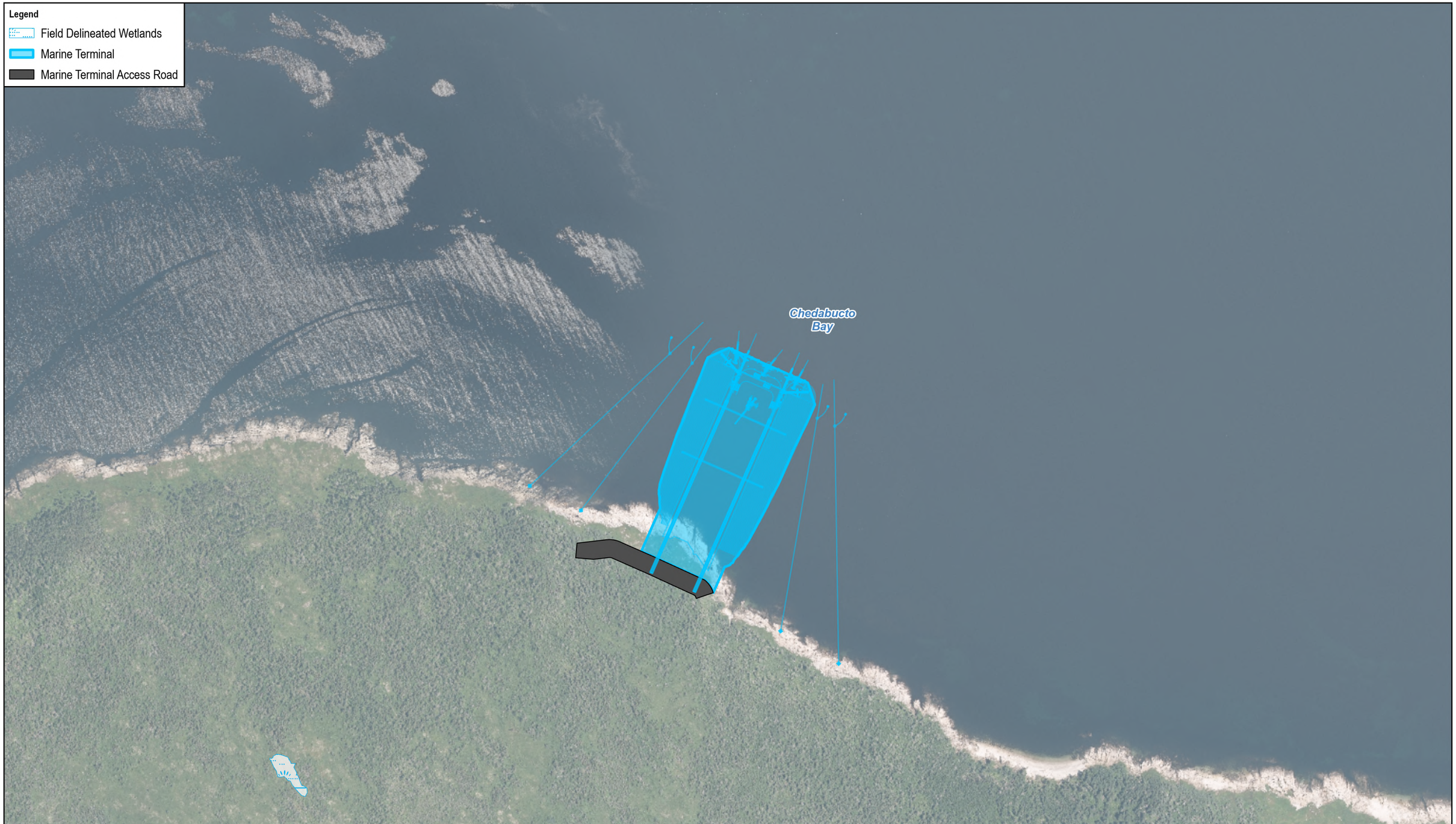
2.2 Physical Activities Regulations Provisions

The Project is a designated project under the *Physical Activities Regulations* of the IAA. The Project includes construction, operation, and closure of a new marine terminal, designed to accommodate ships larger than 25,000 dwt. Based on the size of the vessels proposed to be utilized (48,000 dwt), the marine terminal triggers the requirement for assessment under Section 52 of the Schedule to the *Physical Activities Regulations*.

2.2.1 Overview of the Undertaking

The Project consists of a single rubble mound marine terminal extending north from the coastline into Chedabucto Bay. Granite aggregate will be shipped from the marine terminal by ocean-going vessels.

Figure 2.2-1 shows the Project plan for the marine terminal. The Project scope covers the construction, operation, and closure activities. Marine terminal components are shown on Figure 2.2-2.



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Meters

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 CSRS
Grid: NAD 1983 CSRS UTM Zone 20N

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CARVER MINERAL RESOURCES INC.
LAZY HEAD MARINE TERMINAL PROJECT

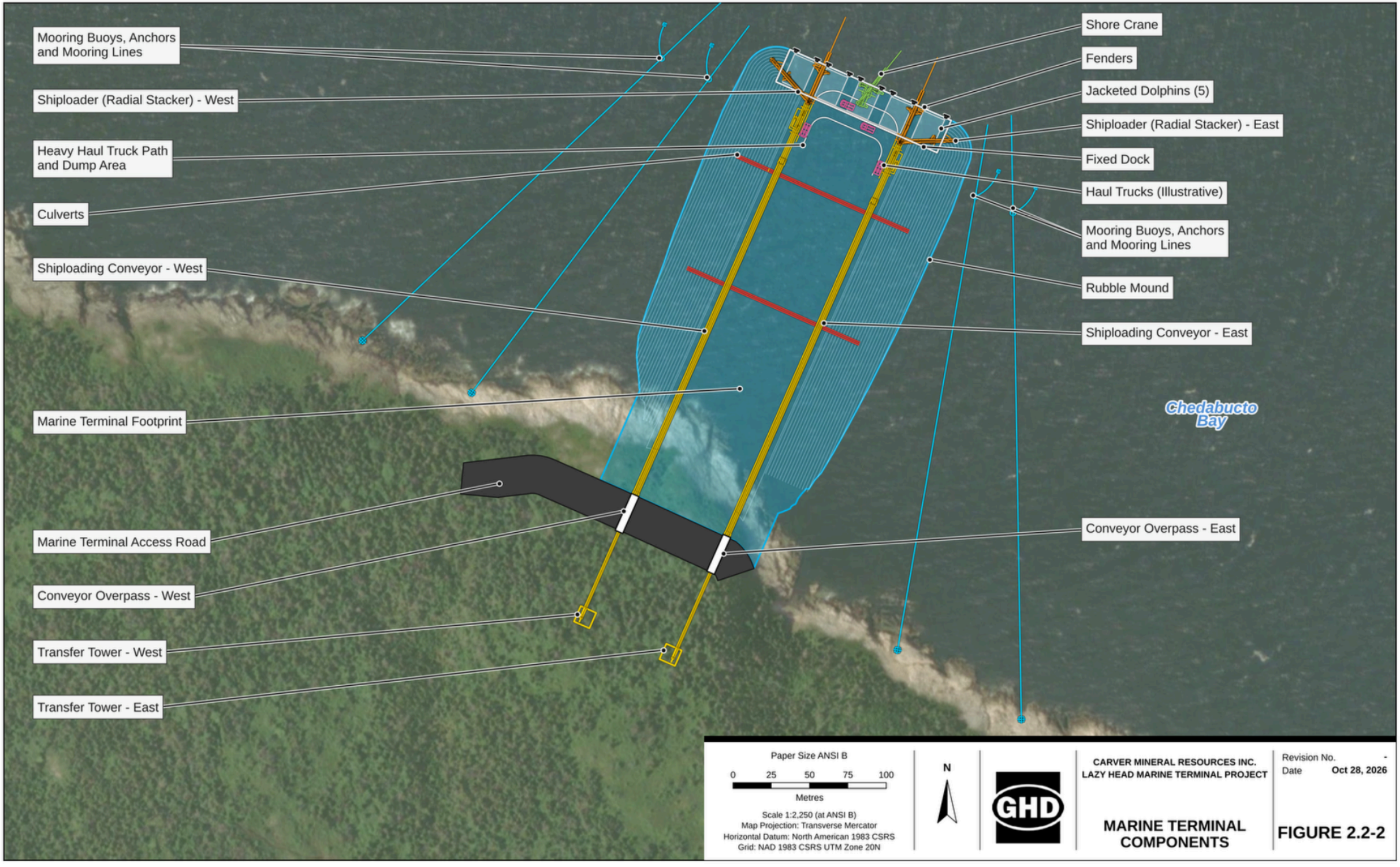
PROJECT PLAN

Project No. **12671292**
Revision No. **-**
Date **Sep 24, 2026**

FIGURE 2.2-1

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Attribution: Field delineated features created by GHD. Mine infrastructure layers provided by Monien Resources Corp. This product has been produced by or for GHD and includes data provided by the Department of Service Nova Scotia. The incorporation of data sourced from the Department of Service Nova Scotia within this product shall not be construed as constituting an endorsement by the Department of Service Nova Scotia of our product.


Mooring Buoys, Anchors and Mooring Lines
Shiploader (Radial Stacker) - West
Heavy Haul Truck Path and Dump Area
Culverts
Shiploading Conveyor - West
Marine Terminal Footprint
Marine Terminal Access Road
Conveyor Overpass - West
Transfer Tower - West
Transfer Tower - East
Shore Crane
Fenders
Jacketed Dolphins (5)
Shiploader (Radial Stacker) - East
Fixed Dock
Haul Trucks (Illustrative)
Mooring Buoys, Anchors and Mooring Lines
Rubble Mound
Shiploading Conveyor - East
Conveyor Overpass - East
Chedabucto Bay
Paper Size ANSI B
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Metres
Scale 1:2,250 (at ANSI B)
Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 CSRS
Grid: NAD 1983 CSRS UTM Zone 20N
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GHD
CARVER MINERAL RESOURCES INC.
LAZY HEAD MARINE TERMINAL PROJECT
MARINE TERMINAL COMPONENTS
Revision No. -
Date Oct 28, 2026
FIGURE 2.2-2

The marine terminal will be built as a single rubble mound structure extending about 270 metres (m) from the shoreline into Chedabucto Bay (Figure 2.3-2). The design was chosen to minimize seafloor disturbance and includes:

– Fully covered conveyors along the rubble mound to move material.
– A fixed dock structure at the seaward end of the rubble mound that provides a vertical dock face and structural support for transfer equipment.
– Four mooring buoys anchored to shore by concrete deadmen for berthing and mooring vessels across the full tidal range.

Two enclosed conveyors, and dual luffing-slewing radial stackers mounted on the fixed dock. The terminal is designed to handle 48,000 deadweight tonne bulk carriers (Handymax-class, about 198 m long and 32 m wide) serving the U.S. East Coast and Gulf region construction market and offshore wind projects along the east coast of North America. At full production (Year 7), about 1.4 vessels per week (71 per year) are expected, with each vessel call taking about 24 hours. Loaded vessels will leave at high tide with a maximum draft of about 12 m. Tug assistance is not expected, though a small line handling boat will assist with ship berthing activities.

The terminal will not include refuelling infrastructure. Refuelling, provisioning, waste management, and other vessel services will be provided by third parties. The terminal is not in an area of Chedabucto Bay requiring pilotage authority. Project vessels will connect to the main shipping lane about 4 km north of the terminal, with entrance and exit paths extending about 400 m from the terminal. The final approach is still being developed with the Atlantic Pilotage Authority, the GCIFA, and Transport Canada.

Marine transport will be provided by third-party or Carver-owned bulk carriers, all meeting regulatory requirements including the *Canada Shipping Act*, and requirements for pilotage, ballast water management, vessel speed restrictions, and seasonal management measures.

The Project includes the marine terminal infrastructure extending from the access road overpasses at the dual shipping conveyors to the fixed dock face. Key components include electrical and control systems, the fixed dock's five jacketed dolphins, infill sections and structural steel deck frame, vessel berthing and mooring facilities, and ship-loading radial stackers. The scope encompasses construction, operation, and closure activities. Operations may occur up to 24 hours per day, year-round, depending on vessel schedules, with each aggregate vessel call requiring approximately 24 hours to complete berthing, loading, and departure activities.

At Project closure, the buildings, ship loaders, mooring buoys, conveyors, transfer towers, and other equipment will be removed. The rubble mound and fixed dock will remain in place. Sediment and erosion controls will be applied throughout closure. Additional details regarding Project closure and reclamation activities will be developed as part of Project permitting.

2.3 Infrastructure, Structures and Physical Works

The primary components of the Project are detailed in the following sections and shown on Figure 2.3-1.

– Marine Terminal
– Marine Transportation and Pilotage
– Access Road
– Ancillary infrastructure, including fuel storage, power supply, and waste management, all assessed under the provincial Environmental Assessment process.

2.3.1 Marine Terminal

The marine terminal design has been developed to avoid in-water blasting. A marine geotechnical drilling program was completed in summer 2026, outside the commercial fishing season in Chedabucto Bay (Lobster Fishing Area 31A), to confirm seafloor conditions and support detailed design of the marine terminal. Evaluation of the geotechnical results may support refinements to the terminal configuration, including the potential to bring the facility closer to shore or increase the depth of the berth, which could in turn require in-water dredging. Should such refinements be considered, the implications for design, construction methods, and the marine environment

would be fully evaluated through detailed design and discussed with the GCIFA and other affected stakeholders before any change is advanced.

The main components of the marine terminal are summarized in Table 2.3-1.

Table 2.3-1 Summary of Marine Terminal Components

Component	Description	Key Features and Function
Rubble Mound	A single rubble mound extending approximately 270 m seaward from the shoreline.	Built from about 1.1 million tonnes of blasted rock and armour stone (1-tonne, 2.5 to 4.5-tonne, and 7 to 11-tonne), sourced from the processing plant area. Placed on a stable 2:1 slope to form durable embankments. Includes culverts to allow natural water flow and reduce siltation. Support conveyors and allow light vehicle access for inspection, maintenance, and armour stone loading. Expected to provide long-term habitat for lobster and other marine species.
Conveyor System	Two covered conveyors, 48 to 60 inches wide, running approximately 270 m along the top of the rubble mound to the fixed dock.	Fully covered and enclosed at drop points to control dust, reduce noise, limit light pollution, and prevent material loss to the sea. Allow year-round shipping and maintenance access. Two conveyors enable higher loading rates, shorter vessel time at berth, lower vessel emissions, and provide backup if one conveyor or stacker is out of service. Each conveyor has two landside transfer towers and two waterside towers on the fixed dock.
Fixed Dock	The fixed dock measures approximately 120 m in length by 25 m in width, sized to accommodate berthing of the design vessel and to support the radial stackers and associated material handling equipment (i.e., shore crane).	The fixed dock will serve as a breasting and mooring structure, and a support for conveyor equipment that transfers aggregate from the land-based material handling system to the ship loading radial stackers, temporary stockpile area for oversized product for loading via the shore crane, and support for the shore crane.
Vessel Mooring System	The mooring system will include four mooring buoys — two for bow lines and two for stern lines — as well as multiple mooring devices for breasting lines mounted along the waterside edge of the fixed dock.	Each mooring buoy will be rated to a minimum holding capacity of approximately 200 tonnes, sized to accommodate the mooring forces associated with the design vessel under prevailing wind and wave conditions. The concrete deadmen will be sized for a minimum holding capacity of approximately 200 tonnes each. Anchor chains and mooring lines are specified to applicable marine design standards. Water depth at the dock face is about 12 m at chart datum, with a tidal range of about 1.8 m. Minimum under-keel clearance is 1 m at departure; loaded vessels leave at high tide with a maximum operating draft of about 12 m.
Ship loaders	Two radial-stacker ship loaders mounted on the fixed dock.	Each radial stacker can rotate (slew), extend (telescope), and raise or lower (luff), allowing precise placement of aggregate into vessel holds while the ship is secured. Prevents cargo warping and avoids the need to move the vessel along the berth, reducing the terminal's marine footprint. Ship loaders are controlled by marine terminal personnel to ensure accurate placement and minimize disturbance in the marine environment.

2.3.2 Marine Transportation and Pilotage

Transport Canada Vessel Traffic Services (VTS) Zones are established through the *Canada Shipping Act* to help ensure the safety of marine traffic and the environment by monitoring movement of larger vessels, providing navigation information, coordinating emergency response, and supporting marine mammal protection measures. Project vessels would be required to follow the *Vessel Traffic Services Zones Regulations* and communicate with the Canadian Coast Guard while travelling through VTS Zones such as the Strait of Canso and Eastern Approaches.

At full production, the Project is expected to generate about 71 vessel trips per year (1.4 vessels per week). Project-related shipping is anticipated to result in a relatively small increase in overall marine traffic.

Vessels travelling to and from the marine terminal will operate under existing Canadian marine safety regulations. These rules help ensure safe vessel movements, reduce the risk of collisions and groundings, support emergency response, and protect marine mammals and the marine environment. Vessels accessing the marine terminal will be monitored through the Canadian Coast Guard's vessel traffic management system when travelling through designated shipping zones.

Although the terminal is located outside the area where pilotage is legally required, all vessels calling at the terminal will use qualified marine pilots. A dedicated Lazy Head Pilotage Association will be established to manage pilot training, procedures, and vessel movements. Pilots will have appropriate marine qualifications and experience and will receive site-specific training before operating at the terminal.

Before operations begin, a detailed marine navigation simulation study will be completed to confirm that vessels can safely access, berth at, and depart from the terminal under a range of weather and sea conditions. The study will help determine operating limits, navigational aid requirements, and whether tug assistance is needed. Any required navigational aids will be installed before the terminal begins operating. Findings will be incorporated into a Marine Operations Manual and navigation safety procedures developed in consultation with regulators, local fishers, and other marine users.

The Proponent will continue to work with Transport Canada, the Atlantic Pilotage Authority, the Canadian Coast Guard, local fishers, GCIFA, and other stakeholders to support safe navigation and minimize interactions with existing marine traffic.

2.3.3 Access Road

The marine terminal will be accessed via a pre-existing access road developed as part of the quarry development, and assessed as part of the provincial Environmental Assessment, as noted in Section 1; it extends from Route 16 (Marine Drive) to the quarry and associated processing infrastructure to allow for movement of Project personnel, equipment, and materials. The marine terminal access road refers to an approximately 195-m road segment extending from the pre-existing access road, as shown on Figure 2.2-1, to the marine terminal. It will be designed at a 1% to 3% slope. A drainage swale will be located on the south side of the road for water management.

2.3.4 Ancillary Infrastructure, Structures, and Physical Works

2.3.4.1 Fuel Storage

Mobile equipment will run mainly on diesel during construction and early operations. The Project will look for opportunities to switch to lower-emission options, such as battery-electric or hybrid equipment.

Diesel will also power on-site generators during construction and the initial operations.

Liquid petroleum and non-petroleum products (including antifreeze) will be kept on-site for routine servicing. Fuel storage will include diesel tanks, a gasoline tank, and storage for lubricating oils and maintenance fluids.

All storage tanks will be double-walled or fitted with secondary containment. Larger petroleum containers will be kept in dedicated contained areas and managed under applicable federal and provincial regulations. The fuelling pad will be built on a lined surface designed to direct any spills to a central collection point. A Spill Prevention Control and Countermeasure Plan will follow best management practices to provide additional containment.

Fuel and maintenance fluids will be delivered by licensed suppliers experienced with hazardous materials. Tank transfers will be supervised by the delivery driver to catch and address any spill risks before they occur. Diesel and other petroleum products will be stored in aboveground containers near the maintenance shop (Figure 2.3-1).

2.3.4.2 Power Supply

Power for the Project will be provided either by diesel powered generators or by direct connection to the 69 kilovolt Nova Scotia Power Inc. transmission line that parallels the southern boundary of the Project, depending on operations, as described previously.

2.3.4.3 Waste Management

The Project will generate sewage and greywater, which will be treated either on-site or off-site at a municipal facility.

A conventional septic system is not possible because the soil over the granite is too shallow for proper treatment. Instead, a large holding tank is planned for the construction phase. Sewage and greywater will be directed to the tank and pumped out by a licensed hauler for off-site treatment.

A raised bed septic system may also be considered as an on-site alternative, with the suitable type determined later based on site testing. In either case, the amount of waste generated will depend on the number of workers.

Portable sanitation units will be used during construction and early operations. A permanent washroom and bathing facility may be built later as operations progress. Non-hazardous waste will be stored in bins and shipped off-site to approved facilities. Hazardous materials or items requiring special handling, recycling, or disposal will be properly stored and shipped off-site.

2.4 Project Activities

This section provides a description of Project activities, the location of each activity, expected outputs, and an indication of each activity's magnitude and scale, as available. The Project involves three main phases – construction, operation, and closure. A Project schedule illustrating important milestones for Project phases is provided in Section 1.2.

Table 2.4-1 Overview of Project Activities

Project Phase	Project Activities
Construction (2 years)	– Implement sediment and erosion controls – Construct a single rubble mound – Install outbound shipping conveyor system, ship loading radial stackers, and fixed dock – Install utilities – Clear vegetation, overburden, topsoil, and loose rock associated with marine terminal access road construction – Construct the marine terminal access road
Operation (85 years)	– Transfer aggregate products via outbound shipping conveyor system to marine terminal – Ship aggregates and wind farm armour stone products from marine terminal
Closure (1 year)	– Demolish and remove marine terminal conveyors, utilities and any infrastructure (rubble mound and fixed dock will remain in place) – Implementation of sediment and erosion controls – Grading and landscaping

2.5 Design Considerations and Alternatives

2.5.1 Alternatives to the Project

This section reviews the options considered for meeting the Project's purpose, including not proceeding, other possible locations in Nova Scotia, and different ways of carrying out the work.

2.5.1.1 Do Nothing

Under a "do nothing" approach, the Project would not proceed and no granite would be shipped to supply U.S. East Coast and Gulf region markets or offshore wind developments. While this would avoid Project-related effects including benefits of the Project, it would not meet the Project's purpose.

2.5.1.2 Alternative Site

Morien completed a province-wide review of potential marine export aggregate sites in Nova Scotia. An ideal site is one where the deposit is adjacent to deep water and the material can be moved to the vessel by conveyor. No other site in Nova Scotia with the desired mineral resources met both conditions. In addition, to meeting the selection criteria, Lazy Head also provides:

– Direct access to deep, sheltered, ice-free waters.
– Limited nearby residences.
– Proximity to existing infrastructure and workforce.
– A site layout allowing design-led mitigation, including a vertically lowered processing plant and natural screening along the northern boundary.

2.5.2 Mitigation by Design

Through the impact assessment process, several Project components were adjusted based on input from Carver, consultants, Rightsholders, stakeholders, and community members.

2.5.2.1 Design

Several terminal designs were considered. An earlier, longer offshore configuration for larger vessels was not advanced following engineering review, fisheries consultation, and environmental considerations. The terminal was shortened to reduce the marine footprint, while accommodating smaller vessels.

The design was also changed from a single trestle to a single rubble mound approach, allowing two covered outbound shipping conveyors to contain dust, reduce noise, and prevent material loss. The design also supports more efficient loading, reducing vessel time at the terminal and limiting potential interactions with commercial fishing.

The selected design avoids in-water blasting, with the rubble mound being built from rock sourced on-site. Following feedback from the GCIFA on sediment movement in Chedabucto Bay, culverts were added to allow water circulation and reduce localized siltation.

The rubble mound approach was preferred over steel or caisson-only structures because it:

– Improves worker safety (inspection and maintenance from land, avoiding transfers between vessels, work over water, and marine weather exposure).
– Is more durable and resilient to Chedabucto Bay's conditions.
– Is expected to provide habitat for lobster and other marine species over time.

2.5.2.2 Location

Alternative terminal locations were evaluated based on navigational safety, operational efficiency, and local marine conditions. Site suitability depended largely on water depth and seabed conditions capable of safely accommodating vessels without extensive offshore infrastructure or in-water blasting.

3. Part C: Location Information

The Project is located near Lazy Head, a coastal cape in the MODG, NS (Figure 1.1-1). It is about:

– 3.8 km northeast of Fox Island Main
– 3.0 km northwest of Hazel Hill
– 4.3 km west of Canso

3.1 Geographic Coordinates

The PA is centred at: 5,023,542.01 m N, 652,486.42 m E (Universal Transverse Mercator coordinates, North American Datum of 1983 Zone 20), 45°20'55.68" N latitude and -61°03'12.3" W longitude.

3.2 Site Maps

Mapping provided in this document includes:

– Figure 1.1-1 – Project Location
– Figure 1.1-2 – Project Study Area
– Figure 2.3-2 – Project Plan

3.3 Description of Lands and Ownership

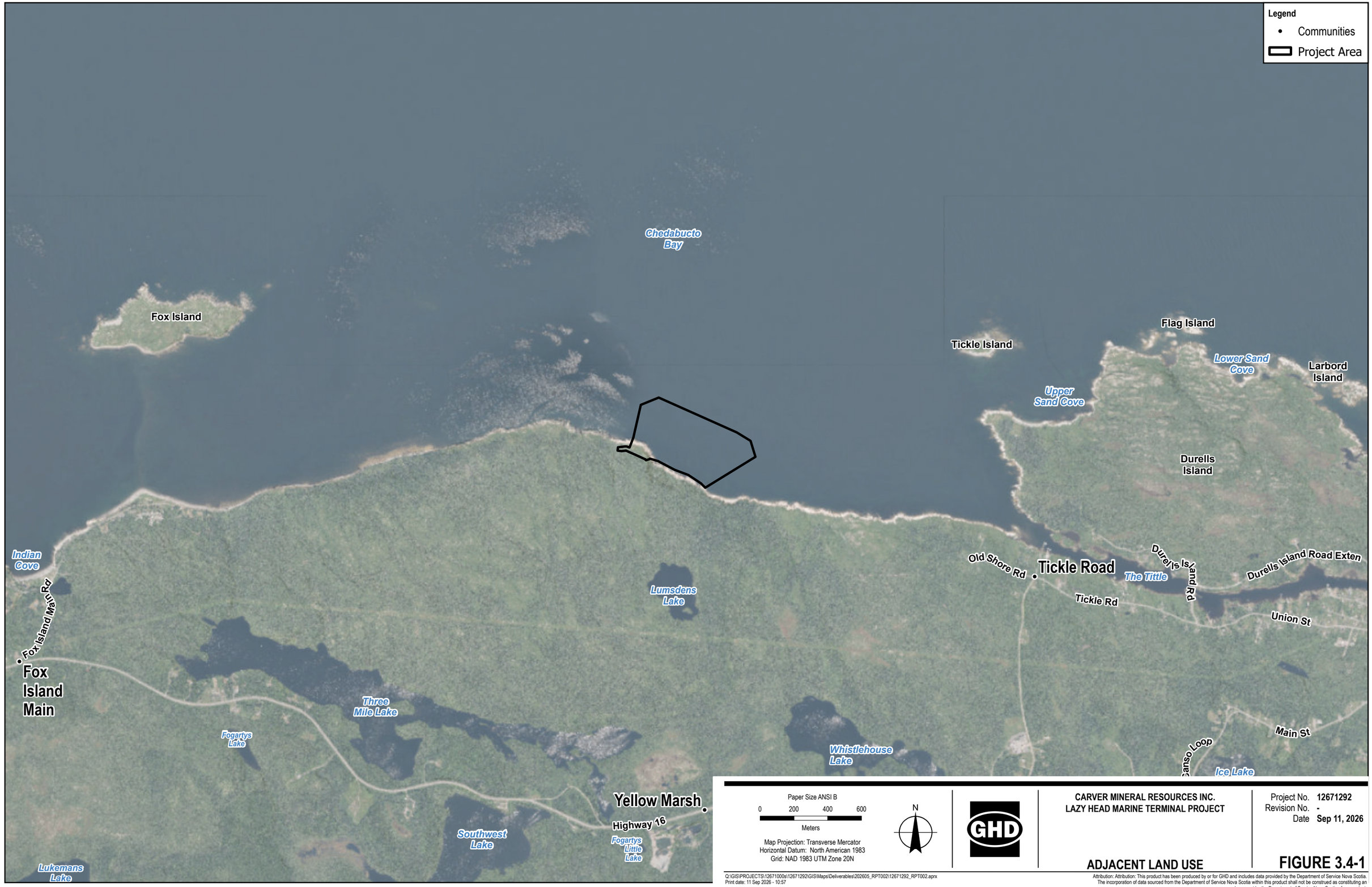
Both Canada and the Province of Nova Scotia have jurisdiction over coastal and marine areas, depending on location and activity. Provincial Crown land generally ends at the ordinary high-water mark but also covers the intertidal zone (CanLII, 2026). Federal jurisdiction includes submerged land beyond the low-water mark, extending 12 nautical miles into Canada's Territorial Sea (Government of Canada, 2026).

DNR Land Administration has confirmed that the lands and submerged seabed around the marine terminal fall under provincial jurisdiction. Carver will work with the appropriate authorities to confirm requirements and obtain all necessary permits and approvals. No privately owned water lots have been identified in this area.

The marine terminal access road will be located on Crown Land (PID 35092410). Carver has applied for a Crown land lease and will work with regulatory agencies and landowners to secure the land access rights, permits, and approvals required for Project construction and operation.

3.4 Proximity to Residences and Communities

The land-based area of the Project, where the access road will be constructed, is characterized as an undeveloped wooded landscape. The community of Fox Island Main is 3.8 km from the PA. The nearest permanent residential dwelling is on Route 16, approximately 1.9 km from the marine terminal. Adjacent land use is shown on Figure 3.4-1.



Paper Size ANSI B

0 200 400 600

Meters

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 20N

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CARVER MINERAL RESOURCES INC.
LAZY HEAD MARINE TERMINAL PROJECT

ADJACENT LAND USE

Project No. 12671292
Revision No. -
Date Sep 11, 2026

FIGURE 3.4-1

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Attribution: Attribution: This product has been produced by or for GHD and includes data provided by the Department of Service Nova Scotia. The incorporation of data sourced from the Department of Service Nova Scotia within this product shall not be construed as constituting an endorsement by the Department of Service Nova Scotia of our product;

3.5 Proximity to Indigenous Land Use

The First Nations Reserve Lands closest to the Project are set aside for Potlotek First Nation (Indigenous Services Canada, 2026). Chapel Island 5 on Bras d'Or Lake, Cape Breton Island is approximately 45 km from the Project (Table 3.6-1). This section includes identification of Federal Indigenous Reserve Lands.

Indigenous land and resource use may occur within or beyond Reserve Lands. Based on the findings of the MEKS completed for the Project, Indigenous lands and resource use occurs in or near the MEKS Study Area, which includes the PA. More information on Indigenous land and resource use is included in Section 3.8.2.

3.6 Proximity to Federal Lands

In Canada, Federal Lands include lands owned, administered, or controlled by the Government of Canada such as national parks, military bases, federal infrastructure (e.g., designated seaports or airports), and Indigenous Reserve Lands. No federal lands intersect the PA. The federal lands closest to the PA are listed in Table 3.6-1.

Table 3.6-1 Distances from Nearest Federal Lands

Nearest Federal Lands	Approximate Distance from PA (km)
Fox Island (potential future protected area)	2.4
Potlotek First Nation: Chapel Island 5	45
Cape Breton Highlands National Park	140
Halifax International Airport	196
Canadian Forces Base Shearwater	204
Halifax Port Authority	210

Source: Indigenous Services Canada, 2026; Parks Canada, 2025; Transport Canada, 2025, 2020; DND, 2025; IAAC, 2026

3.7 Physical and Biological Environment Setting

The Project is located in a largely undeveloped rural area of Nova Scotia, surrounded by forest and the marine environment (Chedabucto Bay) to the north. Baseline environmental studies started in 2025 and are still ongoing, including surveys for Mainland Moose, migratory birds, freshwater fish, and marine benthic species, along with surface water and groundwater monitoring. These programs help build a clearer picture of site conditions and support future permitting. The environmental setting described below is based on the baseline data collected to date.

3.7.1 Noise

Noise and vibration from shipping vessels are regulated by Transport Canada. Under the Fisheries Act, underwater noise is recognized as a physical disturbance and a form of habitat degradation, with the Marine Mammal Regulations setting limits on vessel approaches and noise exposure to protect marine life. DFO also leads the Ocean Noise Strategy, which sets out mitigation measures and best practices for reducing human-made underwater noise. Underwater noise is also indirectly regulated under SARA, which protects the acoustic space that listed species need for foraging and communication.

On land, noise is regulated federally through Health Canada's guidance on human health impacts (Health Canada, 2017), and provincially through the NS *Workplace Health and Safety Regulations* and the ECC Guidelines for Environmental Noise Measurement and Assessment (ECC, 2023a). The Guidelines require noise levels to be met where people live, work, or take part in recreational activities, and set maximum permissible sound levels for rural areas during the day, evening, and night.

Existing noise levels were measured at four nearby locations (LT1 through LT4), between about 1.3 km and 2.9 km from the marine terminal study area. The results reflect a rural coastal setting, with low background sound levels, limited human-made noise, and occasional natural or marine-related sounds.

3.7.2 Air

Air quality in Canada is regulated under the *Canadian Environmental Protection Act* (CEPA), which sets national standards for fuels, vehicles, and industrial emissions. In Nova Scotia, air quality is regulated under the *Air Quality Regulations* of the NS *Environment Act*, which set standards to protect human health.

GHG emissions are tracked by ECCC. NS released 14 Mt CO_2 eq in 2023, a 36% decrease from 2005 levels of 22 Mt CO_2 eq (ECCC, 2025).

The PA falls within ECC's Northern Air Quality Zone. The nearest monitoring station in that zone is in Pictou, NS, about 131 km west of the site. Because of the distance, air quality data were instead taken from the Port Hawkesbury station, about 37 km north of the marine terminal. Although this station is in a different air quality zone (Eastern), it is closer and considered more representative of conditions at the site. Both Port Hawkesbury and Canso are rural communities, though Port Hawkesbury is more developed, so air quality in the PA is likely even better than what the station shows.

Data on fine particles (PM2.5) and common gases (nitrogen oxide, nitrogen dioxide, sulphur dioxide, and ozone) were collected from January 2010 to December 2024 (ECC, 2025a; 2025b; 2025c; 2025d). Dust (total suspended particulate) is not measured at this station. Overall, the data show that pollutant levels have remained low and stable over the 15-year period, consistent with a rural coastal setting.

3.7.3 Light

NS does not currently have rules or guidelines for light emissions from industrial sites. To assess lighting impacts, the Project used guidance from the Institution of Lighting Professionals (ILP).

The Project is located near Lazy Head in Guysborough County, NS, in a mostly rural area about 4.3 km west of Canso, 3.0 km northwest of Hazel Hill, and 3.8 km northeast of Fox Island Main. Given this rural setting, the surrounding area is considered to have a relatively dark nighttime environment, which is used as the baseline for assessing potential light spill beyond the Project footprint.

3.7.4 Geology, Soils and Sediment

Provincial standards for geology, soils, and sediment include the Guide to Developing Erosion and Sediment Control Plans (ECC, 2025), which sets out requirements and best practices to prevent sediment from entering waterways. The provincial *Blasting Safety Regulations and Environmental Assessment Registration Regulations* also apply. Federally, the Canadian Water Quality Guidelines for the Protection of Aquatic Life help protect aquatic ecosystems.

The seabed near the marine terminal is mostly made up of coarse material, including exposed bedrock, boulders, and cobble, with smaller amounts of gravel, pebbles, and coarse sand. Further north, away from the coastline, the seabed becomes finer and eventually mostly sand. Marine sediment samples were tested for metals and other contaminants, and all results were within the applicable federal and provincial guidelines for protecting marine life. The risk of seismic activity in the area is considered low.

The land-based portion of the Project sits on granite bedrock typical of the Canso area, with a small area of metasedimentary rocks along the coast. Drilling in December 2025 confirmed that most of the PA is underlain by granite, which does not pose a risk of Metal Leaching or Acid Rock Drainage. Metasedimentary rocks that can pose this risk elsewhere in the region are present only in negligible amounts within the PA.

Surface soils are thin (generally 1.25 m or less), shaped by the last glacial event about 10,000 years ago. The western part of the PA, along the access road, is covered by a stony, sandy till plain.

The greatest change in topography is along the northern coastal boundary, where the land rises sharply from sea level to about 30 m at the top of the coastal plateau. The highest point in the PA is 53 m, and the terrain elsewhere is relatively flat. Surface water drains outward from a central high point into small streams and wetlands, eventually flowing to the ocean to the north, Three Mile Lake to the south, or Lumsden Lake to the southeast.

The seabed at the marine terminal footprint is similar to the broader MSA: coarse near the shore, transitioning to finer sand further out. Marine sediment samples showed all measured contaminants were within applicable guidelines, and the risk of seismic activity in the PA is considered low.

3.7.5 Groundwater

Groundwater is regulated provincially through the *Environmental Assessment Regulations* and Industrial Approval, under the NS *Environment Act*. Groundwater drawdown resulting from project development that has the potential to alter stream flows, impacting fish and/or fish habitat is federally regulated under the *Fisheries Act*.

Groundwater studies are not relevant to the natural environment around the marine terminal.

3.7.6 Surface Water

Surface water in Canada is regulated federally by ECCC under the CEPA, and by DFO under the *Fisheries Act*, which protects fish and fish habitat and prohibits harmful substances from entering fish-bearing waters. Provincially, surface water is regulated under the NS *Environment Act* through the Environmental Assessment Regulations and Industrial Approval process. Any groundwater drawdown from the Project that could alter stream flows and affect fish or fish habitat is also federally regulated under the *Fisheries Act*.

The marine terminal is located in Chedabucto Bay, along the Atlantic coast. Baseline conditions were compiled from DFO, the Canadian Hydrographic Service, and the NS Coastal Monitoring Program (CMAR). The area has open Atlantic waters with strong flushing, which means contaminants are diluted more quickly than in enclosed bays.

Tides in the area rise and fall twice a day, with a moderate range of about 1.2 to 1.6 m — typical for the Atlantic coast of Nova Scotia. Storm surges can add another 0.3 to 1.0 m during common storms and 1 to 2 m during severe storms, with occasional higher values (e.g., about 2 m during Hurricane Juan in 2003).

Water quality in the area reflects typical open Atlantic conditions:

– Water temperatures range from 0–4°C in winter to 12–18°C in summer
– Salinity is typical of offshore marine waters
– Dissolved oxygen levels are near saturation
– Nutrient levels are low to moderate
– pH is slightly alkaline (around 7.8 to 8.2)
– Turbidity and suspended solids are generally low, with short-term increases during storms
– Freshwater studies are not relevant to the marine terminal area.

3.7.7 Wetlands

Wetlands provide important ecological value, including habitat for plants and animals, water storage and flow management, and water quality improvement.

Federally, wetlands are protected under the Federal Policy on Wetland Conservation, which supports their ecological and socio-economic functions through partnerships with provinces, territories, Indigenous communities, and the private sector. In NS, wetlands are protected under the *Environment Act* and the Wetland Conservation Policy (ECC, 2019), which define wetlands as marshes, swamps, fens, or bogs where water is at or near the surface and supports plants, soils, and biological activity adapted to wet conditions. The policy aims to prevent a net loss of wetland area or function, particularly for Wetlands of Special Significance (WSS), and requires approvals to alter wetlands, with some exceptions.

No wetlands were identified in the natural environment around the marine terminal, or access road.

3.7.8 Fish and Fish Habitat

The *Fisheries Act* is the main federal legislation that manages and protects fisheries resources, fish, and fish habitat.

The MSA includes marine fish habitats. The marine terminal study area covers about 21.3 ha in Chedabucto Bay. Surveys of the seafloor community found several species of commercial interest along Nova Scotia's Atlantic coast, including American Lobster (*Homarus americanus*), Atlantic Rock Crab (*Cancer irroratus*), Blue Mussel *(Mytilus edulis*), and Sea Scallop. No federally listed Species at Risk (SAR) were observed.

Other marine wildlife observed during surveys included lobster and crab shells along the coast (suggesting predation in the bay), two unidentified whales about 1 km offshore, and three seals near or northeast of the PA.

Marine sediment quality was assessed to identify any signs of contamination and establish baseline conditions (see Section 3.7.4).

Overall, the marine environment appears healthy, functioning, and of high quality, with diverse and abundant seafloor life, varied substrate, good algal cover, clean sediment, and clear evidence of predator-prey interactions. It is highly suitable for common and commercially important species.

The area may also support SAR known to inhabit the region, including Lumpfish (*Cyclopterus* sp.), Northern Wolffish (*Anarhichas denticulatus*), and Spotted Wolffish *(Anarhichas minor*), mainly for feeding. Prey species for the wolffish were identified during surveys, and some habitats may be suitable for spawning or shelter. Lumpfish spawning habitat may be limited due to the lack of eelgrass, though rocky areas near any eelgrass beds outside the MSA could still be used for nesting.

3.7.9 Terrestrial Habitat and Flora

The federal SARA (Canada, 2002) and the NS *Endangered Species Act* (NSESA; Nova Scotia, 1998) provide legal protection for plant and lichen species identified as at risk. Both Acts prohibit killing or disturbing listed SAR and damaging their residences or critical habitat. SAR are species listed under SARA or the NSESA. SOCI are not legally listed but are recognized by COSEWIC as Endangered, Threatened, or of Special Concern, or ranked as vulnerable by the Atlantic Canada Conservation Data Centre (ACCDC).

Terrestrial habitat is not relevant to the natural environment around the marine terminal, with the exception of the natural environment surrounding the proposed access road.

3.7.10 Terrestrial Fauna

Terrestrial wildlife and SAR are protected under federal and provincial legislation, including the SARA, the NS *Wildlife Act* (1989) and Regulations, and the NSESA.

Wildlife with the potential to occur in or near the PA was first identified through a desktop review, followed by opportunistic observations during all baseline biophysical surveys, with a focus on SAR and SOCI.

Terrestrial fauna is not relevant to the natural environment surrounding the marine terminal. Any potential effects of the access road on terrestrial wildlife will be addressed in the EARD.

3.7.11 Avifauna

Migratory birds and bird SAR are protected under federal and provincial legislation, including the *Migratory Birds Convention Act, 1994* (MBCA) and the *Migratory Birds Regulations, 2022* (MBR), the SARA, and the NS *Wildlife Act* (1989).

The PA's location near Chedabucto Bay supports seabirds and shorebirds, in addition to landbirds using terrestrial habitats.

Bird surveys were conducted in June, August, and September 2025, and again in April and May 2026. The goal was to identify species and habitat use, with a focus on SAR and SOCI, and to track how species use the area across seasons.

Surveys included:

– Breeding bird survey (June 2025)
– Nightjar survey (June 2025)
– Coastal bird and migration surveys (June, August, and September 2025, and April and May 2026)
– Spring migration surveys (April and May 2026)
– Nocturnal owl survey (April 2026)

Two coastal bird survey stations were set up along the northern coastline of the PA, chosen for their wide views over the coast, Chedabucto Bay, and Fox Island. The open barrens, low shrubs, and steep rocky coast provide nesting habitat for marine birds and shorebirds such as ducks, gulls, sandpipers, and cormorants. The nearby forest edge also allows monitoring of forest bird species using the area during migration.

A total of 18 marine bird and shorebird species were identified during the migration surveys. The rocky coastlines provide protected nesting sites with direct access to coastal food sources. The most common species were Common Eider, Double-crested Cormorant, Herring Gull, and Northern Gannet, all which nest near open water, with Common Eider and Northern Gannet preferring rocky coastlines.

The PA contains a variety of habitats that provide potential nesting habitat for migratory birds. Breeding bird surveys completed in 2025 recorded 149 birds from 31 species, and migration surveys recorded 40 species. No bird species listed as SAR under federal or provincial legislation were observed during the surveys. SOCI migratory bird species are addressed in Section 3.7.12.

Surveys for nightjars and owls did not detect any species, likely due to the lack of suitable habitat conditions in the PA.

3.7.12 Species at Risk and Species of Conservation Interest

SAR are protected under the federal SARA or the NSESA. SOCI are species whose populations are currently or potentially threatened by natural or anthropogenic factors, but do not have protections under SARA or the NSESA. They are designated by COSEWIC as Endangered, Threatened, or of Special Concern, and/or are ranked S1, S2, or S3 species or any combination thereof by ACCDC.

Aquatic SAR

A review of DFO's Aquatic SAR Map showed no Critical Habitat within the MSA, though some aquatic SAR could occur seasonally in the Atlantic Ocean near the PA. These include:

– Atlantic Wolffish (Special Concern): Potential habitat is present, but high algae growth likely limits its presence.
– Lumpfish (Threatened under COSEWIC; Not listed on Schedule 1 under SARA [under consideration for addition to Schedule 1]): Suitable rearing habitat (eelgrass) was not observed in the area.
– Northern Wolffish and Spotted Wolffish (Threatened): May occur due to suitable habitat.
– White Shark – Atlantic (Endangered): May be present seasonally in summer and autumn, but not a permanent resident.
– Blue Whale, Fin Whale, North Atlantic Right Whale, Sowerby's Beaked Whale: Generally unlikely to occur nearby due to habitat preferences or distance from known feeding areas, though Fin Whale may occasionally pass through.
– Leatherback Turtle and Loggerhead Sea Turtle (Endangered): Unlikely due to habitat mismatch and distance from the continental shelf.
– No aquatic SAR were observed within the PA's marine environment during the marine surveys.

Avian SAR

No avian SAR were observed during the completion of baseline surveys. The ACCDC report, however, identified three avian SAR observations within the 5-km study radius of the PA, as follows:

– Barn Swallow (*Hirundo rustica*) (Threatened): Typically associated with human structures in rural areas; interaction with the Project is unlikely
– Evening Grosbeak (C*occothraustes vespertinus*) (Special Concern): May occur due to suitable mature mixed forest habitat
– Eastern Wood-Pewee (*Contopus virens*) (Special Concern): May occur due to suitable forest habitat

Avian SOCI

The following avian SOCI were identified during the completion of baseline surveys:

- Common Tern (*Sterna Hirundo*)
- Common Eider (*Somateria mollissima*)
- Great Cormorant (*Phalacrocorax carbo*)
- Northern Gannet (*Morus bassanus*)
- Red-breasted Merganser (*Mergus serrator)*
- Semipalmated Sandpiper (*Calidris pusilla*)
- Willet (*Tringa semipalmata*)
- Canada Jay (*Perisoreus canadensis)*
- Boreal Chickadee (*Poecile hudsonicus*)
- Bay-breasted Warbler (*Setophaga castanea*)
- American Goshawk (*Astur atricapillus*)
- Northern Harrier (*Circus hudsonius*)
- Blackpoll Warbler (*Setophaga striata*), and
- Cape May Warbler (*Setophaga tigrine*).

The ACCDC report identified the following SOCI that have the potential of being present based on their habitat preferences and landscape identified within the PA:

- Pine Siskin (*Spinus pinus*)
- Rose-breasted Grosbeak (*Pheucticus ludovicianus*)
- Wilson's Warbler (*Cardellina pusilla*)
- Black-backed Woodpecker (*Picoides arcticus*)
- Tennessee Warbler (*Leiothlypis peregrina*)

Terrestrial Flora and Fauna SOCI

Some bat species are considered "location sensitive," and the ACCDC report identified an observation of Little Brown Myotis about 17 km from the PA, and Northern Myotis and Tricoloured Bat more than 45 km away. No bat species were observed during field surveys.

Of the SOCI identified in the ACCDC report, field surveys confirmed the presence of two vascular plant species, Highbush Blueberry (*Vaccinium corymbosum*) and Purple False-foxglove (*Agalinis purpurea*), as well as one lichen species, Finger Ring Lichen (*Arctoparmelia incurva*).

3.8 Socioeconomic Environment

The human environment includes both Indigenous Peoples and non-Indigenous communities. Mi'kmaq language and terminology are used throughout this report. Based on best knowledge, Mi'kmaq is the plural, non-possessive form, while Mi'kmaw is the singular form. Despite this convention, the names of organizations and direct quotes are as stated by the organization providing the information.

3.8.1 Mi'kmaq of Nova Scotia

The Mi'kmaq are the Indigenous people of Nova Scotia and hold Aboriginal and Treaty Rights including the Aboriginal Right to hunt, gather and fish, as well as the Treaty Right to hunt and gather, and to fish for a "moderate livelihood". These Rights apply throughout the year and across the province.

There are 13 Mi'kmaq First Nations in Nova Scotia (CIRNAC, 2025a). The Mi'kmaw language belongs to the Eastern Algonquian language group (Government of Canada, 2025). In 2022, Nova Scotia passed the *Mi'kmaq Language Act*, officially recognizing Mi'kmaw as the province's original language (Office of the Commissioner of Official Languages, 2022).

No reserve lands are in the PA. The following First Nations have been identified as having reserve lands closest to the PA: Potlotek First Nation, We'koqma'q L'nue'kati, Paq'tnkek Mi'kmaw Nation, Millbrook First Nation, Sipekne'katik First Nation, and Eskasoni First Nation.

3.8.1.1 Potlotek First Nation

Potlotek First Nation has two Reserves: Chapel Island 5 and Malagawatch 4 (CIRNAC, 2026). The nearest Potlotek First Nation Reserve Land is approximately 45 km from the Project.

As of December 2025, the total registered membership of Potlotek was 867 (Table 3.8-1) (CIRNAC, 2026). Approximately 78% of registered members of Potlotek were living on Reserve Lands, whereas 22% were living off Reserve, as summarized in Table 3.8-1.

Table 3.8-1 Registered Population of Potlotek First Nation (December 2025)

Registered Population	Male	Female	Total	%
Living on Own Reserve	326	317	643	74
Living on Other Reserves	19	18	37	4
Living on Own Crown Land	0	0	0	0
Living on Other Band Crown Land	0	0	0	0
Living on Non-Band Crown Land	0	0	0	0
Living Off Reserve	90	97	187	22
Total	435	432	867	100

Source: CIRNAC, 2026

In the 2021, Chapel Island 5 had a population of 405 with 94% identifying as Indigenous. No census data were identified for Malagawatch 4 (Statistics Canada, 2023).

3.8.1.2 We'koqma'q L’nue’kati

We'koqma'q L’nue’kati has two Reserves: Whycocomagh 2 and Malagawatch 4 (CIRNAC, 2026). The nearest We'koqma'q L’nue’kati First Nation Reserve Land is Malagawatch 4 at approximately 58 km from the Project. As of December 2025, the total registered membership of We'koqma'q L’nue’kati was 1,142 (Table). Approximately 89% of the registered members were living on Reserve Lands, whereas only 8% were living off Reserve (CIRNAC, 2026).

Table 3.8-2 Registered Population of We'koqma'q L’nue’kati First Nation (December 2025)

Registered Population	Male	Female	Total	%
Living on Own Reserve	484	527	1,011	86%
Living on Other Reserves	16	19	35	3%
Living on Own Crown Land	1	1	2	0%
Living on Other Band Crown Land	0	0	0	0%
Living on Non-Band Crown Land	0	0	0	0%
Living Off Reserve	40	54	94	8%
Total	541	601	1142	100%

Source: CIRNAC, 2026

3.8.1.3 Paq’tnkek Mi’kmaw Nation

Paq’tnkek Mi’kmaw Nation has three Reserves: Paq’tnkek-Niktuek 23, Welnek 38 and a portion of Franklin Manor 22 (CIRNAC, 2026). The nearest Paq’tnkek Mi’kmaw Nation Reserve Land is Paq'tnkek-Niktuek 23 at approximately 58 km from the Project. As of December 2025, the total registered membership of Paq’tnkek Mi’kmaw Nation was 613 (Table 3.8-3) (CIRNAC, 2026). Approximately 74% of members were living on Reserve lands and 25% lived off Reserve.

Table 3.8-3 Registered Population of Paq'tnkek Mi'kmaw Nation (December 2025)

Registered Population	Male	Female	Total	%
Living on Own Reserve	200	225	425	69
Living on Other Reserves	11	22	33	5
Living on Own Crown Land	0	0	0	0
Living on Other Band Crown Land	0	0	0	0
Living on Non-Band Crown Land	0	0	0	0
Living Off Reserve	66	89	155	25
Total	276	337	613	100

Source: CIRNAC, 2026

3.8.1.4 Millbrook First Nation

Millbrook First Nation has eight Reserves: Millbrook 27, Sheet Harbour 36, Beaver Lake 17, Cole Harbour 30, Truro 27A, Truro 27B, Truro 27C, and Tufts Cove Indian Reserve (CIRNAC, 2026). The nearest Millbrook First Nation Reserve Land is Sheet Harbour 36 at approximately 121 km from the Project. As of December 2025, more than half (59%) of the registered population of Millbrook First Nation resided off Reserve, whereas 41% were living on Reserve Lands (Table 3.8-4).

Table 3.8-4 Registered Population of Millbrook First Nation (December 2025)

Registered Population	Male	Female	Total	%
Living on Own Reserve	480	490	970	39
Living on Other Reserves	21	18	39	2
Living on Own Crown Land	0	1	1	0
Living on Other Band Crown Land	1	1	2	0
Living on Non-Band Crown Land	1	0	1	0
Living Off Reserve	720	744	1,463	59
Total	1,223	1,254	2,477	100

Source: CIRNAC, 2026

3.8.1.5 Sipekne'katik First Nation

Sipekne'katik First Nation has five Reserves: Indian Brook 14, Pennal 19, New Ross 20, Shubenacadie 13, and Wallace Hills 14A (CIRNAC, 2026). The nearest Sipekne'katik First Nation Reserve Land is Indian Brook 14 at approximately 187 km from the Project. As of December 2025, Sipekne'katik First Nation had a registered population of 3,116 with approximately 46% living on Reserve Lands and 53% were living off Reserve (Table 3.8-5).

Table 3.8-5 Registered Population of Sipekne'katik First Nation (December 2025)

Registered Population	Male	Female	Total	%
Living on Own Reserve	652	731	1,383	44
Living on Other Reserves	31	33	64	2
Living on Own Crown Land	0	0	0	0
Living on Other Band Crown Land	2	1	3	0
Living on Non-Band Crown Land	8	6	14	0
Living Off Reserve	770	882	1,652	53
Total	1,463	1,653	3,116	100

Source: CIRNAC, 2026

3.8.1.6 Eskasoni First Nation

Eskasoni First Nation has three Reserves: Eskasoni 3, Eskasoni 3A, and Malagawatch 4 (CIRNAC, 2026). The nearest Eskasoni First Nation Reserve Land is approximately 200 km from the Project. As of December 2025, the total registered membership of Eskasoni Nation was 4,830 (Table 3.8-6). Approximately 85% of the registered members of Eskasoni First Nation were living on Reserve Lands, whereas 15% were living off Reserve (CIRNAC, 2026).

Table 3.8-6 Registered Population of Eskasoni First Nation (December 2025)

Registered Population	Male	Female	Total	%
Living on Own Reserve	2,021	2,057	4,078	84
Living on Other Reserves	17	19	36	1
Living on Own Crown Land	0	0	0	0
Living on Other Band Crown Land	1	0	1	0
Living on Non-Band Crown Land	0	0	0	0
Living Off Reserve	339	376	715	15
Total	2,378	2,452	4,830	100

Source: CIRNAC, 2026

3.8.2 Indigenous Rights and Title

3.8.2.1 Comprehensive and Specific Land Claims

Canada has signed 27 modern treaties (comprehensive land claims and/or self-government agreements), none of which is in NS (Government of Canada, 2026). In 1976, the Mi'kmaq Grand Council (Mi'kmaq Santé Mawiomi) and the Union of Nova Scotia Indians, representing the Mi'kmaq First Nations in Nova Scotia, submitted a comprehensive land claim asserting Aboriginal title to lands throughout NS to the provincial and federal governments (KMK, 2020). This claim has not been accepted for negotiation by the Crown. Thus, no land subject to an active comprehensive land claim agreement or self-government agreement intersects the Project.

The Government of NS would prefer to resolve legal uncertainty around Rights through negotiation rather than court challenges (NS Office of L'nu Affairs, 2011). Discussions among the parties have resulted in agreements such as the 2010 Terms of Reference for a Mi'kmaq – Nova Scotia – Canada Consultation Process (CIRNAC, 2010).

The Government of Canada has committed to settling specific claims, which relate to administration of land and other First Nation assets as well as fulfilment of historic treaties and other agreements. In NS, six specific claims are in progress, 23 specific claims have been successfully concluded, and eight specific claims have been closed (CIRNAC, 2025b). Limited information was available on the location of specific claims though none has been identified in relation to the Project, namely the area associated with the access road.

3.8.2.2 Indigenous Land and Resource Use and Mi'kmaq Ecological Knowledge Study

The lands now known as NS have been home to the Mi'kmaq and their ancestors for more than 10,000 years and since time immemorial. Prior to European contact and colonialization, the Mi'kmaq used the land widely though site-specific land use may be difficult to ascertain. Historic European documentation, information on known cultural and heritage resources and interviewing Indigenous harvesters can be used to better understand past and current use of lands and resources.

A Mi'kmaq Ecological Knowledge Study (MEKS) was completed to understand how Mi'kmaq communities have traditionally used and continue to use the PA and surrounding lands and waters. The study was based on background research, interviews with Mi'kmaq knowledge holders, and a site visit conducted in 2026.

The study found that Mi'kmaq people have a long history of using the area for harvesting fish, shellfish, wildlife, berries, and other plant resources. Commonly identified resources include mackerel, lobster, eel, trout, clams,

oysters, deer, rabbit, and berries. While most documented use relates to historic and recent activities, some current use continues today, demonstrating the area's ongoing cultural importance.

Traditional use occurs throughout the broader study area, including marine, coastal, and inland environments. The study concluded that the PA forms part of a larger cultural landscape that has supported Mi'kmaq land and resource use for generations and continues to maintain cultural, social, and harvesting connections to the area.

3.8.3 Indigenous Health Status and Health Care

Mi'kmaq people in Nova Scotia have access to the public health care system, but they continue to experience poorer health outcomes than the general population. Challenges include higher rates of chronic illness, mental health concerns, barriers to accessing health services, and broader social factors such as housing and systemic inequities.

Mi'kmaq organizations have reported growing demand for health and mental health services, while limited staffing and infrastructure continue to place pressure on community health systems. In response, Indigenous-led organizations such as Tajikeimɨk, the Union of Nova Scotia Mi'kmaq, the Confederacy of Mainland Mi'kmaq, and Mi'kmaw Kina'matnewey provide a range of culturally appropriate health, wellness, education, and support programs.

Although Indigenous health programs and services continue to expand, access to health care facilities remains limited in many Mi'kmaq communities in Nova Scotia.

3.8.4 Physical and Cultural Heritage

Cultural and heritage resources are treated as a Valued Component because archaeological, historical, and paleontological sites and artifacts are protected under the *NS Special Places Protection Act* for their societal and heritage value.

In 2025–2026, CRM Group carried out an ARIA under Heritage Research Permit A2025NS184, covering the PA (MSA and landside area of the proposed marine terminal access road). The ARIA included background research, Mi'kmaq input, field investigations, and landscape analysis to identify archaeological resources and classify areas for archaeological potential.

No evidence of pre-contact Mi'kmaw use was found within the vicinity of the Project, though nearby place names and traditional harvesting sites suggest historic activity in the surrounding area. A 1.22-ha section of flat, dry, elevated terrain along the Chedabucto Bay coastline was identified as having high archaeological potential, given its sweeping views and access to natural resources such as cranberries.

Modelling suggests that the marine portion of the Project was once coastal land that the Mi'kmaq may have used before it was flooded. Surface features would likely have been disturbed by waves and tides, but deeper features such as hearth pits and non-perishable artifacts like stone tools could remain intact beneath the seafloor. Even if displaced by erosion, these would still hold archaeological and cultural significance.

3.8.5 Socioeconomic Conditions

Socioeconomic information was mainly gathered through desktop research, using provincial and municipal sources, along with other websites and reports. Population and demographic data are from Statistics Canada's 2016 and 2021 censuses. The Project is located in the Municipality of the District of Guysborough, with the nearest communities being Upper Fox Island, Fox Island Main, Hazel Hill, Tickle Road, and Canso. Because limited census data are available for small, unincorporated communities, regional information is used to describe conditions.

In 2021, the population of Guysborough County showed a decrease over the previous census though population gain was experienced in NS generally. Also in 2021, Guysborough County had a higher median age than NS (Statistics Canada, 2023). Between 2016 and 2021, Guysborough County experienced a slight increase in the portion of its population aged 65 years and older (3.2%), while its younger population (15-64 years) declined by 3.3%. Population ageing in rural areas is generally due to outmigration of young people and a low birth rate.

Table 3.8-7 Population of Guysborough County and Nova Scotia (2021)

Jurisdiction	Population			Median Age
	2016	2021	Change (%)	Years
Guysborough County	7,625	7,373	-3.3	58.0
Nova Scotia	923,598	969,383	5.0	45.6

Source: Statistics Canada, 2023

The Municipality of the District of Guysborough (to which Canso was amalgamated in 2012) provides municipal services such as land use planning, permitting, and recreation. Essential services in the area include Eastern Memorial Hospital, Fanning Education Centre/Canso Academy, Canso Public Library, and Canso & Area Arena. Safety and emergency services are provided by the Royal Canadian Mounted Police and a volunteer fire department, with additional support for families, seniors, and people with disabilities from government and non-profit organizations.

Housing is mostly single-detached homes, with an average household size of two people, typical of rural areas. The local economy is supported by commercial and sport fisheries (targeting species such as lobster, sea scallops, tuna, mackerel, cod, and haddock) and nearby aquaculture (e.g., oysters and blue mussels).

The Municipality had an unemployment rate of 18.6% in 2020, higher than the provincial average of 12.7%. In 2021, nearly 75% of employment in Guysborough County came from seven sectors: agriculture, forestry, fishing and hunting; health care and social assistance; manufacturing; retail trade; educational services; construction; and public administration. Compared to the province, agriculture/forestry/fishing and manufacturing employed a larger share of the local workforce, reflecting the rural economy. Women were most often employed in health care and educational services, while men were more likely to work in construction and mining/quarrying.

Like many rural communities across Canada, the Guysborough region faces challenges related to an aging population, limited access to health care services, and difficulties recruiting and retaining health care professionals. Residents may need to travel longer distances to access specialized care and services. NS also experiences relatively high rates of chronic disease, particularly among older adults, with health outcomes influenced by factors such as age, income, housing, and food security. Health services in the area are provided through NS Health's Eastern Zone and include emergency, diagnostic, rehabilitation, mental health, and continuing care services at Guysborough Memorial Hospital and Eastern Memorial Hospital in Canso (NS Health, 2026).

Recreation near Lazy Head has a coastal focus, including beaches such as Fox Island Main Beach. Seabreeze Campground, approximately 2.5 km from the PA boundary, offers cottages, camping, hiking, kayaking, and ocean fishing. The 5-km Lazy Head Trail runs along the coast on the north side of the PA, and Three Mile Lake (48 m south of the PA) is popular for brook trout fishing. Two nearby ATV trails connect to Route 16 (Marine Drive) but do not cross the PA. Regional attractions include Canso Islands and Grassy Island Fort National Historic Sites (about 5.8 km east), the Canso Museum, Commercial Cable Trans-Atlantic Municipal Park, and Queensport Lighthouse. The nearest protected area, Canso Coastal Barrens Wilderness Area, is about 535 m from the PA. None of these attractions are within the PA.

No vehicle traffic studies were completed, as the Project is not expected to significantly change local traffic — aggregate will be shipped by sea. In 2023, average daily traffic on Highway 16 ranged from about 1,015 to 1,347 vehicles. Project-related traffic (contractors and personnel) is not expected to add significantly to local levels.

The marine terminal will be located in Chedabucto Bay, an established marine corridor used by recreational vessels, commercial fishing boats, and industrial shipping traffic. At full production, the Project is expected to generate approximately 71 vessel calls per year (about 1.4 vessels per week), representing a relatively small increase in overall marine traffic. The terminal will accommodate ocean-going bulk carriers up to approximately 48,000 deadweight tonnes. Prior to operation, a detailed vessel navigation simulation study will be completed to confirm safe vessel access, berthing, and departure procedures, identify any required navigational aids, and establish operating limits. A Terminal Marine Operations Manual and Navigation Safety Committee, developed in consultation with regulators and the fishing community, will guide vessel operations, communications, navigation safety, and interactions with commercial fishing activities. All vessels calling at the terminal will be guided by qualified pilots.

Carver is committed to maximizing local recruitment, employment, training, procurement, and service opportunities across all Project phases. Carver will provide a safe, respectful, and inclusive workplace, supported by policies against harassment, bullying, discrimination, and violence, with gender-appropriate and culturally sensitive processes. The Project will also adopt a workplace drug and alcohol policy, require cross-cultural awareness training, and establish a worker code of conduct with a fair process for addressing complaints.

4. Part D: Federal, Provincial, Territorial, Indigenous and Municipal Involvement and Effects

This section describes federal, provincial, territorial, Indigenous, and municipal involvement in the Project. Section 4.3 describes where authorities have jurisdiction over aspects of the Project or where potential effects of the Project are anticipated on matters under the jurisdiction of various authorities.

4.1 Federal Funding Support

No public or government funding is required for the Project.

4.2 Federal Lands

No changes to the environment resulting from the Project are anticipated to occur on federal lands, in a province other than NS, or outside of Canada.

The nearest federal land is at Fox Island, a potential future protected area as part of the proposed Atlantic Archipelago National Wildlife Area (NWA) (Government of Canada, 2026; IAAC, 2026. Fox Island is located 2.4 km from the boundary of the PA, approximately 2.2 km from the nearest vessel approach pathway, and approximately 2.9 km from the established Transport Canada shipping route in Chedabucto Bay, which the vessels departing from the marine terminal will be tying into. Although not currently designated as an NWA, ECCC's Canadian Wildlife Service (CWS) conducts research at Fox Island as it provides important habitat and critical functions for migratory birds. Fox Island is located more than 2 km from the marine terminal and the Project's proposed vessel routes. Due to this distance, Project-related noise and lighting are expected to be infrequent, temporary, and substantially reduced before reaching the island. As a result, no significant effects on migratory birds, bird habitat, or other terrestrial wildlife are anticipated.

The marine terminal area and submerged seabed are located on provincial Crown land. The access road will be developed on Crown land obtained through the provincial Crown land leasing process.

4.3 Jurisdictional Involvement

The Lazy Head Marine Terminal Project is a designated Project under the Physical Activities Regulations of the IAA. It includes the construction, operation, and closure of a new marine terminal designed to handle ships larger than 25,000 dwt (Section 2.2). Because the proposed vessels are 48,000 dwt, the marine terminal triggers a federal assessment.

The Proponent has confirmed through DNR Land Administration that the lands and submerged seabed around the marine terminal are Crown Lands under provincial jurisdiction.

In March 2026, Canada and Nova Scotia ratified a Co-operation Agreement supporting a "one project, one review" approach. Both governments aim to coordinate their reviews and, where possible, carry out a single shared assessment instead of two separate ones, avoiding duplication and supporting an efficient process.

The applicable regulatory frameworks are outlined in Table 4.3-1. Any potential adverse Project impacts within federal jurisdiction will be addressed through federal regulatory review and permitting. Once the provincial EA approval is received, an Industrial Approval will be required under the *NS Environment Act*. Additional permits and approvals from federal, provincial, and possibly municipal authorities will also be needed, along with compliance with the Workplace Health and Safety Regulations and the Labour Standards Code of NS.

Overall, federal and provincial requirements are expected to be met through a streamlined, coordinated process consistent with the "one project, one review" principle.

Table 4.3-1 Applicable Regulatory Framework

Legislation	Requirements and/or Prohibitions	Regulatory Authority
Federal		
Impact Assessment Act and *Physical Activities Regulations*	Assessment of marine terminal under Section 52 of the Schedule to the *Physical Activities Regulations*. Paragraph 31(1)(b) of the IAA allows to substitute the federal assessment for a harmonized process.	IAAC
Fisheries Act	Authorization is required for direct or indirect disturbance of any fish or fish habitat from Project activities.	DFO
Migratory Birds Convention Act, 1994 – Migratory Birds Regulations	It is prohibited to kill, harm, capture, possess, or trade migratory birds or their nests or eggs, to destroy or disturb nests containing live birds or viable eggs, or to deposit harmful substances in waters or areas migratory birds frequent, except as authorized by regulation or permit.	ECCC
Canada Wildlife Act and Regulations	Activities that have the potential to adversely affect wildlife are prohibited in National Wildlife Areas and Migratory Bird Sanctuaries.	ECCC, CWS
Species at Risk Act	Physical disturbance and/or destruction of SAR and/or habitats are prohibited.	DFO/ECCC
Canadian Environmental Protection Act	Pollution prevention measures are required to protect the environment and associated risks to human health.	ECCC
Transportation of Dangerous Goods Act and Regulations	Anyone handling, offering for transport, or transporting dangerous goods must classify the goods, ensure employees are trained and certified, use approved means of containment, apply required safety marks and placards, prepare compliant shipping documents, maintain Emergency Response Assistance Plans where required, report releases, and comply with inspection and enforcement provisions.	TC
Explosives Act and Regulations	Use of explosives must be authorized and applicable licences, permits, or certificates must be obtained for their manufacture, storage, transport, import/export, and use. Compliance is mandatory for storage, security screening, training, transportation, reporting, and inspection requirements.	Natural Resources Canada
Canadian Navigable Waters Act	Approval required for construction of a marine terminal.	TC
Canada Shipping Act	Applies to marine safety, navigation, and environmental protection in Canadian waters.	TC
Marine Transportation Security Act – Marine Transportation Security Regulations	Applies to safe operation of marine vessels and facilities.	TC
Canada Labour Code, Part II – Maritime Occupational Health and Safety Regulations	Provides health and safety standards.	TC

Legislation	Requirements and/or Prohibitions	Regulatory Authority
Atlantic Pilotage Act	Establishes a legal framework for safe marine navigation and pilotage services within Canada.	Federal Minister of Transport
Provincial		
Environment Act – Activities Designation Regulations	Water approval and/or notifications are required for any water withdrawal and watercourse or wetland alterations.	ECC
Endangered Species Act and Regulations	Prohibits killing, injuring, disturbing, taking, or interfering with endangered or threatened species and/or their habitats.	DNR
Wildlife Act and Regulations	Prohibits taking, hunting, killing, or possessing protected wildlife species (e.g., eagles, osprey, falcons, hawks, owls).	DNR
Crown Lands Act	Any occupation or use of Crown land must be authorized by DNR, comply with prescribed terms and conditions, protect boundaries and environmental values, and align with the Act's objectives of sustainable land management, biodiversity protection, and public interest, with enforcement measures for unauthorized use.	DNR
Occupational Health and Safety Act (1996) and Regulations	Projects must operate under regulated labour standards.	NS Department of Labour, Skills and Immigration
Environment Act – On-site Sewage Disposal Systems Regulations	In unserviced areas, sewage waste is managed through private on-site septic systems, which are governed by provincial legislation.	ECC
Environment Act – NS Drinking Water Standards and Guidelines	In unserviced areas, drinking water quality, testing, and treatment requirements are regulated by provincial legislation.	ECC
Public Highways Act	Driveway access must be approved for public safety.	NS Department of Transportation
Municipal		
Municipal Planning Strategy	Ensure consistency with applicable Municipal Planning Strategy policies. Industrial facilities and resource extraction are governed by the MODG Municipal Planning Strategy and Land Use By-law.	MODG
Land Use By-law	Confirm proposed development is permitted or requires special approval. Meet all development standards in the Land Use By-law. Obtain required development permits for new buildings or structures, changes in land use, expansions or alterations and temporary uses (where regulated).	MODG
Collection of Solid Waste & Recyclables By-law (By-law #4, amended 2022)	Businesses are subject to mandatory separation of garbage, recyclables, and compostables, container weight and size limits, animal-proof storage, private disposal of construction, demolition, and prohibited wastes.	MODG
Noise Control By-law (originally adopted as By-law #16, amended)	Prohibition of noise or combination of noises exceeding thresholds of 65 A-weighted dBA from 6:00 AM to 11:00 PM and 55 dBA from 11:00 PM and 6:00 AM.	MODG
Municipal Building Bylaw	Building / development permits are required for all types of construction including new buildings and structures. Occupancy permit is also required. Public Works Department must approve connections to municipal sewer and / or water systems.	MODG

5. Part E: Potential Effects of the Project

This section outlines the potential changes the Project may cause in both the natural and human environment. These mitigation measures are well-established, widely used, and expected to effectively reduce the Project's potential negative impacts.

5.1 Potential Changes to Federally Regulated Environmental Components

5.1.1 Fish and Fish Habitat

Fish and fish habitat, as defined under the *Fisheries Act*, may be directly and indirectly affected by Project development. The mitigation measures described in this section align with the standard measures identified by IAAC for effects on fish and fish habitat.

Project-related interactions with fish, fish habitat, aquatic SAR and other species of conservation concern are expected to be incidental, localized, and unlikely to result in measurable adverse effects on regional populations or habitat functions.

5.1.1.1 Potential Effects Pathways

Fish and fish habitat, including aquatic SAR, are protected federally under the *Fisheries Act* and SARA. Any Harmful Alteration, Disruption, or Destruction (HADD) of fish habitat requires authorization under Section 35 of the *Fisheries Act*, and DFO will review impacts to aquatic SAR as part of the FAA.

Construction and marine shipping activities may affect fish, fish habitat, and marine mammals. Potential effects include underwater noise and vibration, temporary habitat disturbance or alteration, increased turbidity, changes to water quality, shoreline erosion, and disruption of fish behaviour, movement, feeding, spawning, and communication. Vessel traffic may also increase the risk of accidental spills and the introduction of aquatic invasive species. Dredging, if required, could alter some nearshore habitat; the habitat would remain available and continue to support fish and other marine life.

5.1.1.2 Proposed Mitigation

The marine terminal and access road have been optimized to reduce impacts. Where impacts cannot be avoided, they will be offset in accordance with the *Fisheries Act* and DFO's Fish and Fish Habitat Protection Program. A fish habitat offset plan will be developed in consultation with DFO, the Mi'kmaq of Nova Scotia, and relevant stakeholders. A Project-specific Environmental Management Plan will also be developed and implemented across all Project phases to ensure regulatory compliance, monitor mitigation effectiveness, and verify effect predictions.

Mitigation will focus on avoiding and minimizing effects, including buffer zones during in-water disturbances, management of activities that could affect water quality, timing restrictions, sediment and erosion controls, and monitoring. A site-specific Erosion and Sediment Control Plan (ESCP) will be developed and reviewed by a qualified aquatic ecologist before any in-water work. Depending on construction activities, a fish rescue may be completed following DFO's Interim Standard: Fish Capture and Relocation. Underwater noise will be mitigated by monitoring for marine mammals before construction, avoiding sensitive timing windows (e.g., breeding), and, if required during permitting, hydroacoustic monitoring with noise thresholds developed in consultation with DFO.

5.1.1.3 Regulatory Review

The *Fisheries Act* prohibits any work (other than fishing) that could kill fish or cause HADD of fish habitat. If these effects cannot be avoided or mitigated, an FAA is required. In the application, the Proponent must describe the potential effects, proposed mitigation, and a plan for offsetting any remaining effects.

Potential impacts to fish and fish habitat will also be assessed through the provincial environmental assessment process, following the NS Proponent's Guide to Environmental Assessment (2025).

SARA prohibits killing, harming, harassing, capturing, or taking an individual of a listed aquatic SAR, or damaging its habitat. If harmful effects on aquatic SAR cannot be avoided or mitigated, a SAR permit under SARA is required. DFO will review potential impacts as part of the FAA process. Potential impacts to aquatic SAR listed under the NSESA will be assessed through the provincial EA process. The Proponent will follow DFO's recommendations and mitigation measures for fish SAR outlined in the Measures to Avoid Causing Harm to Fish and Fish Habitat (DFO, 2018).

5.1.2 Migratory Birds

The Project could affect migratory birds (as defined in subsection 2(1) of the MBCA) in several ways. Birds could be directly harmed if they collide with Project equipment or infrastructure, and their habitat could be lost or altered during construction. Noise, lights, and vibrations could also disturb normal behaviour and migration patterns. The mitigation measures described in this section align with the standard measures identified by IAAC for effects on migratory birds and their habitat, including Guidelines to Avoid Harm to Migratory Birds – Establishing Buffer Zones and Setback Distances (ECCC, 2023).

The Project footprint represents a small proportion of the avifauna habitat available in the region and is not expected to result in the loss or alteration of regionally important aquatic habitat features. Project-related interactions with avifauna, fish habitat, aquatic SAR and other species of conservation concern are expected to be incidental, localized, and unlikely to result in measurable adverse effects on regional populations or habitat functions.

5.1.2.1 Potential Effects Pathways

Migratory birds are protected under the MBCA and provincial legislation. Project activities may affect birds and their habitats as follows.

Shoreline construction may cause loss or alteration of habitat, along with disturbance from noise, lighting, and vibration during all Project phases. Vegetation clearing, road building, and excavation may also cause loss or alteration of habitat. These activities also carry a risk of injury, mortality, or nest destruction.

5.1.2.2 Proposed Mitigation

The Project will include measures to avoid or reduce effects on migratory birds and their habitat during construction, operation, and closure. Key measures include avoiding work near active nests, conducting nest surveys before shoreline or vegetation disturbance, establishing protective buffers around nests, and scheduling work outside the nesting season whenever possible.

The marine terminal will be designed to reduce noise and light that could disturb birds. Measures may include directing and shielding lights, limiting unnecessary lighting, and using covered equipment where practical. Bird deterrents may also be used to discourage birds from gathering near Project infrastructure.

Additional measures include managing stockpiles to discourage nesting, maintaining speed limits to reduce bird collisions, preventing birds from accessing contaminated water, and implementing spill response plans to protect birds and their habitat. If active nests are found, work will be adjusted to avoid disturbing them until they are no longer protected under applicable legislation.

5.1.2.3 Regulatory Review

Migratory birds, their eggs, and active nests are protected under the federal MBCA and MBR. These laws prohibit harming migratory birds, disturbing active nests, or releasing substances that could harm birds in areas they use.

The Project must also comply with NS's *Wildlife Act*, which protects wildlife, nests, and eggs, and the province's Wetland Conservation Policy, which helps protect bird habitat. Any potential effects on migratory birds, fish, fish habitat, or aquatic SAR will be assessed and managed through the federal and provincial environmental assessment processes.

5.1.3 Potential Changes to Jurisdictional Waters

As described in Section 3.3, the marine terminal is located within provincial waters, as confirmed by DNR Land Administration. No other province has claimed waters within Chedabucto Bay, so the Project is not located in interprovincial or federal waters. As noted in Section 2.4, the marine terminal's rubble mound extends about 270 m from shore. Neither structure extends beyond the mouth of Chedabucto Bay, placing them entirely within NS's jurisdiction.

The submerged seabed around the marine terminal falls under provincial jurisdiction for land ownership. However, Canada retains jurisdiction over certain aspects of coastal waters, as listed in Section 4.3, including navigable waters (*Canadian Navigable Waters Act*), fish and fish habitat (*Fisheries Act*), and SAR (SARA). Any related impacts would be addressed through the approvals processes under each Act, based on detailed designs developed at that stage.

5.2 Potential Impacts to Indigenous Peoples: Mi'kmaq of Nova Scotia

As discussed in Section 3.8, the Project is within Mi'kmaq of Nova Scotia traditional territory, and the Mi'kmaq likely participate in current use of land and resources for traditional purposes in the PA and surrounding areas. The Project does not intersect with any Indigenous Reserve Lands, active comprehensive land claim agreements, nor with specific land claims to the best of the Proponent's knowledge.

5.2.1 Indigenous Land and Resource Use

The Mi'kmaq of Nova Scotia have long used lands and resources across NS for traditional purposes. A MEKS was completed and results indicate Indigenous harvesting takes place in coastal areas of Chedabucto Bay and possibly in the PA.

Project activities during construction, operation, and closure may directly or indirectly affect this use by limiting access to secured areas, reducing available resources, and changing landscapes and viewscapes. The mitigation measures below align with IAAC's standard measures, including limits on recreational use by Project workers and progressive reclamation.

5.2.1.1 Potential Effects Pathways

Mi'kmaq fishing and other traditional activities may be restricted within the Marine Study Area (MSA). Project works during all phases may affect access to lands and resources tied to Mi'kmaq Rights. Noise and light may disturb marine mammals and fish and change the experience of traditional use. The marine terminal will alter the viewscape, and the rubble mound and fixed dock will remain in Chedabucto Bay after closure.

5.2.1.2 Proposed Mitigation

The MEKS provided important information on traditional use of lands, waters, and resources. Carver will use ecological and traditional knowledge from the MEKS in Project planning and design to avoid or reduce interactions with traditional use sites where possible. Project employees and contractors will not be allowed to fish, hunt, trap, gather plants, or use off-road vehicles for recreation within the PA, or use the PA to access nearby areas for these purposes, unless such access is specifically permitted to support the exercise of Aboriginal and Treaty Rights.

Mitigation will focus on avoiding and reducing effects on traditional land and resource use through early and ongoing engagement with Indigenous groups. MEKS information will help identify sensitive areas and support measures to avoid or reduce effects on harvesting activities, fisheries, fish habitat, and culturally important areas. Carver will work with Indigenous groups to identify harvesting areas and culturally important marine areas and, where appropriate, consider vessel routing measures, low-impact shipping corridors, or seasonal avoidance of key harvesting areas.

Lighting will be minimized where practical, directed downward and inward, and designed to reduce light spill. Areas temporarily disturbed by the Project will be progressively reclaimed as they are no longer needed, helping to restore the land and shorten the duration of disturbance. Indigenous groups will be consulted on reclamation

planning, including identifying plant species of cultural importance for habitat restoration, and opportunities will be provided for participation in reclamation activities. Ongoing engagement with the Mi'kmaq will help identify additional measures to avoid or reduce effects on the current use of lands and resources for traditional purposes.

5.2.1.3 Regulatory Review

Carver will use ecological and traditional knowledge from the MEKS in Project design as a best practice to reduce effects on Indigenous Peoples, and remains committed to ongoing engagement with the Mi'kmaq of Nova Scotia throughout the life of the Project.

Key guidance documents include the Proponents' Guide: The Role of Proponents in Crown Consultation with the Mi'kmaq of Nova Scotia (2011), the Mi'kmaq Ecological Knowledge Study Protocol, 2nd Edition (Assembly of Nova Scotia Mi'kmaw Chiefs, no date), IAAC Guidance: Protecting Confidential Indigenous Knowledge Under the Impact Assessment Act, IAAC Guidance on Indigenous Knowledge Under the Impact Assessment Act: Procedures for Working With Indigenous Communities, and the IAAC Indigenous Policy Framework for Project Reviews and Regulatory Decisions. These guide discussions with the Mi'kmaq and inform Project personnel on Indigenous engagement and knowledge management.

Effects on Mi'kmaq land and resource use are also addressed through the Nova Scotia EA process and indirectly through federal and provincial laws on fish and wildlife, as well as controls on dust, vibration, noise, light, and other matters.

5.2.2 Physical and Cultural Heritage

Project activities could damage or remove physical and cultural heritage resources, including any structure, site, or item of historical, archaeological, paleontological, or architectural value. As noted in Section 3.8.4, no Indigenous or non-Indigenous heritage resources have been identified in the PA. One area along the coastline was flagged as having high archaeological potential for Indigenous resources based on natural landscape features, and subsea coastal areas may also contain unknown archaeological features.

Heritage resources could be affected directly or indirectly by activities such as clearing, grubbing, and construction. The mitigation measures below align with IAAC's standard measures for physical and cultural heritage, including chance-find procedures consistent with the *NS Special Places Protection Act*.

5.2.2.1 Potential Effects Pathways

Construction activities could disturb or remove heritage resources. No further interactions are expected during operation or closure.

5.2.2.2 Proposed Mitigation

Carver will comply with the *NS Special Places Protection Act* for the management of heritage resources. If previously unidentified archaeological resources are found, work in the area will stop immediately, and Carver will contact the Coordinator of the Special Places Program (Department of Communities, Culture, Tourism and Heritage) and the Mi'kmaq to determine next steps.

Chance-find procedures will apply across the PA: work will stop at the location of any discovery, a no-work zone will be set up around it, Indigenous groups and IAAC will be notified within 24 hours, and Indigenous groups will be invited to monitor archaeological works. Mandatory chance-find training, covering sensitive locations in the PA and the steps above, will be delivered to all Project employees and contractors.

Mitigation will focus on avoiding and reducing effects on heritage resources, including archaeological sites and culturally significant areas, through Project design that avoids known resources, along with archaeological monitoring during disturbance and chance-find procedures. Carver will follow the recommendations of the ARIA, which calls for monitoring by a qualified archaeologist during any ground disturbance in the MSA. Monitoring will not be required if marine activities do not cause visible sediment displacement. The infrastructure footprint will also be reduced where feasible.

5.2.2.3 Regulatory Review

Effects on the Mi'kmaq of Nova Scotia and physical and cultural heritage are addressed through the Nova Scotia EA process and provincial laws such as the *NS Special Places Protection Act*, which protects known and unknown heritage objects (archaeological, historical, or palaeontological). Carver will comply with the Act and coordinate with the NS Special Places Program as needed.

The Mi'kmaw Archaeological Protocols (Assembly of Nova Scotia Mi'kmaw Chiefs, 2024) and the Statement of Principles Regarding Archaeological Resources (Assembly of Nova Scotia Mi'kmaw Chiefs, 2016) define Mi'kmaq archaeological resources as cultural landscapes, sites, features, and artifacts. Carver will factor Indigenous cultural heritage into Project decisions to reduce, and where possible eliminate, effects on physical and cultural heritage. Carver's engagement with the Mi'kmaq of Nova Scotia is described in Section 1.4.2.

5.2.3 Indigenous Health, Social and Economic Conditions

Indigenous health, social, and economic conditions are linked to general socioeconomic conditions described in Section 3.8.5. No public information was found that specifically describes these conditions for the Mi'kmaq of Nova Scotia. The health and wellbeing of Indigenous Peoples is connected to Project effects on air quality, light, noise and vibration, water quality, and country foods (fish, birds, animals, plants). Social effects may also occur through impacts on Aboriginal and Treaty Rights (such as current use of lands and resources for traditional purposes, including the ability to make a modest living), physical and cultural heritage (such as loss or disturbance of archaeological and spiritual sites), and the ability to carry out cultural practices (such as ceremonies and knowledge transfer). These effects are covered in other sections and are not repeated here. This section focuses on potential economic impacts of the Project for the Mi'kmaq. The mitigation measures below align with IAAC's standard measures, including managing air quality, noise, and vibration in line with NS legislation, and creating employment and business opportunities that support safe, respectful, and inclusive workplaces and communities for Indigenous Peoples.

5.2.3.1 Potential Effects Pathways

Construction, operation, and closure activities will create employment and economic opportunities for the Mi'kmaq of Nova Scotia and non-Indigenous communities. Project spending and employment are described in Section 2.1.1. Positive effects may include jobs, skills training, contracts, Mutual Benefit Agreements (MBAs), and community capacity building.

The health of Indigenous Peoples, including the Mi'kmaq, is closely tied to access to traditional lands that support hunting, fishing, and gathering of country foods, not only as sources of nutrition but as foundations of identity, mental wellness, and knowledge sharing across generations. Restricted access can disrupt cultural continuity and contribute to poorer health, food insecurity, and loss of cultural connection. These effects are discussed in Section 5.2.1.

The Project may also have indirect negative effects. Shift or rotational work can limit the time available for traditional activities that support community wellness. While workers and their families may gain financial benefits, Project employment could contribute to labour shortages in other local sectors. A temporary or permanent rise in population could also increase competition for fishing, hunting, and gathering. Natural resource projects can sometimes cause boom-and-bust cycles, but the Project's timeline of nearly 100 years offers potential for long-term benefits and community investment through higher municipal and regional revenues. Development may also raise the cost of living, which can affect those not directly benefiting from the Project.

5.2.3.2 Proposed Mitigation

Mitigation will focus on avoiding and reducing negative effects on Indigenous health, social, economic, cultural, and heritage values through early, ongoing, and meaningful engagement with Indigenous groups. Engagement will help identify community priorities, incorporate traditional knowledge, protect culturally important areas, and guide Project planning, workforce interactions, access management, and marine traffic activities.

All Project phases will provide direct and indirect employment and procurement opportunities for the Mi'kmaq of Nova Scotia. Carver will pursue partnerships or mutually beneficial agreements with Mi'kmaq communities to support employment, training, business opportunities, capacity development, and long-term collaboration. A

Mi'kmaq procurement strategy will be explored, and job, training, and contracting opportunities will be communicated in ways developed with Indigenous groups.

To promote safe, respectful, and inclusive workplaces and communities, Carver will implement workplace policies addressing harassment, discrimination, violence, and substance use; require cultural awareness training and a worker code of conduct; and maintain a process for resolving concerns and complaints. Carver will also maintain engagement with Mi'kmaq communities throughout the Project to support workforce participation and minimize pressure on local labour availability.

The Project will also include measures to protect archaeological, cultural, and heritage resources. If previously unidentified archaeological, historical, cultural, paleontological, or architectural resources are discovered during construction, work will stop immediately in the area, the site will be protected, and Indigenous groups and regulators will be notified. Indigenous groups will have opportunities to participate in monitoring archaeological work where appropriate. All employees and contractors will receive training on chance-find procedures and the protection of cultural and heritage resources.

5.2.3.3 Regulatory Review

Carver is committed to ongoing engagement with the Mi'kmaq of Nova Scotia to maximize Project benefits and reduce negative impacts. Effects on Mi'kmaq health, social, and economic interests are also addressed through the NS EA process and indirectly through engagement with the Mi'kmaq. First Nations may enter into agreements regarding benefits such as training and employment.

Relevant guidance documents include Analyzing Health, Social and Economic Effects under the *Impact Assessment Act* (IAA) (IAAC, 2020), Interim Guidance: Health Impact Assessment of Designated Projects under the IAA (Health Canada, 2024), A Quick Guide to Indigenous-Led Health Impact Assessment (Centre for Indigenous Environmental Resources, 2026), Indigenous Health Impact Assessment: Systematic Review of the Literature (National Collaborating Centre for Indigenous Health, 2026), and Understanding Indigenous Health Inequities Through a Social Determinants Model (National Collaborating Centre for Indigenous Health, 2022).

5.3 Potential Effects on Other Environmental and Socioeconomic Components

This section describes potential effects on other environmental and socioeconomic components relevant to the marine terminal as a federal work or undertaking. These discussions supplements Sections 5.1 and 5.2 and are referenced in Section 5.4.

5.3.1 Acoustic Environment

Project activities will change the acoustic environment through noise and vibration during all phases (construction, operation, and closure). This includes heavy equipment use and marine terminal operations.

Vessel operations generate both airborne and underwater noise. Underwater noise propagates through the marine environment and may be detected by marine mammals, fish, sea turtles, and other aquatic species. Exposure to elevated noise levels may result in masking of biologically important sounds, behavioural disturbance, habitat avoidance, stress responses, and, in some circumstances, temporary or permanent changes in hearing sensitivity. Repeated exposure may contribute to cumulative effects when combined with existing commercial shipping and other marine activities.

5.3.1.1 Potential Effect Pathways

The Project will produce more noise than usually heard in a rural setting. Construction noise will be temporary and intermittent. Operational noise will come from ship loading and vessel-related equipment at berth, with about 1.4 vessels per week (71 per year) and a loading cycle of about 24 hours per vessel (berthing, loading, departure). Closure noise will be temporary and generally lower than during construction and operation. Potential effects on fish and fish habitat are discussed in Section 5.1.1.

5.3.1.2 Proposed Mitigation

The Project will be designed to reduce noise where possible. Mobile equipment and vehicles will be well maintained, fitted with mufflers where appropriate, and operated only in designated areas. All Project personnel will complete site inductions covering environmental requirements. Noise will be monitored throughout the Project to confirm that mitigation is working and that levels beyond the PA boundary remain acceptable. If levels exceed regulatory limits, additional steps will be taken. These measures will help limit disturbance to people and wildlife, including those using the area for traditional activities or recreation.

Infrastructure and conveyors extending along the marine terminal will be fully covered to reduce noise and dust. The marine terminal has been designed to avoid noisy activities such as in-water blasting. During construction, Carver, in consultation with DFO, will develop a Marine Mammal Detection and Response Plan to manage underwater noise. The plan will set noise thresholds, use qualified marine mammal observers to monitor nearby waters during noisy activities, include continuous underwater noise monitoring, and require work to stop immediately if noise exceeds the thresholds. A marine geotechnical program completed in summer 2026, may support design adjustments to shorten the terminal or deepen the berth, though this could also require dredging.

5.3.1.3 Regulatory Review and Best Management Practices

Noise management for the Project will be guided by provincial workplace and environmental noise regulations, including established sound level criteria for receptor locations, with municipal noise requirements also considered, where appropriate. Potential impacts to fish and fish habitat will be managed in accordance with the *Fisheries Act,* which prohibits the conduct of any work, undertaking, or activity, other than fishing, that could result in the death of fish and/or HADD of fish habitat. In the event that the Project is unable to avoid or mitigate the death of fish or Harmful Alteration, Disruption, or Destruction, an FAA is required for the Project. As part of the FAA application and supporting documentation package, Carver will outline potential effects of the Project on fish and fish habitat, measures to avoid and/or mitigate potential effects, and offsetting for any remaining impacts, under the DFO Framework.

5.3.2 Atmospheric Environment

Project activities may affect air quality and GHG emissions. Sources include aggregate extraction, vehicle traffic, heavy machinery and equipment, and exposed dry soils or waste rock within the PA. GHG will be generated throughout the life of the Project from fuel combustion by equipment and vehicles.

GHG emissions can contribute to climate change by trapping heat in the atmosphere. Warming can affect ocean temperature and circulation, storm frequency and intensity, and habitat conditions for plants and animals.

5.3.2.1 Potential Effects Pathways

Construction and operation will produce air emissions from marine vessels, cargo handling equipment, and on-site vehicles. These sources release air contaminants (such as particulate matter, nitrogen oxides, sulphur oxides, and carbon monoxide) and GHGs. Bulk material handling may also produce fugitive dust. Emissions may reduce local air quality near the marine terminal, with possible effects on human health and nuisance conditions. The proximity of the aggregate product piles to the marine terminal is expected to reduce emissions associated with movement of aggregate products, especially those from heavy-duty diesel trucks, compared to longer-distance haulage.

5.3.2.2 Proposed Mitigation

The Project will be designed to reduce emissions where possible. Equipment, vehicles, and haul trucks will be well maintained, and idling and cold starts will be reduced or avoided where practical. Project equipment will meet applicable federal off-road emissions standards in effect at the time of purchase, including the federal *Off-Road Compression-Ignition Engine Emission Regulations*. A Fugitive Dust Management Plan will be developed and implemented, with monitoring and adaptive management as needed to confirm controls are working.

Dust suppression systems (such as water spray and misting) will be installed at material handling points, and processing equipment and transfer areas will be enclosed or covered. Low-emission or electric cargo handling equipment will be used where feasible. Activities will be limited during high winds, vehicle speeds managed, and idling minimized.

5.3.2.3 Regulatory Review

The CEPA includes regulations aimed at reducing GHG emissions, such as the *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations* and the *Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations*, which apply to various sources used within the PA.

Potential effects from dust settling into waters used by fish, changing water quality (e.g., pH, suspended solids) and harming fish habitat, will be assessed as part of the FAA.

5.3.3 Visual Environment

Project activities may change the visual environment, mainly through new lighting from vehicles, equipment, and fixed lights installed for safety and security. In a rural setting, changes to ambient light levels can affect both people and wildlife.

5.3.3.1 Potential Effects Pathways

Project infrastructure will change the visual environment compared to baseline conditions. All phases will introduce artificial lighting for safety and security. Changes to ambient light can disturb terrestrial wildlife (such as birds) and be a nuisance to nearby residents.

A qualitative light assessment was completed and compared to the ILP Guideline. Under the ILE Environmental Zone Classification system, rural areas, small villages, and relatively dark urban locations are classified as "E2 Low district brightness areas." The Project is located near Lazy Head in Guysborough County, NS, in a rural setting about 4.3 km west of Canso, 3.0 km northwest of Hazel Hill, and 3.8 km northeast of Fox Island Main. Nearby points of reception are mainly residential and institutional, with the closest receptor (Seabreeze Campground) located approximately 2.5 km from the PA boundary. Given the rural setting, the assessment assumes a relatively dark nighttime environment when reviewing potential light spill beyond the Project footprint.

Lighting during all phases, along with lighting from vessels berthing at the terminal, may change existing lighting conditions. Terminal infrastructure will likely not be visible from local residential areas due to coastal topography, but its lighting could still affect the visual environment.

5.3.3.2 Proposed Mitigation

The Project will be designed to reduce light effects where possible. Lighting will be limited to what is needed for safety, security, and active work during periods of reduced natural light. Temporary lighting will be selected, placed, and aimed to reduce spill, glare, and skyglow beyond active work areas. Motion-sensing lighting will be installed in lower-traffic areas where practical to avoid unnecessary lighting.

The terminal will be designed to reduce visual contrast with the surrounding landscape. Conveyor systems along the rubble mound and transfer points at each end will be covered to limit light pollution. Directional lighting, shielding, and dimming controls will reduce glare and light spill, helping protect nearby ecological and human receptors around the marine terminal.

5.3.3.3 Regulatory Review

Light levels are not directly regulated under provincial or federal law. However, the ILP Guidance Note 01/21 – The Reduction of Obtrusive Light was used for the light assessment and is a commonly accepted standard for setting appropriate limits.

SARA protects SAR in Canada, including their habitat, and the MBCA protects migratory birds, their eggs, and their nests from killing, harm, or disturbance. Changes to ambient light from Project lighting can affect migratory birds and are considered in Project design.

5.3.4 Geology, Soils, and Sediment

Project activities may directly or indirectly affect geology, soils, and sediment. These effects can, in turn, impact soil, vegetation, and watercourses. Degraded soil, vegetation, and water quality could expose people to contaminants through ingestion, skin contact, or inhalation.

5.3.4.1 Potential Effects Pathways

Construction may affect marine sediment through infilling and increased turbidity, which can affect water quality. Terminal operation may also affect how sediment moves in the marine environment.

5.3.4.2 Proposed Mitigation

A Project-specific ESCP will be developed and implemented before construction. Erodible areas will be stabilized, and disturbed areas will be limited where practical.

The ESCP will manage sediment movement during construction. Turbidity curtains will be installed as needed during in-water work to control total suspended solids (TSS). The marine terminal design includes culverts in the rubble mound to allow natural sediment movement and prevent build up of sediment along the mound.

5.3.4.3 Regulatory Review

Carver will follow the Guide to Developing Erosion and Sediment Control Plans (ECC, 2025) when preparing the Project ESCP and will apply the Canadian Water Quality Guidelines for the Protection of Aquatic Life to protect the aquatic environment.

Contaminated soil and sediment are regulated under the NS Contaminated Sites Regulations. Carver is responsible for taking all reasonable measures to prevent, reduce, and address any adverse effects from soil contamination, to remove or dispose of contaminants in a way that minimizes harm, and to remediate any contaminated sites in accordance with the Regulations.

5.3.5 Groundwater

Development of the Project is not expected to impact groundwater.

5.3.6 Surface Water

In Chedabucto Bay, surface water quality may be temporarily affected by increased total suspended solids (TSS) and disturbance during in-water work, and by potential spills of petroleum products and lubricants from heavy machinery.

5.3.6.1 Potential Effects Pathways

Surface water quality may be affected during all Project phases through potential releases of sediment (increased TSS) and petroleum, oil, or lubricants (POL) during marine terminal construction and in-water work. Increased marine traffic during construction and operation raises the risk of accidental POL spills, which could harm the marine environment.

5.3.6.2 Proposed Mitigation

The Project will be designed to reduce effects on surface water. All contact water will be collected and treated before discharge, and secondary containment will be installed for all fuel and chemical storage and in maintenance areas. A Project-specific ESCP will be developed and implemented to manage TSS and sediment-laden runoff. An Emergency Response and Spill Contingency Plan will guide incident prevention and response for accidental spills.

The ESCP will reduce effects on surface water quality during construction and closure. Additional measures will include management of in-water works, such as the use of turbidity and/or silt curtains during construction, and if required, during dredging activities, , treatment of collected runoff for suspended solids prior to discharge, and implementation of monitoring and adaptive management programs, to limit sediment dispersion, protect water quality, and maintain the integrity of the aquatic environment

Monitoring and adaptive management will help limit sediment dispersion and protect the aquatic environment.

5.3.6.3 Regulatory Review

The *Fisheries Act* prohibits any work (other than fishing) that could kill fish or cause harmful alteration, disruption, or destruction of fish habitat. If these effects cannot be avoided or mitigated, an FAA is required. Carver would describe potential effects, mitigation measures, and offsetting plans as part of any application.

Discharges will also be managed under the NS Environmental Assessment Registration and Industrial Approval requirements, and the ESCP will follow the Guide to Developing Erosion and Sediment Control Plans (ECC, 2025), consistent with IAAC's standard mitigation measures for surface water.

5.3.7 Wetlands

No tidal wetlands were identified in the natural environment around the marine terminal. Freshwater wetlands, as defined under Section 3 of the NS *Environment Act*, may be directly or indirectly affected by Project activities such as clearing, grubbing, and construction of Project infrastructure.

5.3.7.1 Potential Effects Pathways

No tidal wetlands were identified in the natural environment around the marine terminal or the access road.

5.3.7.2 Proposed Mitigation

No mitigation is required, as no tidal wetlands were identified.

5.3.8 Terrestrial Habitat and Flora

Terrestrial habitat is not relevant to the natural environment around the marine terminal.

5.3.9 Terrestrial Fauna

Terrestrial habitat is not relevant to the natural environment around the marine terminal or the access road.

5.3.10 Avifauna

Project development can affect birds through direct mortality (such as collisions and nest destruction) and indirect pathways including habitat loss and fragmentation, disturbance from noise, light, and human activity, altered food webs, and effects on survival and reproduction. Potential effects, mitigation, and regulatory review are similar to those described for migratory birds in Section 5.1.2.

5.3.10.1 Potential Effects Pathways

The marine terminal may affect birds through lighting that attracts them and increases collision risk, disturbance from vessel traffic, changes to coastal and marine habitat, and water quality impacts that affect prey availability. Effects will be regular but not continuous, and may reach into marine ecosystems, affecting both resident and migratory species.

5.3.10.2 Proposed Mitigation

Mitigation for birds follows a hierarchy of avoiding, minimizing, and restoring or offsetting, based on the main effects (habitat loss, disturbance from blasting and noise, and collision risk).

Mitigation will focus on avoiding and reducing effects on birds. The terminal will be designed to avoid important bird habitats (nesting, feeding, and resting areas) where practical. Bird-friendly lighting will be used, including minimized, shielded, low-intensity, and directional fixtures to reduce attraction, disorientation, and collision risk. Timing restrictions will be applied to avoid critical breeding and migration periods and sensitive areas. If construction takes place during the shorebird breeding season, nest sweeps will be completed on the shoreline disturbance area where practical. Additional measures will include habitat protection and restoration, spill prevention and water quality controls, noise and disturbance management, and monitoring with adaptive management. Dedicated bird surveys were conducted at Lazy Head in 2025 and 2026 to confirm the presence of

birds and assess potential impacts. Final construction and operational footprint designs will use these results to avoid or reduce effects on birds and their habitats where practical.

5.3.10.3 Regulatory Review

As described in Section 5.1.2, migratory birds are protected under the MBCA and MBR, which prohibit capturing, killing, injuring, or harassing birds, and damaging or destroying their nests or eggs, except as authorized. Guidance from ECCC, including Avoiding Harm to Migratory Birds and CWS offshore protocols, will be applied to reduce risks during construction and operation.

5.3.11 Species at Risk and Species of Conservation Interest

SAR, as defined under SARA and the NSESA, and SOCI, as classified by COSEWIC or ACCDC, may be directly or indirectly affected by construction and operation of the Project. Potentially affected species may include flora, freshwater and marine wildlife, terrestrial wildlife, and birds. Effects could be direct, through mortality, or indirect, through sensory disturbance, habitat loss and fragmentation, or changes to air and water quality.

5.3.11.1 Potential Effects Pathways

SAR and SOCI may be more affected by Project activities than other species, since they typically have small populations, specific habitat needs, and higher sensitivity to disturbance. Several of these species also have commercial or recreational value or are considered particularly important by the Mi'kmaq of Nova Scotia.

Construction and operation may affect SAR and SOCI through habitat loss and alteration (from dredging, infilling, and clearing), changes in water quality (from turbidity or contaminant release), and disturbance from noise, lighting, and vessel traffic. These effects may cause displacement, reduced reproductive success, changes in behaviour, and mortality of marine fish, marine mammals, birds, and terrestrial wildlife. Indirect effects may occur through changes in prey availability and ecosystem function, including disruption of benthic communities and coastal habitats that support sensitive species.

5.3.11.2 Proposed Mitigation

Mitigation will focus on avoiding effects where feasible and reducing those that cannot be avoided. Standard and Project-specific measures will be applied across the marine, aquatic, and terrestrial environments to maintain habitat integrity for sensitive species. Common measures across both components include:

– Limiting habitat disturbance and keeping the Project footprint as small as possible during detailed design to avoid important habitats, wetlands, and old-growth forests.
– Scheduling vegetation clearing outside the regional nesting period. If this is not possible, nest surveys will be completed no more than three days before construction, and active nests will be avoided with a buffer set by a qualified biologist until young have fledged.
– Managing construction debris and garbage to avoid attracting birds.
– Limiting lighting to what is needed for safe operation, installing lights facing downward, and using motion-sensing lights where practical.
– Prohibiting Project employees and contractors from fishing, hunting, trapping, gathering plants, or using off-road vehicles for recreation within the PA.

Mitigation will focus on preventing and reducing effects on marine and coastal ecosystems and the terrestrial and freshwater environments that support SAR and SOCI. Sensitive habitats (such as fish habitat and bird use areas) will be avoided where possible, and disturbance during construction and operation will be minimized. In-water work will be done in sequence to avoid trapping or distressing marine SAR or SOCI, and a fish rescue plan will be applied where needed. Design-embedded and additional measures, consistent with regulatory requirements and best management practices, will reduce effects on marine fish and fish habitat, marine mammals, migratory birds, and their habitats. Standard mitigation for marine fish and fish habitat is expected to appropriately reduce effects on priority marine species. In-water activities will be subject to permitting under the *Fisheries Act*, including an FAA, which will address effects on priority fish species and any required offsetting.

5.3.11.3 Regulatory Review

Project effects on SAR and SOCI will be assessed under federal legislation, including SARA, and through the provincial EA process, following the NS Proponent's Guide to Environmental Assessment (ECC, 2025) and the Guide to Addressing Wildlife and Habitat in an EA Registration Document (ECC, 2009).

The Project will comply with SARA, the Fisheries Act, and the MBCA. It has been designed to reduce interactions with listed species and their habitats using standard and Project-specific best management practices, including avoidance of sensitive habitats, adherence to timing windows, control of in-water work and sedimentation, management of underwater noise and lighting, and spill prevention and monitoring. Where residual impacts cannot be avoided, offsetting or restoration will be applied in line with regulatory guidance. Mitigation will also follow federal guidance documents, including DFO codes of practice and standardized measures for work in or near water, as well as ECCC guidance for migratory birds.

5.4 Potential Impacts Based on Federal Work Designation

The Lazy Head Marine Terminal is a federal work or undertaking as defined in subsection 3(1) of the *Canadian Environmental Protection Act*, 1999, because it will operate in connection with navigation and shipping. Potential effects are discussed in Sections 5.1 to 5.3, including fish and fish habitat (Section 5.1.1), wetlands (Section 5.3.7), terrestrial habitat and wildlife (Sections 5.3.8 to 5.3.11), and socioeconomic conditions, including commercial and recreational fisheries (Section 5.3.12).

5.5 Estimate of Greenhouse Gas Emissions

A preliminary estimate of GHG emissions has been completed for the Project. The estimate includes emissions from:

– Mobile equipment (such as trucks and service vehicles)

– Fixed equipment (diesel equipment)

– Electricity use for the marine terminal

Over the expected 88-year life of the Project (2 years of construction, 85 years of operation, and 1 year of closure), about 129 kilotonnes of CO_2 equivalent are expected to be produced. Of the three assumed sources, 15.2% of emissions will be sourced from mobile equipment, 66.7% will be sourced from fixed equipment, and 18.1% will be sourced from electricity use. Electricity use is attributed to general and administrative work for the Project.

The estimate follows the SACC guidance and assumes no carbon capture and storage, no avoided domestic emissions, and no offset credits. Emission factors for mobile and fixed combustion are from Table 4.3 of the National Inventory Report 1990–2023: Greenhouse Gas Sources and Sinks in Canada (ECCC, 2025), and the electricity emission factor is from Table 5.3 of the same report. Global Warming Potential values are from the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, over 100 years. The estimate will be updated in future regulatory submissions as more data becomes available.

Canada's targets under the Canadian Net-Zero Emissions Accountability Act, 2021 commit to a 40-45% reduction from 2005 levels by 2030 and net-zero emissions by 2050.

5.6 Waste and Emissions Generated by the Project

All Project phases will generate waste and emissions that need to be managed. Specific amounts cannot be estimated at this stage of Project development, but the main types are described below.

Expected waste includes construction debris, packaging, and general domestic waste, along with hazardous waste such as fuels, oils, lubricants, and solvents. During operation, waste will come mainly from Project personnel and vehicle maintenance (used oils, lubricants, and machine parts). At closure, dismantling will generate debris, hazardous materials from vehicle maintenance, cleaning solutions, and general refuse. Emissions across all phases will include dust, noise, light, and vehicle and equipment emissions, with some in-water sediment disturbance during construction and closure. The rubble mound and fixed dock will remain in place after closure.

5.6.1 Liquid Discharge

No liquid discharge will occur from the marine terminal.

5.6.2 Solid Waste

General refuse and domestic waste, including food waste, glass, plastic, paper, and cardboard, will be produced during all phases of the Project.

Multi-stream recycling and waste bins will be placed within the land-based portion of the PA for the life of the Project. Non-recyclable or industrial waste, such as metal waste or scrap wood, will be disposed of in industrial waste bins.

Items requiring special disposal will be flagged and directed to specific waste streams that follow the appropriate reporting, storage, transport, and disposal rules. These may include contaminated soils, spill clean-up materials, petroleum products, oils, lubricants, and any materials stained during vehicle and equipment maintenance.

5.7 Cumulative Effects

Several existing and proposed projects in the region were reviewed to identify the potential for cumulative effects. Most projects, including quarries, wind energy developments, industrial facilities, and other infrastructure projects, are located 5 to 70 km from the PA. Based on the distance between these projects and the proposed marine terminal, significant overlap of environmental effects is not anticipated. The closest identified project is the Black Point Aggregates quarry (EA approved 2016, roughly 70-year life), located approximately 4 km away; however, cumulative effects are not expected. Cumulative effects will be further evaluated as the Project advances through future regulatory review and permitting processes.

6. Closing

Carver proposes to construct and operate the Lazy Head Marine Terminal Project, located in Lazy Head, NS. The Project includes development of a marine terminal in Chedabucto Bay for the export of aggregate. The marine terminal provides an efficient route to market for aggregate, supplying the U.S. East Coast and Gulf region construction market and offshore wind energy developments along the east coast of North America.

Through proactive planning and early, transparent engagement, the Project emphasizes mitigation by design. This includes minimizing disturbance to the marine environment through refinement of the marine terminal design, as well as significantly reducing dust, noise, and light pollution by covering conveyors and transfer towers, where appropriate. The IPD highlights how the Project has been shaped through feedback from community members, regulators, and the Mi’kmaq of Nova Scotia.

Federal, provincial, and municipal authorizations, permits, licences, and approvals will be required for Project construction and operation.

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