SHORELINE AGGREGATES INC.
POINT ROUSSE QUARRY

Environmental Assessment Registration Document

Submitted by:
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Point Rousse Quarry Lease Application

- Quarry Lease Location Area
  - Within Mine Lease #189 (11299M) covering 73.5 ha
- Environmental Assessment Registration Identification
  - File Reference Number 200.20.3378

2.0 PROPONENT

2.1 Name of Corporate Body

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3.0 THE UNDERTAKING

3.1 Nature of the Undertaking

Shoreline Aggregates Inc. (Shoreline) is a company which operates as a producer and exporter of rock aggregate materials to international markets. Since 2016, Shoreline has operated within the Point Rousse Project area in the Pine Cove Mine Lease (Lease #189) on the Baie Verte Peninsula (**Figure 1**), which was formerly held by Signal Gold Inc. As the project assets have been purchased by Maritime Resources Corp. (Maritime), Shoreline has entered an agreement with Maritime to provide the ability for them to acquire a quarry lease within Maritime's mining/surface lease (Mine Lease #189 (11299M) / Surface Lease #107). The proposed project, referred to as the Point Rousse Quarry, is a 73.5 ha quarry application area applied for by Shoreline that sits within Maritime Resources (Maritime) active Pine Cove Mine Lease.

3.2 Purpose/Rationale/Requirement for the Undertaking

The main purpose for this quarry is to utilize the rock resources within the lease area to supply materials related to Shoreline's aggregate production operations, with all products made on site being exported to international markets from the Point Rousse marine terminal. As such, Shoreline will be requesting that a 20-year lease be issued for the quarry in order to secure a long-term source of rock resources to meet their exportation business demands for specific aggregate requirements that cannot be meet by the South Brook Quarry. Upon the anticipated implementation of the quarry lease, Shoreline will inherit the responsibilities of the property under a quarry mechanism for operations, regulatory responsibilities, remediation, and financial assurance for closure. This will be independent of Maritime Resources. Maritime will maintain their mineral/mining rights and the ability to extract ore bearing material under their mining lease tenure. Shoreline's quarrying operations will only involve the development of the 'waste rock' overlying Maritime's targeted gold mineralization.

Access to the site is pre-established through Maritime Resource's existing Pine Cove Mine access road (**Figure 2**).

4.0 DESCRIPTION OF THE UNDERTAKING

4.1 Geographic Location

The project is located on the Point Rousse Peninsula, in the northern portion of the Baie Verte Peninsula on NTS Map Sheet 12H/16 (**Figure 1**). The proposed quarry lease area sits within the southwestern corner of Maritime Resources 6.6 km^2 mining lease (Mine Lease #189 (11299M) / Surface Lease #107) which is located approximately 4.0 km northeast of the Town of Baie Verte. The southern portion of the lease application area lies within the municipal boundary and planning area of the town (**Figure 2**). Written

approval for the development of this quarry site has been obtained from the Town of Baie Verte by Shoreline Aggregates.

Access to the site is gained through Maritime Resource's Pine Cove Mine Site access road which branches towards the northwest from Ming's Bight Road (Newfoundland and Labrador Highway Route 418) and travels ~ 3.8 km to Mine Lease #189 and a further approximately 1.7 km to the lease application area (**Figure 2**).

The quarry lease application area is currently set at **73.5 ha** in size, with this outline being finalized upon the completion of a legal survey should the site be approved under a quarry lease (**Figure 2**). The lease application area is flanked by the Atlantic Ocean, Baie Verte along the western lease boundary. Pine Cove Pond lies along the central portion of the eastern lease area and South Brook runs along the southern lease boundary (**Figure 3**).

The Baie Verte Peninsula is a heavily developed mining region with both active and exhausted mine sites located throughout the general area. In addition to Maritime Gold's Mine Lease #189, which hosts Shoreline Aggregates quarry application area, and Maritime's Mine Lease # 149, an additional 7 mine lease areas lie within a 2.5 km radius from Maritime's mine lease. Seaside Realty Ltd's 3.5 km^2 Mine Lease # 226 (10238M) is located ~270 m to the north and four other Mine Lease's held by Maritime Gold (Mine Lease #240, #243, #245 and #193B) lie between 580 m and 2.5 km to the east. A further two leases (Mine Lease #188 & #141), held under Rambler Metals and Mining Canada Ltd., sit ~ 2.5 km to the southeast (**Figure 4**). Additionally, the decommissioned Baie Verte open pit asbestos mine site is located directly across the bay from the quarry application area.

As the area hosts active mine leases which includes both operational and decommissioned mine sites, the quarry activity proposed by Shoreline Aggregates to take place within the quarry application area is not anticipated to have any greater effects on the immediate area than the adjacent ongoing mining operations. Sensitive receptors near the project are minimal in nature as the closest receptor is a small cluster Crown Title areas hosting private cabins along the eastern edge of Scrape Pond, over 2.65 km from Shoreline's quarry area boundary. The Town of Baie Verte is located over 4 km to the southwest and the community of Ming's Bite is located over 6.1 km to the northeast. The sensitive receptor locations within the general area are shown on ***Figure 5***.

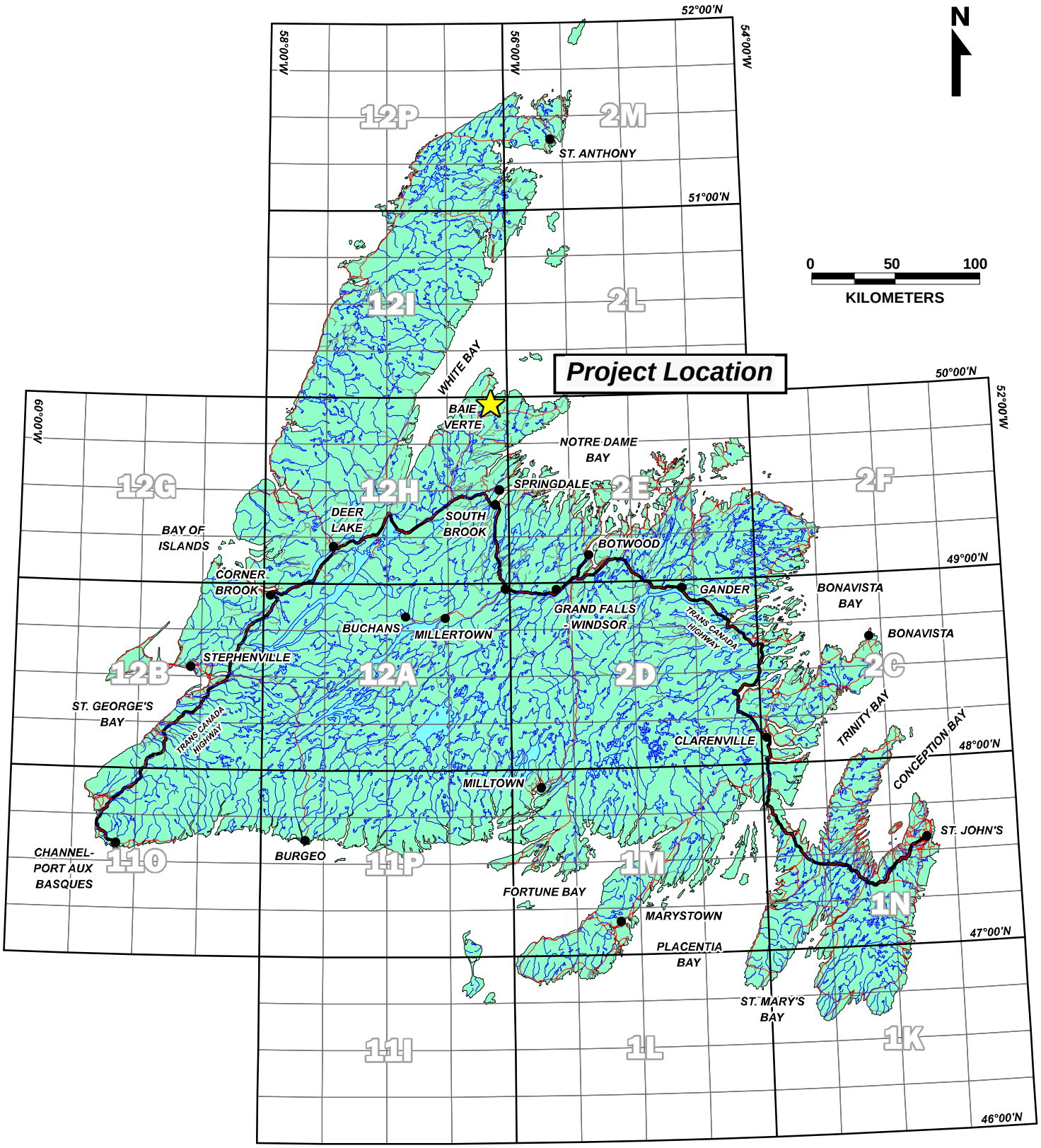


FIGURE 1: Project Location Map (N.T.S. 12H/16)

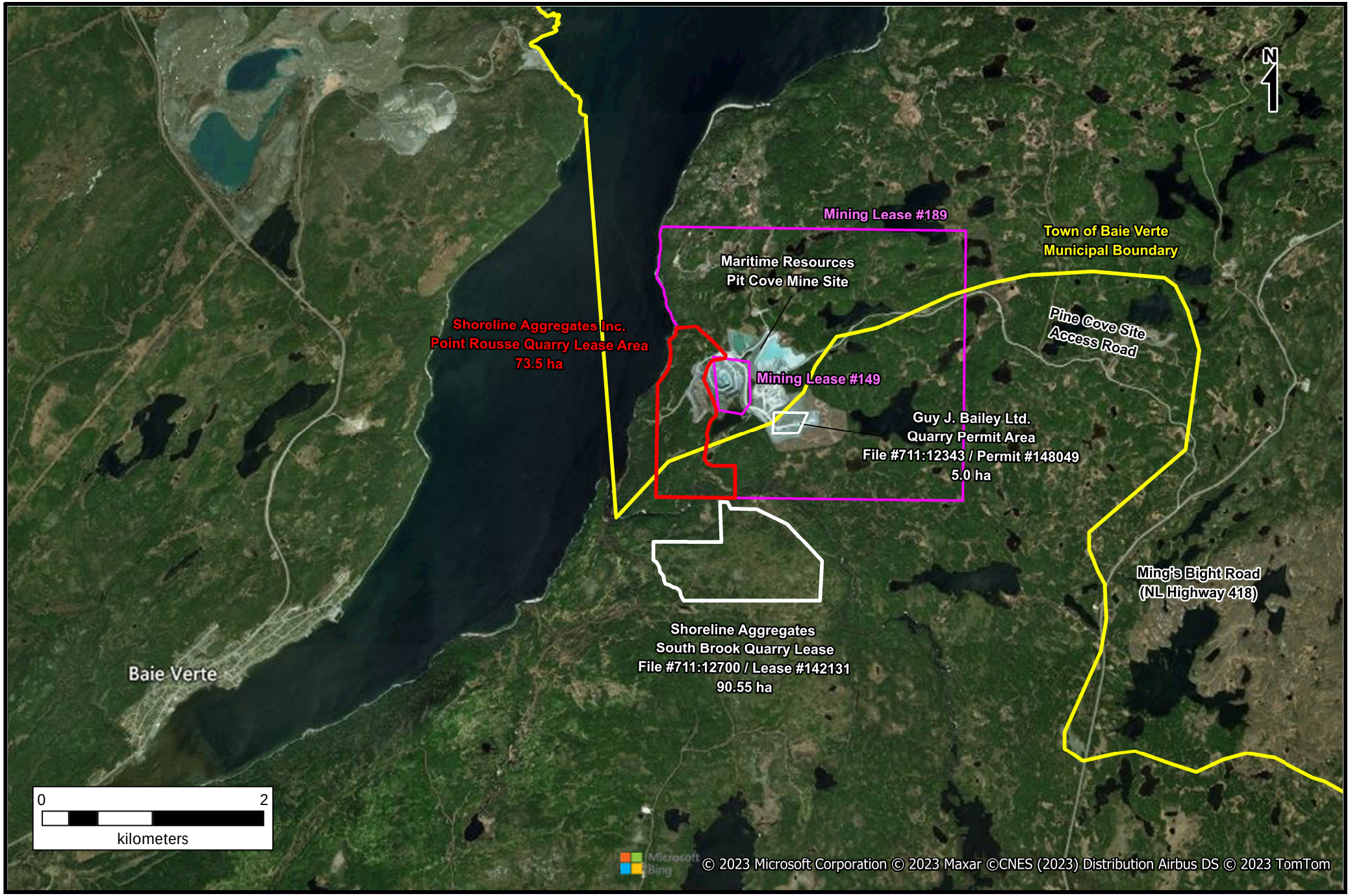


Figure 2: Project Area Map

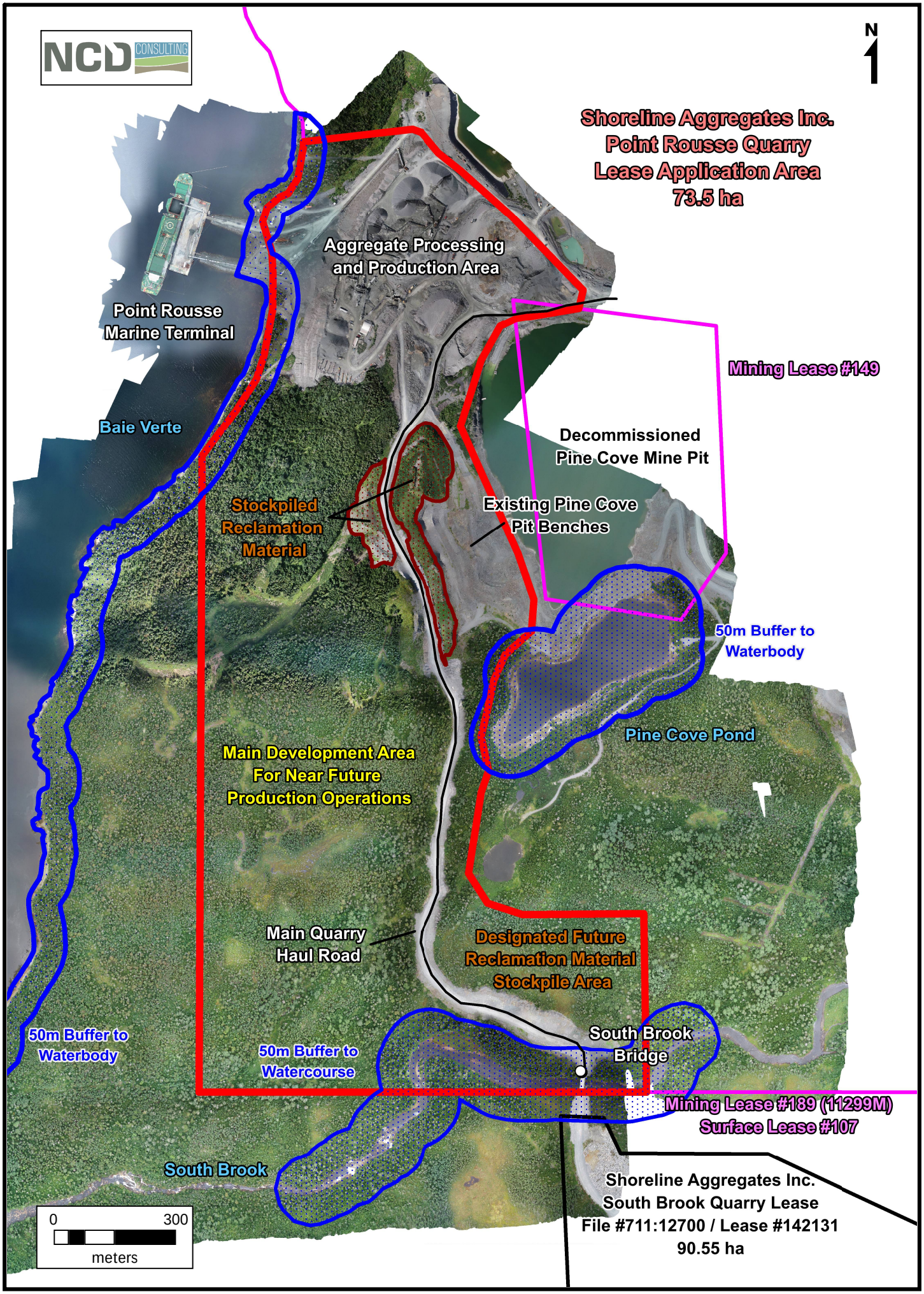


Figure 3: Detailed Quarry Lease Map

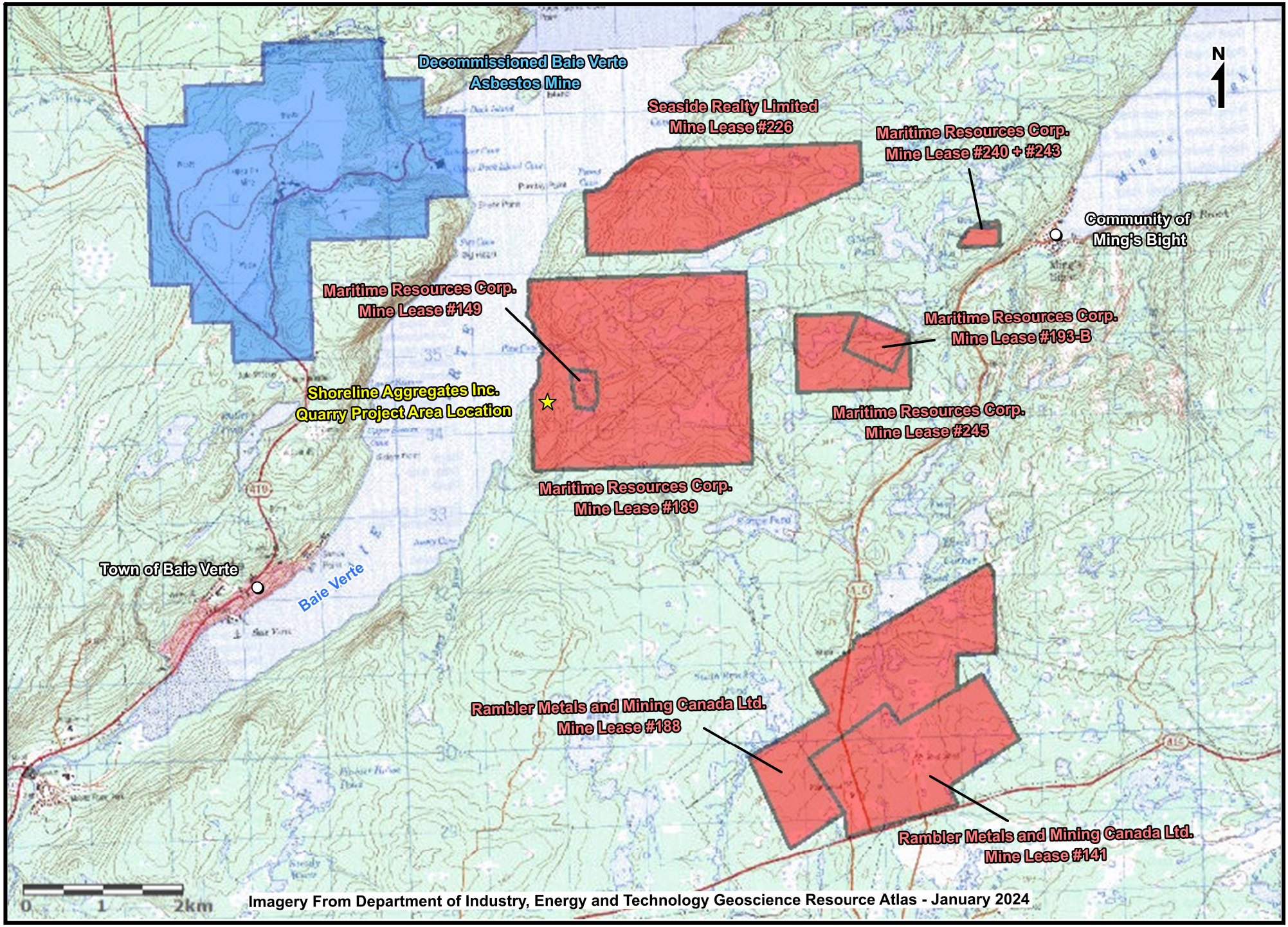


Figure 4: Baie Verte Mine Lease Map

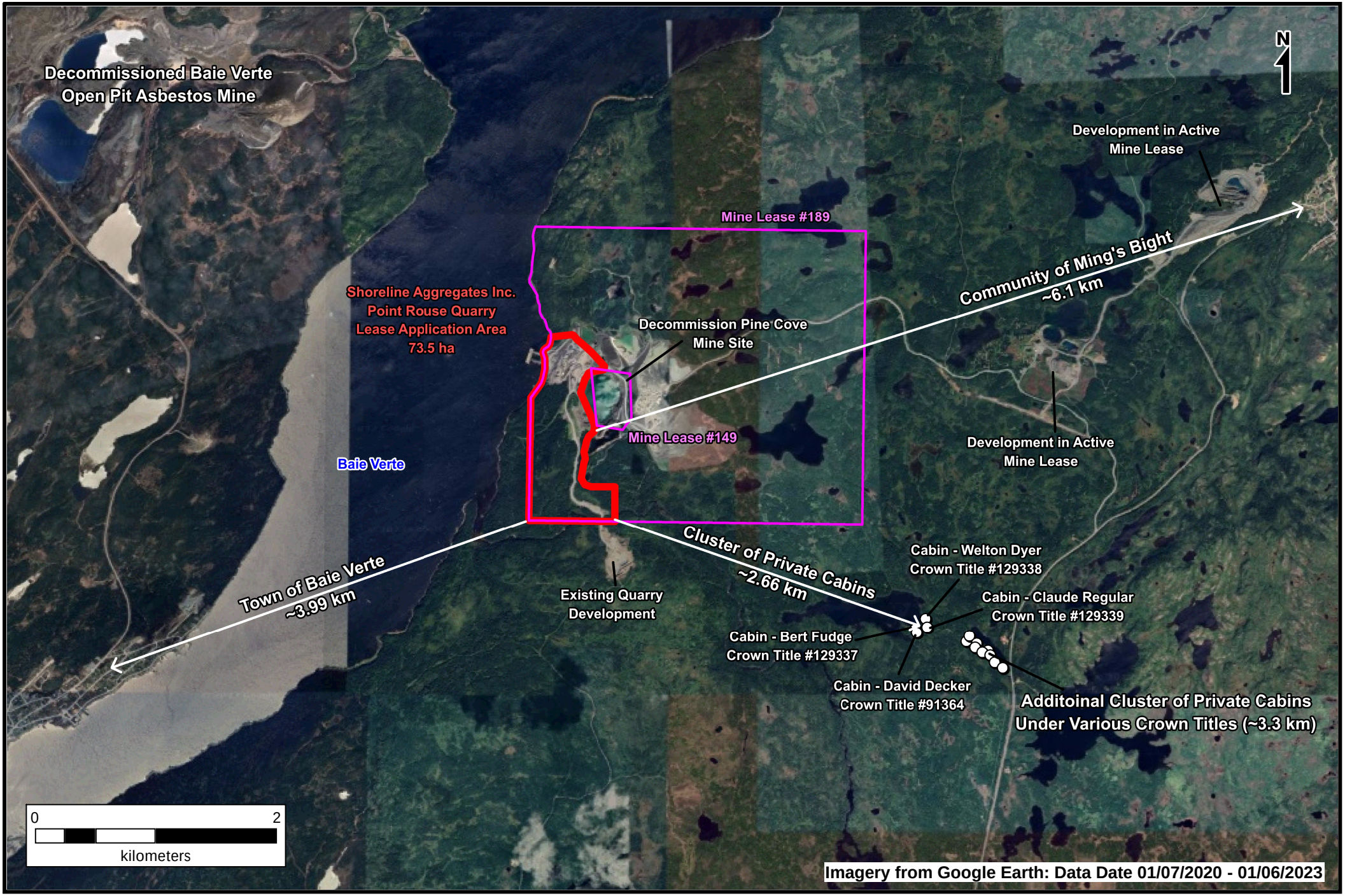


Figure 5: Receptor Location Map

4.2 Physical Features

4.2.1 Project Site Description

As Shoreline Aggregates initially began operating within the Pine Cove Mine lease in 2016, their aggregate production equipment and operations center has existed within the purposed quarry area footprint for many years. In December of 2021, the previous landowner Signal Gold Inc. renewed a 5 - Year surface lease for the Point Rousse Project area (Surface Lease #107). Shortly thereafter, Shoreline began an expansion plan for the production area layout. This expansion plan included the relocation of past reclamation material stockpiles, the creation of new equipment laydown areas and creating the current stockpile and processing area setups, as presented on ***Figure 6***.

Elevations inside the quarry range from ~ 3 m to ~ 123 m above sea level (asl). The lowest elevation is noted along the northwestern edge of the lease area where the boundary line runs adjacent to the shoreline of Baie Verte. The highest elevation within the quarry is noted on small, isolated peaks of land clustered in the central portion of the lease within the undeveloped greenspace at ~ 121 m - 123 m. Elevations within the lease decrease outwards from the central height of land, dropping off towards the ocean shoreline to the west, towards South Brook to the south and towards Pine Cove Pond and the decommissioned Pine Cove pit benches to the east. An existing 1.4 km truck drivable access/haul road runs north-south through the application area, connecting with a small 24 m long bailey bridge located at the southeastern lease boundary and crossing South Brook (**Figure 3**).

The exposed pit benches along the eastern lease boundary have already undergone partial reworking and sloping as per rehabilitation requirements when the Pine Cove Mine pit was decommissioned. As such, the benches sit between 4 m and 7 m in height and have a general slope of < 30 degrees. The exposed plateaus of the bench faces occur between 8 m and 15 m wide at elevations between 83 m and 77 m asl.

The grubbing material removed from the development and expansion of the processing area is currently stockpiled along the quarry haul road near the processing area entrance shown on **Figure 3**. Other than the processing area, the majority of the lease area hosts forested, undisturbed ground.

The crusher/screener set up, which contains multiple pieces of equipment including three cone crushers, a jaw crusher, multiple screeners and up to 8 conveyors, is near the central processing area in the north (**Figure 6**). The screener setup is supplied by the crusher jaw box which sits ~ 40 m east of the screener. The crusher control tower and required 2500 KVA transformer pad are situated adjacent to the screeners (see ***Section 4.6*** for a list of required personnel and equipment to run the site). Equipment, tools and site maintenance materials are located at the laydown at the south end of the processing

area, ~ 70 m from the 12 m x 14 m maintenance building which includes adjacent shipping containers and office trailer buildings. Three staff trailers and a parts storage trailer sit adjacent to the northwestern lease boundary near the marine terminal loading barge access road.

The crusher control tower transformer is energized by a Newfoundland Power (NL Power) overhead line which runs along the northwestern corner of the lease boundary, with a branch running southeast towards the crusher set up. The infrastructure that requires power is supplied from these lines via an overhead cable directly from the pole, while no buried power distribution cables are located within the lease area.

The quarry operates a mostly closed loop wash plant that only requires additional water from outside sources to replenish the system when needed. The description of wash plant setup and the use of the accompanying tailings ponds within Mine Lease #189 are discussed in ***Section 4.3.3*.**

The lease application area is currently host to 7 stockpiles which contain various production materials. ***Figure 6*** shows each labeled stockpile location for the materials within the processing area and include ½" stone, $^{3}/_{8}$" stone, concrete/asphalt sand, blast rock crusher feed and rejected fine material from the wash plant.

A single 22,730 L diesel fuel tank sits adjacent to the crusher jaw box (**Figure 6**). This tank owned by Western Petroleum (serial # C-277005) is held under Gasoline and Associated Products (GAP) registration #13855.

Shoreline Aggregates utilizes the existing Point Rousse Marine Terminal located along the northwestern lease boundary in order to export their products to international markets. The terminal consists of a ~ 120 m long loading barge with 4 mooring bollards dotting the adjacent shoreline (**Figure 6**). Ships are loaded with product material via a ~ 400 m long conveyor which runs from the product stockpile areas to the edge of the loading barge, this then connects to a telescopic conveyor situated on the barge itself.

4.2.2 Existing Biophysical Environment

The site is located along the margin between the Central Newfoundland Forest - Northcentral Subregion and the North Shore Forest ecoregions. The climate of this area is a general mix of the two ecoregions. The Northcentral Subregion has higher summer maximum temperatures, lower rainfall and higher general temperatures than anywhere else in Newfoundland, while the North Shore Forest is generally milder as the climate in this region is heavily influenced by the Atlantic Ocean, although it is generally the driest area of shoreline in the province. The mean annual temperatures in the project area will mostly sit between 4.0°C - 5.0°C, with a mean summer temperature of ~11°C - 12°C and a mean winter temperature between -3°C and -4°C. The Northcentral Subregion is generally host to a rolling topography below a 200m elevation with a mean annual

precipitation amount between 1,000 mm to 1,300 mm. The North Shore Forest is a narrow coastal zone containing forested hillsides and barren coastal headlands with a mean annual precipitation amount ranging from 900 mm to 1,000 mm.

Vegetation in the North Shore Forest is generally less developed towards the coast due to increased wind exposure where barrens are increasingly common. Coastal elevations range from sea level to approximately 150 m in elevation. Bedrock outcrops are common throughout the region. Black spruce, white spruce and balsam fir, with an understory of feathermoss, are the dominant tree species. The vegetation season is shorter and cooler than in Central Newfoundland, but the frost-free period is several weeks longer. In the Northcentral region, pure Black Spruce forests and Aspen stands dominate this area because of the prevalence of fire over the natural history of the subregion as well as the higher summer temperatures. There are also local areas covered by poor sandy till overlying galcio-fluvial deposits and outwash deposits along some of the major river systems.

Lichen and various mosses, including Kalmia heath, grow across the drier areas of the Northcentral Subregion, with the common wildlife in the area being black bear, caribou, moose, lynx, coyote and red fox. While some of these species are located within the North Shore Forest, seabirds, especially murre, eider and tern, take refuge in this ecoregion.

4.2.3 Site Visibility

The Baie Verte Peninsula is a heavily developed mining region with numerous visible mine sites located throughout the general area. As the proposed project area lies within an active mine lease which hosts a decommissioned open pit mine, as well as the visible decommissioned asbestos mine directly across the bay, the quarry activity proposed by Shoreline Aggregates is anticipated to blend in with the surrounding industrial developments which date back to the early 1960’s and regionally the late 1800’s.

Figure 6: Current Aggregate Production and Processing Area Map

4.3 Construction, Operation and Maintenance

The project sits within an active mine lease from which the proponent has operated in since 2016. Furthermore, the active mine lease which the quarry application area is located in has undergone previous periods of significant development and hosts a decommissioned open pit mine site. As such, the construction aspect of this proposed quarry will be very minimal in scope, as the access/haul roads, processing equipment area setup, the South Brook bridge and all other quarrying related footprints/access already exist on site (**Figures 3** and **6**). The only operations required during the construction phase of the project will involve the clearing of trees and the stripping of grubbing and surficial soils from development block areas prior to production. The clearing of treed areas and organics/subsoils will happen in yearly phases and not all at once, as dictated by development and demand, in order to minimize disturbances of the land within the quarry area.

The initial development operations of this quarry over the first 5 years will see yearly production phase blocks developed in ~ 10 m lifts across four levels. Production will begin at the peaked elevation areas in the central lease at ~ 123 m and end at 83 m in elevation (**Figures 3** and **7,** see **Section 4.3.4**). Processing on site will consist of crushing, screening and washing of extracted material before it is stockpiled and eventually loaded onto shipping vessels for transport to international markets (see **Section 4.3.4**).

4.3.1 Road Maintenance

Shoreline Aggregates will utilize Maritime Resources existing Pine Cove Mine access road to enter the proposed lease area, which will be maintained by Maritime Resources.

Shoreline Aggregates will maintain the existing 1.4 km access/haul road which runs north-south through the proposed project area boundary. As this existing haul/access road is a gravel road, it will, over time, typically require maintenance. This will be completed by utilizing an excavator and/or grader to smooth or fill in ruts, settled areas and potholes as required. This may require the additional placement of aggregate material from the quarry for the purpose of road upkeep (for a list of required personnel/equipment see **Section 4.6**).

4.3.2 Site Clearing

Of the entire **73.5 ha** quarry, an ~ **18.74 ha** area has been previously cleared of trees and organic material, leaving the majority of the lease hosting undisturbed forested ground. This reclamation material has been stockpiled along the existing haul road as shown on ***Figure 3***.

Prior to the onset of production, treed areas, organics and surficial soils will be removed from the development footprint area. All tree covered areas will be cleared either by

handheld chainsaws or mechanical harvesting equipment. Tree cutting will be completed under a commercial cutting permit issued by the Department of Fisheries, Forestry and Agriculture and any merchantable timber will be stacked in 6 to 8 feet lengths.

The subsoil and grubbing layer within the lease area was conservatively estimated to be between 0.5 m and 1 m in thickness. This material will be stripped and stockpiled within the designated grubbing stockpile area in the southeastern corner of the lease area (**Figure 3**). To the best of their ability, Shoreline will stockpile the upper layer of organic/grubbing material separately from the underlying subsoils in order to reduce any dilution of the organic components of the grubbing material.

Some of the stripped subsoils will be windrowed to the permit boundary within the dedicated 5 m buffer zones depicted on ***Figure 7*** and some may be used to construct perimeter berms as required to temporarily secure the crest of quarry faces during development operations. All the remaining grubbing and subsoil material will be preserved in the stockpile area shown on ***Figures 3*** and ***7*** for future rehabilitation of the site.

4.3.3 Water Management

Overland water drainage will be naturally controlled by the topographic profile of the project area. Due to the topographic highs being located within the center of the proposed initial production area, overland water will naturally drain away from the production footprints, running towards the heavily vegetated areas at lower elevations. Water will be directed away from the eastern margin of the plateau and towards the vegetated hillside naturally sloping to the west - northwest (**Figure 7**). If it is deemed necessary to assist in directing water off the plateau areas towards the west, individual ~ 0.5 m - 1 m deep drainage channels may be utilized within the footprints of the active production phases. These drainage channels will be lined with rock check dams, silt fence and hay bales should filtering of site water be required before discharge into vegetated areas.

Shoreline Aggregates utilizes a closed system wash plant for the washing of various aggregate products on site (**Figure 6**). The wash plant setup consists of a slurry tank, a sand washer, and multiple wash screens and stackers for the adjacent washed product stockpiles. The current wash plant management utilizes one of two mine tailings areas within Maritime Resources lease area as settling ponds for solids.

The containment pond can be replenished from multiple external sources including groundwater inflow from natural sloping, overland flow captured from onsite drainage, pit water within the main tailings pond on site, or, externally off site from one of two water sources, Decker’s Pond or South Brook. It is important to note that no water has been replenished from either external source, such as Decker’s Pond or South Brook, as sufficient supply within the internal capacities has maintained Shorelines demand for 2023. However, to remain in compliance with regulations, Shoreline Aggregates

maintains water use licenses (WUL) for both sources to provide assurance of supply if ever required (Decker's Pond WUL-21-11744 and South Brook WUL-20-11024).

Three waterbodies/watercourses identifiable on a 1:50,000 NTS scale map are located in the immediate area of the proposed quarry lease boundary. The Atlantic Ocean and more specifically Baie Verte is located towards the west with the shoreline located up to ~ 400 m from the project boundary. To the direct south, a 1 m to 30 m wide brook connecting to the southeastern edge of Baie Verte (South Brook) undulates across the southern boundary. Pine Cove Pond sits just south of the decommissioned Pine Cove Mine pit, along the central portion of the eastern lease area boundary. Shoreline commits to no overland runoff or directed quarry drainage entering into these waterbodies and the 50 m buffer to all waterbodies and watercourses required by the Department of Industry, Energy and Technology (DIET) will be maintained at all times, as shown on ***Figures 3*** and ***7***.

The central lease area elevation sits at 123 m asl and during the first 5 years of development, production efforts are slated to plateau at 83 m in elevation. As the nearby coastal sea level elevation is at 0 m asl and the water level within the decommissioned Pine Cove Mine pit sits between 40 m - 50 m asl, no interaction with the water table is anticipated.

4.3.4 Quarry Construction, Development and Operation

The quarry construction work will consist of clearing the site from trees and grubbing while removing, windrowing, and stockpiling organics as mentioned in ***Section 4.3.2***. The general direction of development shown on ***Figure 7*** is preliminary and may be adjusted during later design stages of production. It is provided to give the reader a rough idea of how the site most likely will be developed.

Shoreline Aggregates has determined that a reasonable average annual rate of production is ~750,000 m^3 or ~2,000,000 t (tonnes). This anticipated annual resource volume is estimated based on Shoreline Aggregates anticipated business demands. However, a change in the production schedule or increases/decreases in the annual production volumes may occur in the case where significant changes to market demand or future contract requirements arise. The production volumes and development layout presented in this document are purely preliminary in nature.

The initial development operations of this quarry will see yearly production phase blocks developed in ~ 10 m lifts across four levels. Production within the next 5 years will begin at the cluster of elevation peaks in the central lease area at 123 m and end at 83 m in elevation (**Figures 3** and **7**). Each stage of depicted production blocks will blast downward, creating a plateaued area of land which daylights along the topographic contour for that elevation (**Figure 7**). Over the next 5 years of production, an estimated

20.22 ha area of land will be developed, ending with a plateau created at 83 m in elevation.

Production operations will consist of drilling and blasting the defined bedrock resource. The blasted material will be placed in the crusher feed stockpile (**Figure 6**) until it undergoes crushing and screening to various aggregate sizing depending on the end user's current material needs. The blasted material will be loaded from the crusher feed stockpile into the crusher/screener jaw box for processing by excavators and loaders (see **Section 4.6** for a complete list of anticipated employee requirements).

Once the material is crushed/screened, it will be placed into finish product stockpiles or placed in the wash plant feed stockpile until the material is eventually loaded into the wash plant. The washed material is then added to market ready stockpiles via the integrated stackers within the wash plant setup (**Figure 6**). Rejected fines material from the washing operations may be stockpiled adjacent to the maintenance shop (**Figure 6**). The final produced aggregate products can then be loaded into ships docked at the loading barge at the Point Rousse Marine Terminal.

All extraction activities will adhere to the Government of Newfoundland and Labrador's Occupational Health and Safety Regulations under the Occupational Health and Safety Act, including maintaining a maximum quarry face height of 10 m or less. Detailed phase plans for production within the quarry for the foreseeable future will be outlined in a set of Quarry Lease Plans (QLP) to be reviewed and approved by the Department of Industry, Energy and Technology under the Quarry Materials Act.

With the anticipated full approval of the quarry development and anticipated release from EA review, typical quarrying activities are slated to take place as soon as possible within the quarry area. This is expected by March of 2024 but will ultimately be dictated by the timing of approval and severity of winter conditions.

4.4 Potential Sources of Pollution During Construction and Operation

The construction and operational phases of the development will utilize equipment such as chainsaws, timber harvesting equipment, excavators, bulldozers, and dump trucks. The equipment and related activities represent a potential source of noise and vibrational disturbance, exhaust emissions, the potential release of petroleum hydrocarbons, the generation of dust, domestic waste, and general refuse. Blasting operations within the quarry during production represents a source of noise and vibration.

4.4.1 Air

Air pollution will be controlled by having all equipment on site fitted with the appropriate emission-control equipment. Site clearing will be completed in phases, with only areas required for production cleared, reducing the overall potential of excessive dust and

pollution impacts. Thus, the entire 73.5 ha will not be stripped of its organic cover initially. Dust created by equipment operation along roads will be kept at a minimum by the watering of roads as required. All activities within the quarry will be conducted in a manner that respects the province's *Air pollution Control Regulations (2004).*

4.4.2 Noise and Vibration

The extraction and processing operations of the quarry site are not anticipated to have an effect on nearby receptors any more than the other mining operations and mineral exploration activities in the general area. All equipment will be kept in good operating order to ensure that maximum manufacture decibel levels produced are not exceeded. Workers will have proper hearing protection and the work site will be a controlled work environment.

Blasting operations will be conducted by Newfoundland Hard Rok Inc., or a similar contracted third-party licensed blaster. The explosives will not be manufactured or stored on site and will be trucked to site as required. Blasting frequency will be based on the expected rate of production with blast sizes corresponding to the projected material demand. Anticipated 100 mm diameter blasting holes will be drilled in horizontally spaced patterns of 3 m x 3 m, and at depths of up to ~10 m. As the closest human receptor is located over 2.65 km away, no noise or vibrational disturbances during blasting are foreseen. All production operations and quarry faces/bench layouts throughout the development area will comply with Occupational Health and Safety Regulations (OHS) and maintain a maximum face height of 10 m.

4.4.3 Domestic Waste and Sewage

Domestic waste generated on site is regularly collected and disposed of in accordance with the Environmental Protection Act 2002 by a local waste management service provider.

The main employee washroom facilities are located in the site office complex, which is located outside of the proposed project boundaries to the east, within Maritime Resources surrounding mine lease. An additional employee washroom is located near the crusher control tower in the aggregate processing area of the project (**Figure 6**). This washroom functions on a septic tank setup which is regularly inspected to maintain compliance with the Environmental Protection Act 2002. Sewage held within this septic system is regularly removed by an approved sewage service provider.

4.4.4 Fuel

A single 22,730 L diesel fuel tank is located on site (**Figure 6**), as diesel fuel will be required to operate the development and processing equipment located within the quarry area. This tank owned by Western Petroleum (serial # C-277005) is held under Gasoline

and Associated Products (GAP) registration #13855. The fuel tank is placed in a spill tray that exceeds the capacity of the storage tank placed within it.

The fuel storage tank will be regularly checked, and emergency spill kits are available on site for containment and cleanup of any hydrocarbon leaks. All equipment will be kept in good operating order with regular inspections in an effort to proactively prevent spill incidents and identify leaks. Any leaks or spills in excess of 70 liters or any amount of fuel interacting with any of the watercourses/waterbodies in the area will be immediately reported to the Provincial Environmental Emergency Telephone Line and cleaned up.

4.4.5 Effluent

There is a potential for erosion and the transport of fine-grained particles during construction activities in relation to clearing of the land. This will be monitored on a constant basis while clearing takes place and, if required, appropriate mitigating measures in line with industry best management practices will be utilized.

The first step will be to create erosion control ditches with check dams, hay bales, and silt fencing to filter water leaving the site. Site runoff will then be directed towards vegetated areas that will act as an additional filter for fine particles. Gradual phased development of the site will ensure that the organic layer will not be stripped all at once, this will reduce the amount of erosion.

The same process will be applied for the operational phases of the project. Site runoff will be directed to various vegetated areas depending on what stage of development is occurring. If required, drainage channels may be installed to better control and direct flow. All water released into the environment will meet the regulatory requirements of the *Environmental Control Water and Sewage Regulations (2003)* as well as provincial permits.

4.5 Potential Resource Conflicts During Construction and Operation

Potential resource conflicts during construction and operation of the quarry could include the following: encounters with wildlife, commercial wood cutting, and the extremely unlikely use of the area for recreational purposes such as big/small game hunting and hiking.

Any encounter with wildlife shall follow regulations stated in the Wildlife Regulations under the *Wildlife Act (CC. 96-809)*. As the proposed quarry area lies within an active mine lease, the historical and ongoing nature of the mining activity throughout the region is expected to limit the wildlife present in the area.

As previously discussed, the quarry application area is located in Maritime Resources Mine Lease #189, adjacent to an established and secured open pit mine site. The existing mine infrastructure and security measures will restrict unauthorized access to the quarry

application area by the general public. Furthermore, the long history of mine operations in the region will generally limit any public recreational usage of the immediate area.

The 73.5 ha project boundary as well as the surrounding 6.6 km^2 (660 ha) mine lease and numerous other mine leases in the region lie within a Corner Brook Pulp and Paper Timber Limit area (CBPPL). The immediate use of land for commercial cutting by CBPP within the area is not anticipated to occur due to the surrounding mining activity. Furthermore, the miniscule amount of merchantable timber in the quarry area compared to the overall size of the timber limit area, which encompasses over 50,000 ha, is thought to have little impact.

Throughout the construction and operational activities in the quarry, the 50 m buffer between all quarry workings and Baie Verte, Pine Cove Pond and South Brook will be maintained (shown on **Figure 3**). These buffers will allow the quarry to maintain adequate distance from all water bodies as per the Water Resources Management Division, Department of Municipal Affairs and the Mineral Lands Division, Department of Industry, Energy and Technology of the Government of Newfoundland and Labrador.

The following quarry development design parameters will be applied as a precautionary measure to prevent suspended solids from reaching any watercourses:

- Within the proposed quarry area, a 5 m wide buffer will be left intact where no resources will be excavated alongside the western quarry boundary (shown on **Figure 3**). Berms constructed from the windrowed subsoils will be placed within the 5 m buffer area inside the lease boundary.
- The development plateaus will be lower than the 5 m buffer zone perimeter berms, where present. Precipitation water will be contained within the quarry development area in order to direct it towards the west, following the natural topographic profile, or through constructed drainage channels with additional filtration methods if required (silt screening, hay bales etc.…)
- Water from precipitation and overland flow for the entire site will be controlled using the mitigation measures previously mentioned in ***Section 4.3*** & ***Section 4.4***
- The abundant vegetation and forested ground between the development area and the coastline will add additional filtration of released waters (**Figure 7**).

4.6 Occupation

The occupations required for the proponent's site are listed below and classified as per the National Occupational Classification (NOC, 2021).

Construction

- 1 Site Supervisor/Foreman (70010)
- 2 Heavy Equipment Operators –Excavator/Bulldozer (73400)
- 1 Heavy Equipment Operator – Tree Harvester/Mulcher (73400)
- 2 Heavy Equipment Operator – Dump Trucks (73400)
- 1 HSE Advisor (22232)

Operation

- 1 Quarry Manager (82020)
- 4 Mobile Equipment Supervisors (82020)
- 1 Heavy Equipment Supervisors (82020)
- 5 Washing/Crushing Supervisors (82020)
- 2 Ship loading Supervisors (82020)
- 15 Heavy Equipment Operator - Ship Loading Operators (73400)
- 5 Heavy Equipment Operator – Loader/Excavator (73400)
- 12 Mobile Equipment Operator – Trucks (73400)
- 12 Heavy Equipment Operator – Crusher/Screener (73400)
- 3 Heavy Equipment Operator – Wash Plant Operators (73400)
- 6 Quarry Field Maintenance (75110)
- 1 HSE Advisor (22232)

The construction phase of the project will require up to 7 employees to complete. This quarry operation staffs up to ~ 65 employees to operate the quarry site at its maximum production capacity, although the number of employees on site at any given time will be much lower than the total staff base. This number does not include employees whose occupations are located outside of the lease area and do not work directly with the quarry production operations. These off-site employees include laboratory technicians and administrative positions. Drilling and blasting and other specialized work, when necessary, will be contracted out to third party entities. It should be noted this development will provide the continuation of employment of the individuals who are currently, or have been, actively working for Shoreline.

Typical quarrying activities will take place between March and December of each year corresponding to an approximately 9-month production cycle. The timing of the production cycle will be defined and limited mostly by the timing of ocean ice flow and freeze up which can restrict product shipment. Also, extreme Winter conditions can limit production.

Fluctuations in material demand may lead to a change in the number of required employees and annual production rates. Shoreline Aggregates Inc. strives to provide

equal opportunity employment opportunities with preference given to the local labor resources. The company is also committed to establishing employment goals for gender equity in order to improve employment opportunities for all individuals in the construction industry.

4.7 Reclamation and Closure

The project will be rehabilitated under a reclamation and closure plan to be approved under a quarry lease issued by the Department of Industry, Energy and Technology with reclamation bonding in place to cover all aspects of the rehabilitation plan. This includes the removal of all infrastructure currently located in the lease application area, in the unlikely event that the quarry needs to be prematurely closed and Shoreline Aggregates is no longer operational.

All subsoils and grubbing materials stripped during development activities within the quarry will be preserved through stockpiling and windrowing for use in the future rehabilitation of the site.

The reclamation process, in the event of site closure, will first consist of demolishing all concrete structures and removing fixed buildings, like the maintenance shop, from the processing area. Next, the filling and contouring of the areas adjacent to the development bench faces created during production will take place with preserved subsoil material to produce 30-degree sloping. The 30-degree sloping will be followed by the resurfacing of all disturbed areas inside the project boundary with a uniform layer of preserved grubbing material. The reclamation grubbing material will contain an organic component to help promote regrowth.

5.0 APPROVAL OF THE UNDERTAKING

Table 1 on the following page contains a list of possible referral agencies with some anticipated responses including possible permits required for the project.

Due to the quarry application area being contained within a mining and surface lease that have already gone through environmental review and release, including an approved Development, Reclamation and Closure plan under the Mining Lease, the permit application was not referred out by the Quarry Materials Division. Instead, in this unique case, the project will be reviewed by all agencies during the EA referral process.

Table 1: Possible Referral Agencies and Anticipated Permits Required

Department/Regulatory Agency	Status	Possible Required Approvals/Permits
Municipal Affairs and Environment - Land Use Planning	Comments Pending EA Registration	
Municipal Affairs and Environment - Water Resources Management Division	Comments Pending EA Registration	
Municipal Affairs and Environment - Environmental Assessment Division	Project Registration Required	Environmental Assessment Registration
Industry, Energy and Technology - Mineral Lands Division	Comments Pending EA Registration	Quarry Lease Plans Required (Reviewed Upon EA Release)
Industry, Energy and Technology – Electricity and Alternative Energy	Comments Pending EA Registration	
Transportation and Infrastructure	Comments Pending EA Registration	
Tourism, Culture, Arts and Recreation - Tourism	Comments Pending EA Registration	
Tourism, Culture, Arts and Recreation – Historical Resources	Comments Pending EA Registration	
Tourism, Culture, Arts and Recreation - Parks	Comments Pending EA Registration	
Service NL	Comments Pending EA Registration	
Fisheries, Forestry and Agriculture - Fisheries	Comments Pending EA Registration	
Fisheries, Forestry and Agriculture - Forestry	Comments Pending EA Registration	Operating Permit & Commercial Cutting Permit
Fisheries, Forestry and Agriculture - Crown Lands	Comments Pending EA Registration	
Fisheries, Forestry and Agriculture - Land Management	Comments Pending EA Registration	
Fisheries, Forestry and Agriculture - Wildlife	Comments Pending EA Registration	

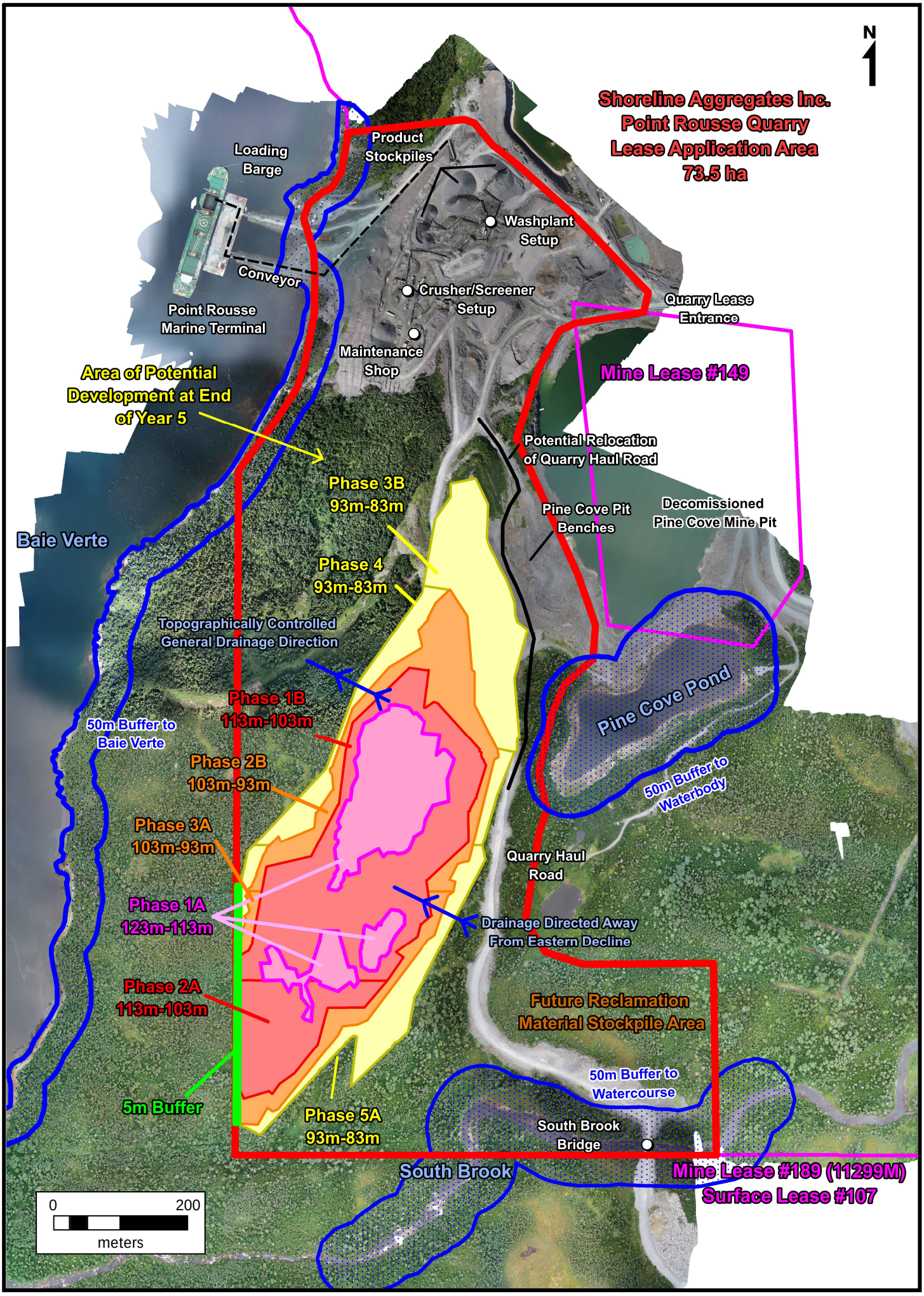


Figure 7: Preliminary Production Plan Map

6.0 SCHEDULE

The proposed schedule for this project is as follows:

Submission of Registration Document	January 2024
Review/Release of Submission Document by Government	March 2024
Commencement of Construction and Operations	March - April 2024

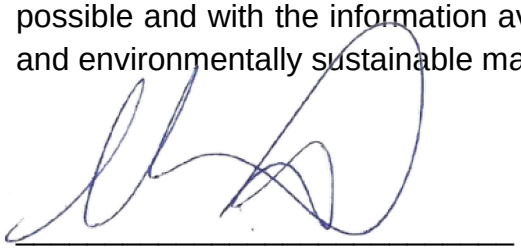
7.0 CAPITAL COST & FUNDING OF UNDERTAKING

The capital cost for the undertaking of this project is seen as relatively minimal, as Shoreline Aggregates already has in place the processing equipment and operational machinery required to run the quarry. Furthermore, all the operational infrastructure, haul roads and laydown areas are pre-existing from the long history of development in the mine lease area.

As such, the only capital costs for the project would involve the clearing of trees, grubbing and subsoils from the proposed production area shown on ***Figure 7***. A capital cost estimate for the proposed initial production area for the project was determined by Shoreline Aggregates to be approximately $500,000. This estimate is given for the preliminary 5 – year production plan discussed in this document. Future development plans beyond 5 years will be determined once production planning has reached that stage and providing cost estimations for development that far removed from the current 5-year project timeline would be unreasonable. The funding for the construction and operation of the project is to be provided entirely by the proponent.

8.0 LIMITATIONS

This environmental registration document was prepared by NCD Consulting Ltd. in consultation with Shoreline Aggregates Inc. for their use under the terms defined in a written contract between the two parties. The information included in this document was provided by the client and relates to the scope of this project exclusively. NCD Consulting Ltd. has collaborated with the client and utilized NCD's combined extensive knowledge in quarry development and potential environment related concerns to, as accurately as possible and with the information available, layout the development of the site in a safe and environmentally sustainable manner.



Jan 11th,2024

Name: Mr. Shannon Lewis
Position: General Manager
Shoreline Aggregates Inc.

Date