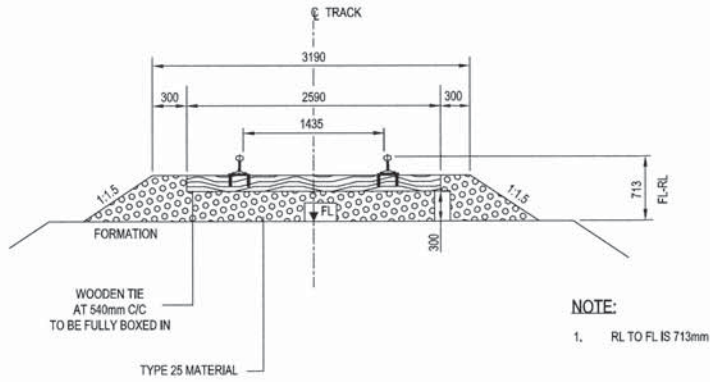
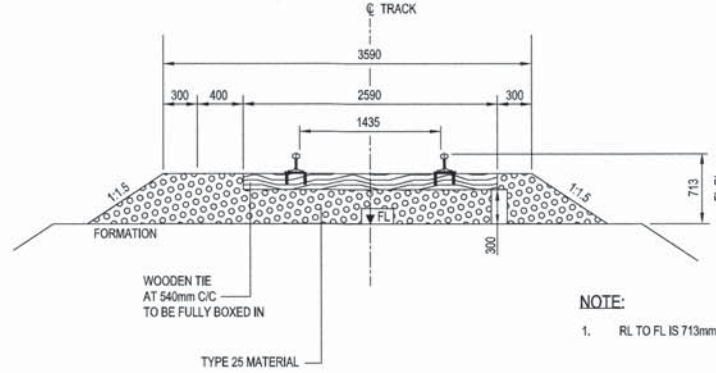


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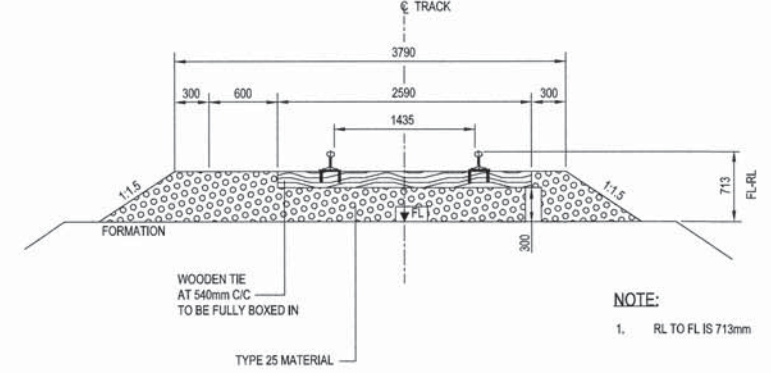
TYPICAL CROSS SECTION- SUPERSTRUCTURE
HARDWOOD TIES
R > 800m AND TANGENT TRACK
NTS

B



TYPICAL CROSS SECTION- SUPERSTRUCTURE
HARDWOOD TIES
400m < R <= 800m
NTS

C

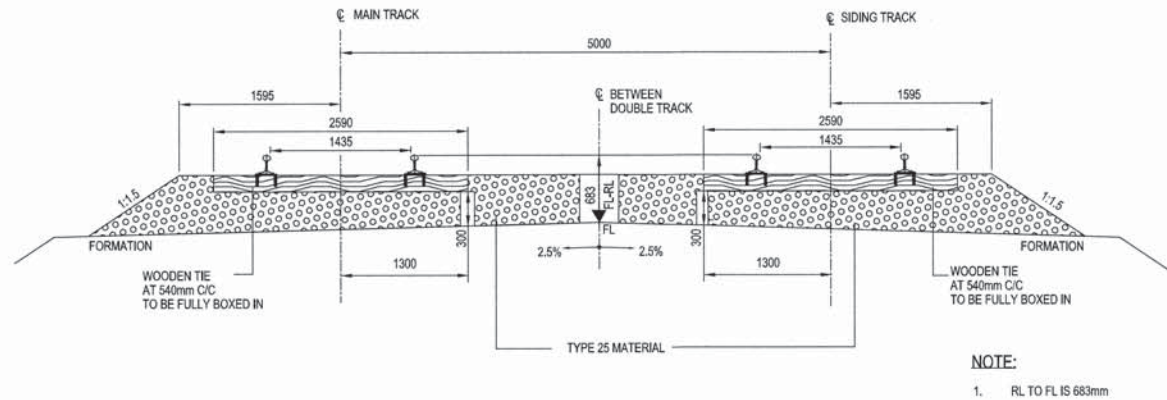


TYPICAL CROSS SECTION- SUPERSTRUCTURE
HARDWOOD TIES
R <= 400m
NTS

A

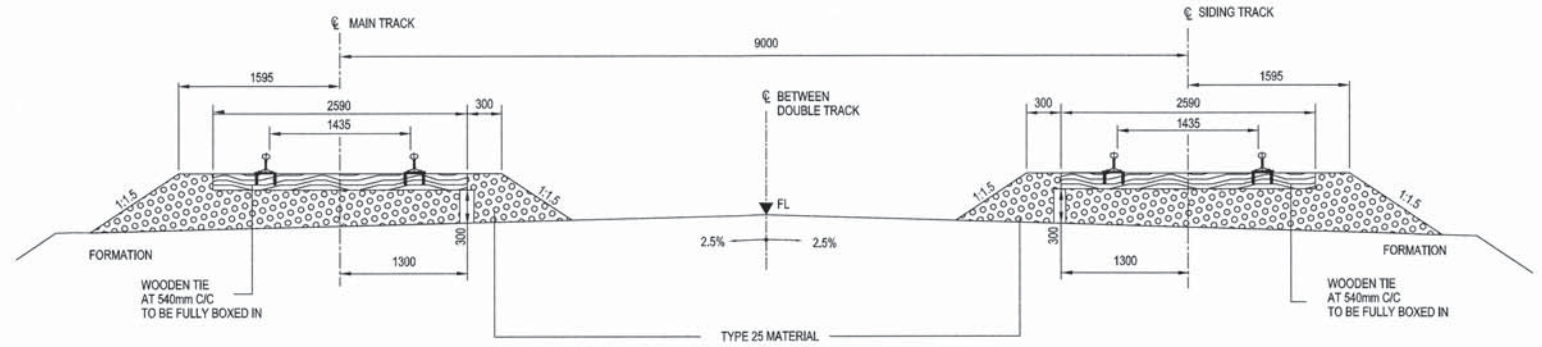
B

D



TYPICAL CROSS SECTION AT PASSING LOOP LOCATION-SUPERSTRUCTURE
HARDWOOD TIES
NTS

E



TYPICAL CROSS SECTION AT PASSING LOOP LOCATION- SUPERSTRUCTURE
IN YARD
HARDWOOD TIES
NTS

D

E

NOTE:
1. THIS DRAWING WAS PREVIOUSLY ISSUED AS H353004-00000-220-294-0003-0001.

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HATCH LTD.
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Date: 2018-11-08
PERMIT NUMBER: P 512
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F

DRAWING No.	DRAWING TITLE
H353004-30000-224-294-0006-0001	TYPICAL CROSS SECTION- SHEET 6 OF 6
H353004-30000-224-294-0005-0002	TYPICAL CROSS SECTION- SHEET 5 OF 6
H353004-30000-224-294-0005-0001	TYPICAL CROSS SECTION- SHEET 4 OF 6
H353004-30000-224-294-0004-0002	TYPICAL CROSS SECTION- SHEET 3 OF 6
H353004-30000-224-294-0004-0001	TYPICAL CROSS SECTION- SHEET 2 OF 6
REFERENCE DRAWINGS	



REG. PROFESSIONAL

APPROVED FOR CONSTRUCTION

No.	DESCRIPTION	BY	CHK'D	DATE
0	APPROVED FOR CONSTRUCTION	S.P.A	G.J	2018/10/19
REVISIONS				

THIS DRAWING WAS PREPARED BY HATCH LTD. (PHOTO) FOR THE EXCLUSIVE USE OF BAFFINLAND IRON MINES (P) (C) 2018. IT IS THE PROPERTY OF HATCH LTD. AND ITS USE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT BETWEEN HATCH AND THE CLIENT. INCLUDING ANY LIMITATIONS ON LIABILITY CONTAINED THEREIN. THIS DRAWING AND ITS CONTENTS REMAIN THE INTELLECTUAL PROPERTY OF HATCH LTD. SUBJECT TO CLIENT'S RENTAL, PERPETUAL, AND NON-EXCLUSIVE LICENSE TO USE AND REPRODUCE THE DRAWING FOR PURPOSES CONNECTED WITH THE PROJECT, INCLUDING THE CONSTRUCTION, COMPLETION, MAINTENANCE, EXTENSION, REINSTATEMENT AND REPAIR 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.

HATCH

DRAFTSPERSON	S PINKNEY-ATKINSON	NR	2018/09/26
DESIGNER	S PINKNEY-ATKINSON	NR	
CHECKER	GLEN JOHNSTONE	Johnstone, Glen	
DESIGN COORD.	GLEN JOHNSTONE	Johnstone, Glen	
RESP. ENG.	FANUS VAN BILJON		
LEAD DISC. ENG.	FANUS VAN BILJON		
AREA LEAD	FANUS VAN BILJON		
ENG. MANAGER	DANIEL STANGER		
AREA MANAGER	FAY PITTMAN		
ROLE	NAME	SIGNATURE	DATE

Baffinland

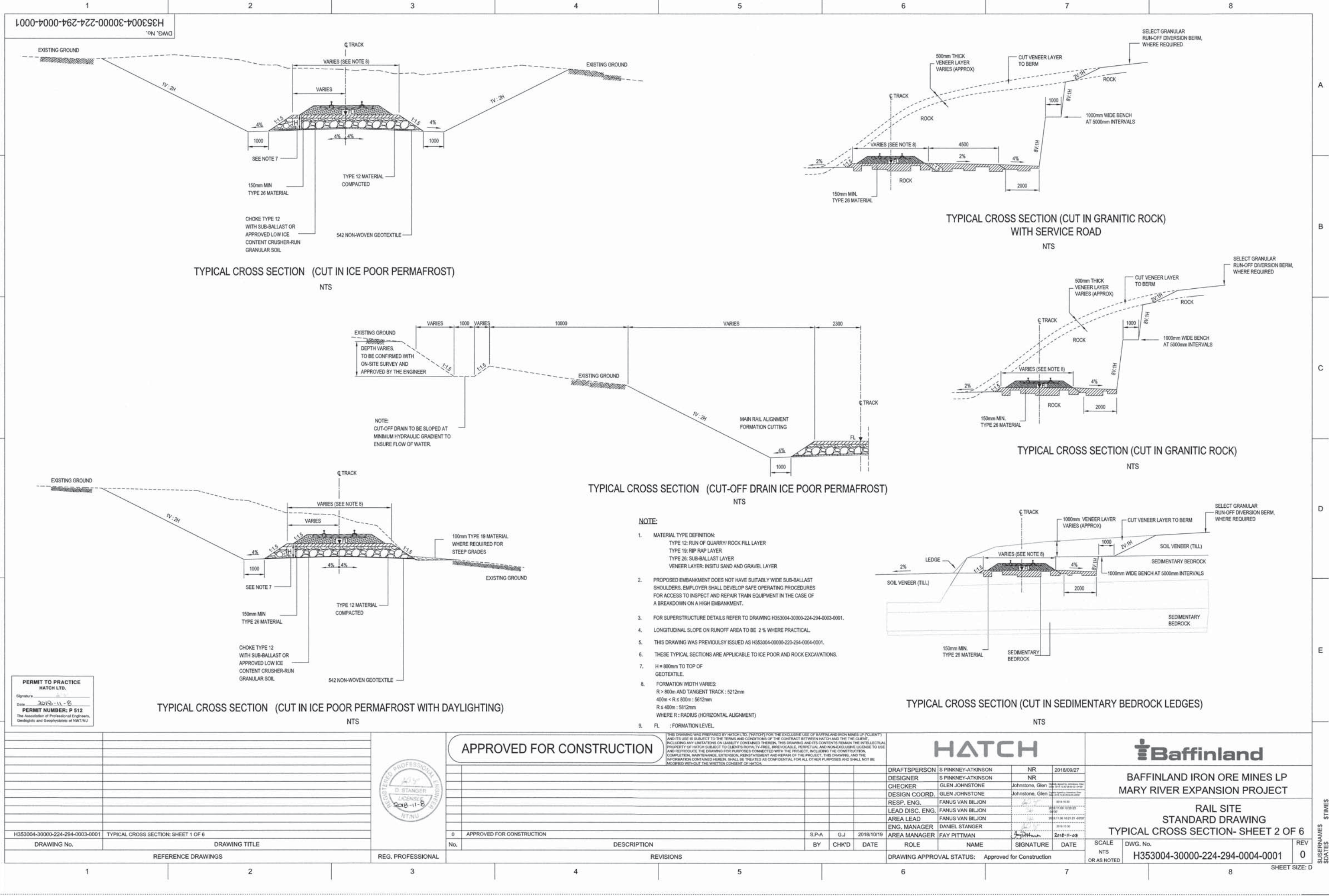
MARY RIVER EXPANSION STAGE 3
BAFFINLAND IRON ORE MINES

RAIL SITE
STANDARD DRAWING
TYPICAL CROSS SECTION- SHEET 1 OF 6

SCALE	DWG. No.	REV
NTS OR AS NOTED	H353004-30000-224-294-0003-0001	0

SUBSURNAMES
S.DATES
S.FILES
S.TIMES

SHEET SIZE: D



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H353004-30000-224-294-0003-0001	TYPICAL CROSS SECTION: SHEET 1 OF 6
DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	



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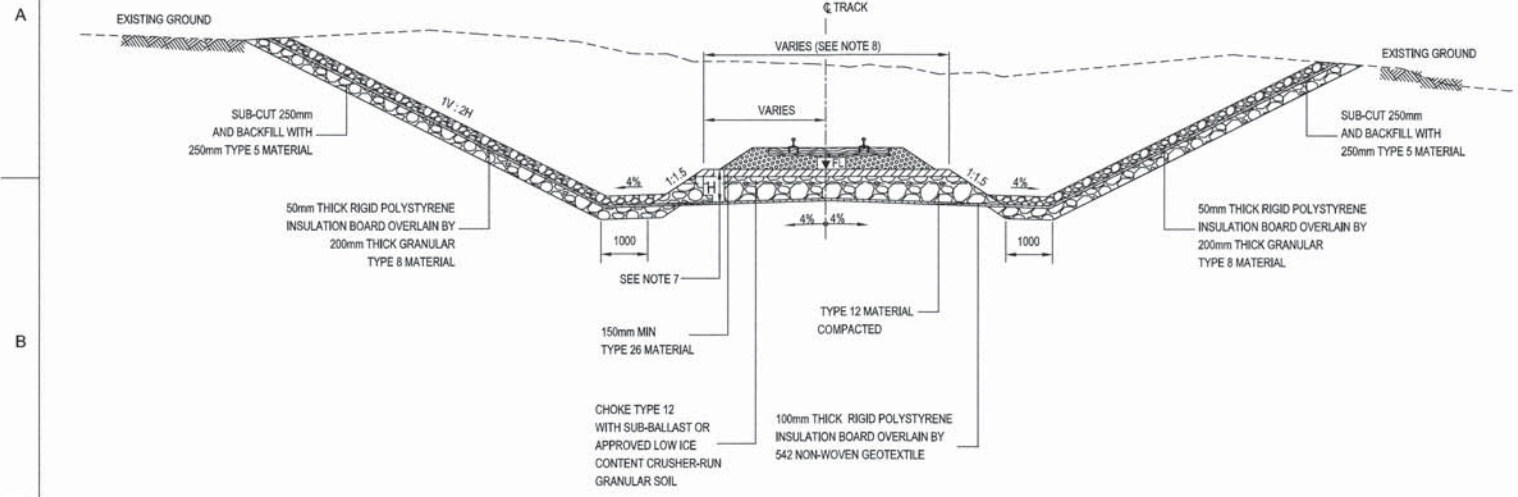
No.	DESCRIPTION	BY	CHK'D	DATE
0	APPROVED FOR CONSTRUCTION	S.P.A	G.J	2018/10/19

THIS DRAWING WAS PREPARED BY HATCH LTD. ("HATCH") FOR THE EXCLUSIVE USE OF BAFFINLAND IRON MINES ("BAFFINLAND") AND ITS USE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT BETWEEN HATCH AND 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 THE CONSTRUCTION, COMPLETION, MAINTENANCE, EXTENSION, RENOVATION AND REPAIR 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.

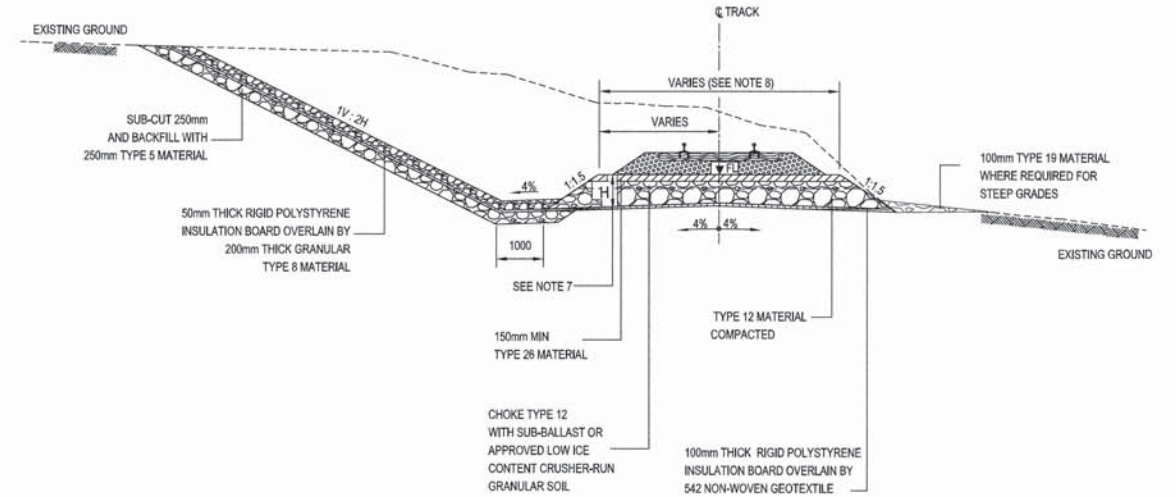
DRAFTSPERSON	S. PINKNEY-ATKINSON	NR	2018/09/27
DESIGNER	S. PINKNEY-ATKINSON	NR	
CHECKER	GLEN JOHNSTONE	Johnstone, Glen	
DESIGN COORD.	GLEN JOHNSTONE	Johnstone, Glen	
RESP. ENG.	FANUS VAN BILJON		
LEAD DISC. ENG.	FANUS VAN BILJON		
AREA LEAD	FANUS VAN BILJON		
ENG. MANAGER	DANIEL STANGER		
AREA MANAGER	FAY PITTMAN		
ROLE	NAME	SIGNATURE	DATE

Baffinland	
BAFFINLAND IRON ORE MINES LP MARY RIVER EXPANSION PROJECT	
RAIL SITE STANDARD DRAWING TYPICAL CROSS SECTION- SHEET 2 OF 6	
SCALE NTS OR AS NOTED	DWG. No. H353004-30000-224-294-0004-0001
REV 0	SHEET SIZE: D

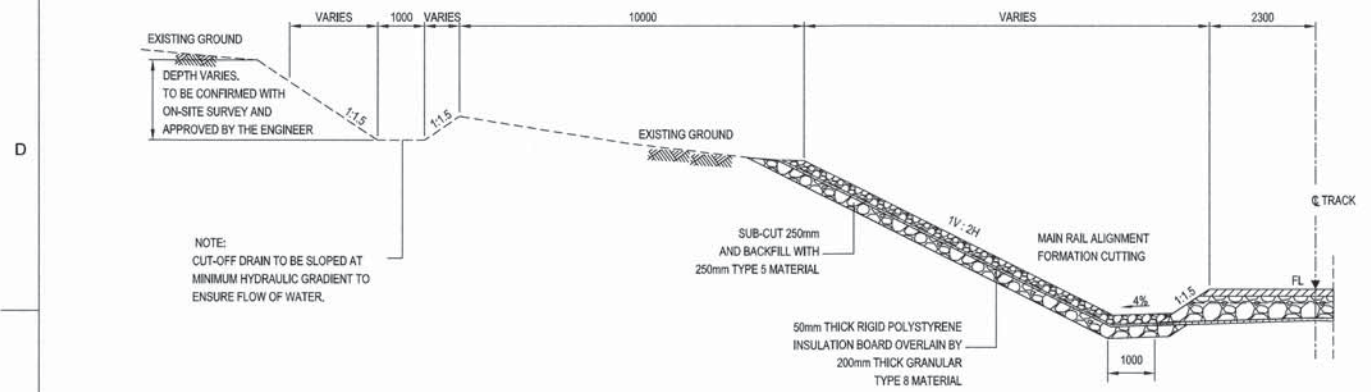
H353004-30000-224-294-0004-0002
DWG. No.



TYPICAL CROSS SECTION (CUT IN ICE RICH PERMAFROST)
NTS



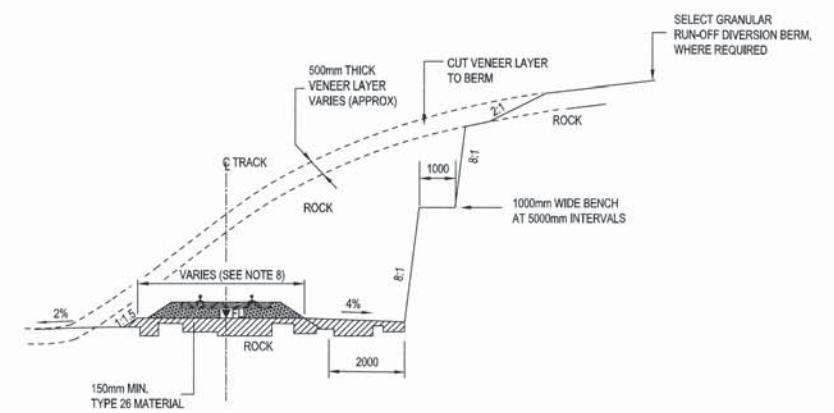
TYPICAL CROSS SECTION (CUT IN ICE RICH PERMAFROST WITH DAYLIGHTING)
NTS



TYPICAL CROSS SECTION (CUT-OFF DRAIN ICE RICH PERMAFROST)
NTS

NOTE:

- MATERIAL TYPE DEFINITION:
TYPE 12: RUN OF QUARRY/ ROCK FILL LAYER
TYPE 19: RIP RAP LAYER
TYPE 25: BALLAST LAYER
TYPE 26: SUB-BALLAST LAYER
VENEER LAYER: INSITU SAND AND GRAVEL LAYER
- PROPOSED EMBANKMENT DOES NOT HAVE SUITABLY WIDE SUB-BALLAST SHOULDERS. EMPLOYER SHALL DEVELOP SAFE OPERATING PROCEDURES FOR ACCESS TO INSPECT AND REPAIR TRAIN EQUIPMENT IN THE CASE OF A BREAKDOWN ON A HIGH EMBANKMENT.
- FOR SUPERSTRUCTURE DETAILS REFER TO DRAWING H353004-30000-224-294-0003-0001.
- LONGITUDINAL SLOPE ON RUNOFF AREA TO BE 2 % WHERE PRACTICAL.
- THIS DRAWING WAS PREVIOUSLY ISSUED AS H353004-00000-220-294-0004-0001.
- THESE TYPICAL SECTIONS ARE APPLICABLE TO ICE RICH PERMAFROST SOILS.
- H = 800mm TO UNDERSIDE OF POLYSTYRENE INSULATION
- FORMATION WIDTH VARIES:
R > 800m AND TANGENT TRACK : 5212mm
400m < R ≤ 800m : 5612mm
R ≤ 400m : 5612mm
WHERE R: RADIUS (HORIZONTAL ALIGNMENT)
- FL : FORMATION LEVEL.



TYPICAL CROSS SECTION (CUT IN GRANITIC ROCK)
NTS

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Signature
Date

H353004-30000-224-294-0003-0001	TYPICAL CROSS SECTION: SHEET 3 OF 8
DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

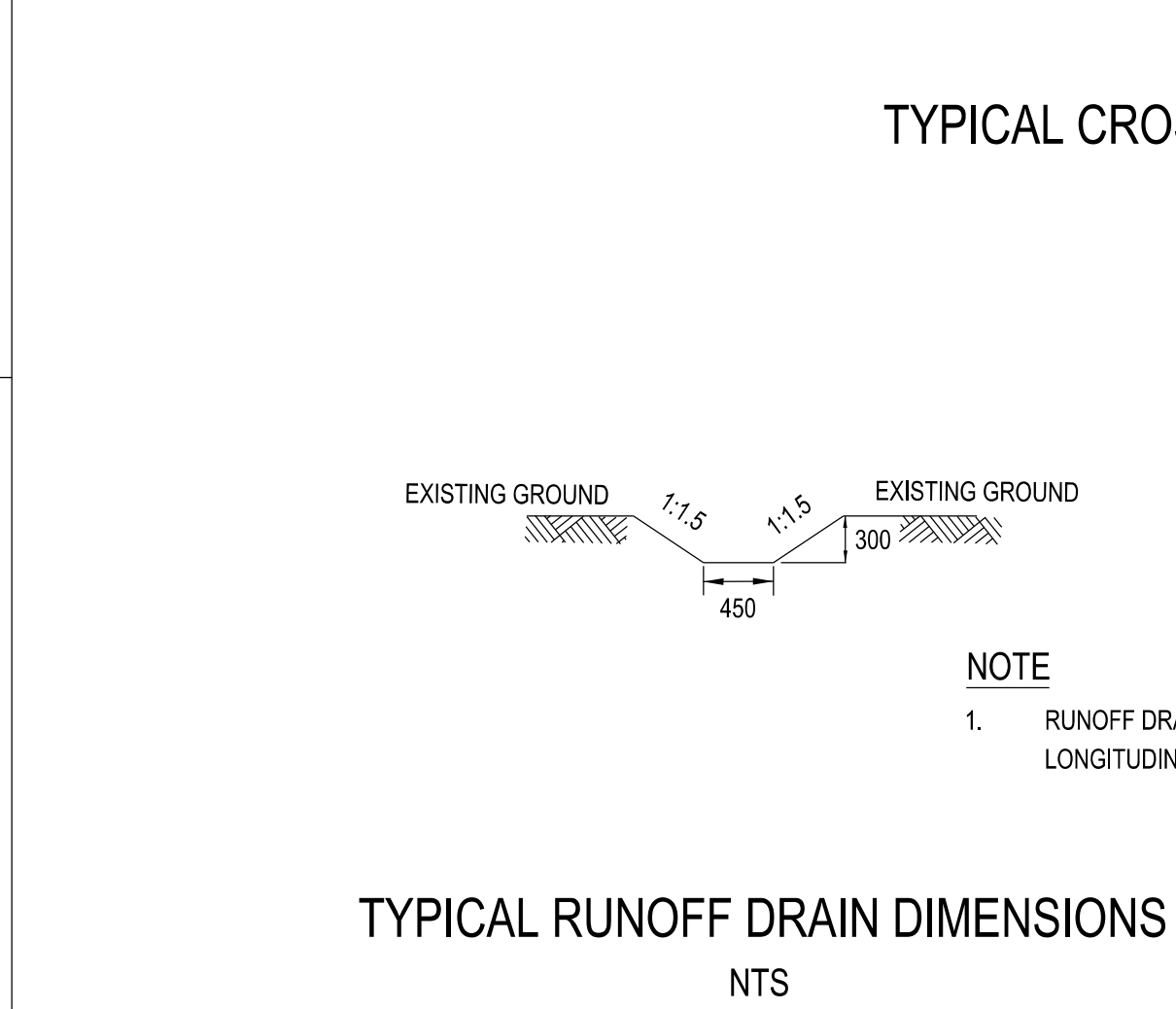
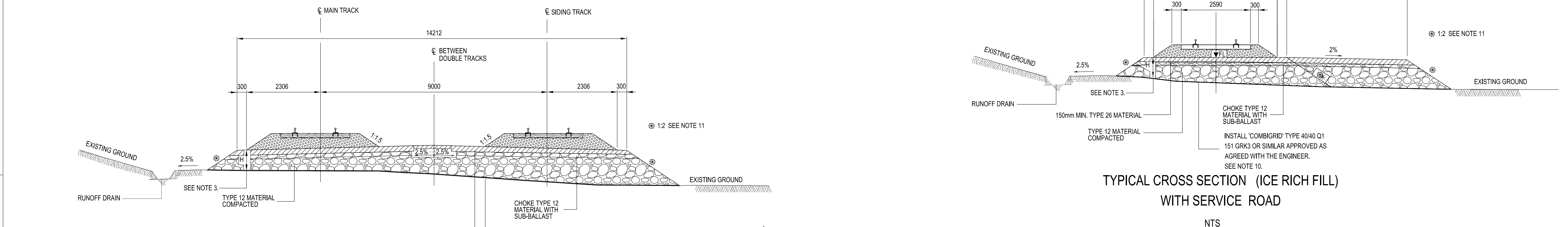
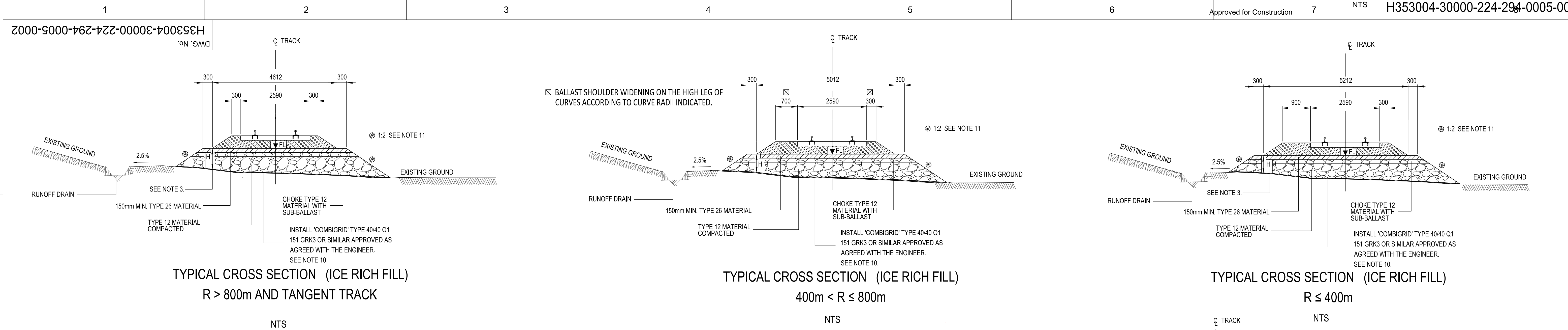


APPROVED FOR CONSTRUCTION	
No.	DESCRIPTION
0	APPROVED FOR CONSTRUCTION



THIS DRAWING WAS PREPARED BY HATCH LTD. (PROXY) FOR THE EXCLUSIVE USE OF BAFFINLAND IRON MINES LP (CLIENT), AND ITS USE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT BETWEEN HATCH AND THE CLIENT. INCLUDING ANY LIMITATIONS ON LIABILITY CONTAINED THEREIN. THIS DRAWING AND ITS CONTENTS REMAIN THE INTELLECTUAL PROPERTY OF HATCH SUBJECT TO CLIENTS RENTAL FEE. IRREVOCABLE, PERPETUAL AND NON-EXCLUSIVE LICENSE TO USE AND REPRODUCE THE DRAWING FOR PURPOSES CONNECTED WITH THE PROJECT, INCLUDING THE CONSTRUCTION, COMPLETION, MAINTENANCE, EXTENSION, RESTATEMENT AND REPAIR 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.			
BY	CHK'D	DATE	
SP-A		2018/10/19	

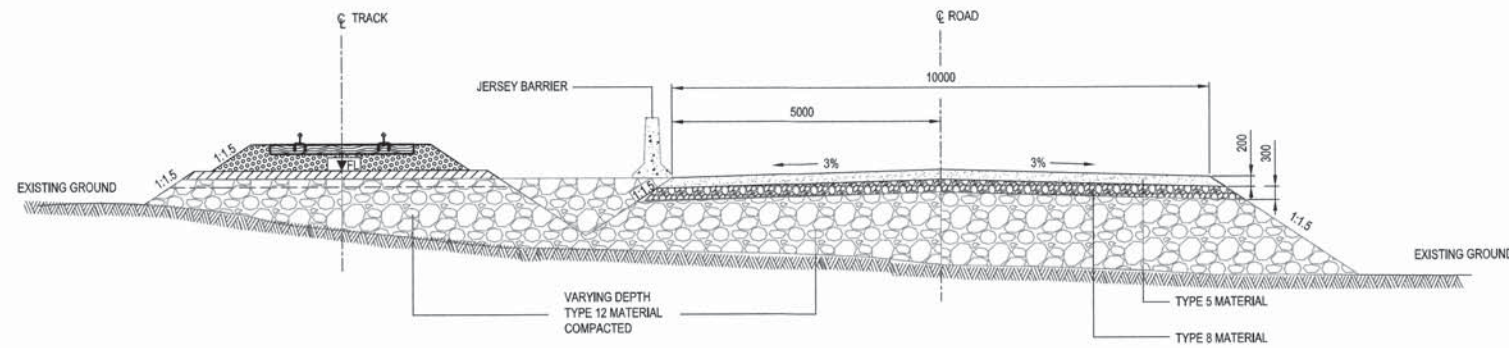
DRAFTSPERSON	S PINKNEY-ATKINSON	NR	2018/09/27
DESIGNER	S PINKNEY-ATKINSON	NR	
CHECKER	GLEN JOHNSTONE	Johnstone, Glen	
DESIGN COORD.	GLEN JOHNSTONE	Johnstone, Glen	
RESP. ENG.	FANUS VAN BILION		2018-10-30
LEAD DISC. ENG.	FANUS VAN BILION		2018-11-06 10:22:41 -0500
AREA LEAD	FANUS VAN BILION		2018-11-06 10:22:41 -0500
ENG. MANAGER	DANIEL STANGER		2018-11-08
AREA MANAGER	FAY PITTMAN		2018-11-08
ROLE	NAME	SIGNATURE	DATE

BAFFINLAND IRON ORE MINES LP MARY RIVER EXPANSION PROJECT	
RAIL SITE STANDARD DRAWING TYPICAL CROSS SECTION- SHEET 3 OF 6	
SCALE NTS OR AS NOTED	DWG. No. H353004-30000-224-294-0004-0002
REV 0	SHEET SIZE: D

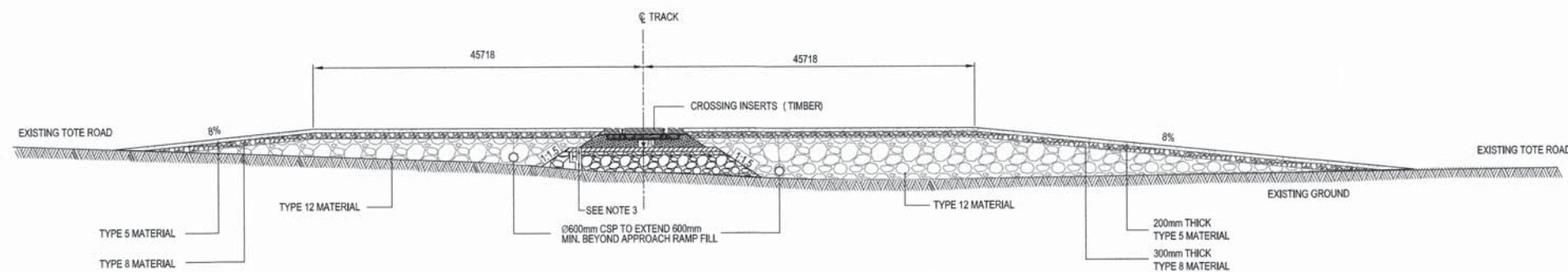


- NOTE:**
- MATERIAL TYPE DEFINITION:
TYPE 12: RUN OF QUARRY/ROCK FILL LAYER
TYPE 25: BALLAST LAYER
TYPE 26: SUB-BALLAST LAYER
 - PROPOSED EMBANKMENT DOES NOT HAVE SUITABLY WIDE SUB-BALLAST SHOULDERS. EMPLOYER SHALL DEVELOP SAFE OPERATING PROCEDURES FOR ACCESS TO INSPECT AND REPAIR TRAIN EQUIPMENT IN THE CASE OF A BREAKDOWN ON A HIGH EMBANKMENT.
 - MINIMUM EMBANKMENT (TYPE 12 PLUS SUB-BALLAST) THICKNESS VARIES DEPENDING ON SUB-GRADE CONDITION
H= 1500mm MINIMUM STANDARD DIMENSION FOR EMBANKMENT IN PERMAFROST
 - 542 NON-WOVEN GEOTEXTILE UNDER TYPE 12 MATERIAL ON ICE RICH SILT.
 - FOR RUNOFF DRAIN DETAILS REFER TO TYPICAL RUNOFF DRAIN DIMENSIONS.
 - FOR SUPERSTRUCTURE DETAILS REFER TO DRAWING H353004-30000-220-294-0005-0001.
 - THIS DRAWING WAS PREVIOUSLY ISSUED AS H353004-00000-220-294-0005-0001.
 - THESE TYPICAL SECTIONS ARE APPLICABLE TO ICE RICH PERMAFROST FILL AREAS.
 - TOP OF EMBANKMENT WIDTH VARIES DEPENDING ON THE RADIUS OF THE CURVE AS SHOWN ON THIS DRAWING.
 - EXTENT OF COMBIGRID TO BE DETERMINED DURING PROBING ALONG THE RAILWAY LINE IN ADVANCE OF EMBANKMENT CONSTRUCTION. DEPENDING ON SOIL FOUNDATION CONDITIONS, 542 g/m GEOTEXTILE MAY BE USED INSTEAD OF COMBIGRID.
 - FOR EMBANKMENT FILL HEIGHTS LESS THAN 4m IN HEIGHT THE SIDE SLOPE SHALL BE 1:2 AND FOR EMBANKMENT FILL HEIGHT EXCEEDING 4m THE SIDE SLOPE WILL BE 1:1.5.

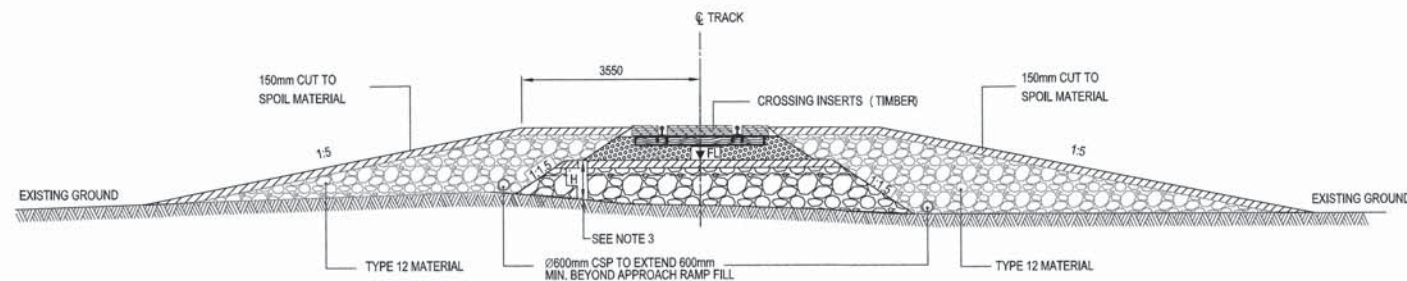
			APPROVED FOR CONSTRUCTION			THIS DRAWING WAS PREPARED BY HATCH LTD. ("HATCH") FOR THE EXCLUSIVE USE OF BAFFINLAND IRON MINES LP ("CLIENT") AND ITS USE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT BETWEEN HATCH AND THE CLIENT, INCLUDING ANY LIMITATIONS ON LIABILITY CONTAINED THEREIN. THIS DRAWING 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 THE CONSTRUCTION, COMPLETION, MAINTENANCE, EXTENSION, REINSTATEMENT AND REPAIR 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.														
									DRAFTSPERSON		S PINKNEY-ATKINSON		NR		2016/12/09					
									DESIGNER		S PINKNEY-ATKINSON		NR							
									CHECKER		GLEN JOHNSTONE									
									DESIGN COORD.		GLEN JOHNSTONE									
									RESP. ENG.		R HALIM									
									LEAD DISC. ENG.		FANUS VAN BILJON									
									AREA LEAD		FANUS VAN BILJON									
									ENG. MANAGER		F VAN BILJON									
									AREA MANAGER		F PITTMAN									
									ROLE		NAME		SIGNATURE		DATE					
									DRAWING APPROVAL STATUS: Approved for Construction								SCALE NTS OR AS NOTED		DWG. No. H353004-30000-224-294-0005-0002	



TYPICAL CROSS SECTION FOR TOTE ROAD AND RAIL INTERFACE






TYPICAL CROSS SECTION FOR LEVEL CROSSING

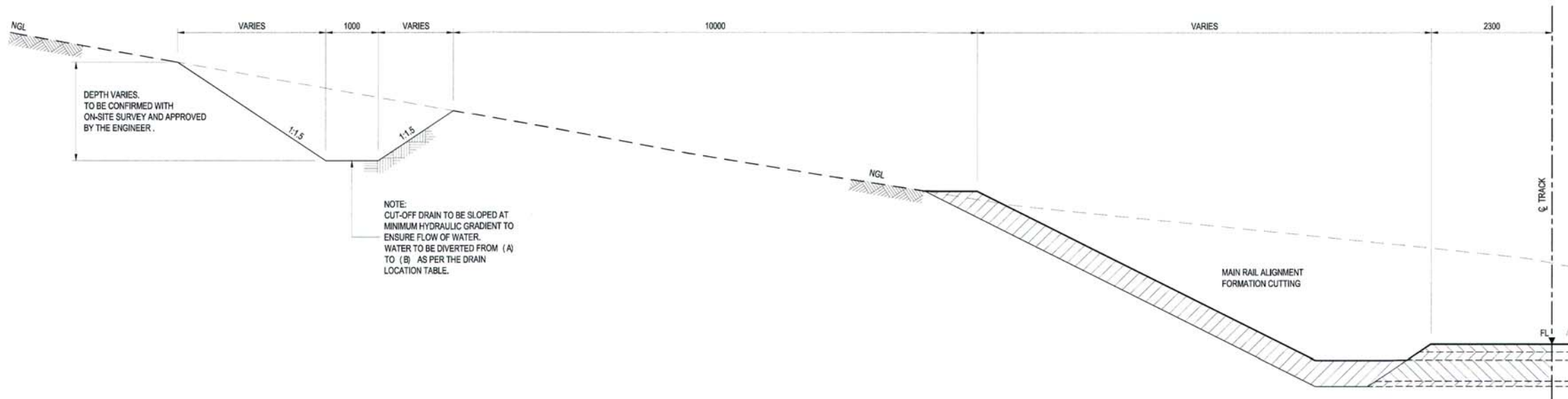


TYPICAL CROSS SECTION FOR CARIBOU AND SNOW MOBILE CROSSING

- NOTES:**
1. MATERIAL TYPE DEFINITION:
TYPE 5: 32mm MINUS
TYPE 8: 150mm MINUS
TYPE 12: RUN OF QUARRY/ROCK FILL LAYER
TYPE 25: BALLAST LAYER
TYPE 26: SUB-BALLAST LAYER
 2. PROPOSED EMBANKMENT DOES NOT HAVE SUB-BALLAST SHOULDERS. EMPLOYER SHALL DEVELOP SAFE OPERATING PROCEDURES FOR ACCESS TO INSPECT AND REPAIR TRAIN EQUIPMENT IN THE CASE OF A BREAKDOWN ON A HIGH EMBANKMENT.
 3. MINIMUM EMBANKMENT (TYPE 12 PLUS SUB-BALLAST) THICKNESS VARIES DEPENDING ON SUB-GRADE CONDITION
H= 700mm STANDARD DIMENSION
H= 1500mm FOR ICE RICH PERMAFROST.
 4. 542 NON-WOVEN GEOTEXTILE UNDER TYPE 12 MATERIAL ON ICE RICH SILT.
 5. FOR JERSEY BARRIER DETAILS REFER TO TYPICAL JERSEY BARRIER DIMENSIONS.
 6. FOR SUPERSTRUCTURE DETAILS REFER TO DRAWING H353004-30000-224-294-0003-0001.
 7. THIS DRAWING WAS PREVIOUSLY ISSUED AS H353004-00000-220-294-0005-0001.
 8. TIMBER CROSSING INSERTS SHALL BE 178mm HIGH AND 223mm WIDE INSERTS TO BE FASTENED TO TIMBER TIES USING 305mm LAG SCREWS. MINIMUM OF 76mm SHALL BE MAINTAINED BETWEEN GAUGE FACE OF THE RAIL AND NEAREST CROSSING INSERT.
 9. WHERE REQUIRED, JERSEY BARRIER LOCATED ON RAIL SIDE.

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Date: 2018-11-08
PERMIT NUMBER: P 512
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				<div style="border: 1px solid black; padding: 5px; text-align: center;"> APPROVED FOR CONSTRUCTION </div>				<small>THIS DRAWING WAS PREPARED BY HATCH LTD. IN PART FOR THE EXCLUSIVE USE OF BAFFINLAND IRON MINES LP (CLIENT) AND ITS USE IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT BETWEEN HATCH AND 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 THE CONSTRUCTION, COMPLETION, MAINTENANCE, EXTENSION, RENOVATION AND REPAIR 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.</small>				 				BAFFINLAND IRON MINES LP MARY RIVER EXPANSION PROJECT				RAIL SITE STANDARD DRAWING TYPICAL CROSS SECTION- SHEET 6 OF 6				<small>SUBSHEET NAMES SHEET 0001 SHEET 0002 SHEET 0003 SHEET 0004 SHEET 0005 SHEET 0006 SHEET 0007 SHEET 0008 SHEET 0009 SHEET 0010 SHEET 0011 SHEET 0012 SHEET 0013 SHEET 0014 SHEET 0015 SHEET 0016 SHEET 0017 SHEET 0018 SHEET 0019 SHEET 0020 SHEET 0021 SHEET 0022 SHEET 0023 SHEET 0024 SHEET 0025 SHEET 0026 SHEET 0027 SHEET 0028 SHEET 0029 SHEET 0030 SHEET 0031 SHEET 0032 SHEET 0033 SHEET 0034 SHEET 0035 SHEET 0036 SHEET 0037 SHEET 0038 SHEET 0039 SHEET 0040 SHEET 0041 SHEET 0042 SHEET 0043 SHEET 0044 SHEET 0045 SHEET 0046 SHEET 0047 SHEET 0048 SHEET 0049 SHEET 0050 SHEET 0051 SHEET 0052 SHEET 0053 SHEET 0054 SHEET 0055 SHEET 0056 SHEET 0057 SHEET 0058 SHEET 0059 SHEET 0060 SHEET 0061 SHEET 0062 SHEET 0063 SHEET 0064 SHEET 0065 SHEET 0066 SHEET 0067 SHEET 0068 SHEET 0069 SHEET 0070 SHEET 0071 SHEET 0072 SHEET 0073 SHEET 0074 SHEET 0075 SHEET 0076 SHEET 0077 SHEET 0078 SHEET 0079 SHEET 0080 SHEET 0081 SHEET 0082 SHEET 0083 SHEET 0084 SHEET 0085 SHEET 0086 SHEET 0087 SHEET 0088 SHEET 0089 SHEET 0090 SHEET 0091 SHEET 0092 SHEET 0093 SHEET 0094 SHEET 0095 SHEET 0096 SHEET 0097 SHEET 0098 SHEET 0099 SHEET 0100 SHEET 0101 SHEET 0102 SHEET 0103 SHEET 0104 SHEET 0105 SHEET 0106 SHEET 0107 SHEET 0108 SHEET 0109 SHEET 0110 SHEET 0111 SHEET 0112 SHEET 0113 SHEET 0114 SHEET 0115 SHEET 0116 SHEET 0117 SHEET 0118 SHEET 0119 SHEET 0120 SHEET 0121 SHEET 0122 SHEET 0123 SHEET 0124 SHEET 0125 SHEET 0126 SHEET 0127 SHEET 0128 SHEET 0129 SHEET 0130 SHEET 0131 SHEET 0132 SHEET 0133 SHEET 0134 SHEET 0135 SHEET 0136 SHEET 0137 SHEET 0138 SHEET 0139 SHEET 0140 SHEET 0141 SHEET 0142 SHEET 0143 SHEET 0144 SHEET 0145 SHEET 0146 SHEET 0147 SHEET 0148 SHEET 0149 SHEET 0150 SHEET 0151 SHEET 0152 SHEET 0153 SHEET 0154 SHEET 0155 SHEET 0156 SHEET 0157 SHEET 0158 SHEET 0159 SHEET 0160 SHEET 0161 SHEET 0162 SHEET 0163 SHEET 0164 SHEET 0165 SHEET 0166 SHEET 0167 SHEET 0168 SHEET 0169 SHEET 0170 SHEET 0171 SHEET 0172 SHEET 0173 SHEET 0174 SHEET 0175 SHEET 0176 SHEET 0177 SHEET 0178 SHEET 0179 SHEET 0180 SHEET 0181 SHEET 0182 SHEET 0183 SHEET 0184 SHEET 0185 SHEET 0186 SHEET 0187 SHEET 0188 SHEET 0189 SHEET 0190 SHEET 0191 SHEET 0192 SHEET 0193 SHEET 0194 SHEET 0195 SHEET 0196 SHEET 0197 SHEET 0198 SHEET 0199 SHEET 0200 SHEET 0201 SHEET 0202 SHEET 0203 SHEET 0204 SHEET 0205 SHEET 0206 SHEET 0207 SHEET 0208 SHEET 0209 SHEET 0210 SHEET 0211 SHEET 0212 SHEET 0213 SHEET 0214 SHEET 0215 SHEET 0216 SHEET 0217 SHEET 0218 SHEET 0219 SHEET 0220 SHEET 0221 SHEET 0222 SHEET 0223 SHEET 0224 SHEET 0225 SHEET 0226 SHEET 0227 SHEET 0228 SHEET 0229 SHEET 0230 SHEET 0231 SHEET 0232 SHEET 0233 SHEET 0234 SHEET 0235 SHEET 0236 SHEET 0237 SHEET 0238 SHEET 0239 SHEET 0240 SHEET 0241 SHEET 0242 SHEET 0243 SHEET 0244 SHEET 0245 SHEET 0246 SHEET 0247 SHEET 0248 SHEET 0249 SHEET 0250 SHEET 0251 SHEET 0252 SHEET 0253 SHEET 0254 SHEET 0255 SHEET 0256 SHEET 0257 SHEET 0258 SHEET 0259 SHEET 0260 SHEET 0261 SHEET 0262 SHEET 0263 SHEET 0264 SHEET 0265 SHEET 0266 SHEET 0267 SHEET 0268 SHEET 0269 SHEET 0270 SHEET 0271 SHEET 0272 SHEET 0273 SHEET 0274 SHEET 0275 SHEET 0276 SHEET 0277 SHEET 0278 SHEET 0279 SHEET 0280 SHEET 0281 SHEET 0282 SHEET 0283 SHEET 0284 SHEET 0285 SHEET 0286 SHEET 0287 SHEET 0288 SHEET 0289 SHEET 0290 SHEET 0291 SHEET 0292 SHEET 0293 SHEET 0294 SHEET 0295 SHEET 0296 SHEET 0297 SHEET 0298 SHEET 0299 SHEET 0300 SHEET 0301 SHEET 0302 SHEET 0303 SHEET 0304 SHEET 0305 SHEET 0306 SHEET 0307 SHEET 0308 SHEET 0309 SHEET 0310 SHEET 0311 SHEET 0312 SHEET 0313 SHEET 0314 SHEET 0315 SHEET 0316 SHEET 0317 SHEET 0318 SHEET 0319 SHEET 0320 SHEET 0321 SHEET 0322 SHEET 0323 SHEET 0324 SHEET 0325 SHEET 0326 SHEET 0327 SHEET 0328 SHEET 0329 SHEET 0330 SHEET 0331 SHEET 0332 SHEET 0333 SHEET 0334 SHEET 0335 SHEET 0336 SHEET 0337 SHEET 0338 SHEET 0339 SHEET 0340 SHEET 0341 SHEET 0342 SHEET 0343 SHEET 0344 SHEET 0345 SHEET 0346 SHEET 0347 SHEET 0348 SHEET 0349 SHEET 0350 SHEET 0351 SHEET 0352 SHEET 0353 SHEET 0354 SHEET 0355 SHEET 0356 SHEET 0357 SHEET 0358 SHEET 0359 SHEET 0360 SHEET 0361 SHEET 0362 SHEET 0363 SHEET 0364 SHEET 0365 SHEET 0366 SHEET 0367 SHEET 0368 SHEET 0369 SHEET 0370 SHEET 0371 SHEET 0372 SHEET 0373 SHEET 0374 SHEET 0375 SHEET 0376 SHEET 0377 SHEET 0378 SHEET 0379 SHEET 0380 SHEET 0381 SHEET 0382 SHEET 0383 SHEET 0384 SHEET 0385 SHEET 0386 SHEET 0387 SHEET 0388 SHEET 0389 SHEET 0390 SHEET 0391 SHEET 0392 SHEET 0393 SHEET 0394 SHEET 0395 SHEET 0396 SHEET 0397 SHEET 0398 SHEET 0399 SHEET 0400 SHEET 0401 </small>	
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CUT-OFF DRAIN
TYPICAL CROSS SECTION
SCALE 1:50

DIRECTION OF FLOW OF STREAM DIVERSION		
CHAINAGE FROM (km)	CHAINAGE TO (km)	LENGTH (m)
12661	12760	99
20618	20498	320
46454	46473	19
47552	47602	50
49799	49980	181
58940	59060	120
58940	59060	120
58442	58552	110
58706	58652	154
60623	60950	327
61580	61340	240
62550	62920	370
63110	62930	180
63090	62930	160
63724	63555	169
64827	64950	123
66164	66228	64
82266	82094	172
90726	90910	184
89200	90500	1300
91216	90910	306
97286	97194	92

NOTE:
1. THIS DRAWING WAS PREVIOUSLY ISSUED:
H353004-00000-224-272-0032-0001

PERMIT TO PRACTICE
HATCH LTD.

Signature _____
Date _____ December 20, 2018
PERMIT NUMBER: P 512
The Association of Professional Engineers,
Geologists and Geophysicists of NWT/NU

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HATCH

Baffinland

BAFFINLAND IRON MINES LP
MARY RIVER PROJECT

RAIL SITE
STANDARD DRAWING
TYPICAL CUT-OFF DRAIN DETAIL



0 APPROVED FOR CONSTRUCTION.

AJVN 67 2018/11/27

DRAFTSPERSON	A VAN NIEKERK	NR	22/11/17
DESIGNER	A VAN NIEKERK	NR	22/11/17
CHECKER	G JOHNSTONE		
DESIGN COORD.	G JOHNSTONE		
RESP. ENG.	D STANGER		
LEAD DISC. ENG.	F VAN BILJON	van Biljon, Fanus	
AREA LEAD	F VAN BILJON	van Biljon, Fanus	
ENG. MANAGER	D STANGER		
AREA MANAGER	F PITTMAN		

ROLE NAME SIGNATURE DATE

DRAWING APPROVAL STATUS: Approved for Construction

SCALE
1:100
OR AS NOTED

DWG. No.
H353004-30000-224-294-0008-0001

REV
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SHEET SIZE: D