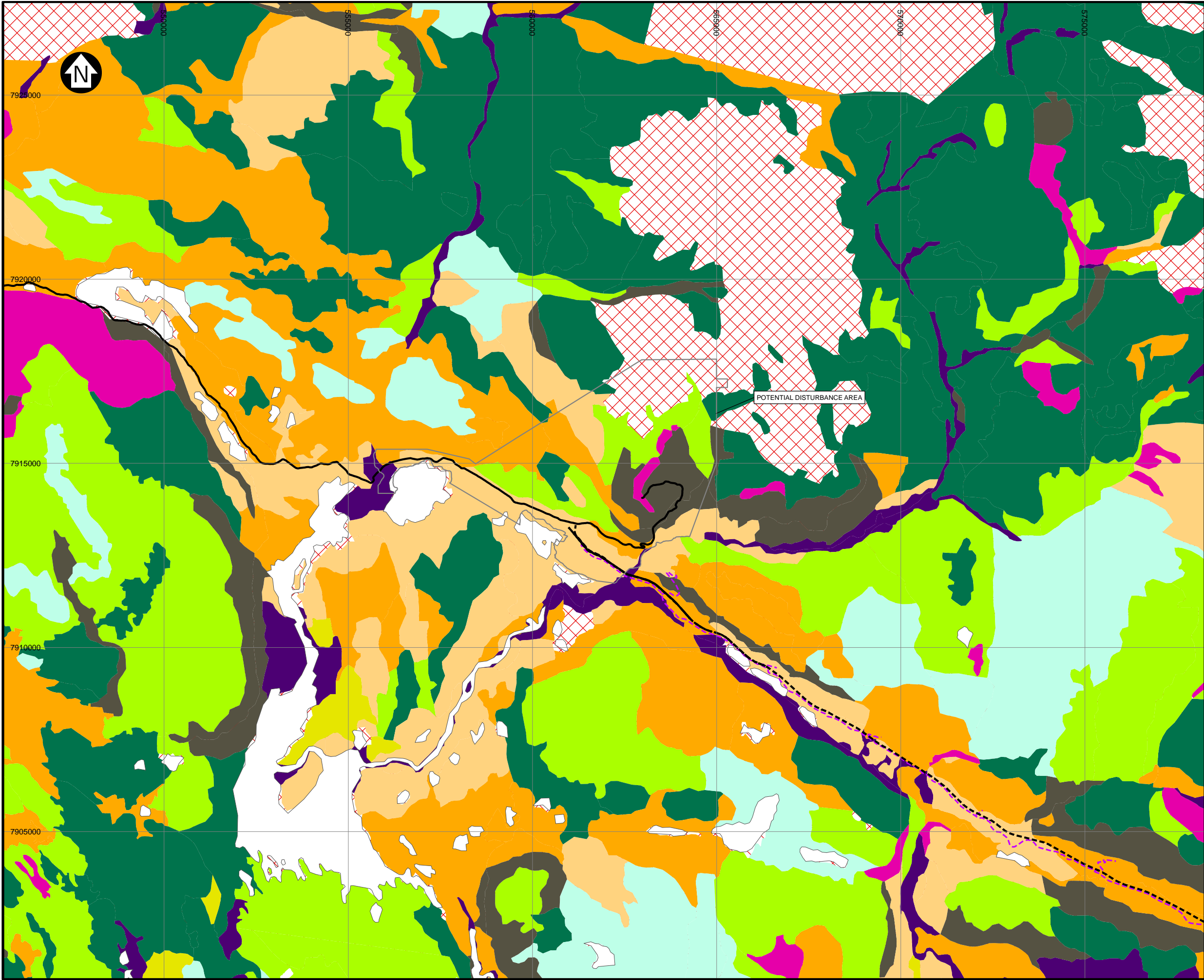


**APPENDIX A**  
**SUPPORT FIGURES**





FIGURE ID: BL\_Vol6\_GIS\_004 Surficial Geology in the Mine Site Area Figure 6-2.3.mxd



**SURFICIAL DEPOSITS**

**QUATERNARY**

**HOLOCENE**

**Ca** COLLUVIUM: block and rubble accumulations, 1-50 m thick. Talus: active block and rubble accumulations as much as 50 m thick forming talus aprons and fans below cliffs resulting from rock falls and debris flows; commonly crossed by debris flow channels and l  ves.

**Ap** FLUVIAL SEDIMENTS: alluvium; gravel and sand, 2-20 m thick. Alluvial deposits: gravel and sand; 2-20 m thick; active braided floodplains, terraces, and fans; includes active proglacial outwash.

**Mr** MARINE AND GLACIAL MARINE SEDIMENTS: gravel, sand, silt, and clay, 1-20 m thick, deposited in deltaic and beach environments during regression of the postglacial sea.

**Mt** Beach sediments: gravel and sand, 1-5 m thick, forming ridges and swales.

**Mv** Deltaic sediments: clay, silt, sand, and gravel, 5-20 m thick, forming coarsening upward sequences under dissected terraces.

**Lt** Deepwater proglacial silt veneers: silt, clay silt, and fine sand with dropstones, 1-2 m thick.

**Lb** GLACIAL LACUSTRINE SEDIMENTS: clay, silt, sand, and gravel deposited in glacier dammed lakes in deepwater, beach, and deltaic environments.

**Gt** Deltaic sediments: clay, silts, sand, and gravel, 5-20 m thick, forming coarsening upward sequences under dissected terraces.

**Gh** Deepwater proglacial silt: silt, clay silt, and fine sand with dropstones; veneers 1-2 m thick; blankets 2-5 m thick.

**Gt** GLACIOFLUVIAL SEDIMENTS: gravel and sand, 1-10 m thick, deposited behind, at, and in front of the ice margin.

**Gh** Proglacial outwash: gravel and sand, 1-10 m thick, forming braided floodplains, terraces, and fans.

**Gh** Ice contact stratified drift: gravel and sand, 1-5 m thick forming eskers, and kames.

**EARLY HOLOCENE AND WISCONSINAN**

**Tm** TILL: nonsorted stony muds, 0.5-60 m thick, deposited in subglacial and ice marginal environments; lithic composition generally reflects underlying bedrock.

**Tv** End moraine: 5-60 m high, composed of or mantled by till, extensively kettled in places; large features mainly cored by debris-rich relict glacier ice.

**Tb** Till veneer: 0.5-2 m thick and discontinuous; some surfaces armoured by stones due to washing by subglacial meltwater.

**Tb** Till blanket: 2-10 m thick forming an undulating blanket with drumlines and ribbed (Rogen) moraines in places.

**BEDROCK**

**PRE-QUATERNARY**

**R** Rock: rock of various compositions and ages (Jackson and Sangster, 1987) variously modified by glacial erosion during the Quaternary and with patchy till cover; hilly and hummocky surfaces, ice moulded in places, with lake basins in subglacially scoured regions; cliffs resting from glacial over-steepening; in places veneered by thin till, commonly bouldery.

**LEGEND:**

**WATER**

**POTENTIAL DISTURBANCE AREA**

**SURFICIAL GEOLOGY NOT AVAILABLE**

**MILNE INLET TOTE ROAD**

**PROPOSED RAIL ALIGNMENT**

**CONSTRUCTION ACCESS ROAD**

**NOTES:**

1. BASE MAP:    HER MAJESTY THE QUEEN IN RIGHTS OF CANADA, DEPARTMENT OF NATURAL RESOURCES (2004). ALL RIGHTS RESERVED.

2. COORDINATE GRID IS SHOWN IN UTM NAD83 ZONE 17 AND IS IN METRES.

3. BODIES OF WATER ARE SHOWN IN WHITE.

SCALE 1,000 500 0 1,000 2,000 3,000 4,000 5,000 m

BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

**SURFICIAL GEOLOGY  
IN THE MINE SITE AREA**

**Baffinland**

REF NO.  
BL\_Vol6\_GIS\_004

**FIGURE 6-2.3**

REV  
0

