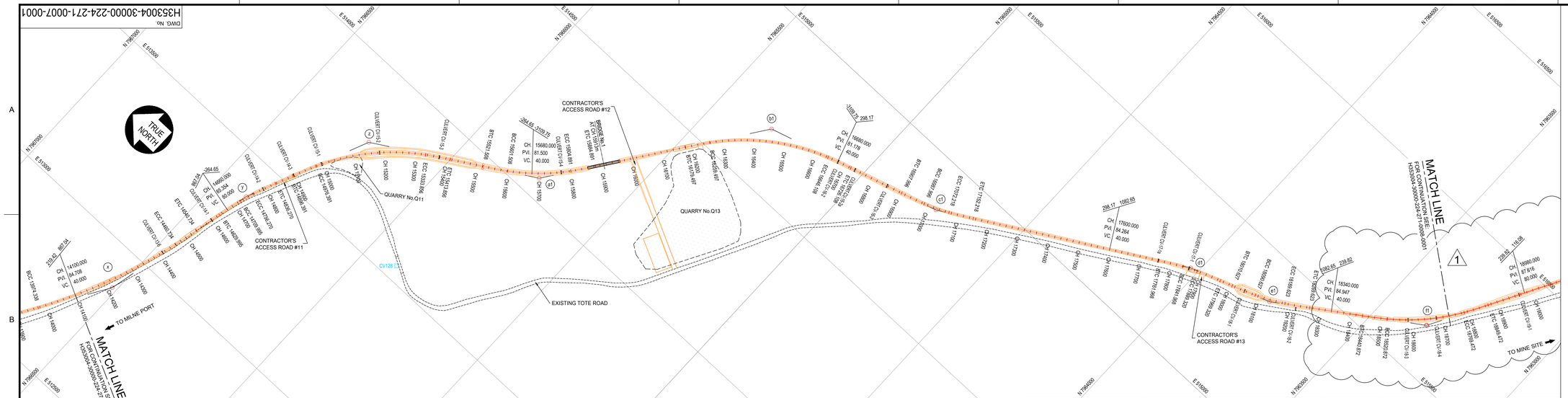
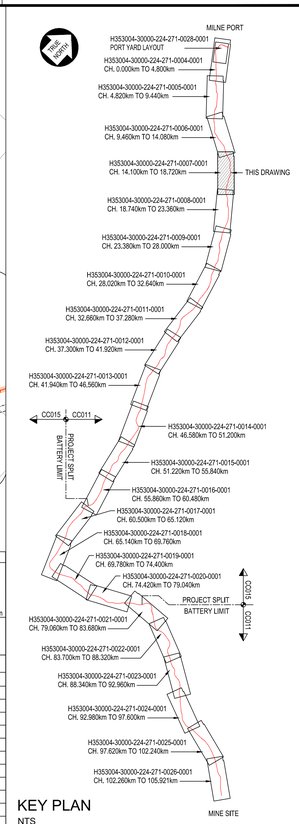
DWG. No. H353004-30000-224-271-0007-0001



CURVE x	CURVE y	CURVE z	CURVE a1	CURVE b1	CURVE c1	CURVE d1	CURVE e1	CURVE f1
RAD. = 1700.000m	RAD. = 700.000m	RAD. = 700.000m	RAD. = 680.000m	RAD. = 700.000m	RAD. = 700.000m	RAD. = 700.000m	RAD. = 700.000m	RAD. = 700.000m
SPIRAL = 80m	SPIRAL = 80m	SPIRAL = 80m	SPIRAL = 80m	SPIRAL = 80m	SPIRAL = 80m	SPIRAL = 80m	SPIRAL = 80m	SPIRAL = 80m
SHIFT = 0.157m	SHIFT = 0.381m	SHIFT = 0.381m	SHIFT = 0.392m	SHIFT = 0.381m	SHIFT = 0.381m	SHIFT = 0.381m	SHIFT = 0.381m	SHIFT = 0.381m
D.A. = 19.0895°	D.A. = 10.3358°	D.A. = 35.8070°	D.A. = 23.8774°	D.A. = 38.1927°	D.A. = 13.4418°	D.A. = 10.4239°	D.A. = 14.6511°	D.A. = 26.8962°
T.L. = 94.863m	T.L. = 103.340m	T.L. = 266.260m	T.L. = 183.857m	T.L. = 282.474m	T.L. = 122.530m	T.L. = 103.883m	T.L. = 130.034m	T.L. = 207.472m
ARC. = 486.396+160m	ARC. = 46.275+160m	ARC. = 357.465+160m	ARC. = 203.383+160m	ARC. = 386.611+160m	ARC. = 84.222+160m	ARC. = 47.352+160m	ARC. = 98.996+160m	ARC. = 248.600+160m
Dc = 1.027°	Dc = 2.495°	Dc = 2.495°	Dc = 2.568°	Dc = 2.495°	Dc = 2.495°	Dc = 2.495°	Dc = 2.495°	Dc = 2.495°
Ea = 0.500°	Ea = 1.500°	Ea = 1.500°	Ea = 1.500°	Ea = 1.500°	Ea = 1.500°	Ea = 1.500°	Ea = 1.500°	Ea = 1.500°
Eu,f = 0.651°	Eu,f = 1.294°	Eu,f = 1.294°	Eu,f = 1.377°	Eu,f = 1.294°	Eu,f = 1.294°	Eu,f = 1.294°	Eu,f = 1.294°	Eu,f = 1.294°
Vf = 40mph	Vf = 40mph	Vf = 40mph	Vf = 40mph	Vf = 40mph	Vf = 40mph	Vf = 40mph	Vf = 40mph	Vf = 40mph

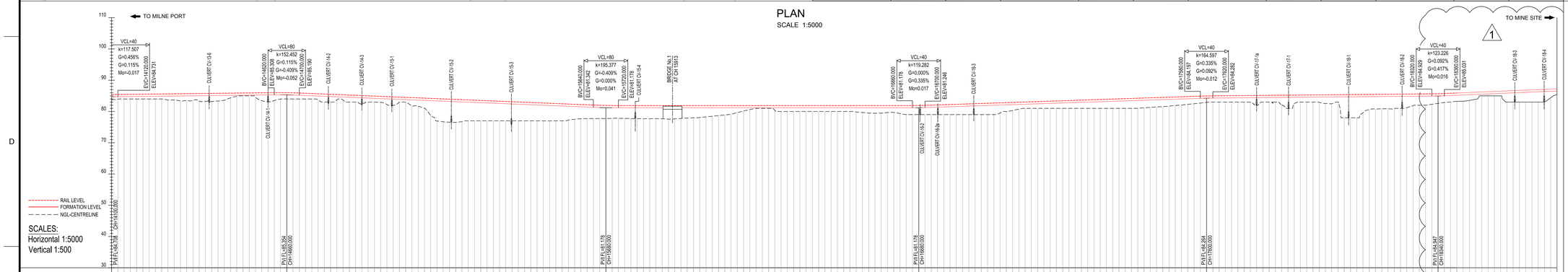
FORMATION SETTING OUT CO-ORDINATE LIST UTM (NAD83) ZONE 17

	Y	X		Y	X		Y	X		Y	X
PI CURVE x	512874.742	7966514.622	ECC CURVE z	513869.342	7966068.426	ECC CURVE b1	514739.970	7965117.605	ETC CURVE d1	515305.150	7963928.180
ECC CURVE x	513114.533	7966460.249	ETC CURVE z	513911.761	7966000.612	ETC CURVE b1	514764.304	7965041.408	BTC CURVE e1	515319.032	7963889.276
ETC CURVE x	513192.362	7966441.749	BTC CURVE a1	513967.102	7965908.274	BTC CURVE c1	514816.329	7964867.119	BCC CURVE e1	515347.344	7963814.466
BTC CURVE y	513279.363	7966421.788	BCC CURVE a1	514009.558	7965840.484	BCC CURVE c1	514840.663	7964790.922	PI CURVE e1	515362.733	7963766.806
BCC CURVE y	513356.971	7966402.419	PI CRURVE a1	514061.617	7965750.571	PI CURVE c1	514851.375	7964749.707	ECC CUEVE e1	515392.194	7963726.304
PI CURVE y	513380.085	7966398.679	ECC CURVE a1	514147.423	7965691.989	ECC CURVE c1	514874.012	7964713.639	ETC CURVE e1	515435.990	7963659.371
ECC CURVE y	513400.951	7966388.053	ETC CURVE a1	514211.878	7965644.623	ETC CURVE c1	514912.755	7964643.659	BTC CURVE f1	515532.466	7963517.884
ETC CURVE y	513475.027	7966357.873	CENTRE BRIDGE No.1	514234.675	7965628.549	BTC CURVE d1	515218.199	7964115.930	BCC CURVE f1	515578.779	7963452.667
BTC CURVE z	513530.263	7966334.133	BTC CURVE b1	514452.652	7965474.856	BCC CURVE d1	515256.942	7964045.950	PI CURVE f1	515649.348	7963346.469
BCC CURVE z	513603.136	7966301.154	BCC CURVE b1	514517.134	7965427.526	PI CURVE d1	515270.237	7964026.021	ECC CURVE f1	515761.794	7963286.353
PI CURVE z	513774.885	7966228.996	PI CURVE b1	514683.510	7965312.081	ECC CURVE d1	515276.838	7964002.991	ETC CURVE f1	515831.131	7963246.472



KEY PLAN

NTS



PLAN

SCALE 1:5000

LONGITUDINAL SECTION

LEGEND :

- APPROVED WATER SOURCES
- MASSIVE ICE FORMATION

NOTE :

1. EARTHWORKS FOOTPRINT DOES NOT INDICATE EXTENT OF FORMATION WIDENING AROUND CURVES WHERE APPLICABLE (REFER TO TYPICAL DRAWINGS) .
2. START / END DEVIATION REFER TO RAIL ALIGNMENT EXTENDING BEYOND EXISTING PERMITTING AREA BOUNDARIES.
3. CO-ORDINATE SYSTEM: UTM (NAD83) ZONE 17, NORTH, METER.
4. ALL DIMENSIONS SHOWN ARE IN METERS, UNLESS OTHERWISE SPECIFIED.
5. THIS DRAWING WAS PREVIOUSLY ISSUED AS: H353004-00000-224-272-00-07 -0001
6. FORMATION = TOP OF SUBGRADE.
7. CURVE DATA BELOW THE LINE IS IN IMPERIAL UNITS (IU).

PERMIT TO PRACTICE
HATCH LTD.
Signature
Date 2021-08-26
PERMIT NUMBER: P 512
The Association of Professional Engineers, Geologists and Geophysicists of NWT/NU

DRAWING No.	DRAWING TITLE
H353004-35000-232-272-0001-0001	BRIDGE GENERAL LAYOUT
H353004-30000-224-271-0008-0001	PLAN AND LONGITUDINAL SECTION - CH. 18+740 TO CH. 23+360
H353004-30000-224-271-0006-0001	PLAN AND LONGITUDINAL SECTION - CH. 9+460 TO CH. 14+080

REFERENCE DRAWINGS

REGISTERED PROFESSIONAL ENGINEER C.H. CHAN LICENSEE 2021 NTNU

REG. PROFESSIONAL

APPROVED FOR CONSTRUCTION

THIS DRAWING WAS PREPARED BY HATCH LTD. (HATCH) FOR THE EXCLUSIVE USE OF BAFFINLAND IRON MINES LTD. (CLIENT) AND ITS USE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT BETWEEN HATCH AND THE THE CLIENT, INCLUDING ANY LIMITATIONS ON LIABILITY CONTAINED THEREIN. THIS DRAWING AND ITS CONTENTS REMAIN THE INTELLECTUAL PROPERTY OF HATCH SUBJECT TO CLIENT'S ROYALTY-FREE, IRREVOCABLE, PERPETUAL AND NON-EXCLUSIVE LICENSE TO USE AND REPRODUCE THE DRAWING FOR PURPOSES CONNECTED WITH THE PROJECT. INCLUDING OPERATION, MAINTENANCE, MODIFICATION, EXPANSION, REPAIR AND REINSTATEMENT OF THE PROJECT. THIS DRAWING, AND THE INFORMATION CONTAINED HEREIN, SHALL BE TREATED AS CONFIDENTIAL FOR ALL OTHER PURPOSES AND SHALL NOT BE MODIFIED WITHOUT THE WRITTEN CONSENT OF HATCH.

No.	DESCRIPTION	BY	CHK'D	DATE
1	ALIGNMENT ALTERED (18320 TO 19800m) AND KEY PLAN UPDATED.	AJVN		2021/01/19
0	APPROVED FOR CONSTRUCTION	AJVN		2019/03/22

REVISIONS

HATCH

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	A VAN NIEKERK	NR	2017/01/24
DESIGNER	A VAN NIEKERK	NR	2017/01/07
CHECKER	C CHAN		2021/09/02
DESIGN COORD.	L NGWENYA		2021/08/13
RESP. ENG.	R HALIM		2021-08-26
LEAD DISC. ENG.	F VAN BILJON		2021/08/13
AREA LEAD	L NGWENYA		2021/08/13
ENG. MANAGER	F VAN BILJON		2021/08/13
AREA MANAGER	F PITTMAN	Fay Pittman	

DRAWING APPROVAL STATUS: Approved for Construction

Baffinland

BAFFINLAND IRON MINES LP
MARY RIVER PROJECT

RAIL SITE
PLAN AND LONGITUDINAL SECTION
CH. 14+100 TO CH. 18+720

SCALE 1:5,000 OR AS NOTED

DWG. No. H353004-30000-224-271-0007-0001 REV. 1

SHEET SIZE: A0

$USERNAME
$DATE
$TIME
$FILES