



Allard Distributing Ltd. Huguette Lake Quarry (Reg #2099) - Water Management Plan (6.5 ha Quarry Area – Expiry 2041) in Labrador West – File #711:12216

October 14, 2021

(Quarry Lease Plans Document Submission Date)

September 06, 2023

(Water Resource Management Plan Submission Date)

Attached Documentation: Figure 1, Figure 2, Figure 3 & Site Photos

Introduction

Allard Distributing Ltd (Allard) is a 35+ employee company based in Labrador West whose business includes wholesale distribution of petroleum products and civil engineering construction projects. They are looking to secure a long-term source of sand and gravel mainly for maintaining winter roads in the region but also to supply local markets in Labrador West. Due to the extreme temperatures in Western Labrador, winter sand is a critical resource to ensure safe travel. A quarry lease plan was submitted in October of 2021 for the 6.5 ha area (File 711:12216) in the Huguette Lake region that was initially applied for as a quarry permit but is being converted to a quarry lease at the request of the the Department of Industry, Energy and Technology's (DIET) as per a condition of the EA Release on Nov. 20, 2020 (COR/2020/04321 Reg #. 2099). The submission of this water management plan was required as part of the quarry lease application which presented a 5-Year Development, Reclamation and Closure (DRC) plan for the years 2022 to 2026. The 5-Year plan included the total extraction of approximately 50,017 m³ of sand and gravel aggregate resource.

Site Location and Access

The quarry lease application area is located approximately 16.2 km southwest of Labrador City between the Bloom Lake Mine Railway and the Trans-Labrador Highway, on NTS Map Sheet 23B/14 (**Figure 1**). Access to the site is gained via a gravel road (Huguette Lake Access Road) that intersects the Trans Labrador Highway (TLH 500) 17.5 km from the town of Labrador City and 6.3 km from Fermont (**Figure 2**). The project area is zoned as a municipal planning area for the Town of Labrador City, and a mining reserve under the town's development regulations. The quarry site itself is approximately 13 km southwest of the Town's western municipal boundary. The northeast border of the application area is shared with 4 Grey Rock Services Inc (Grey Rock) quarry permits File #711:6327, #711:6656, #711:6944 and #711:9017 (**Figure 3**). Additionally, Grey Rock quarry permit File #711:6344, and an Allard quarry permit File #711:6823 are also located nearby and to the north of the quarry lease.

Existing Site Plan

The quarry is dominated by glaciofluvial sediments. Field observations of material located proximal to the lease area indicate that it is layered (glaciofluvial) and composed of particles that range in size from sand to cobble, with variations in material composition occurring both vertically and laterally. The quarry site is undeveloped and the surface inside is typically covered in caribou lichen with sporadic black spruce (**Site Photos**). Drainage of the general area is directed towards the south-southeast and into a stream located 40 m to the southeast of the quarry boundary.

The stream at that location is at an elevation of approximately 607 m above sea level and is 460 m from quarry development over the first 5 years. A marshy area is also located 110 m to the northeast of the boundary and is situated at an elevation of approximately 608 m. An intermittent stream not identified on the 1:50,000 map sheet runs beyond and somewhat parallel to the southwest border of the lease in the southeast portion. The stream appears to be mostly active in the springtime. Topography inside the quarry ranges from ~612 m to ~ 634 m above sea level.

Quarrying Method and Production Related to Water Management

Processing activities will consist of quarry face removal using an excavator and/or loader, screening to remove oversized particles, and stockpiling of screened aggregate from the screener belts. Washing of material will not be required.

Site Water Management

The height of the stream that is located 40 m to the southeast of the quarry lease boundary is approximately 607 m in elevation, while that of the marshy area located 110 m to the northeast is approximately 608 m. The Grey Rock quarry permit immediately located to the north has a quarry floor positioned at 617 m with no apparent water table issues, and thus the water table is not expected to be encountered while quarrying with the lowest quarry floor positioned at 623 m in elevation within Allard's quarry.

Inspection of an exposed cut located on the northeast border of the lease and other sites within the area revealed the present material is composed of sand with minor gravel and minor fine particles which is highly permeable (**Site Photos**). As this quarry material shows a very high permeability, site runoff water is not expected to be an issue and should naturally drain easily through the unconsolidated permeable ground. Additionally, no ponded or standing water has been noted within the lease area nor within and of the surrounding developed areas, further providing evidence for the successful subsurface drainage of any surficial water. General subsurface drainage is then naturally directed towards the south-southeast into the stream located 40 m to the southeast of the quarry boundary. If any surficial water is noted near the stream, all necessary measures including silt screens, hay bales and check dams will be implemented if required.



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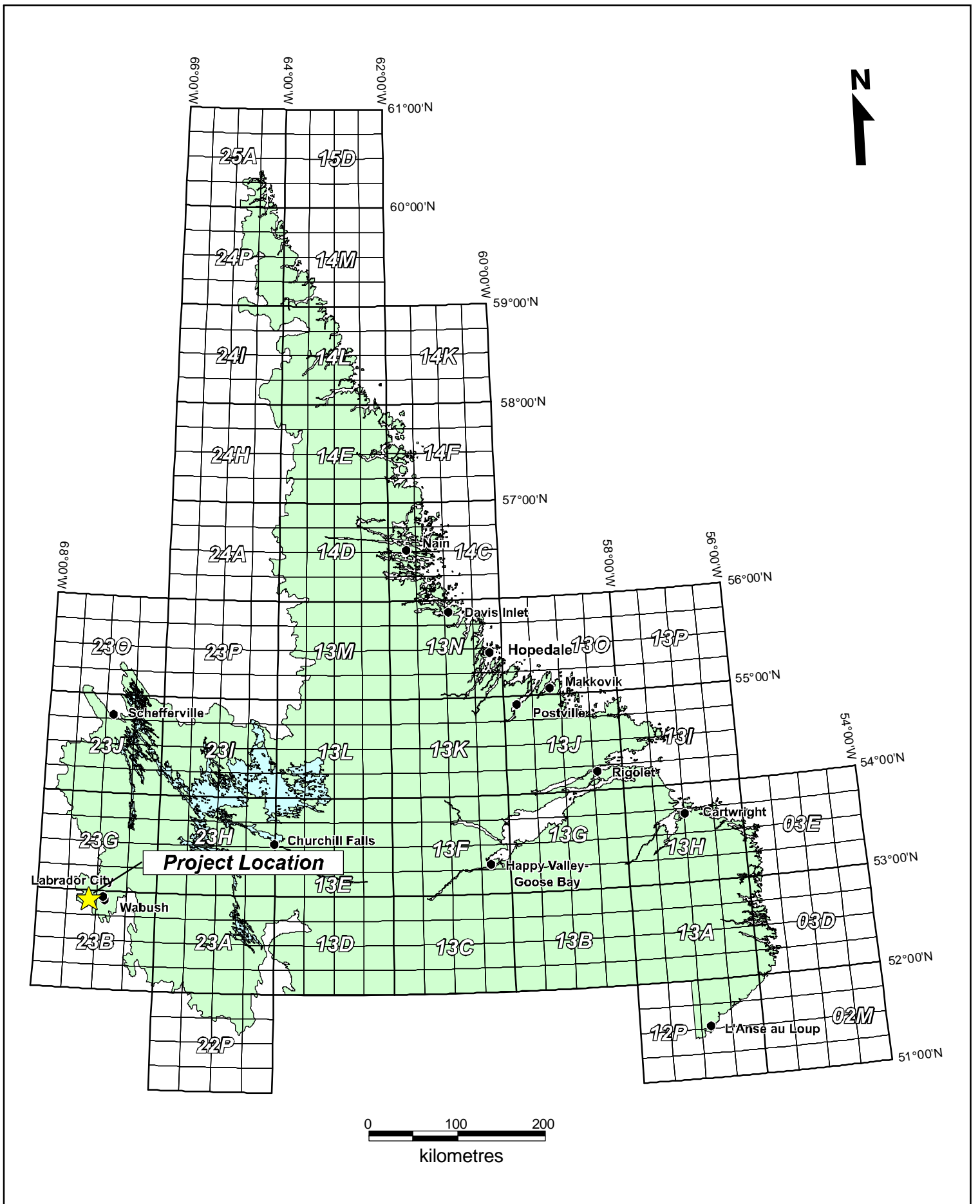


FIGURE 1: PROJECT LOCATION MAP (N.T.S. 23B/14)



Figure 2: Detailed Project Location Map

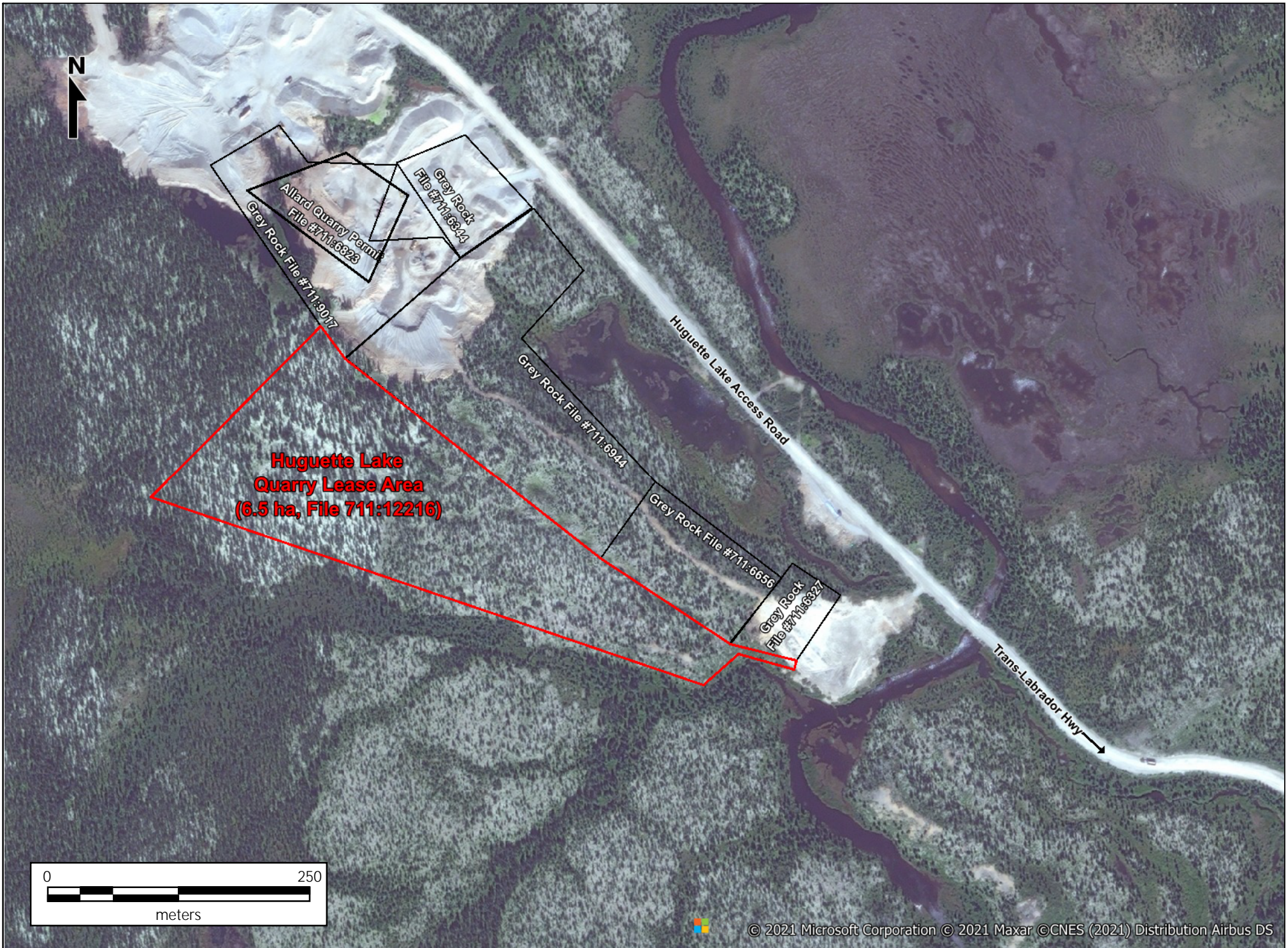


Figure 3: Quarry Lease Location Map

Site Photos



Plate 1: UAV view of the northeast section of the lease area and looking northwest.



Plate 2: UAV closeup view of the northeast section of the lease area and looking northwest.



Plate 3: UAV view near the northeast boundary and adjacent Grey Rock quarries.



Plate 4: Location of access road to be built leading from adjacent Allard quarry permit.



Plate 5: View of forested area and undeveloped floor.



Plate 6: View of forested area and undeveloped floor.



Plate 7: Example of sand aggregate materiel.



Plate 8: Example of gravel size (oversized) aggregate materiel.



Plate 9: Sand aggregate laminations in nearby quarry face.



Plate 10: View looking east from the eastern end of the lease area.



Plate 11: Stream located 40 m to the southeast of the lease area.