

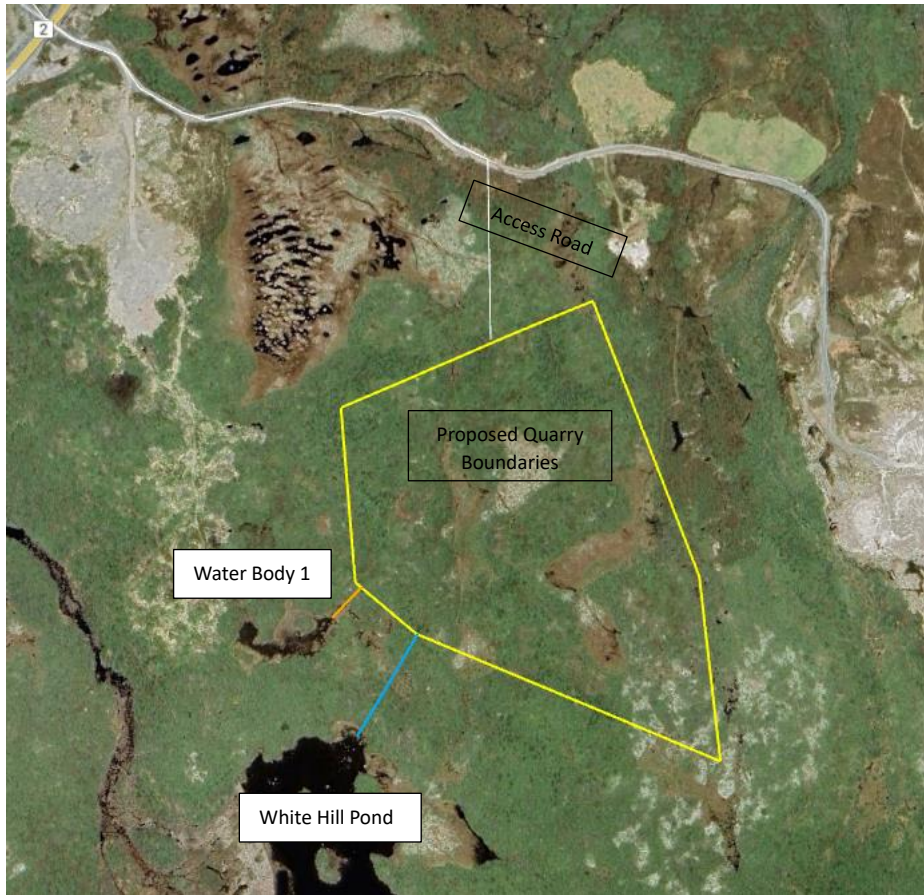
# **Water Resource Management Plan**

## **EA#2291 – White Hill Pond FEL Quarry**

Farrell's Excavating Limited

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1. Prepare a location map identifying all streams and water bodies within 30 meters of the project footprint area.



*Figure 1: Quarry Boundaries with Vicinity Water Bodies*

Water Body 1: 45.0 m

White Hill Pond: 120.0 m

2. Identify all streams or water bodies located inside the project footprint area. Within the proposed boundaries there are various small water bodies.



*Figure 2: No Water Bodies Identified Within Updated Boundaries*

3. Describe how to manage the stream or water body situated inside the project footprint boundary (eliminate it, divert it, or keep it in place).

A settling pond will be created to contain and store runoff which will be used in quarry processes or recycled/disposed of in an appropriate manner. There are no identified water bodies within the proposed boundaries, therefore no modifications to water bodies will take place.

4. Determine the amount of stormwater runoff for a 1 in 100-year 24-hour climate change rainfall event.

This amount is unknown.

5. Describe how to manage the runoff or on-site drainage water (1:100-year stormwater runoff amount) – either discharge it directly into the nearby stream/water body or store it in a detention pond and release it gradually.

Runoff will be stored in the settling pond and will either be used in the different quarry processes (ex. Water truck for dust suppression) or will be slowly drained over a vegetated area by an existing culvert. There is no use for water in the desired operations.

6. Prepare a schematic diagram of the on-site drainage plan.

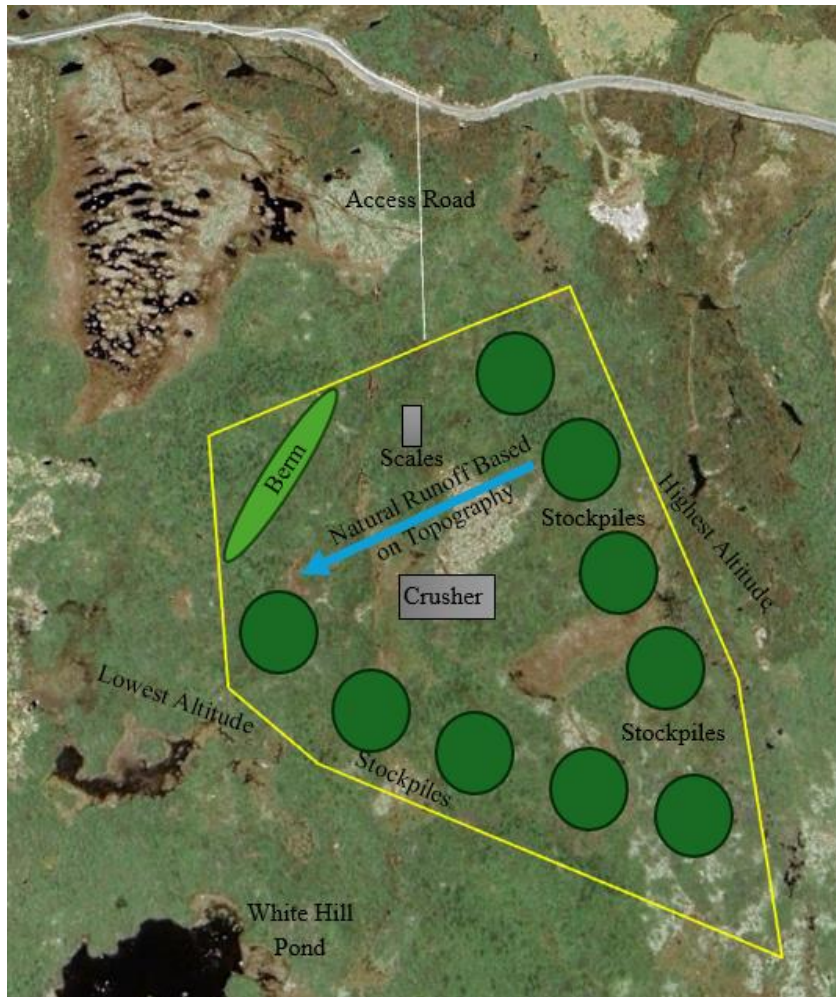


Figure 3: Quarry Layout Plan with Proposed Runoff Based on Land Topography

7. Describe how to manage the dewatering of the mine pit/quarry pit, if required.

Dewatering will occur as needed by using pumps to remove excess water and slowly release it over the vegetated area where the existing culvert dispenses water. The water will flow over the vegetated area and will be naturally percolated. Water can also flow over the ground surface into an existing settling pond.

8. Outline preventive measures to be taken to prevent land erosion from runoff, on-site drainage water, and/or dewatering, as these have the potential to impact the water quality and quantity of natural water bodies.

Along with the use of silt fencing, water will be directed into settling ponds and over vegetated areas to act as a secondary sediment containment area before it gets released into any body of water. This way any contaminant, sediment, and/or debris can be separated from the pre-existing water bodies in the areac.