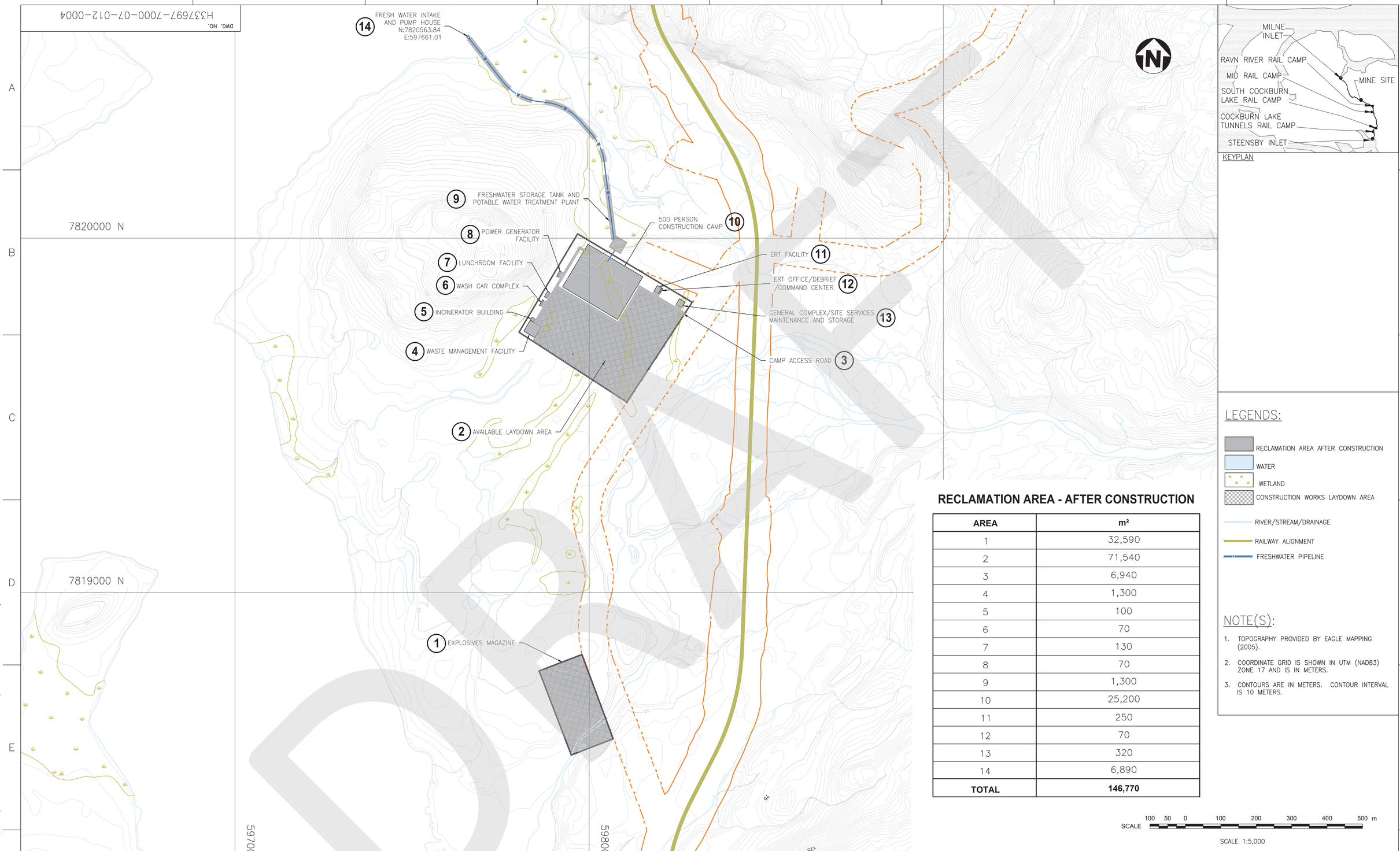
DWG. NO. H337697-7000-07-012-0004



KEYPLAN

RECLAMATION AREA - AFTER CONSTRUCTION

AREA	m²
1	32,590
2	71,540
3	6,940
4	1,300
5	100
6	70
7	130
8	70
9	1,300
10	25,200
11	250
12	70
13	320
14	6,890
TOTAL	**146,770**

LEGENDS:

- RECLAMATION AREA AFTER CONSTRUCTION
- WATER
- WETLAND
- CONSTRUCTION WORKS LAYDOWN AREA
- RIVER/STREAM/DRAINAGE
- RAILWAY ALIGNMENT
- FRESHWATER PIPELINE

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 10 METERS.

SCALE 100 50 0 100 200 300 400 500 m

SCALE 1:5,000

DRAWING NO.	DRAWING TITLE

REFERENCE DRAWINGS

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
A	ISSUED FOR INFORMATION				

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
A	ENVIRONMENTAL PERMITTING		

ISSUE AUTHORIZATION

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CHECKED BY T. HO DATE	DISCIP. ENGR. J. BINNS DATE
PROJ. DES. COORD. DATE	PROJ. ENGR. DATE
PROJ. MGR. DATE	

Baffinland Iron Mines Corporation

MARY RIVER PROJECT

PRELIMINARY MINE CLOSURE AND RECLAMATION PLAN
SOUTH COCKBURN LAKE RAIL CAMP

SCALE	DWG. NO.	REV.
OR AS NOTED	H337697-7000-07-012-0004	A

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Layout: SOUTH COCKBURN LAKE CAMP

DWG. NO. H337697-4510-07-012-0001

FRESH WATER INTAKE AND PUMP HOUSE
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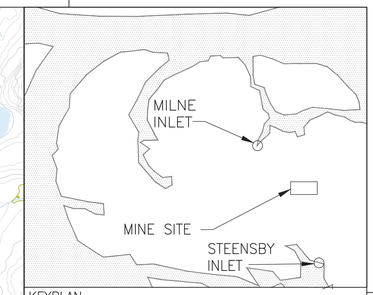
E:596600.563

593000 E | 594500 E | 596000 E | 597500 E | 599000 E

1 CONCRETE PRODUCTION AREA
2 GENERAL SITE SERVICE AREA
3 ACCOMMODATION/GENERAL MANAGEMENT FACILITY AREA
4 WORK FRONT AREA
5 WASTE MANAGEMENT FACILITY
6 WORK FRONT AREA
7 RAIL CONTRACTOR AREA
8 SHIPPING AND RECEIVING AREA
9 GENERAL CONTRACTOR AREA
10 EARTHWORKS CONTRACTOR AREA
11 FOUNDATIONS CONTRACTOR AREA
12 CIVIL CONTRACTOR AREA
13 WORK FRONT AREA
14 CIVIL AIRSTRIP CONTRACTOR AREA
15 WORK FRONT AREA
16 EXPLOSIVES AND EMULSION FACILITY AREA
17 MARINE CONTRACTOR AREA
18 WORK FRONT AREA
19 WORK FRONT AREA
20 2 x 150 MAN FLOATING CAMP
21 1 FUEL BARGE

TREATED EFFLUENT DISCHARGE
N:7801463.153
E:593427.722

3 Km LAKE



KEYPLAN

RECLAMATION AREA - AFTER CONSTRUCTION

AREA	m²
1	127,420
2	76,330
3	105,030
4	1,860
5	15,540
6	1,860
7	353,740
8	120,640
9	24,000
10	26,000
11	26,000
12	26,000
13	1,860
14	19,980
15	1,860
16	13,230
17	20,000
18	1,860
19	1,860
20	7,140
21	3,570
TOTAL	**975,780**

LEGENDS:

- RECLAMATION AREA AFTER CONSTRUCTION
- 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.

SCALE 300 150 0 500 1000 1500 m

SCALE 1:15,000

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REFERENCE DRAWINGS	

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
A	ISSUED FOR INFORMATION				
REVISIONS					

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A	ENVIRONMENTAL PERMITTING		
ISSUE AUTHORIZATION			

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PROJ. DES. COORD. DATE	PROJ. ENGR. DATE
PROJ. MGR. DATE	

Baffinland Iron Mines Corporation

MARY RIVER PROJECT

PRELIMINARY MINE CLOSURE AND RECLAMATION PLAN
STEENSBY PORT CONSTRUCTION PHASE

SCALE	DWG. NO.	REV.
OR AS NOTED	H337697-4510-07-012-0001	A

DWG. NO. H337697-4510-07-012-0002

m

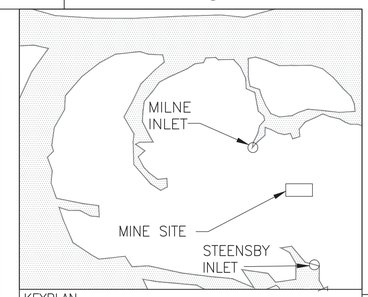
594500 E | 596000 E | 597500 E | 599000 E

7803500 N | 7802000 N | 7800500 N | 7799000 N | 7797500 N

55 LAKE PUMP HOUSE
56 E-HOUSE
LANDFILL 57
54 E-HOUSE
53 ACCOMMODATION BUILDING
52 UTILDORS
51 RAIL & LIGHT VEHICLE MAINTENANCE BUILDING
FRESHWATER PIPELINE 79
MOW MATERIAL STORAGE 58
ON HOLD FOR PROPAGATION STUDY
50 SEWAGE TREATMENT BUILDING
CONTAINER STORAGE & VEHICLE PARKING 49
E-HOUSE 48
47 E-HOUSE
COMMUNICATION TOWER
E-HOUSE 59
FIRE PUMP HOUSE BUILDING 60
46 INSPECTION SHED
ACCESS ROAD 45
SOLID WASTE DISPOSAL & INCINERATOR SYSTEM 44
ADMINISTRATION, LAB & FIRST AID BUILDING 61
43 POWER PLANT BUILDING
POTABLE WATER TREATMENT BUILDING 62
80 EFFLUENT PIPELINE
E-HOUSE 63
42 UNHEATED STORAGE BUILDING
EMERGENCY BOILER HOUSE 64
1 FUEL STORAGE
STORAGE SHEDS 41
E-HOUSE 65
PERMANENT LAYDOWN AREA 40
2 STORM WATER MANAGEMENT POND
RAILWAY SPUR TRACKS 39
3 OPTIONAL RAILWAY SPUR
RAILWAY 81
4 WASTE TRANSFER STATION
TWIN ROTARY RAIL CAR DUMPER c/w LCR (6000MTPH) 38
5 PERMANENT LAYOUT AREA
UNIT SUBSTATION 37
6 TERTIARY CRUSHER PRODUCT CONVEYOR
71 AMMONIUM NITRATE STORAGE
7 FINE CONVEYOR
8 LUMP CONVEYOR
35 SCREEN FEED BIN CONVEYOR
RAIL RECLAIM CONVEYOR 36
9 TRANSFER HOUSE
10 TERTIARY CRUSHING STATION
11 TRANSFER HOUSE
12 LUMP STACKER/RECLAIMER & TRIPPER
66 E-HOUSE
UNIT SUBSTATION 34
67 AIR STRIP SHELTER
68 FIELD ELECTRICAL CENTRE
CARGO STORAGE BLD 69
13 ORE STOCKPILE STORM WATER POND
TRANSFER HOUSE 33
DEICING EQUIPMENT STORAGE 70
32 BARGE LOCATION
14 LUMP PRODUCT YARD CONVEYOR
PRIMARY SCREENING STATION 31
RUNWAY
FINE STOCK PILE 29
OVERSIZE LUMP CONVEYOR 30
15 LUMP STOCK PILE
AIRSTRIP
16 UNIT SUBSTATION
FINES YARD CONVEYOR 28
FINES STACKER & TRIPPER 27
72 RAILWAY TO FREIGHT DOCK
HELICOPTER PAD 78
LUMP STOCK PILE 26
73 UNIT SUBSTATION
LUMP PRODUCT RECLAIMER 25
STEENSBY INLET
17 SHIP LOADER FEED CONVEYOR
ACCESS ROAD
18 TRANSFER HOUSE
74 PROPOSED FREIGHT DOCK & FUEL UNLOADING
PORT SURGE BIN BUILDING 24
ACCESS ROAD 77
19 SHIP LOADER FEED CONVEYOR
DOCK OFFICE BUILDING 76
ORE DOCK OPERATIONS FACILITY 23
E-HOUSE 22
DOCK OFFICE BUILDING 75
ORE LOADING DOCK 21
DRIVE HOUSE 20

RECLAMATION AREA - AFTER OPERATION

AREA	m²	AREA	m²
1	100,430	42	1,080
2	25,320	43	3,740
3	8,100	44	2,500
4	26,010	45	89,100
5	130,440	46	3,500
6	430	47	130
7	300	48	60
8	420	49	5,300
9	490	50	480
10	580	51	8,880
11	350	52	2,080
12	360	53	5,260
13	49,330	54	140
14	3,150	55	40
15	74,220	56	40
16	140	57	10,000
17	1,200	58	2,670
18	410	59	140
19	1,110	60	290
20	750	61	900
21	15,440	62	290
22	140	63	140
23	220	64	130
24	220	65	140
25	360	66	40
26	29,670	67	230
27	220	68	360
28	1,250	69	540
29	52,050	70	520
30	460	71	15,630
31	1,800	72	29,030
32	24,000	73	220
33	240	74	2,200
34	100	75	610
35	22,500	76	220
36	830	77	7,650
37	100	78	1,430
38	1,280	79	6,260
39	16,000	80	24,420
40	198,780	81	114,380
41	24,510	**TOTAL**	**1,154,480**



KEYPLAN

LEGENDS:

- RECLAIMED AREA AFTER OPERATION
- 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):

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SCALE 300 150 0 500 1000 1500 m

SCALE 1:15,000

DRAWING NO.	DRAWING TITLE

REFERENCE DRAWINGS

ISSUED FOR USE

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE
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A	ISSUEDE FOR INFORMATION	DF	AG	TH	11/09/11

REVISIONS

REV.	ISSUE FOR	AUTH. BY			DATE
B	ENVIRONMENTAL PERMITTING	SP	TH		07/02/12
A	ENVIRONMENTAL PERMITTING	SP	TH		11/09/11

ISSUE AUTHORIZATION

HATCH™

DESIGNED BY	DRAWN BY
A. GRZEGORCZYK	D. FUNG
DATE	DATE
CHECKED BY	DISCIP. ENGR.
T. HO	J. BINNS
DATE	DATE
PROJ. DES. COORD.	PROJ. ENGR.
DATE	DATE
PROJ. MGR.	
DATE	

Baffinland Iron Mines Corporation

MARY RIVER PROJECT

PRELIMINARY MINE CLOSURE AND RECLAMATION PLAN
STEENSBY PORT FINAL CLOSURE PHASE

SCALE: OR AS NOTED

DWG. NO. H337697-4510-07-012-0002

REV. B

Appendix B
Mine Closure and Reclamation Planning Guidelines, Regulations and Lease Requirements

The following tables provide cross-referencing to where responses to key Mine Closure and Reclamation Planning guidelines, regulations or lease requirements can be found in this document. The referenced section of this ICRP provides an outline, at a conceptual level, of how the proponent plans to address the particular requirement.

Table B-1: Territorial Lands Act

Territorial Land Use Regulations (TLUR 2010)		
Key Mine Closure and Reclamation Plan Guidelines	**TLUR Section**	***ICRP* (Section)**
All closure work shall be carried out in accordance with permit requirements as stated in the *Territorial Land Use Regulations.*	s. 8 through 10, 31	2.5
"Subject to the terms and conditions of his permit or the express written authority of an inspector, every permittee shall replace all materials removed by him in the course of excavating, other than rock trenching, and shall level and compact the area of excavation."	s. 12	Table 5.1
"Restore the channel and bed of the stream to their original alignment and cross-section."	s. 13.(1 b)	Table 5.1
"Subject to the terms and conditions of his permit, every permittee shall, after completion of a land use operation, restore the permit area as nearly as possible to the same condition as it was prior to commencement of the land use operation."	s. 18	Table 5.1
Remove all buildings equipment, machinery, and storage equipment/containers and materials onsite.	s. 19.(1)	5.2.4
A final plan will be issued to the "engineer" within 60 days following completion of the land use operation or expiration of the permit.	s. 33	2.3.1.4
All plan drawings shall be: • Drawn to scale that clearly illustrates all mine features. • Shows the scale on the drawing. and • Provide geographic co-ordinates.	s.35	Appendix A
"In order to ensure that a permittee complies with the terms and conditions of his permit with these Regulations, the engineer may include in the permit a condition that the permittee deposit with the Minister a security deposit not exceeding $100,000."	s. 36	10

Table B-2: Nunavut Impact Review Board

Guidelines for the Preparation of an Environmental Impact Statement for Baffinland Iron Mines Corporation's Mary River Project (2009)	
Key Mine Closure and Reclamation Plan Guidelines	***ICRP* (Section)**
"To ensure that issues associated with the effective closure and reclamation of all Project Components is considered at the earliest possible stage in the mine development process, thereby influencing mine design to take into account environmental issues related to mine closure and reclamation."	All
"To establish major targets for reclamation of lands potentially affected by the Project."	Table 5.1
"Description of reclamation methods, time frames and schedules, including proposed notice periods to employees and public."	5
"Description of temporary closure measures and a discussion of at what point a temporary closure should be considered permanent for the purposes of requiring implementation."	0
"Discussion of research programs to address challenges to reclamation, given the local conditions."	Appendix D
"Considerations for the Projection of public health and safety."	7.1.1, & 7.3.1
"Description of closure and post - closure monitoring of environmental components."	9
"Discussion of the need for long - term monitoring and maintenance by establishing physical and chemical stability."	9
"Discussion on reduction or elimination of environmental effects once the mine ceases operation."	Table 5.1 & 9
"Discussion regarding re-establish conditions that permit the land to return to similar pre-mining land use."	Table 5.1 & 5.1.1
"Consideration for ML/ARD potential of rocks, in association with related waste rock management strategies."	5.2.1.9 & 5.2.2.7
"Any considerations for the restoration of the natural aesthetics of the Project."	Table 5.1

Table B-3: AANDC (CIRNAC) Guidelines

Mine Site Reclamation Guidelines for the Northwest Territories (2007)	
Key Mine Closure and Reclamation Plan Guidelines	***ICRP* Report Section**
Develop and implement preventive and control strategies to effectively minimize the potential for ARD and ML to occur.	5.2.2
Where ARD and ML are occurring as a result of mine activities, mitigate and minimize impacts to the environment.	5.2.1.9 & 5.2.2.9
Re-establish the pre-mining ground cover, which may involve encouraging self-sustainable indigenous vegetation growth.	5
Remediate any sources of contamination that may have been created during the development and operation of the mine site in order to protect humans, wildlife, and environmental health.	Table 5.1
Ensure physical stability of residual earth structures for environmental, human, and wildlife safety.	Table 5.1
Open Pit: • Minimize access to protect human and wildlife safety. • Implement water management strategies to minimize and control migration and discharge of contaminated drainage, and if required, collect and treat contaminated water. • Stabilize slopes to minimize erosion and slumping.	5.2.1
Waste Rock: • Minimize erosion, thaw settlement, slope failure, collapse or the release of contaminants or sediments.	5.2.2
Buildings and infrastructure, equipment: • Return area to its original state or to a condition compatible with the end land-use targets.	5.2.4
Restore natural drainage patterns where surface infrastructure has been removed.	Table 5.1
Landfills: • Control erosion and effects to the ground thermal regime.	5.2.7
Water Management Systems: • Dismantle and remove/dispose of as much of the system as possible and restore natural or established new drainage patterns. • Stabilize and protect from erosion and failure for the long term.	Table 5.1 & 5.2.8

Table B-4: AANDC (CIRNAC) Policies

Mine Site Reclamation Policy for Nunavut (2002) and Mine Site Reclamation Policy for the Northwest Territories (2002)	
Key Mine Closure and Reclamation Plan Guidelines	***ICRP* Report Section**
Areas should be returned to viable and self sustaining areas where practical.	5.1.1
Use best management principles such as progressive reclamation and reduce the environmental risk.	6
Communication and consultation shall be undertaken with all applicable parties.	2.3.1.3 & 2.4
Closure impacts for all mine components.	Table 5.1
Closure costs estimates should be undertaken by a third party using a recognized methodology such as RECLAIM. Closure cost estimates should include contingency factors.	10
Inclusion of a progressive reclamation plan.	6
Removal/stabilization of all structures.	5.2.4 & 5.2.5
Reclaim and stabilize waste rock stockpiles remaining on site.	5.2.2
Reclaim the disturbed surface areas to acceptable standards.	Table 5.1
Water quality at closure shall meet or exceed the accepted standards.	Table 5.1
Temporary Closure measures shall be included in the Preliminary Closure Plan and cost estimate.	7
Inclusion of a post - closure monitoring program.	9
Detailed closure and decommissioning of the following: • Buildings and other structures. • Roads. • Airstrips. • Waste rock stockpiles. • Ore stockpiles • Quarries. • Open pit. • Petroleum and chemical storage areas and facilities. • Pipelines. • Power corridors. • Sewage and waste disposal areas and Mine drainage.	5.2
Re-vegetation of the site where practical.	5
Meet or exceed applicable water standards.	Table 5.1
Recycle materials where practical.	5.2.7
Closure cost estimate to be calculated for the total financial security for final closure.	10
Utilization of a recognized methodology for calculating the closure costs (i.e. RECLAIM model).	10

Mine Site Reclamation Policy for Nunavut (2002) and Mine Site Reclamation Policy for the Northwest Territories (2002)	
Key Mine Closure and Reclamation Plan Guidelines	***ICRP* Report Section**
Establish financial security to be provided to the Minister of Aboriginal Affairs and Northern Development Canada (previously Indian Affairs and Northern Development).	10

Table B-5: AANDC (CIRNAC) Guideline

Mine Reclamation in the Northwest Territories and Yukon (1992)	
Key Mine Closure and Reclamation Plan Guidelines	***ICRP* Report Section**
Preliminary Closure Plan objectives are to: • Protect the public health and safety. • Prevent and/or reduce the environmental deterioration. • Return all disturbed areas to the original state or an accepted level of reclamation.	N/A
Ensure post-closure physical and chemical stability.	5.1.1
Development of a monitoring program to assess the effectiveness of the restoration to be undertaken between the Proponent and Indian and Northern Affairs Canada.	9
Reclaimed areas should be returned to previous land use and aesthetics, to the extent possible.	Table 5.1
Include temporary closure and indefinite (long-term) Preliminary Closure Plans.	7
Mine features should be closed in accordance with the guidelines provided in Tables 5.2 through Table 5.8 (Robertson and Kirsten 1992).	5
Inclusion of a fully developed closure cost estimate.	10
Re-vegetation where practical. Local arctic species and distributions should be considered.	5.2

Table B-6: Northwest Territories Water Board Guidelines

Guidelines for Abandonment and Restoration Planning for Mines in the Northwest Territories (1990)	
Key Mine Closure and Reclamation Plan Guidelines	***ICRP* Plan Report Section**
Evaluation of ML/ARD potential for open pit, waste rock stockpiles and disturbed areas.	5.2.1 & 5.2.2 (ongoing process)
Cover design for waste rock stockpiles, if required. Stockpiles should be designed and contoured to ensure stability.	5.2.2
Re-vegetation of disturbed areas, where practical.	5.2
Open pit closure preferably backfilling or flooding.	5.2.1
Stability of open pit should be investigated.	5.2.1
Quarries should be backfilled and contoured to match the surrounding topography.	5.2.3
Removal of fuel and chemical storage tanks and associated piping and plumbing if applicable.	5.2.7
Fuel contaminated soils should be remediated.	5.2.7 & 9.4
Chemical storage facilities should be removed from site.	7.1.5 & 7.3.5
Soils surrounding chemical facilities should be tested for contamination and where present be removed from site.	9.4
Culverts should be removed from site.	5.2.8
Airstrips should be left intact, unless deemed unsafe.	5.2.6
Natural drainage should be restored to the site. Roads that do not impede the natural drainage may remain intact.	5.2.6 & 5.2.8
Solid wastes should be dealt with in responsible manner.	5.2.7
Hazardous wastes are to be disposed at an approved facility.	5.2.7
Buildings and structures should be removed from the site.	5.2.4
Concrete foundations may be left in a safe condition.	5.2.4
The Preliminary Closure Plan should include a planned shutdown/temporary closure scenario.	7.1
The Preliminary Closure Plan should include a long-term shutdown/Long-term Closure scenario.	7
The Preliminary Closure Plan should include a final abandonment/final closure scenario.	5
It is encouraged that site closure include phased plan development (progressive closure).	6
A monitoring program should be devised to measure the effectiveness of the site closure.	9
Financial security is required for the closure phase.	10

Appendix C
Site Photos of Current Site Condition (2017/2018)

Mary River Mine Site

~~(Aerial photos of existing site conditions, 2017)~~

Mary River Mine Site – View South

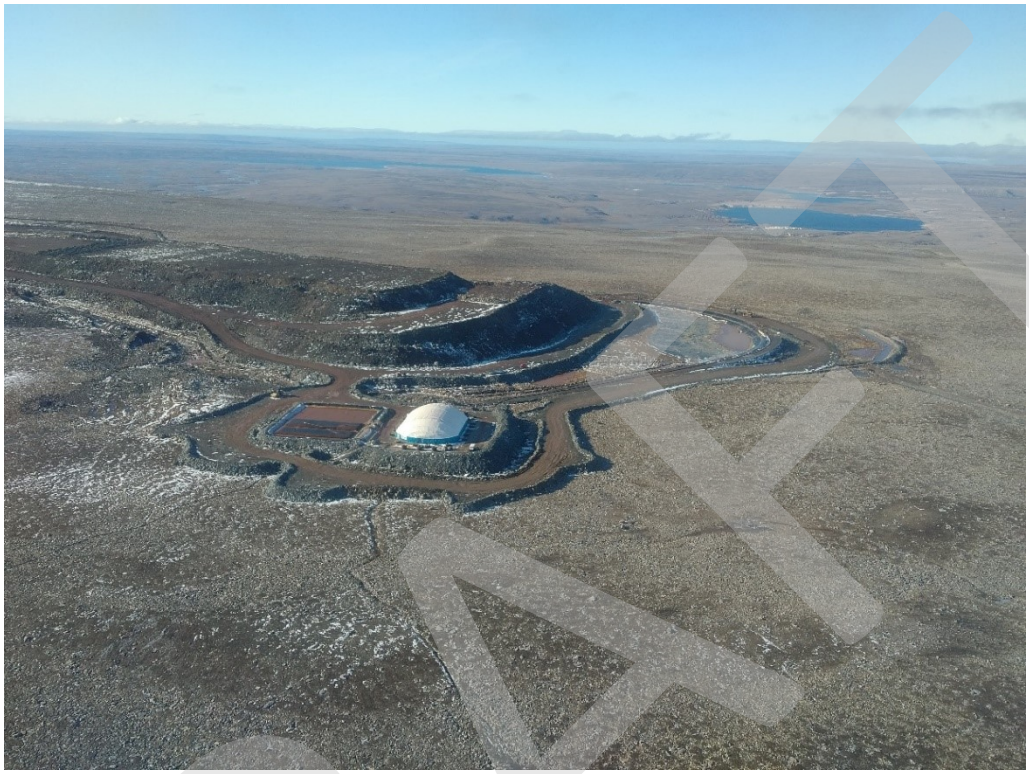
Mary River Mine Site – Close-up of Accommodations Complex and Tank Farm

Mary River Mine Site – View West of Accommodation Complex and Tank Farm

Mary River Mine – 800 Person Camp (September 2018)

Mary River Mine

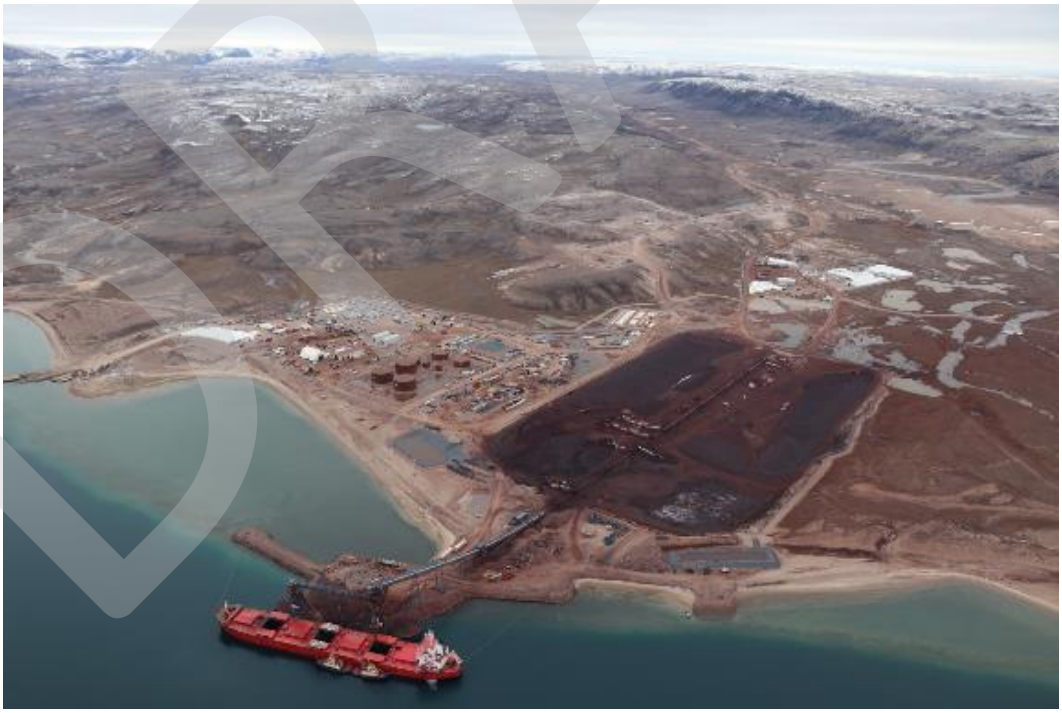
Mary River Mine (September 2018)



Waste Rock Facility, facing northeast

Milne Port

Milne Port – View South



Milne Port – View Southeast

Milne Port – View Northwest

Close-up of Milne Port Tank Farm and Ore Stockpiles

Tote Road

Tote Road Water Crossing

Tote Road

Steensby Camp

Steensby Camp – View Northwest

Mid-Rail Camp