



December 13, 2017

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**Re: 2018 Geotechnical Drilling Program  
Type 'B' Water Licence 2BE-MRY1421  
Commercial Lease No. Q13C301**

Baffinland Iron Mines Corporation (Baffinland) plans to commence a geotechnical drilling program in January 2018 to evaluate the geotechnical conditions near the existing Milne Inlet Tote Road (Tote Road) and at Milne Inlet for the purposes of advancing engineering studies in support of Project expansion (e.g. Phase 2). The drilling program is being managed by Hatch Ltd. and performed by Boart Longyear. The drilling program is scheduled to commence in early January 2018 and is expected to be completed by late April 2018. The drilling program consists of six (6) drill holes at potential railway bridge locations near the Tote Road and ten (10) on-ice (sea ice) drill hole locations for future dock infrastructure in Milne Inlet. Proposed drill hole locations, including coordinates, are presented in Attachment 1. Alongside the 2018 drilling program, Baffinland also plans on conducting a series of ice thickness and bathymetry surveys as well as additional geotechnical tests (e.g. thermistor installation, Vane test) near drill hole sites and other locations near the Tote Road and at Milne Port.

Drilling programs are expected to require minimal water usage and will be performed using a tracked drill rig (LS 250) capable of drilling using both sonic and rotary coring techniques. Other supporting tracked vehicles include a flatbed (Nodwell type) for hauling water and other supplies and a skid steer for moving drill rods and other equipment/supplies.

An archaeology survey of the areas to be drilled and traversed near the Tote Road was completed during the summer of 2016 and observed archaeology sites were identified and staked off. These coordinates have been provided, in confidence, to the drilling manager to minimize the potential for archaeological disturbance. A review of the identified archaeological sites confirms there are no archaeological sites within close proximity to the proposed drill hole locations.

To support drilling operations, nine (9) existing water sources near the Tote Road, identified under Baffinland's Type A Water Licence 2AM-MRY1325 Amend. 1 (Part E, Item 25), have been selected. A table showing the nine (9) water sources are provided in Attachment 2. Due to temperature restrictions

tracking water usage volumes utilising water lines and flow meters will not be feasible. Therefore, Baffinland proposes to track water usage volumes by means of calibrated one cubic metre totes.

Daily environmental monitoring will be performed, including pre, during and post drilling inspections. Locations of drill waste will be disposed of in natural depressions or sumps consistent with Part F, Item 4 of Baffinland's Type B Water Licence 2BE-MRY1421 (Type B Water Licence). Drill water runoff and siltation mitigation measures consistent with Baffinland's Environmental Protection Plan BAF-PH1-830-P16-0008 r1 will be employed as required. For the Milne Inlet on-ice drilling program, under-ice turbidity and total suspended solids (TSS) water quality monitoring will be conducted to characterize water quality conditions prior to and following drilling activities.

In accordance the conditions of the Type B Water Licence, this letter and attachments provides Baffinland's notification for the drilling of six (6) drill holes near the Tote Road that will be closer than 30 metres from the ordinary high water mark of a water body and the identification of water sources for the planned 2018 drilling activities.

Despite best planning, it should be noted that unforeseen geotechnical circumstances may preclude some changes in plans as the program proceeds. Baffinland will endeavor to inform the Inspector and QIA in such circumstances.

We trust that this information meets the various notifications required. Please to not hesitate to contact the undersigned, should you have any questions or comments.

Regards,



Christopher Murray  
Environmental & Regulatory Compliance Manager

Attachments:

Attachment 1: 2018 Geotechnical Drilling Program Locations

Attachment 2: Proposed Water Sources for 2018 Geotechnical Drilling Program

Cc: David Hohnstein (NWB)  
Tim Sewell, William Bowden, Connor Devereaux, Andrew Vermeer (Baffinland)

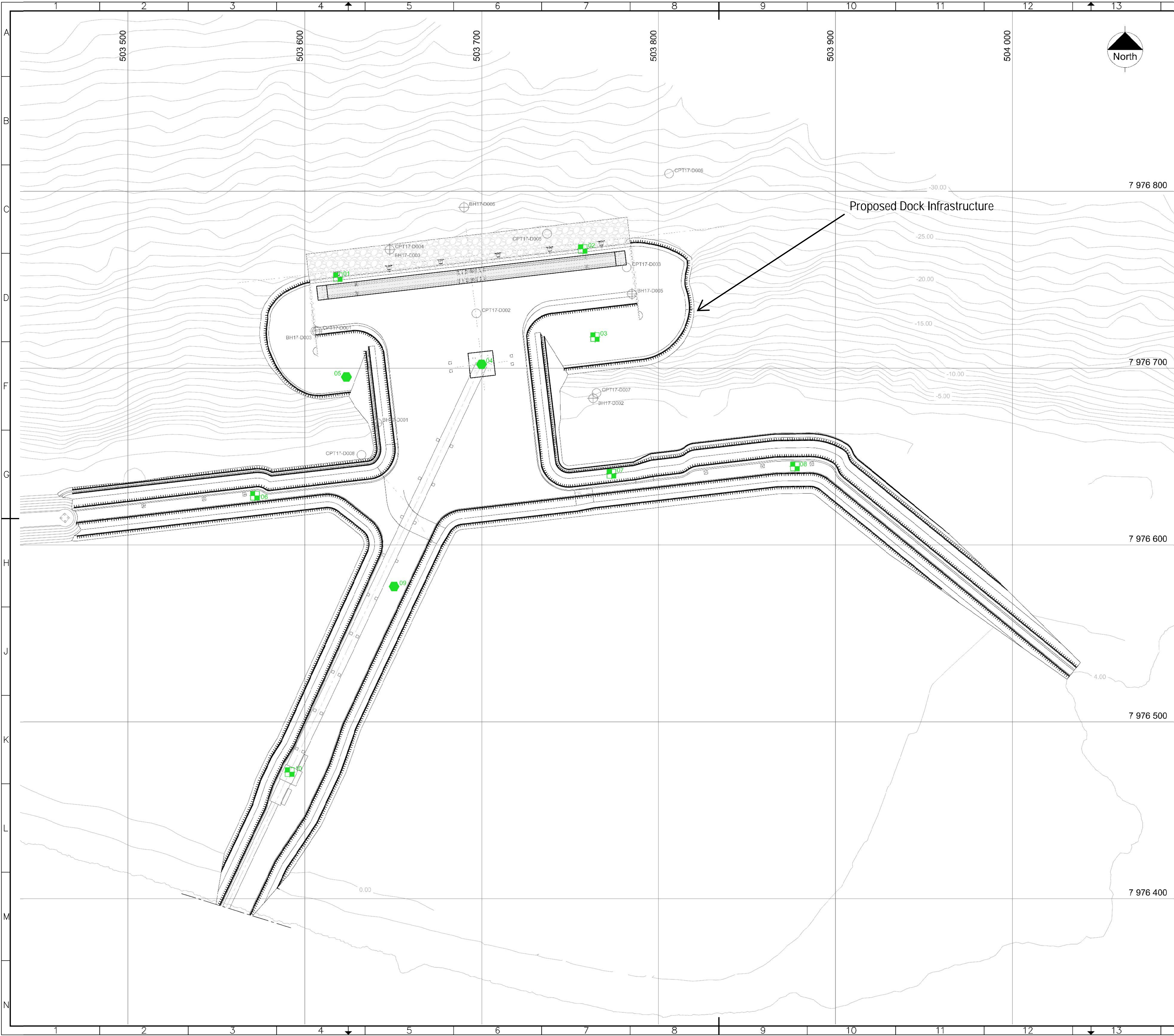
## **Attachment 1**

### **2018 Geotechnical Drilling Program Locations**

**Attachment 1.1**






**2018 Milne Inlet On-Ice Drilling Program**





New Geotechnical Campaign					
N°	Easting	Northing	CPT depth below seabed	Vane Test	Sampling (sharky)
01	50361.367	7976731.459	20m	1 @ -0.50 below seabed 1 @ -1.50 below seabed	1 from seabed to -0.61 below seabed 1 from seabed to -0.61 below seabed
02	50375.714	7976737.392	20m	1 @ -0.50 below seabed 1 @ -1.50 below seabed	1 from seabed to -0.61 below seabed 1 from seabed to -0.61 below seabed
03	50376.408	7976717.604	5m	1 @ -0.50 below seabed 1 @ -1.50 below seabed	1 from seabed to -0.61 below seabed 1 from seabed to -0.61 below seabed
04	50369.394	7976702.221	15m	-	From -0.50 to -1.11 below seabed
05	50362.350	7976635.000	5m	-	From -0.50 to -1.11 below seabed
06	50357.182	7976627.872	5m	1 @ -0.50 below seabed 1 @ -1.50 below seabed	1 from seabed to -0.61 below seabed 1 from seabed to -0.61 below seabed
07	50377.335	7976640.299	5m	1 @ -0.50 below seabed 1 @ -1.50 below seabed	1 from seabed to -0.61 below seabed 1 from seabed to -0.61 below seabed
08	50387.710	7976644.473	5m	1 @ -0.80 below seabed	From -0.50 to -1.11 below seabed
09	50365.051	7976576.499	5m	-	From -0.50 to -1.11 below seabed
10	50359.146	7976471.594	5m	1 @ -0.80 below seabed	From -0.50 to -1.11 below seabed

**REMARK:**  
Position and number of tests could be adapted during the campaign in case of unexpected results

LEGEND:	
 Borehole (geotechnical investigations 2017)	 CPT + Vane test + Sampling (new campaign)
 CPT (geotechnical investigations 2017)	 CPT + Sampling (new campaign)
 Working point	

**REFERENCES:**  
- General - General Layout: BIM-BD-GE-DE-DW-50001  
- Port site - Ore Dock n°2 - 2017 geotechnical investigations BH and CPT locations: H352034-GEOSKT-229-292-0003

**NOTES:**  
- Coorcinat grid is UTM (NAD83) zone  
- All elevations are in metres relative to Chart Datum (mCD)  
- All dimensions are in metres unless stated otherwise

REVISION	DESCRIPTION	DATE
00	First issue	30-Nov-2017

**SUB-CONTRACTOR DESIGN:**

BESIX Engineering Department  
Avenue des Communautés, 100 B - 1200  
Brussels - Belgium



**CONTRACTOR:**



**ENGINEER:**



**CLIENT:**



**PROJECT:**

MARY RIVER EXPANSION STAGE 3  
BAFFINLAND IRON MINES

**DRAWING TITLE:**

ADDITIONAL GEOTECHNICAL CAMPAIGN

DRAWN: FPI	CHECKED: MZE	APPROVED: HVM	AUTHORISED: JVST
SCALE: 1:1000	SIZE: A1	DATE: 30-Nov-2017	
BESIX DRAWING No: BIM-BD-GE-DE-DW-50751			REV: 00