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## PROJECT SUMMARY

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Northumberland Capital Corporation Inc. (NCCI) is proposing the expansion of the Mount Uniacke Quarry, that produces aggregate, which consists of materials like sand, gravel, and crushed stone, frequently used in local construction projects such as roads, buildings, and bridges, as well as infrastructure renewal projects.

The proposed project is located on privately owned land located at 213 Uniacke Mines Road, Mount Uniacke, Hants County, Nova Scotia. The project will consist of the expansion of the existing quarry from approximately 4 hectares (ha) to approximately 40.5 ha of land. The project is anticipated to provide sufficient aggregate for the quarry for the next 30 to 50 years based on current market demands.

Other than the gradual increase in operating footprint, there are no anticipated changes from current operations at the site.

### Key Details

- Quarry Location: PID 45155801; 213 Uniacke Mines Road, Mount Uniacke, Hants County, Nova Scotia
- Current NSECC Industrial Approval: 2014-091797
- Current NSECC Approved Quarry Footprint: 4 hectares
- Proposed Expansion Area: 40.5 hectares (includes current quarry area)
- Operating Schedule: Seasonal, as demand requires

### Quarry Operations Summary

The Mount Uniacke Quarry operation consists of an area where materials are stored and processed, called the laydown area. It has one aggregate crusher that breaks the blasted rock into smaller pieces, which are then separated into different sizes and types and stored in stockpiles. The existing quarry covers about 4 ha and produces between 30,000 and 50,000 tons of aggregate each year. About 20% of these materials go to Allterrain Contracting Inc., and the remainder is sold to other contractors with projects in the area.

Typical quarry activities include:

- Drilling and blasting the rock, currently occurring twice a year
- Crushing and sorting the blasted rock into different types of materials, depending on local demands
- Transporting the materials to their final destination

During operations, environmental management includes controlling noise and dust, protecting surface and groundwater, conserving wetlands, monitoring wildlife and habitats, and safely handling hazardous materials like fuels and lubricants.

### Regulatory Context

Aggregate quarries are regulated by Nova Scotia Department of Environment and Climate Change (NSECC) through Industrial Approvals. These approvals allow the operation, construction, and reclamation of projects.

Industrial Approvals typically cover items related to the daily operations of projects and include conditions to protect the environment, such as limits for noise and dust, surface and groundwater monitoring, blasting limits, and reclamation requirements.

For quarries larger than 4 ha, an Environmental Assessment Approval is required in addition to the Industrial Approval. The Environmental Assessment process includes a thorough review of potential environmental and socioeconomic impacts and identifies measures to mitigate these impacts. When a project receives an



Environmental Assessment Approval, the Industrial Approval for the project must also be updated before the project can proceed.

## Mi'kmaq Of Nova Scotia

The East Hants First Nation (Sipekne'katik) is the nearest First Nations community to the project, located approximately 30 km to the northeast, followed by Mill Brook First Nation which is approximately 60 km to the northeast. Letters of invitation to participate in an engagement opportunity for the proposed quarry expansion were sent to these First Nations, as well as to the Native Council of Nova Scotia and Kwilmu'kw Maw-klusuaqn (KMKNO). To date, there has been no engagement from these groups.

A study called Archaeological Resource Impact Assessment, that has the objective to find out if there are any important historical or cultural items in the area, was done in 2021 as part of the Environmental Assessment. This study found that the project area is unlikely to have important historical or cultural items. However, if any such items are found during work, all activities must stop immediately, and the Coordinator of Special Places must be contacted to decide the appropriate mitigations.

Considering all the factors mentioned, the project is not expected to have any long-term effects on the Mi'kmaq of Nova Scotia.

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## POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION

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Because the quarry is in a rural area, the demand for its materials is expected to stay relatively the same over time. This means the way the quarry operates won't change much, but it will operate for a longer time to use the whole project area. The project is also on private land that is not open to the public. As a result, there will not be a significant increase in environmental impacts like noise, dust, emissions, truck traffic, or blasting that could affect the people that live in the area. The quarry will continue to follow environmental protection rules set by its Industrial Approval.

Here are the main expected effects of the project on the local environment and community, along with the mitigation measures to reduce these effects.

### Air Quality

**Potential Impacts:** Emissions of gases and dust will come from moving earth, clearing land, blasting, drilling, and processing activities. Dust may enter the air and settle on nearby plants and water. Removing trees and other plants may make the soil less stable and increase the chance of dust being spread by the wind. Carbon emissions (like the gases that come from burning fossil fuels) from heavy machinery and vehicles used during construction, operation, and decommissioning can also affect the air quality.

**Mitigation:** The following measures have been planned to reduce negative effects on air quality during the construction, operation, and closing phases of the project: Set speed limits for vehicles and make sure they don't idle unnecessarily; keep vehicles and equipment well-maintained and inspected according to the rules; trucks carrying loose material should be properly loaded, unloaded, and covered with tarps when traveling; stabilize loose materials like stockpiles and excavated soils; use water to control dust; maintenance of a buffer of trees or vegetation around the site to create a barrier and reduce the amount of dust leaving the site.

## Noise

**Potential Impacts:** The noise levels in the expanded quarry area are not expected to increase much. The current noise from quarry activities will continue during construction and operation. The quarry follows provincial rules for blasting, which include specific locations, times, weather conditions, and monitoring, and in 10 years it has never gone over the legal limits. Therefore, the noise levels should stay within the allowable limits. Since the nearest houses are more than 1 km away, the blasting should not cause noticeable nuisance, vibrations or damage to property.

**Mitigation:** To reduce noise during the project, the following measures are recommended: minimize idling of equipment and vehicles and keep them well-maintained, to ensure they are not too noisy; enforcement of speed limits for vehicles; planned truck routes to avoid reversing and using backup alarms; training operators on how to reduce noise; scheduling work during daytime hours (07:00 to 19:00), and no blasting occurring on Saturdays, Sundays or Holidays; monitoring of noise and vibrations during blasting; implementing a process to handle noise complaints and develop specific measures to reduce noise if complaints persist.

## Groundwater

**Potential Impacts:** Sixteen wells are located within 1 km of the project area, but none are linked to homes. Blasting, drainage, or runoff could affect water quality or levels, these risks are considered low, and groundwater quality and quantity are not expected to change significantly.

**Mitigation:** Excavation below the water table will only happen if approved by the province, and a groundwater monitoring plan may be required. Due to there being no wells associated with homes within 1 km of the project, mitigation measures are currently not required for drinking water sources. If a monitoring plan is required due to wells being affected, action will be taken including providing temporary drinking water, if needed.

## Surface Water, Wetlands, Fish and Fish Habitat

**Potential Impacts:** Surface water in the project area mainly flows over the land because there are no natural drainage paths or water channels. This is not expected to change much. The project will not directly affect fish or their habitats. The project may cause habitat loss and changes in wetland functions and water levels. There is a risk of soil particles settling in water (sedimentation), erosion, and spills from equipment.

**Mitigation:** Actions to control erosion and sedimentation, monitor water quality and wetlands to avoid and mitigate negative effects are already in place at the quarry and will be extended to the new area. Obtain wetland alteration approvals, as necessary.

## Wildlife and its Habitat

**Potential Impacts:** The quarry expansion may affect plants, habitats, and wildlife. Overall, the additional effects from the expansion are expected to be minimal considering the current quarry is already operating and that most of the expansion area was forested before being cleared. Now, the area mainly has young, regrowing plants, with some older conifer trees along the northern edge. The quarry expansion might remove vegetation and topsoil, change water flow, and cause erosion. As shown in the effects above, dust and noise from construction and rock crushing can affect the environment, and vehicles might bring in invasive species.

Two Species at Risk (SAR), were found in the expansion area, the Canada Warbler and the Common Nighthawk. Canada Warblers live in moist, dense forests with lots of shrubs and plants. Nighthawks live in open areas like grasslands, woodlands, and urban spaces, and they nest on the ground in gravel or sandy soils.

**Mitigation:** To limit the project's impact on plants, habitats, and wildlife, many measures will be taken. The main ones are avoiding intact forests and wetlands when possible, saving topsoil for later use, and minimizing the project's footprint. Best practices will be adopted, like using loud noises to scare wildlife away before clearing and setting speed limits to reduce collisions. Measures related to noise and dust were described above. Erosion and



sediment (loose soil) control plans will be developed, and dust will be managed with water trucks. Winter road maintenance will use sand instead of salt. A plan will be created for sudden closures to protect the environment.

The slow pace of expansion allows wildlife to adapt, and the ongoing development and restoration of the quarry are expected to create habitats where both SAR can live.

## **Economy and Land Use**

**Potential Impacts:** The quarry expansion will clear some forested land (most was clear cut in the last four years), but it will not change how the land is used overall. Construction may cause some temporary noise and dust, as mentioned earlier, but it won't affect traffic or the local economy. The quarry closure at the end of its life is not expected to affect nearby land or the economy. The project is expected to help boost the local economy in East Hants, contributing to the Municipal Planning Strategy.

**Mitigation:** The main action associated to land use is managing the project's footprint, so any potential effect can be reduced as much as possible.

## **Climate Change**

Climate change may bring more severe weather, flooding, and freeze-thaw cycles that could affect the site and its roads. These effects are not expected to significantly impact the project, so no adaptation plan is needed, but existing weather-related precautions will still apply.

Equipment and vehicles used in quarry operations produce greenhouse gases, which contribute to climate change. However, getting materials from a local quarry helps reduce these emissions because it avoids the need to transport them from far away, which would use more fuel.

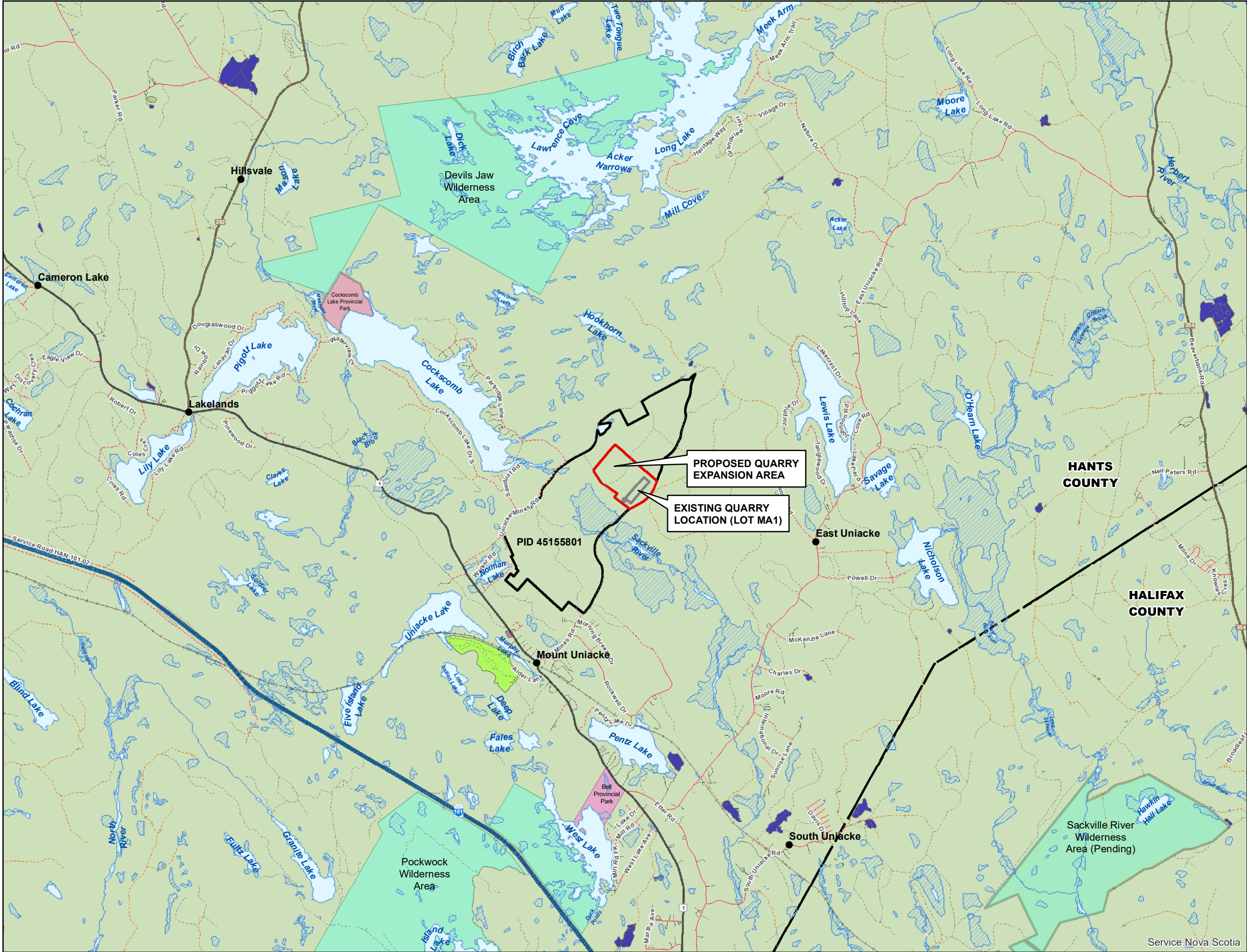
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## **CONCLUSION**

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The project's potential effects on the environment and nearby communities were carefully studied, including impacts on water, air, wildlife, local economy and cultural resources. Measures were developed to avoid or reduce these effects, and most impacts are expected to be minor or not significant. The study also looked at climate change and cumulative effects, and no major negative impacts are expected. One positive outcome is that the project supports long-term economic growth in East Hants, in alignment with the Municipal Planning Strategy.





**KEY MAP:**

**LEGEND:**

- EXISTING QUARRY - LOT MA1 (~4 ha)
- PROPOSED EXPANSION AREA (40.5 ha)
- PID 45155801
- PLACE NAMES
- COUNTY BOUNDARIES

**DESIGNATED**

- AIRSTRIIP (ruin/inactive/abandoned)
- GOLF COURSE
- LAND FILL SITE (land reclamation)
- PARK (amusement & municipal)
- PILE (industrial)
- PIT

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**PROJECT:**

PROJECT:

**MT. UNIACKE QUARRY EXPANSION - ADDENDUM**

PROJECT NO.:

**CA0046632.0394**

CLIENT:

**NORTHUMBERLAND CAPITAL CORP. INC.**

**FIGURE:**

TITLE:

**OVERVIEW PROJECT LOCATION**

FIGURE NO.:	<b>1</b>	REVISION NO.:	<b>0</b>
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SCALE: 1:50,000

DATUM:	NAD 83 CSRS	PROJECTION:	UTM ZONE 20 NORTH
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DRAWN BY:	M. MARRIOTT	CHECKED BY:	N. LOPES HÜLLE
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CREATED DATE: (YYYY-MM-DD)	2025-07-18	REVISION DATE: (YYYY-MM-DD)	2025-07-18
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