

Diagram of Pipeline Extension to Lower Landing Lake:



Legend:

- Existing pipeline
- New pipeline
- - - Seasonal pipeline
- Relocated pump seacan
- Culverts
- New access road and turn-around pad

**GRA-6: NWB Monitoring Program Station Number at Char River**

**GRA-7: NWB Monitoring Program Station  
Number at Lower Landing Lake**





GN-CGS is proposing to relocate the resupply pipeline intake from Char River to Lower Landing Lake, approximately 200 m to the north-west. The relocated intake at Char River will be accessible via an existing road north of Char River. A 145 m long access road (approximately 6 m wide) will be constructed from the existing road to the edge of Lower Landing Lake. A pad (approximately 12x15 m) will be constructed near the end of the access road to facilitate vehicle turn-around. Culverts will be placed during construction where there is evidence of water flow paths. Two identified culvert locations are included in the diagram.

The access road and pad construction will take place when the ground is frozen to minimize damage to the tundra. Approximate height of granular fill required for the access road/pad will be 1 m for the total requirement of:

$$(870 \text{ m}^2 \text{ road} + 180 \text{ m}^2 \text{ pad}) * 1 \text{ m height} = 1050 \text{ m}^3$$

The pipeline extension will continue overland from where it currently ends next to the pump seacan. The pipeline will be constructed using the same 200 mm HDPE piping as the existing pipeline. Once across the river, the pipeline will run adjacent to the access road. The approximately 20 m span of pipe that will suspend across Char River will be installed seasonally. After seasonal pumping has been completed, the pipeline will be disconnected and pulled to the south side of the river for storage on the existing road.

The current seasonal floating intake, flex-hose with fish screen (see provided drawing 2010 0570), will be used with the same pump within the relocated seacan, with a maximum intake of 0.04 m<sup>3</sup>/sec (3456 m<sup>3</sup>/day).

The placement of the pipeline, and relocation of the pump seacan and will take place when the ground is frozen to minimize damage to the tundra.

The existing pad at the current location of the pipeline intake will remain in use as the site needs to be accessible to seasonally connect the portion of the pipeline that suspends over Char River.

GN-CGS is working with an engineering consultant to produce for construction drawings of the pipeline extension and access road/pad. Drawings will be provided when available late 2017.

