DWG. No. H353004-10000-270-282-0001-0001

WATER BUILDING MINE

FIRE WATER SYSTEM - MSC

EXISTING FIRE WATER (RAW WATER) STORAGE 95m³

EXISTING PUMPSTATION

RAW WATER SUPPLY CAMP LAKE

RAW WATER PUMPHOUSE

WATER TREATMENT PLANT - MSC

NEW RAW WATER TANK 65m³

EXISTING RAW WATER TANK 71m³

TREAT-MENT PROCESS PLANT 81.6m³/day

EXISTING POTABLE WATER TANKS 46m³

NEW POTABLE WATER TANK 65m³

EXISTING POTABLE WATER PUMPSTATION

BACKWASH PUMPSTATION

BACKWASH WATER

MINE SITE COMPLEX (MSC) OFFICES & LABORATORY (NOTE 2) (NOTE 5)

SEWAGE

SEWAGE TANK 20m³ (TBC)

BOTTLED WATER TO OFFICES AND LUNCH ROOMS

HAZARDOUS WASTE OR LICENSED DISCHARGE

KM 84 CAMP

RAW WATER STORAGE TANK

68 BED CAMP

EXISTING SEWAGE TANK

RAW WATER BY WATER TRUCK

NEW TRUCK WORKSHOP

RAW WATER TANK

NEW TRUCK WASHBAY AND WORKSHOP

EFFLUENT WATER TANK

REMOTE WASHROOMS

SEWAGE BY TRUCK

CONSTRUCTION & ROAD DUST SUPPRESSION (NOTE 3)

EXISTING TRUCK WORKSHOP

RAW WATER TANK

EXISTING TRUCK WORKSHOP WASHBAY

EFFLUENT WATER TANK

TREATED WASTE WATER BY TRUCK

WEATHERHAVEN CAMP

EXISTING RAW WATER STORAGE

WATER TREATMENT PLANT

FIRE WATER SYSTEM

56 BEDS (NOTE 1)

EXISTING SEWAGE TANK

SEWAGE BY TRUCK

800 PERSON CAMP

RAW WATER TANK 250m³

POTABLE WATER SYSTEM (NOTE 10)

FIRE WATER SYSTEM

POTABLE WATER TANK 250m³

800 BEDS (NOTE 4)

NOTE 9

SEWAGE BY TRUCK

TREATED WASTE WATER BY TRUCK

SEWAGE RECEIVING PUMP STATION

SEWAGE RECEIVING STATION 25m³

SEWAGE TREATMENT PLANT No.1 NOTE 7

TREATED EFFLUENT PUMPSTATION

TREATED EFFLUENT TANK 45m³

NOTE 8

TREATED EFFLUENT TO LICENSED DISCHARGE

NOTE 6

LEGEND

- CONTINUOUS FLOW
- INTERMITTENT FLOW
- FACILITY - NEW/UPGRADED FOR PROJECT
- FACILITY - EXISTING

NOTE:

1. INCLUDES 56 BEDS. FLOWS SHOWN FOR 56 BEDS. WEATHERHAVEN TO BE DECOMMISSIONED IN 2019.
2. 210 BEDS TO BE DECOMMISSIONED IN 2019. OFFICES, LAUNDRY AND LABORATORY TO REMAIN. FLOW SHOWN EXCLUDES 210 BEDS.
3. VOLUME WILL INCREASE AS ADDITIONAL ROADS ARE CONSTRUCTED.
4. CAMP COMMISSIONED IN 2018/2019. FLOW SHOWN FOR 792 BEDS.
5. MSC STP TO BE MOVED TO PSC IN 2019/2020.
6. 3" HDPE PIPELINE.
7. CAPACITY 250m³/day.
8. PUMPSTATION COMMISSIONED IN 2019.
9. TBC - POSSIBILITY MAY BE TRUCKED TO THE PORT.

PERMIT TO PRACTICE
HATCH LTD.
Signature James Wikston
Date 2019-04-11
PERMIT NUMBER: P 512
The Association of Professional Engineers, Geologists and Geophysicists of NWT/NU

Stream No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Stream Description	RAW WATER FROM CAMP LAKE	RAW WATER TO FIRE TANKS	FIRE WATER TO MSC	RAW WATER TO MSC WTP	POTABLE WATER TO MSC (OFFICES, LAB & LAUNDRY)	SEWAGE FROM MSC (OFFICES, LAB & LAUNDRY)	RAW WATER TO REMOTE WASHROOMS	SEWAGE FROM REMOTE WASHROOMS	CONST. & ROAD DUST SUPPRESSION	RAW WATER TO 800 PERSON CAMP	SEWAGE FROM 800 PERSON CAMP TO STP # 1	TREATED EFFLUENT DISCHARGE FROM STP # 1	RAW WATER TO W.HAVEN CAMP	SEWAGE FROM W.HAVEN CAMP	RW TO NEW TRUCK WASHBAY	EFFLUENT FROM NEW TRUCK WASHBAY	RW TO EXISTING TRUCK WASHBAY	EFFLUENT FROM EXISTING TRUCK WASHBAY	WASTE WATER TO LICENSED DISCHARGE OR HAZ WASTE DISPOSAL	TOTAL SEWAGE TO STP #1	SEWAGE FROM MSC TO STP #1	BACKWASH WATER FROM MSC WTP	RAW WATER TO KM 84 TOTE ROAD CAMP	SEWAGE FROM KM 84 TOTE ROAD CAMP	BACKWASH WATER FROM 800 PERSON CAMP WTP	POTABLE WATER TO STP #1 FOR SCREEN SPRAYS
Fluid	RAW WATER	RAW WATER	RAW WATER	RAW WATER	POT. WATER	SEWAGE	RAW WATER	SEWAGE	RAW WATER	RAW WATER	SEWAGE	TREATED EFFLUENT	RAW WATER	SEWAGE	RAW WATER	EFFLUENT	RAW WATER	EFFLUENT	WASTE WATER	SEWAGE	SEWAGE	WASTE WATER	RAW WATER	SEWAGE	WASTE WATER	POT. WATER
Units	m3/day	-	m3/hr	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day	m3/day
Current Permit Limit	355.4	-	-	-	-	-	-	-	151.6	-	-	-	-	-												-
Calculated Flow (Average)	227	One off fill	113	13	12	12	2	2	20	165	158	205	11	11	1	1	1	1	2	204	13	1	14	14	6	1
Calculated Flow (Maximum)	278	One off fill	113	16	15	15	3	3	21	205	198	255	14	14	1	1	1	1	2	254	16	1	17	17	6	1

No.	DESCRIPTION	BY	CHK'D	DATE
2	DORMITORIES AND STP MOVED TO PSC, ADDITION OF NEW WATER TANKS	HV	PC	01-04-2019
1	APPROVED FOR USE	HV	PC	12-12-2018
0	APPROVED FOR USE	HV	PC	07-08-2018

REVISIONS

FOR USE

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REGISTERED PROFESSIONAL ENGINEER J.M. WIKSTON LICENSEE 2019-04-11 NT/NU

REG. PROFESSIONAL

H353004-10000-221-282-0001	MINE WATER & SEWAGE PFD - SUPERCEDED BY THIS DRAWING
DRAWING No.	DRAWING TITLE

REFERENCE DRAWINGS

HATCH

DRAFTSPERSON	H VINCENT	NR	04-06-2018
DESIGNER		NR	
CHECKER	P CHERRY		2019-04-09
DESIGN COORD.	R GOOSEN		2019-04-08
RESP. ENG.	J Wikston		2019-04-11
LEAD DISC. ENG.	P CHERRY		2019-04-09
AREA LEAD	M. HAAKSMA		2019-04-11
ENG. MANAGER	R GOOSEN		2019-04-08
AREA MANAGER	T ATIBA		19-4-18
ROLE	NAME	SIGNATURE	DATE

DRAWING APPROVAL STATUS: Approved for Use

Baffinland

BAFFINLAND IRON MINES LP
MARY RIVER EXPANSION PROJECT

MINE SITE
WATER AND SEWAGE
PROCESS FLOW DIAGRAM

SCALE NTS OR AS NOTED

DWG. No. H353004-10000-270-282-0001-0001

REV 2

SHEET SIZE: D

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