Baffinland
Iron Mines Corporation

March 9, 2012

Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0

Attention: Mr. David Hohnstein, CET, Director of Technical Services
Mr. Sean Joseph, Technical Advisor

Re: **Errata and Clarification Document for the Application for Type A Water License for the Mary River Project**

Dear Mr. Hohnstein and Mr. Joseph,

In response to the NWB's correspondence of March 2, 2012, Baffinland submits the following Errata and Clarification Document that will satisfy the deficiencies identified by the NWB's conformity assessment of Baffinland's Type A Water Licence Application.

Format of this Document

The NWB identified the deficiencies in the attached Table 1B-3, Table 1B-5 and Table 1B-7. Baffinland has provided a clarification/correction for each item listed in these tables. Many of the deficiencies identified referred to errors in cross-referencing in the conformity tables. This cross-referencing has been corrected. In some cases, additional information is necessary. Where additional clarifications are required, complementary text is provided in this transmission letter. The NWB also identified that some drawings were missing from the Application, and, that some documents needed to be stamped by a professional engineer registered in Nunavut. These documents are also appended.

We trust that this document addresses the outstanding NWB's requirements.

Sincerely,

Erik Madsen

Vice President Sustainable Development, Health, Safety and Environment

cc: Mr. Ryan Barry, Executive Director, NIRB
Mr. Robin Aitken – Regional Director AANDC – Iqaluit
Mrs. Navarana Beveridge – Executive Director, Qikiqtani Inuit Association

Mr. Doug Soloway, Superintendent of EA Management (North) Program, Transport Canada
Mr. Mark Dahl, Environment Canada
Mr. Derek Moggy, Department of Fisheries and Oceans
Mr. Robin Johnstone, Department of Natural Resources Canada
Mr. Paul Suvega, Assistant Deputy Minister, Department of Executive, Government of Nunavut

Attachments:

1. Table 1B-3: Concordance with EIS Guidelines (NWB)
2. Table 1B-5: Concordance with PHC Appendix 1
3. Table 1B-7: Concordance with PHC Appendix 3
4. Complementary Information
5. Missing Drawings and/or Re-issued Drawings

Attachment 1: Table 1B-3: Concordance with EIS Guidelines (NWB)

					NWB Determination		Hatch/BIM Response
Section Title	**Section No.**	**Information Requirement**	**Insert Title, Author and Date of Document where information is provided**	**Insert Section of document where information is provided**	Conforms to the MM3 Guidelines (Y) or (No)	Comments	Response
Minimum Application Requirements (Work sheet 2.0: Minimum Requirements)	**7**	A table indicating concordance of the application and supporting documents to the Guidelines. These generic Guidelines are provided in excel as a tool for applicants to provide the necessary concordance table.	Mary River Project Environmental Impact Statement, Baffinland Iron Mines Corporation, February 2012	Volume 1, Appendix 1C-2.	?	Clarifications is required for this item as it might be referring to the information contained in appendix 1B-3 as apposed to 1C-2.	This is refering to the information provided in Table 1B-3
Water Use: Quality and Quantity (Worksheet 3.0: General Water)	**14a**	The source of water including the name of the water body and the location of the water source as shown on a map;	Type A Water Licence Application, Hatch, February 2012	Volume 3, Appendix 3B, Attachment 1- Block 13; Attachment 5 - Fresh Water, Sewage and Waste Water Management Plan	Yes	Although the locations of most of the potable water source are depicted on maps referenced in Block 13, drawing H337697-7000-10-014-0008 (source for north Cockburn Camp) seems to be missing	Refer to drawing H337697-7000-10-014-0008 (attached)
Description of Undertaking (Worksheet 4.0 Project Description)	**2c**	Description of any existing mine shafts or openings.	Mary River Project Final Environmental Impact Statement, Baffinland Iron Mines Corporation, February 2012	Volume 3, Section 3.0	?	The shaft being referred to seems to apply to ships as opposed to the mine; Since it is an open pit mine there is probably no shaft. Clarification is required.	This is an open pit mine - there is no mine shaft.
Water Use: Quality and Quantity Water Intake (Worksheet 6.0: Water Use)	**2**	Provide the name of the primary water source as well as the name of any alternative water source(s).	Mary River Project Final Environmental Impact Statement, Baffinland Iron Mines Corporation, February 2012; Type A Water Licence Application, Hatch, February 2012	Volume 3, Sections 2.0 and 3.0 Volume 3, Figures 3-1.1 to Figure 3-2.9, Appendix 3B, Attachment 5 - Fresh Water Supply, Sewage and waste water Management Plan, Environmental Monitoring Plan	Yes	Information relevant to what is required is provided as referenced; Names of alternative water sources seems to be absent; it is stated that unnamed lakes will be used; alternative water sources may require an amendment if this information is not provided from the onset.	Refer to discussion in transmission letter with respect to alternative water sources.
Water Use: Quality and Quantity Water Intake (Worksheet 6.0: Water Use)	**15**	Indicate the quantities of water required for ice road construction and provide a description of the methods of ice road construction.	Mary River Project Final Environmental Impact Statement, Baffinland Iron Mines Corporation, February 2012	Volume 3, Section 2.5.1	No	It is stated that Ice Road will be constructed to access that rail camps during the first year of construction; amount of water required not provided; Confirmation is needed on whether winter roads not requiring water that will be used	As stated in Vol 3, Section 2.5.1, page 42 (4th paragragh), it is expected that winter roads will be required for the initial construction year of the railway. Refer to clarification presented in Attachment 4-Item 15 of this errata document.

Water works (worksheet 6.0: Water Use)	**30n**	Operation and maintenance plans including instrumentation, monitoring and inspection requirements.	Type A Water Licence Application, Hatch, February 2012	Volume 3, Appendix 3B, Attachment 7 , Water Crossing Summary Sheets,Exsisting Conditions at crossing site	Yes	I believe that this is referring to waterworks in general; not just water crossings. Clarifications required	Volume 3, Appendix 3B, Attachement 5, Fresh Water Supply, Sewage and Water Water Management Plan presents the various mitigation measures and Section 10 deals with ongoing monitoring. Vol 10, App 10D-8, section 3.2 deals with ongoing management and maintenance of water crossings.
Water works (worksheet 6.0: Water Use)	**30o**	Contingency plans.	—	—	Not sure about this	A spill contingency plan was provided; I would think that it applies to this?	Volume 3, Appendix 3B, Attachement 5, Emergency Response and Spill Contingency Plan; Fresh Water Supply, Sewage and Water Water Management Plan presents the various mitigation measures and Section 10 deals with ongoing monitoring. Vol 10, App 10D-8, section 3.2 deals with ongoing management and maintenance of water crossings.
Water works (worksheet 6.0: Water Use)	**28**	Provide a description of dewatering programs, if planned, including estimated quantities, qualities, methods and schedule of withdrawal, end use or discharge location.	—	not applicable	?	Might Referring to dewatering a lakes; need to confirm this	There are no dewatering of lakes. Precipitation in the mine pit will be mostly as snow. Volume 3, Appendix 3B, Attachement 5, Waste Rock Management Plan, Annex 1 deals with pit water management and storm water management at the Mine Site
Predicted Environmental Effects and Proposed mitigation measures (Worksheet 7.0: Watste Disposal)	**13**	Provide a discussion of the consequences of long-term stratification in any pit lakes and associated contingency plans.	Mary River Project Final Environmental Impact Statement, Baffinland Iron Mines Corporation, February 2012; Type A Water Licence Application, Hatch, February 2012	Volume 3, Section 4.0 Appendix 3B, Attachment 10 - Preliminary Mine Closure and Reclamation Plan	No	No info seen on stratification in the sections referenced	Stratification in pit is not expected to be an issue. Refer to explanation presented in Attachment 4 of this transmission.
Studies (Wookbook 7: Waste Disposal)	**24h**	Incineration management;	Type A Water Licence Application, Hatch, February 2012	Volume 3, Appendix 3B, Attachment 5 - Waste Management Plan (Annex 3)	Yes	Incinerator operation information is a sample draft. Is there a particular reason for the draft?	A final O&M docuent will not be available until the incinerators are purchased (which depends on the issuance of the Project Certificate)

Attachment 2: Table 1B-5: Concordance with PHC Appendix 1

Commitment #	Commitment	FEIS Section	NWB Assessment		Hatch/BIM Response
DEIS Organization, Alternatives Assessment			Recommendations Addressed	Comments	BIM Response - March 9, 2012
30	Adaptive management will be applied to address unforeseen risks. For foreseeable risks, every effort will be made to identify ahead of time, and apply appropriate mitigation and monitoring measures.	~~Vol 10, Sec 2.5.7 & Sec 11.0~~ ~~Vol 10, App 10D-10, Sec 8.1.4~~	Yes ?	Section 2.5.7 does not exist; relevant information is found under the other sections referenced	This should read Volume 10, Section 1.6.7 - this section describes BIM's approach for adaptive management. In addition, each EMMP include a section on adaptive management and possible adaptive management strategies (example - App 10D-10, Section 8.0) is explained.
108	As part of detailed design, thermal modeling will be conducted to determine whether the proposed berm design would maintain a permafrost barrier and prevent shallow subsurface seepage to the surrounding environment.	Vol 3, App 3B, Attachment 4 - Site Specific Documents - Mary River - Waste Rock Design Criteria - Section 3.6; and Attachment 5 - Waste Rock Management Plan	Yes?	Sections other than 3.6 of the design criteria do contain the information; attachment 5 does have the information	Vol 3, App 3B, Attachment 4 - Site Specific Documents - Mary River - Waste Rock Design Criteria - Section 3.4.5; and Attachment 5 - Waste Rock Management Plan, Annex 2 - Development of Permafrost in Waste Rock Dumps - Preliminary Geotechnical Evaluation, Section 8
117	Provide the long-term closure and post-closure stability of the pit walls especially with regard to the presence of the pit lake and its impact on stability.	Vol 3, App 3B, Attachment 4 - Site Specific Documents - Mary River - Slope Stability Analysis Report Section 8 - Stability of Mine Pit Wall Adjacent to Waste Rock Dump and Section 9 - Conclusions and Recommendations	Yes ?	Information relevant to addressing this recommendation is provided; conclusions and recommendations are under Section 10 rather than section 9	NWB's observation is correct. The entire report must be read to understand the Slope Stability Analysis for the Waste Rock Dump
118	Provide further analysis showing that the design of the pit is stable and that the vicinity of the waste rock pile to the pit has been taken into account.	Vol 3, App 3B, Attachment 4 - Site Specific Documents - Mary River - Slope Stability Analysis Report Sec 8.0 - Stability of Mine Pit Wall Adjacent to Waste Rock Dump and Sec 9 - Conclusions and Recommendations	Yes ?	Information relevant to addressing this recommendation is provided; conclusions and recommendations are under Section 10 instead of section 9	Vol 3, App 3B, Attachment 4 - Site Specific Documents - Mary River - Slope Stability Analysis Report Sec 8.0 - Stability of Mine Pit Wall Adjacent to Waste Rock Dump and Sec 10 - Conclusions and Recommendations

128	Provide an analysis and discussion to support the proposed side slope design criteria for borrow pits.	Vol 3, App 3B, Attachment 6 - Borrow Pit and Quarry Management Plan - section 4.3 and in Section 4.1 of each of the individual quarry Management and Operations Plan (for Steensby, Milne, Mary River, Q7, Q77 and Q133)	Yes	There is no Section 4.3 in he borrow pit and quarry management Plan; This is probably referring to sec 3.4 in the BP&QMP; the other sections referenced contained relevant information	Vol 3, App 3B, Attachment 6 - Borrow Pit and Quarry Management Plan - section 3.4 and in Section 4.1 of each of the individual quarry Management and Operations Plan (for Steensby, Milne, Mary River, Q7, Q77 and Q133)
219	The waste rock management plan will discuss alternatives to encapsulation for treating effluents from waste rock.	~~Vol 10, Sec 7.2.4.1;~~ Vol 3, App 3B, Attachment 5 - Waste Rock Management Plan	Yes?	Vol 10, Section 7.2.4.1 does not exist; Section 7.2.2 contains relevant information	Vol 10, Section 7.2 presents overall approach for waste rock management. Vol 3, App 3B, Attachment 5 presents the Waste Rock Management Plan
220	Waste rock characterisation will be an ongoing program for the life of the Project.	~~Vol 10, Sec 7.2.4.1~~	Yes?	Vol 10,Section 7.2.4.1 does not exist; 7.2.2.4 contains relevant information	Vol 10, Section 7.2 presents overall approach for waste rock management. Vol 3, App 3B, Attachment 5 presents the Waste Rock Management Plan; Annex 3 of the Waste Rock Management Plan presents the on-going waste rock geotecnical and geochemical characterisation program.
221	A detailed waste rock characterisation and monitoring program will be presented in the FEIS.	~~Vol 10, Sec 7.2.4.1;~~ Vol 3, App 3B, Attachment 5 - Waste Rock Management Plan	Yes?	Vol 10, Section 7.2.4.1 does not exist; the other sections referenced contain relevant information	Vol 10, Section 7.2 presents overall approach for waste rock management. Vol 3, App 3B, Attachment 5 presents the Waste Rock Management Plan; Annex 3 of the Waste Rock Management Plan presents the on-going waste rock geotecnical and geochemical characterisation program.
222	As-built site drainage plans will be incorporated into a future surface water management plan, once constructed.	~~Vol 10, Sec 7.4.2.2~~	No	This section does not exist volume 10	Vol 3, App 3B, Attachment 5 - Surface Water and Aquatic Ecosystem Managment Plan presents the up to date hydrology and site water balances. Attachment 9. Site drainage drawings are presented in Attachment 9.
246	A protocol for executing ARD/ML testing as part of quarry development will be included in an updated Borrow Pit and Quarry Management Plan in the FEIS.	~~Vol 10, Sec 8.2.3;~~ Vol 3, App 3B, Attachment 6 - Borrow Pit and Quarry Management Plan, App B: Acid Rock Drainage Testing Protocol	Yes?	Volume 10, Section 8.2.3 does not exist;	Vol 3, App 3B, Attachment 6 - Borrow Pit and Quarry Management Plan, App B: Acid Rock Drainage Testing Protocol
330	This ties in with # 244. An enhanced description of waste rock runoff treatment alternatives will be presented in the FEIS.	~~Vol 10, Sec 7.2.4.4;~~ Vol 3, App 3B, Attachment 5 - Waste Rock Management Plan, Sec 3.8.5	Yes?	Volume 10, Section 7.2.4.4 does not exist in the plan; the other sections referenced contain relevant information	Vol. 3, App 3B, Attachment 5 - Waste Rock Management Plan, Section 3.7.4 discusses mine runoff water quality and section 3.7.5 presents runoff water treatment alternatives.

332	Enhance the description of the railway management plan, including scheduling of trains, emergency equipment at sites and the specifications of tank cars that are designed to withstand the impact of derailment.	~~Vol 10, Sec 7.2.5; A~~pp 10D-9 Railway Management Plan, Sec 4.0	Yes	Information relevant to addressing this recommendation is provided; Rail management plan is in draft form	Vol 3, Section 3.5 describes the railway for the operation phase. Appendix 10D9.1 presents a draft Railway Maintenance Management Plan and Appendix 10D-9.2 presents a draft Railway Emergency Response Plan. These managment plans are presented in draft form as the several authorizations must be obtained from the CTA and Transport Canada for the operation of the railway. Discussion with CTA and Transport Canada on these various authorisations will take place once the Project Certificate is granted.
345	j) Modelling of the pit water quality will be presented in the FEIS. Predictions of pit water quality will be updated throughout the life of the Project as more information comes available on the geochemistry of the waste rock and the pit wall.	Vol 3, App 3B, Attachment 10, Sec 9.2	Yes?	Vol 10, 9.2 Refers to Stakeholders engagement Plan	Vol 3, App 3B, Attachment 5 - Waste Rock Management Plan, Annex 4 presents the interim Waste Rock Stockpile seepage water quality projections and Annex 5 presents the interim open pit water quality predictions. Vol 3, App 3B, Attachment 10, Sec 9.2 deals with expection at the post closure phase.
345	s) Re-examine the list of parameters to be monitored to include any constituents that potentially could be released (based on what is used and disposed of on-site) and all potential sources of effluents.	Vol 3, App 3B, Attachment 10, ~~Table 8-1~~	Yes	Table 8-1 listed but I could not find the table	Should read Vol 3, App 3B, Attachment 10, Section 9 for Post Closure Monitoring. The specific table of parameters is Table 9-1 (page 37).
347	Stability of the waste rock pile and pit wall will be addressed in the FEIS.	Vol 3, App 3B, Attachment 10, ~~Sec 8.1~~	Yes?	Sec. 8.2 rather than 8.1 contains the relevant information; Sec. 8.1 contains information related to Health and safety of Worker and the Public	Vol 3, App 3B, Attachment 4 - Site Specific Documents - Mary River - Slope Stability Analysis Report - Stability of Mine Pit Wall Adjacent to Waste Rock Dump; Vol 3, App 3B, Attachment 10 (Closure), Sec 8.2

Attachment 3: Table 1B-7: Concordance with PHC Appendix 3

Item		FEIS Section	NWB Assessment		Hatch/BIM Response
A Water License			Comments or/and Recommendations Addressed	Comments	9-Mar-12
18	Information related to the water demand and waste generated by the proposed emergency shelters; and	There are two existing emergency shelters along the tote road. They will be used very infrequently. Any waste generated at these shelters will be trucked to the nearest camp with a permanent waste treatment facility.	?	Further clarifications required	There are two existing emergency shelters along the tote road. They will be used very infrequently and only in emergencies. Any waste generated at these shelters will be trucked to the Mine Site camp.
19	Information on the characteristics, name, location, and type of alternative water sources proposed for use during emergencies.	Refer to Block Flow Diagrams for each site in Vol 3, App 3B, Attachment 9 - Steensby - ~~DWG H337697-4510-014-1107;~~ Mine Site - DWG H337697-4210-10-002-0001 & Milne Site - DWG H337697-7000-10-002-0001	No	Steensby - DWG H337697-4510-014-1107 does not exist; The steenby drawing shows Mine water balance and the Milne drawing shows storm water sources	Refer to Block Flow Diagrams for each site for water use and waste water generated in Vol 3, App 3B, Attachment 9- The correct reference drawing for Steensby is DWG H337697-4510-10-002-0001; Mine Site - DWG H337697-4210-10-002-0001 & Milne Site - DWG H337697-7000-10-002-0001. Refer to text in transmission letter (March 9, 2012) for explanation on alternative water supply.
51	Actual copies of the MSDS for all hazardous substances stored on site should be included in the Plan.	Vol 3, App 3B, Attachment 5 - Hazardous Waste Managment Plan, ~~Annex 1~~	Yes	The information is provided but under Annex A; Annex 1 does not exist in the document	Reference should read Vol 3, App 3B, Attachment 5- Hazardous Waste Management Plan, Annex A; MSDS are also provided in Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Annex 4.
52	A site map that is specifically designed to emphasize spill response elements should be provided. The map should depict spill response equipment, fuel caches, nearby water bodies, camp infrastructures, and other relevant information.	Vol 3, App 3B, Attachment 5~~— Hazardous Waste Managment Plan,~~ Annex 8	No	Annex 8 does not exist in the document	Vol 3, App 3B, Attachment 5- Emergency Response and Spill Contingency Plan, Annex 8

56	Section 5.1, Pg. 11, states that copies of the relevant Material Safety Data Sheets (MSDS) are provided in Annex 8; however, Annex 8 appears to be absent from the document.	~~Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009), Annex 8~~	Yes	Annex 8 is Standard Operating Guideline (SOG), Emergency Response Code 1 Situations, Milne Inlet; it does not refer to MSDS	Relevant MSDS for fuel and hazardous chemical handled at the port are presented in Vol 3, App 3B, Attachment 5- Emergency Response and Spill Contingency Plan, Annex 5; MSDS are also presented in Attachment 5 - Hazardous Materials and Hazardous Waste Management Plan, Annex A.
64	Section 5.1, Pg. 16, states that copies of the Material Safety Data Sheets (MSDS) for substances stored on site are provided in Annex 8; however, Annex 8 appears to be absent from the document.	~~Vol 3, App 3B, Attachment 5 - Hazardous Materials and Hazardous Waste Management Plan (H337697-0000-07-126-0002), Annex 1~~	Yes?	The should be annex A as apposed to Annex 1	Relevant MSDS for fuel and hazardous chemical handled at the port are presented in Vol 3, App 3B, Attachment 5- Emergency Response and Spill Contingency Plan, Annex 5; MSDS are also presented in Attachment 5 - Hazardous Materials and Hazardous Waste Management Plan, Annex A.
66	Information on overflow protection devices, such as, level sensors and backflow prevention devices that can assist in preventing spills should be included in the Plan.	~~Vol 3, App 3B, Attachment 5 - Hazardous Materials and Hazardous Waste Management Plan (H337697-0000-07-126-0002), Section 7.3~~	No	This section does not exist in the document	Vol 3, App 3B, Attachment 3 - Technical specifications for Fuel Storage and Distribution System Design Criteria and Fuel Systems Field Erected Tanks, Piping and Equipment/CM138
68	Section 7.1, Pg. 29-30, contains two sub-sections, 1.1.1 – Training Content and 1.1.2 – Short -Notice Training, which appear to be improperly labeled.	~~Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Section 7.1~~	No	This should be 6.1 as opposed to 7.1; section 7.1 does not exist in the document	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Section 6.1
70	It is recommended that the appendices, Annexes 1 to10, be included in the Plan.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Annexes 1 - 9	Yes?	Annex 9 should be Annex 8; there is no annex 9 in the document	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Annexes 1 - 8; there are only 8 annexes to this OPEP. The MSDS for fuels are presented in the Emergency Response and Spill Contingency Plan, Annex 5.
72	There appears to be some ambiguities concerning where the Oil Pollution Emergency Plan starts and ends and where the Emergency and Spill Contingency Plan begins. This can potentially impact the functionality of both plans. Even though there is the recognition that overlaps should and do exist between the two Plans, it is recommended that a more precise separation, with respect to the content and usage of the plans, be established.	~~Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Section 2.3~~	No	This section 2.3 does not exist in the plan	Refer to explanation presented in Attchment 4, Item 72 of this errata document.

80	A site map depicting the locations of existing and/or proposed Explosive Management Facilities should be included in the Plan.	Vol 3, App 3B, Attachment 9 - Steensby Port Drawings-Steensby Inlet Construction Works Site Layout (H337697-7000-10-014-1006) and Mary River Drawings - Mary River Mine Site Construction Works Site Layout (H337607-7000-10-014-1002)	No	Unable to find both drawing in the respective folders under attachment 9	Vol 3, App 3B, Attachment 9 - Steensby Port Drawings-Steensby Inlet Construction Works Site Layout (H337697-7000-10-014-1006) This drawing is attached. Mary River Drawings - Mary River Mine Site Construction Works Site Layout (H337607-7000-10-014-1002) is presented in Vol 3, App 3B, Attachment 9.
91	Section 3.5, Pg. 11, states that ore will be stored in a Run-of-Mine (ROM) stockpile located near the crusher and that following crushing and screening, four temporary ore stockpiles will be used for storing crushed and screened ore. Other than stating that the drainage will be controlled there is insufficient information pertaining to how the ore storage and associated drainage areas will be constructed.	Vol 3, App 3B, Attachment 5 - Wasterock Management Plan (H337697-0000-07-126-0012), Section 3.6.2	No	Section 3.6.2 does not exist in the Plan	Vol 3, App 3B, Attachment 5 - Wasterock Management Plan (H337697-0000-07-126-0012), Section 3.6 and 3.7; Annexe 1 presents the Stormwater management and drainage system design for the Mine Site.
112	Information on the externality effects of the project on municipal water and waste disposal facilities in communities proximal to the project area; and	Vol 4, Sec 7.4.2	Yes	Information relevant to addressing this recommendation is provided; in a sort of holistic way but not specifically applicable municipal water and waste?	The assessment of the Project effects on community infrastructures is discussed in Vol 4, section 7.0. Section 7.4.2 - Demand for and Investment in Hamlet Infrstructure and Services. Externality effects of the project on municipal water and waste disposal facilities in communities proximal to the project area will be driven by population growth in those communities. Vol 4, Section 2.3 discusses demographic stability of neighbouring hamlets. Since the net effect of the project on in-migration and outmigration of the communities is not expected to be significant, the demand for increased water supply, waste water treatment and waste management is also not expected to be significant.
158	The emergency shelters at Tote Road site are included on the list of camps in Table 3-1.1, however no information is provided with respect to the water demand and quantities of sewage generated by each of those facilities. It is suggested that this information be included.	There is no water consumed at these respective shelters.	?	Clarifications required	These Shelters will only be used in Emergency cases, bottled water will be supplied. There will be no specific water intake or disposal.

Attachment 4: Complementary Information

Table 1B-3 - Water Use: Quality and Quantity, Water Intake (Worksheet 6.0: Water Use)
Item 2: Alternative sources of water
Table 1B-7
Item 19: Information on the characteristics, name, location, and type of alternative water sources proposed for use during emergencies.

Baffinland Response:
Milne Port:

Water will be required for various domestic and industrial activities during Construction, Operation and Closure of the Project within Milne Port LSA. Two water sources were assessed and are licensed for Milne Port; these include Phillips Creek and Km32 Lake. Water will be withdrawn from Phillips Creek during the open water season (June- September) and from Km32 Lake during winter (October – May) when Phillips Creek is frozen. As Phillips Creek and Km32 are only used temporary during Construction both are adequate water sources. Volume 7, section 2 of the FEIS provides more information about the Milne Port water source assessments.

Mine Site:

All water needed at the Mine Site during Construction, Operation and Closure phases of the Project can be obtained from Camp Lake. Camp Lake was assessed and is the existing and permitted water source for the Mine Site. The assessment of this water source is presented in Volume 7, Section 2 of the FEIS and indicates that Camp Lake is a sufficient water source for all phases of the Project at the Mine Site.

Steensby Port:

Three water sources were assessed for Steensby Port; 3km Lake, ST347 and 10 Km Lake. 3Km Lake proved to be a good water source for Construction but was not a sufficient long term water source. As Construction proceeds at Steensby both 10Km Lake and ST347 were identified as sufficient long term water sources. Due to the location of ST347 being closer to Steensby Camp, this Lake was chosen as an ample water source for the rest of Construction and Operation. However 10Km Lake is a viable alternative water source should it be needed.

For each of these sites, a Block Flow Diagram is presented in Volume 3, Appendix 3B, Attachment 9 which identifies the sources and distribution of freshwater for that specific site.

Item 15: Winter/Ice Road
Baffinland Response:
As stated in Volume 3, Section 2.5.1, page 42 (4th paragragh), it is expected that winter roads will be required for the initial construction year of the railway. It is expected that a winter road will be constructed from the Mine Site to the Ravn River and Mid-Rail camp and that a second segment of winter road will be constructed from Steensby to the North and South Cockburn camps. These winter roads will be required for the first winter season of the construction activities until the construction access road is completed.

Water use for the construction of the winter road will be the subject of a distinct Type B Water License application. This application will be submitted once the routing and alignment of the winter road is finalized.

Table 1B-3 - Predicted Environmental Effects and Proposed mitigation measures
Item 13: Provide a discussion of the consequences of long-term stratification in any pit lakes and associated contingency plans.
Baffinland Response:

Stratification of a pit lake refers to the potential lack of oxygen in the water due to stagnation. This can occur when there is minimal "turnover" of the naturally occurring layers of water within a lake. When this occurs the lake is said to be meromictic. Due to the changing temperatures throughout the year the lake warms up and cools down throughout the seasons, this creates a cyclical pattern of water overturn, thus aerating the lake throughout the year. This type of lake turns over twice a year (in the spring and the fall) and is said to be dimictic. As a result stratification is not expected to be a problem.

Table 1B-5
Item 332: Rail management plan is in draft form
Baffinland Response:
The Railway Management Plans (Appendix 10D-9.1 and 9.2) are presented in draft. As a railway under Federal Jurisdiction, the following submissions will be required:

1. The filing of a Notice of Railway Works (administered by Transport Canada) – this will be required to allow construction to be commenced;
2. The filing of an Application to Construct a Railway Line (administered by the CTA) – this will be required to allow construction to commence;
3. The creation of a railway authorized to operate service on the infrastructure (administered by the CTA and Transport Canada) – this will be required to allow the railway to be operated; and
4. The Approval of Alternate or Supplementary Practices necessary for the signalling system (administered by Transport Canada) – this will be required to allow commissioning of the signalling system into service, if any deviation from standard AREMA practice is encountered.

These documents will not be finalized until all authorizations are obtained from Transport Canada and the Canadian Transportation Agency (CTA).

Table 1B-7
Item 72: There appears to be some ambiguities concerning where the Oil Pollution Emergency Plan starts and ends and where the Emergency and Spill Contingency Plan begins. This can potentially impact the functionality of both plans. Even though there is the recognition that overlaps should and do exist between the two Plans, it is recommended that a more precise separation, with respect to the content and usage of the plans, be established.
Baffinland Response:
The Emergency Response and Spill Contingency Plan covers the entire Project whereas the OPEPs are specific to each port facility and focus on spill occurring during "ship to shore transfer of fuel". Baffinland will have one Emergency Response Team for the entire site.

Table 1B-7

Item 112: Information on the externality effects of the project on municipal water and waste disposal activities in communities proximal to the project area;

Baffinland Response:

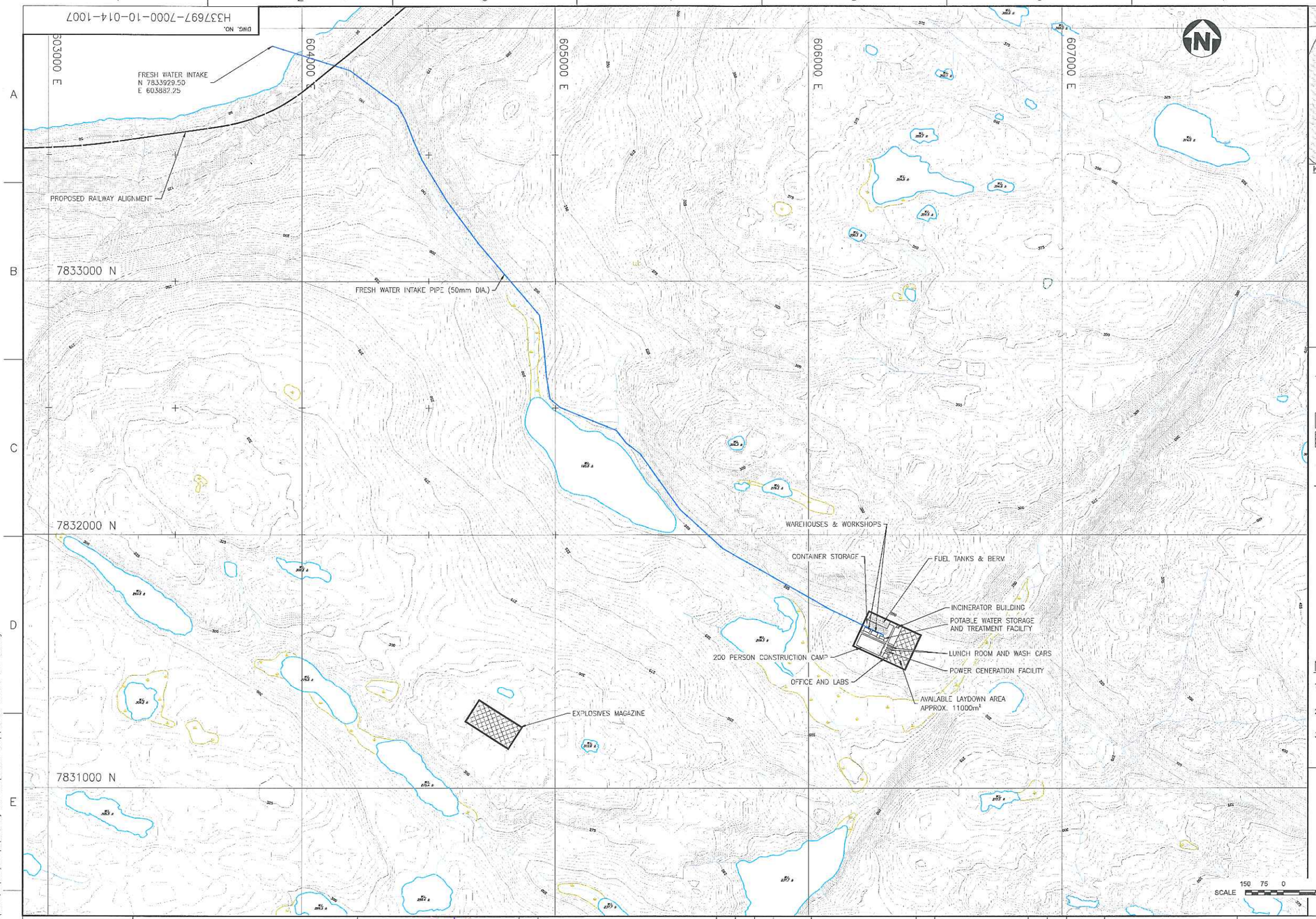
The assessment of the Project effects on community infrastructures is discussed in Volume 4, section 7.0. Section 7.4.2 - Demand for and Investment in Hamlet Infrastructure and Services. Externality effects of the project on municipal water and waste disposal facilities in communities proximal to the project area will be driven by population growth in those communities. Volume 4, Section 2.3 discusses demographic stability of the neighbouring hamlets. The net effect of the project on in-migration and out-migration of the communities is not expected to be significant. Therefore, the demand for increased water supply, waste water treatment and waste management is also not expected to be significant.

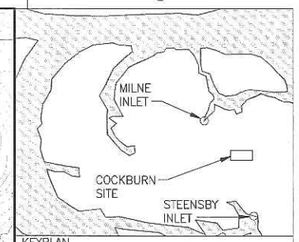
Attachment 5: Missing Drawings and/or Re-issued Drawings

Site	Drawing Title	Drawing Numbers	NWB Comments	BIM Response
Railway	Ravn River Camp	H337697-7000-10-014-0003	This drawing is referenced under Block 13 of the water Licence Application Form; it seems to be mislabeled under Attachment 9 (Railway Drawings), Appendix 3B.	There was a mistake in the Application form under Block 13. The correct document number for this drawing is H337697-7000-10-014
	Mid Rail Camp	H337697-7000-10-014-0004	This drawing is referenced under Block 13 of the water Licence Application Form; it seems to be mislabeled under Attachment 9 (Railway Drawings), Appendix 3B.	There was a mistake in the Application form under Block 13. The correct document number for this drawing is H337697-7000-10-014-1004
	South Cockburn Camp	H337697-7000-10-014-0005	This drawing is referenced under Block 13 of the water Licence Application Form; it seems to be mislabeled under Attachment 9 (Railway Drawings), Appendix 3B.	There was a mistake in the Application form under Block 13. The correct document number for this drawing is H337697-7000-10-014-1005
	North Cockburn Camp	H337697-7000-10-014-0008	This drawing is referenced under Block 13 of the water Licence Application Form; it seems to be missing from Attachment 9 (Railway Drawings), Appendix 3B.	This drawing is provided in this Errata document. The document number and title are : H337697-7000-10-014-1007 – North Cockburn Lake Rail Camp Site Layout
Steensby	Steensby Inlet Construction Work Site Layout	H337697-7000-10-014-1006	This drawing is referred to on the summary sheet accompanying the Steensby Port Drawings; this drawing appears to be missing from Attachment 9 (Steenby Port Drawings), Appendix 3B.	This drawing is provided in this Errata document.
	Steensby Inlet Quarry Site Layout	H3337697-7000-10-014-1112	Is there any particular reason as to why a stamped copy of this drawing is not included under Attachment 9, Appendix 3B?	To avoid repetition this drawing was only included in Attachment 6-Operations and Management Plan Steensby Inlet Quarry, and not in Attachment 9. Therefore this drawing did not require a stamp.

Milne Inlet	Milne Inlet Quarry Site Layout	H3337697-7000-10-014-1110	Is there any particular reason as to why a stamped copy of this drawing is not included under Attachment 9, Appendix 3B?	To avoid repetition this drawing was only included in Attachment 6-Operations and Management Plan Milne Inlet Quarry, and not in Attachment 9. Therefore this drawing did not require a stamp
Mary River Mine site	Mine sit Quarry Site Layout	H3337697-7000-10-014-1111	Is there any particular reason as to why a stamped copy of this drawing is not included under Attachment 9, Appendix 3B?	To avoid repetition this drawing was only included in Attachment 6-Operations and Management Plan Mine Site Quarry, and not in Attachment 9. Therefore this drawing did not require a stamp
Misc.	Quarry Q7-500, Q133-500, Q77-200	Drawing numbers not legible	Is there any particular reason as to why stamped copies of these drawings are not included under Attachment 9, Appendix 3B?	These drawings are provided in this Errata document on 11X17 paper size to improve image quality. These drawings were included only in the individual rail Quarry sites and not in Attachment 9 to avoid repetition and therefore do not require a stamp.
	Water Crossing Summary Sheets from Dillion (Attachment 7)	E337697-2000-07-124-0001 to E337697-2000-07-124-0008	Is there any particular reason as to why stamped copies of these summary sheets are not included under Attachment 7 Appendix 3B similar water crossing drawings under attachment 9?	The summary sheets do not provide detailed design information and therefore are not stamped by a Professional Engineer.
Plans or Reports	Mary River Slope stability (attachment 6)	H337697-4210-10-124-001	Is there any particular reason as to why this document is not stamped?	Only technical specification, design documents and drawings are stamped by a professional engineer.
	Incinerator Operation Information	E337697-PM406-115-0002Sub01.pdf	Is there any particular reason as to why this document is marked “Sample Draft”?	The final O&M manual will be available once the equipment is purchased.
	Rail Management Plan is in Draft form			See explanation in Attachment 4 of this transmission letter.

DWG. NO. H337697-7000-10-014-1007





KEYPLAN

LEGEND:

- WETLAND
- LAYDOWN AREA
- RIVER/STREAM/DRAINAGE
- PROPOSED RAILWAY ALIGNMENT

NOTE(S):

1. TOPOGRAPHY PROVIDED BY EAGLE MAPPING (2005).
2. COORDINATE GRID IS SHOWN IN UTM (NAD83) ZONE 17 AND IS IN METERS.
3. CONTOURS ARE IN METERS. CONTOUR INTERVAL IS 2.5 METERS.

DRAWING NO.	DRAWING TITLE

REFERENCE DRAWINGS

REGISTERED PROFESSIONAL ENGINEER — J.V. CASSON — LICENSEE — March 8/12 — NT/NU

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
A	CREATED	YH	AS	JC	12/03/08

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
A	ISSUED FOR PERMITTING	AS	JC	12/03/08

ISSUE AUTHORIZATION

HATCH

DESIGNED BY A.SMITTEN DATE 2012/08/03	DRAWN BY Y.HUANG DATE 2012/08/03
CHECKED BY J.BINNS DATE 2012/08/03	DISCIP. ENGR. T.HO DATE 2012/08/03
PROJ. DES. COORD. DATE	PROJ. ENGR. DATE
PROJ. MGR. DATE	

Baffinland Iron Mines Corporation

MARY RIVER PROJECT

NORTH COCKBURN LAKE RAIL CAMP SITE LAYOUT

SCALE	DWG. NO.	REV.
1:7500 OR AS NOTED	H337697-7000-10-014-1007	A

Mar 08, 2012 - 10:37am Login name: sm2469
Drawing Name: P:\289860 - Mary River\240\Civil\Roads\Temporary Camps\Temporary Site Plans\Cockburn Camp\H337697-7000-10-014-1007.dwg
Layout: H337697-7000-10-014-1105 (3)

DWG. NO. H337697-7000-10-014-1006

FRESH WATER INTAKE AND PUMP HOUSE
N:7804826.580
E:596600.563

ACCOMMODATION/GENERAL MANAGEMENT FACILITY AREA (AVAILABLE LAYDOWN APPROX. 28500m²)

CONCRETE PRODUCTION AREA (AVAILABLE LAYDOWN APPROX.107600m²)

GENERAL SITE SERVICE AREA (AVAILABLE LAYDOWN APPROX. 57100m²)

WASTE MANAGEMENT FACILITY (AVAILABLE LAYDOWN APPROX. 6600m²)

WORK FRONT AREA

WORK FRONT AREA

RAIL CONTRACTOR AREA (AVAILABLE LAYDOWN APPROX. 97000m²)

TREATED EFFLUENT DISCHARGE
N:7801463.153
E:593427.722

SHIPPING AND RECEIVING AREA (AVAILABLE LAYDOWN APPROX. 112000m²)

GENERAL CONTRACTOR AREA (AVAILABLE LAYDOWN APPROX. 20400m²)

EARTHWORKS CONTRACTOR AREA (AVAILABLE LAYDOWN APPROX. 20400m²)

FOUNDATIONS CONTRACTOR AREA (AVAILABLE LAYDOWN APPROX. 20400m²)

CIVIL CONTRACTOR AREA (AVAILABLE LAYDOWN APPROX. 20400m²)

WORK FRONT AREA

WORK FRONT AREA

CIVIL AIRSTRIP CONTRACTOR AREA (AVAILABLE LAYDOWN APPROX. 17700m²)

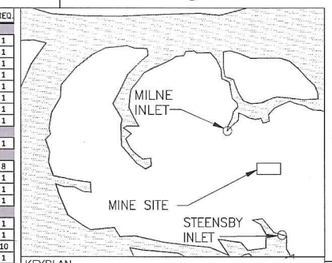
WORK FRONT AREA

WORK FRONT AREA

EXPLOSIVES AND EMULSION FACILITY AREA (AVAILABLE LAYDOWN APPROX. 8100m²)

MARINE CONTRACTOR AREA (AVAILABLE LAYDOWN APPROX. 15600m²)

IDENTIFIER #	FACILITY NAME/FUNTION	FACILITY TYPE	SIZE(ftxft)	SIZE(mxm)	REQ.
Accommodation / General Management Facilities					
BLD-7350-001-SP	Sewage Treatment Plant	Module	-	-	1
BLD-7610-001-SP	Power Generation Facility	Module	-	-	1
BLD-7350-002-SP	Potable Water Treatment Plant	Module	-	-	1
BLD-7110-001-SP	Office Complex - Layout as ten trailers wide	Trailer	60' x 120'	18m x 37m	1
BLD-7330-002-SP	Wash Car Complex - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	1
BLD-7710-001-SP	Warehouse / Workshop / Storage - ERT Facility	Pre-Fab / Pre-Eng	60' x 60'	18m x 18m	1
BLD-7110-001-SP	Office Complex - ERT Office/Debrief/Command Center	Trailer	60' x 12'	18m x 4m	1
BLD-7440-001-SP	Medical Facility - Layout as four trailers wide	Trailer	60' x 48'	18m x 15m	1
Waste Management Facility					
BLD-7130-001-SP	Waste Management Incinerator	Module	60' x 60'	18m x 18m	1
Explosives and Emulsion Facility					
BLD-7990-001-SP	Explosives Storage - Temporary Emulsion Building	Sea Container	40' x 8'	12m x 2m	8
BLD-7710-001-SP	Warehouse / Workshop / Storage - Explosives Maintenace and Equipment Storage Facility	Pre-Fab / Pre-Eng	60' x 60'	18m x 18m	1
BLD-7320-001-SP	Lunchroom Facility	Trailer	60' x 12'	18m x 4m	1
BLD-7330-001-SP	Wash Car Complex	Trailer	30' x 10'	9m x 3m	1
Shipping and Receiving Laydown Area					
BLD-7710-002-SP	Warehouse / Workshop / Storage - Construction Warehouse Facility	Pre-Fab / Pre-Eng	200' x 80'	61m x 24m	1
BLD-7710-002-SP	Warehouse / Workshop / Storage - Operations Warehouse Facility	Pre-Fab / Pre-Eng	200' x 80'	61m x 24m	1
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	10
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	1
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	1
General Site Services					
BLD-7710-002-SP	Warehouse / Workshop / Storage - Light and Heavy Vehicle Maintenance Shop	Pre-Fab / Pre-Eng	200' x 80'	61m x 24m	1
BLD-7710-002-SP	Warehouse / Workshop / Storage - Light and Heavy Vehicle Maintenance Shop (Annex)	Pre-Fab / Pre-Eng	200' x 30'	61m x 9m	1
BLD-7710-002-SP	Warehouse / Workshop / Storage - Equipment Assembly and Storage Facility	Pre-Fab / Pre-Eng	200' x 80'	61m x 24m	1
BLD-7710-001-SP	Warehouse / Workshop / Storage - Carpentry & Civil Workshop	Pre-Fab / Pre-Eng	60' x 60'	18m x 18m	1
BLD-7710-001-SP	Warehouse / Workshop / Storage - Piping & Mechanical Workshop	Pre-Fab / Pre-Eng	60' x 60'	18m x 18m	1
BLD-7710-001-SP	Warehouse / Workshop / Storage - Structural Steel Fabrication Workshop	Pre-Fab / Pre-Eng	60' x 60'	18m x 18m	1
BLD-7710-001-SP	Warehouse / Workshop / Storage - Electrical Fabrication Workshop	Pre-Fab / Pre-Eng	60' x 60'	18m x 18m	1
BLD-7110-001-SP	Office Complex - Layout as four trailers wide	Trailer	60' x 48'	18m x 15m	1
BLD-7320-001-SP	Lunchroom Facility - Layout as four trailers wide	Trailer	60' x 48'	18m x 15m	1
BLD-7330-002-SP	Wash Car Complex - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	1
Work Front Area					
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	6
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	6
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	12
Concrete Production					
BLD-7710-004-SP	Shelter - Concrete Batch Plant Facility	Pre-Fab / Pre-Eng	150' x 80'	46m x 24m	1
BLD-7710-005-SP	Shelter - Concrete Aggregate & Cement Stockpiles (layout 2 shelters side by side)	Pre-Fab / Pre-Eng	150' x 72'	46m x 22m	4
BLD-7710-004-SP	Warehouse / Workshop / Storage - Concrete Batch Plant Maintenance and Equipment Storage	Pre-Fab / Pre-Eng	150' x 80'	46m x 24m	1
BLD-7320-001-SP	Lunchroom Facility	Trailer	60' x 12'	18m x 4m	1
BLD-7330-001-SP	Wash Car Complex	Trailer	30' x 10'	9m x 3m	1
General Contractor Laydown Area					
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	1
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	1
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	5
Earthworks Contractor Laydown Area					
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	1
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	1
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	5
Foundations Contractor Laydown Area					
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	1
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	1
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	5
Civil Contractor Laydown Area					
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	2
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	2
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	10
Civil Airstrip Contractor Laydown Area					
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	2
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	2
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	10
Rail Contractor Laydown Area					
BLD-7320-001-SP	Lunchroom Facility - Layout as two trailers wide	Trailer	60' x 24'	18m x 7m	1
BLD-7330-002-SP	Wash Car Complex	Trailer	60' x 12'	18m x 4m	1
BLD-7710-003-SP	Heated Storage	Sea Container	40' x 8'	12m x 2m	5



KEYPLAN

LEGENDS:

- WATER
- WETLAND
- CONSTRUCTION WORKS LAYDOWN AREAS
- FORESHORE AREA
- RIVER/STREAM/DRAINAGE
- POTENTIAL DEVELOPMENT AREA
- FUTURE RAILWAY ALIGNMENT
- ACCESS ROAD
- TREATED EFFLUENT PIPELINE
- FRESHWATER PIPELINE

NOTE(S):

1. TOPOGRAPHY PROVIDED BY EAGLE MAPPING (2005).
2. COORDINATE GRID IS SHOWN IN UTM (NAD83) ZONE 17 AND IS IN METRES.
3. CONTOURS ARE IN METRES. CONTOUR INTERVAL IS 5 METRES.
4. AS-CONSTRUCTED INFORMATION PROVIDED BY GENIVAR IN 2008.
5. PROPOSED PERMANENT WORKS LAYOUT SHOWN FOR REFERENCE PURPOSES ONLY. DO NOT USE FOR CONSTRUCTION.

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SCALE 1:15,000

Sep 30, 2011, 1:51pm Login name: HUA59318
Drawing Name: C:\prj\projectwise\yhuang\dms14863\H337697-7000-10-014-1006-STEENSBY.dwg Layout: STEENSBY INLET

DRAWING NO.	DRAWING TITLE
H337697-4510-10-014-0001	STEENSBY INLET PROPOSED PERMANENT WORKS SITE LAYOUT

REFERENCE DRAWINGS

REGISTERED PROFESSIONAL ENGINEER J.V. CASSON LICENSEE NT/NU Oct 7/11

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
A	ISSUED FOR ENVIRONMENTAL PERMIT	YH	AS	TH	11/09/30

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE

ISSUE AUTHORIZATION

HATCH

DESIGNED BY Y.H. DATE	DRAWN BY Y.H. DATE
CHECKED BY A.S. DATE	DISCIP. ENGR. DATE
PROJ. DES. COORD. DATE	PROJ. ENGR. DATE
PROJ. MGR. DATE	

Baffinland Iron Mines Corporation

MARY RIVER PROJECT

STEENSBY INLET CONSTRUCTION WORKS SITE LAYOUT

SCALE	DWG. NO.	REV.
OR AS NOTED	H337697-7000-10-014-1006	A

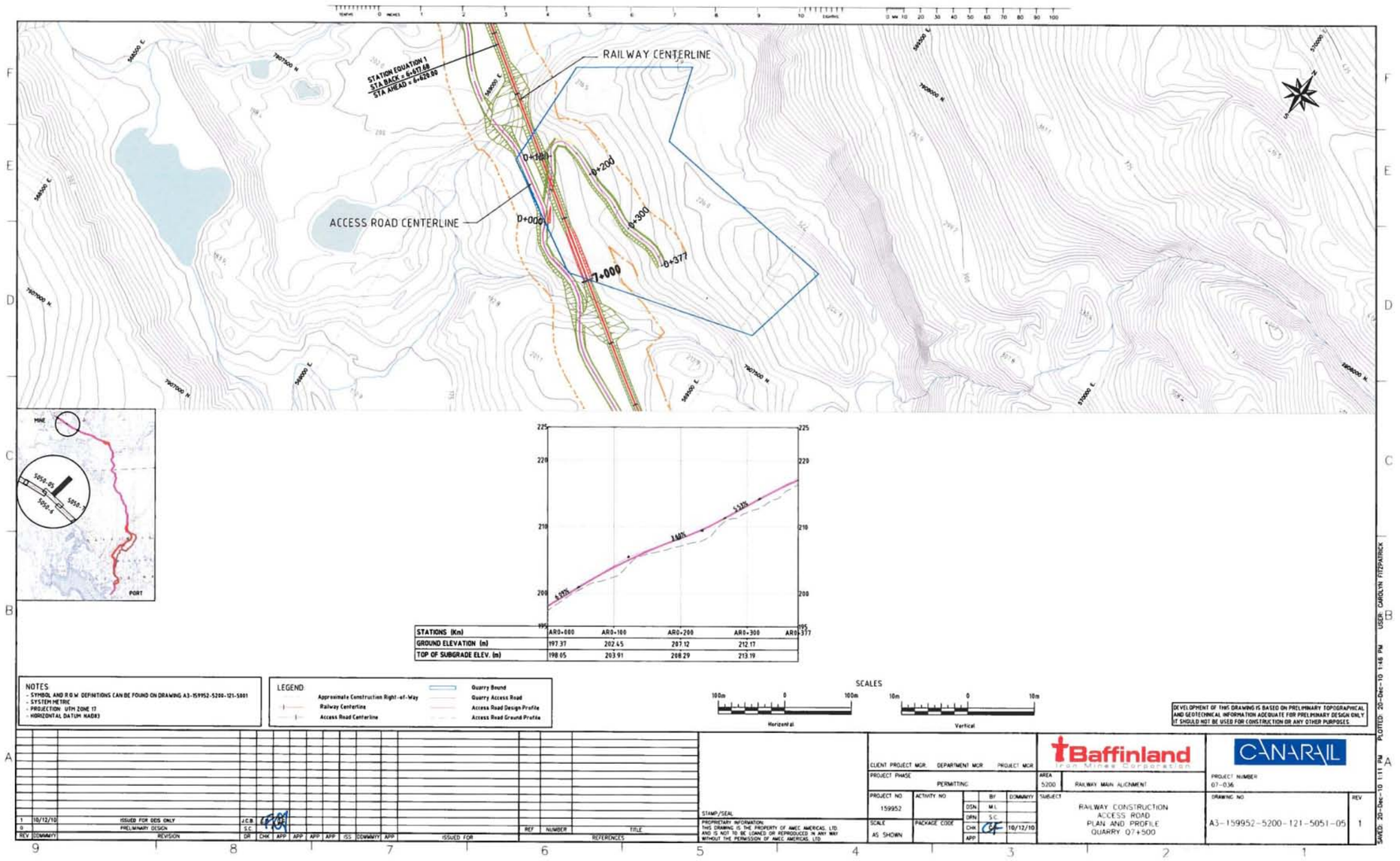

Figure 1- 1: Quarry Q7 + 500 Site Layout

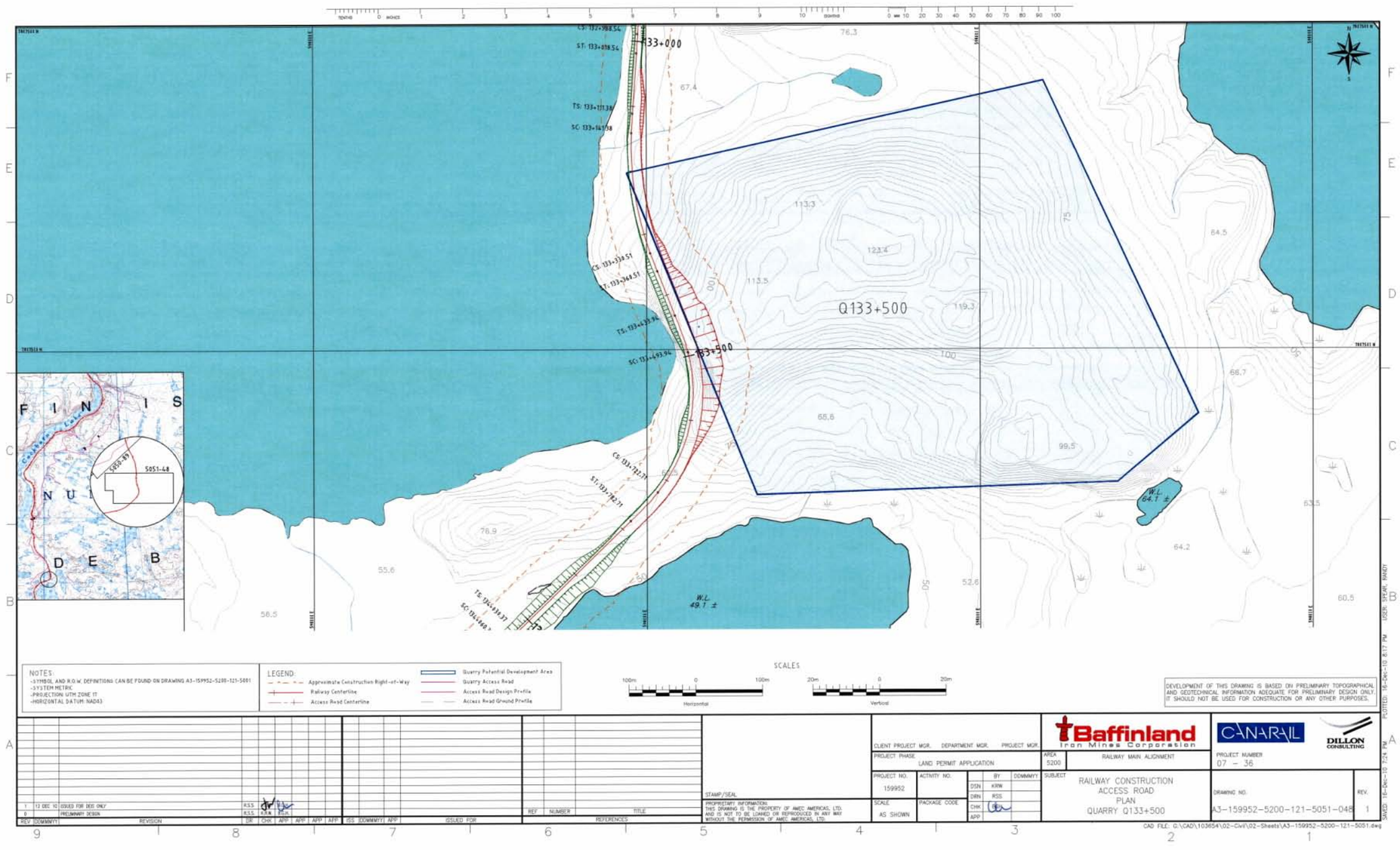

Figure 1- 1: Quarry Q133 + 500 - Site Layout

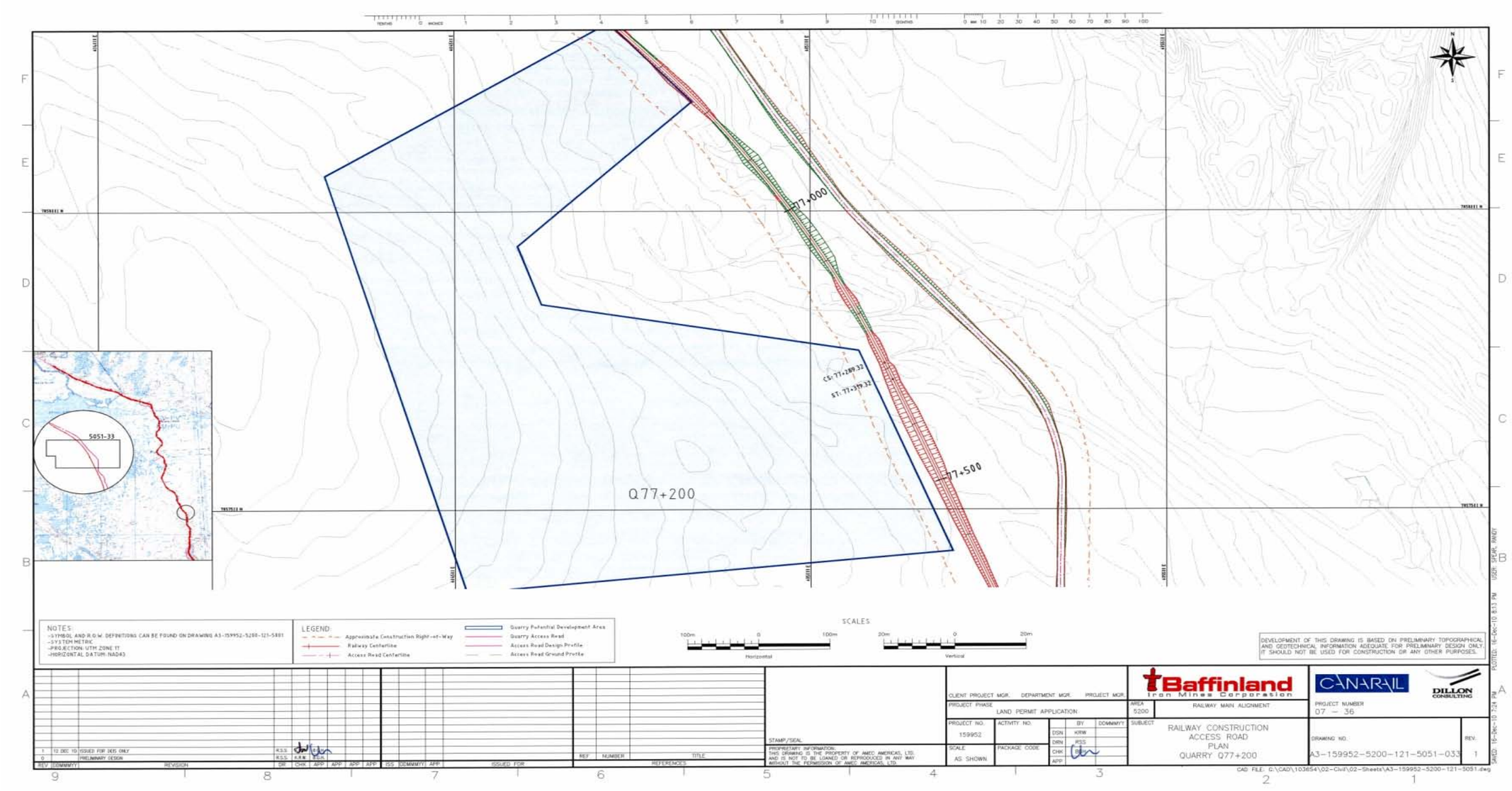

Figure 1- 1: Quarry Q77 + 200 - Site Layout