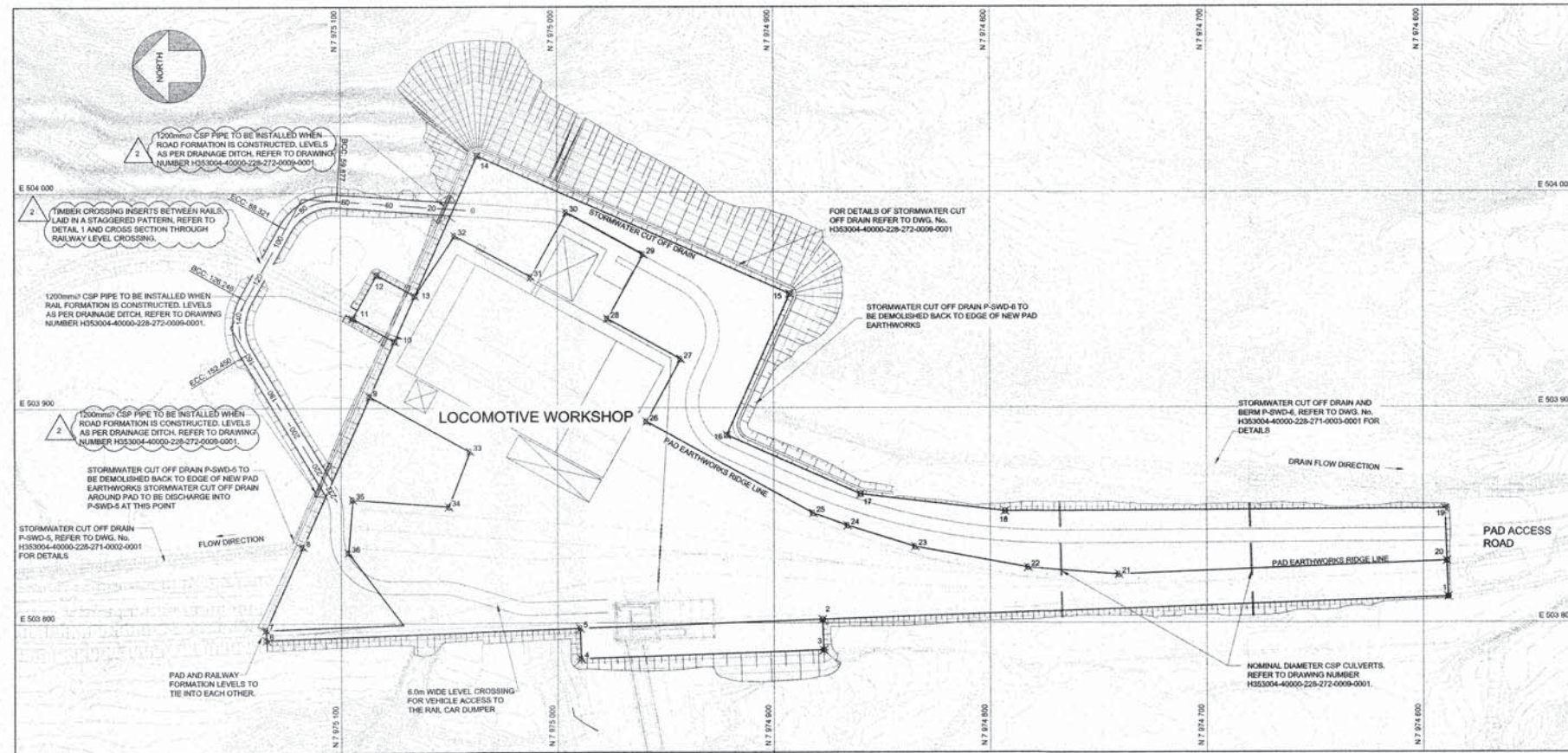


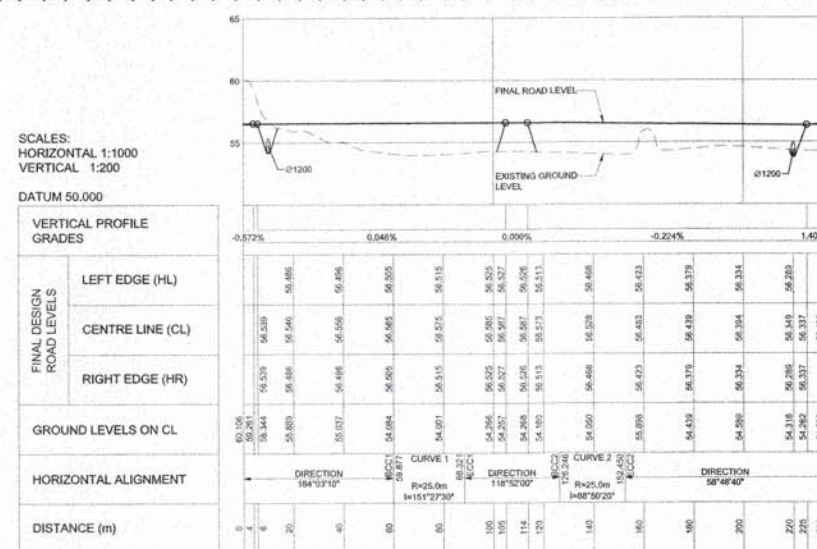
Attachment 11.7

Milne Port Locomotive Workshop Drawings

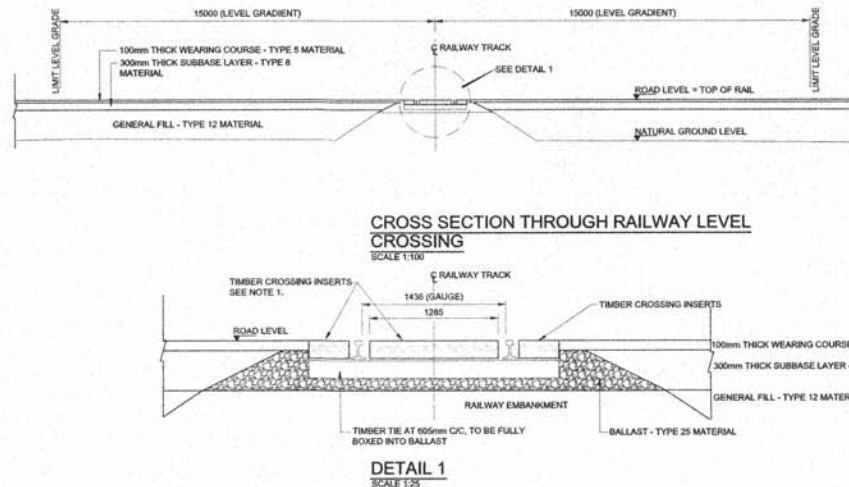
(3 Pages)



PLAN ON LOCOMOTIVE WORKSHOP PAD
SCALE 1:1000



LONGSECTION: RAIL YARD WORKSHOP BYPASS ROAD



DETAIL 1
SCALE 1:25

NOTES:

1. LIDAR SURVEY PROVIDED BY PHOTOSAT (2016).
2. CO-ORDINATE GRID IS SHOWN IN UTM (NAD83). ZONE 17 AND IS METERS.
3. CONTOURS ARE IN METERS. THE CONTOUR INTERVAL IS 0.5m.
4. ALL DIMENSIONS SHOWN ARE IN METERS, UNLESS OTHERWISE NOTED.
5. FOR TYPICAL LAYERWORKS REFER TO DETAIL 1 ON DWG. No. H353004-40000-221-294-0002-0001.

RAILWAY CROSSING NOTE:

1. TIMBER CROSSING INSERTS SHALL BE 175mm HIGH AND 225mm WIDE. INSERTS ARE TO BE FASTENED TO TIMBER TIES USING 305mm LONG LAG SCREWS. A MINIMUM DISTANCE OF 75mm SHALL BE MAINTAINED ON EITHER SIDE THE RAIL HEAD AND THE NEAREST CROSSING INSERT.
2. GRADE CROSSING TO BE SUPPLIED WITH FLASHING LIGHTS AND IS TO HAVE GATED PROTECTION. THE DESIGN AND CONSTRUCTION OF THIS WORK SHALL FORM PART OF THE RAIL SYSTEM CONTRACTORS' SCOPE OF WORK.

RAIL YARD SETTING OUT CO-ORDINATES			
POINT	E	N	LEVEL
1	503 811.031	7 974 588.503	56.374
2	503 801.515	7 974 877.599	56.374
3	503 787.361	7 974 877.589	56.374
4	503 783.437	7 974 989.072	56.374
5	503 797.490	7 974 989.078	56.374
6	503 792.298	7 975 134.802	56.374
7	503 796.882	7 975 134.669	56.374
8	503 835.426	7 975 117.566	56.176
9	503 905.221	7 975 086.567	56.374
10	503 930.854	7 975 075.168	56.374
11	503 941.519	7 975 084.504	56.374
12	503 961.716	7 975 083.369	56.374
13	503 952.012	7 975 065.768	56.374
14	504 016.899	7 975 036.938	56.177
15	503 952.786	7 974 882.606	56.177
16	503 887.272	7 974 921.708	56.177
17	503 859.814	7 974 859.913	56.177
18	503 851.874	7 974 793.156	56.177
19	503 852.880	7 974 589.078	56.177

RAIL YARD SETTING OUT CO-ORDINATES			
POINT	E	N	LEVEL
20	503 828.568	7 974 589.112	56.374
21	503 822.477	7 974 740.599	56.374
22	503 825.428	7 974 782.548	56.374
23	503 835.395	7 974 834.878	56.374
24	503 845.215	7 974 865.899	56.374
25	503 850.536	7 974 881.837	56.374
26	503 893.524	7 974 959.799	56.374
27	503 922.523	7 974 942.899	56.374
28	503 941.146	7 974 978.777	56.374
29	503 971.113	7 974 963.255	56.374
30	503 990.626	7 974 995.649	56.374
31	503 960.699	7 975 012.170	56.374
32	503 979.977	7 975 047.210	56.374
33	503 879.741	7 975 040.342	56.374
34	503 854.154	7 975 050.141	56.374
35	503 857.471	7 975 094.547	56.374
36	503 832.807	7 975 096.518	56.374
37	503 799.208	7 975 071.183	56.374

SETTING OUT DATA RAILYARD WORKSHOP BYPASS ROAD				
NAME	CH	E	N	DETAILS
START	0.000	503 991.931	7 975 042.118	L 59.877m
BCC1	59.877	503 996.184	7 975 101.843	R 25.000m
PI1	503 997.294		7 975 117.788	DA 67°11'10"
EC1	88.321	503 983.295	7 975 125.504	TL 15.884m AL 28.443m
BCC2	126.246	503 950.082	7 975 143.813	R 25.000m
PI2	503 937.427		7 975 150.789	DA 67°03'20"
EC2	152.450	503 925.066	7 975 143.306	TL 14.659m AL 26.294m
END	232.440	503 925.066	7 975 101.882	L 79.950m

PERMIT TO PRACTICE
HATCH LTD.
Signature: _____
Date: 06/07/2018
PERMIT NUMBER: P-512
The Association of Professional Engineers, Geologists and Geomorphologists (APREG)

DRAWING No.	DRAWING TITLE
H353004-40000-221-272-0001-0001	RAIL WORKSHOP - GENERAL ARRANGEMENT
H353004-40000-221-272-0002-0002	RAIL UNLOADING AREA ACCESS ROAD - PLAN AND PROFILE SHEET 2 OF 2
H353004-40000-228-272-0009-0001	LOCOMOTIVE WORKSHOP PAD - DRAINAGE PLAN
H353004-40000-228-271-0003-0001	STORMWATER DIVERSION P-SWD-4 - LAYOUT, PROFILE AND DETAILS
H353004-40000-221-273-0005-0001	LOCOMOTIVE WORKSHOP PAD - PROFILES
H353004-40000-228-271-0003-0001	STORMWATER DIVERSION P-SWD-4 - LAYOUT, PROFILE AND DETAILS
H353004-40000-221-294-0008-0001	STANDARD DRAWINGS - EARTHWORKS AND DRAINAGE DETAILS
H353004-40000-221-284-0008-0001	STANDARD DRAWINGS - TYPICAL PAD, DITCH AND BERM SECTIONS
H353004-40000-221-294-0002-0001	STANDARD DRAWINGS - EARTHWORKS AND DRAINAGE DETAILS

REFERENCE DRAWINGS	2	3	4	5	6	7	8
1							

REG. PROFESSIONAL
ENGINEER
HATCH LTD.
LICENCE
2018-01-19
2018-01-19

FOR CONSTRUCTION	DESCRIPTION	REVISIONS
2	BYPASS ROAD, DETAILS AND SECTIONS ADDED AND SETTING OUT COORDINATES UPDATED	
1	CULVERTS ADDED	
0	APPROVED FOR CONSTRUCTION	

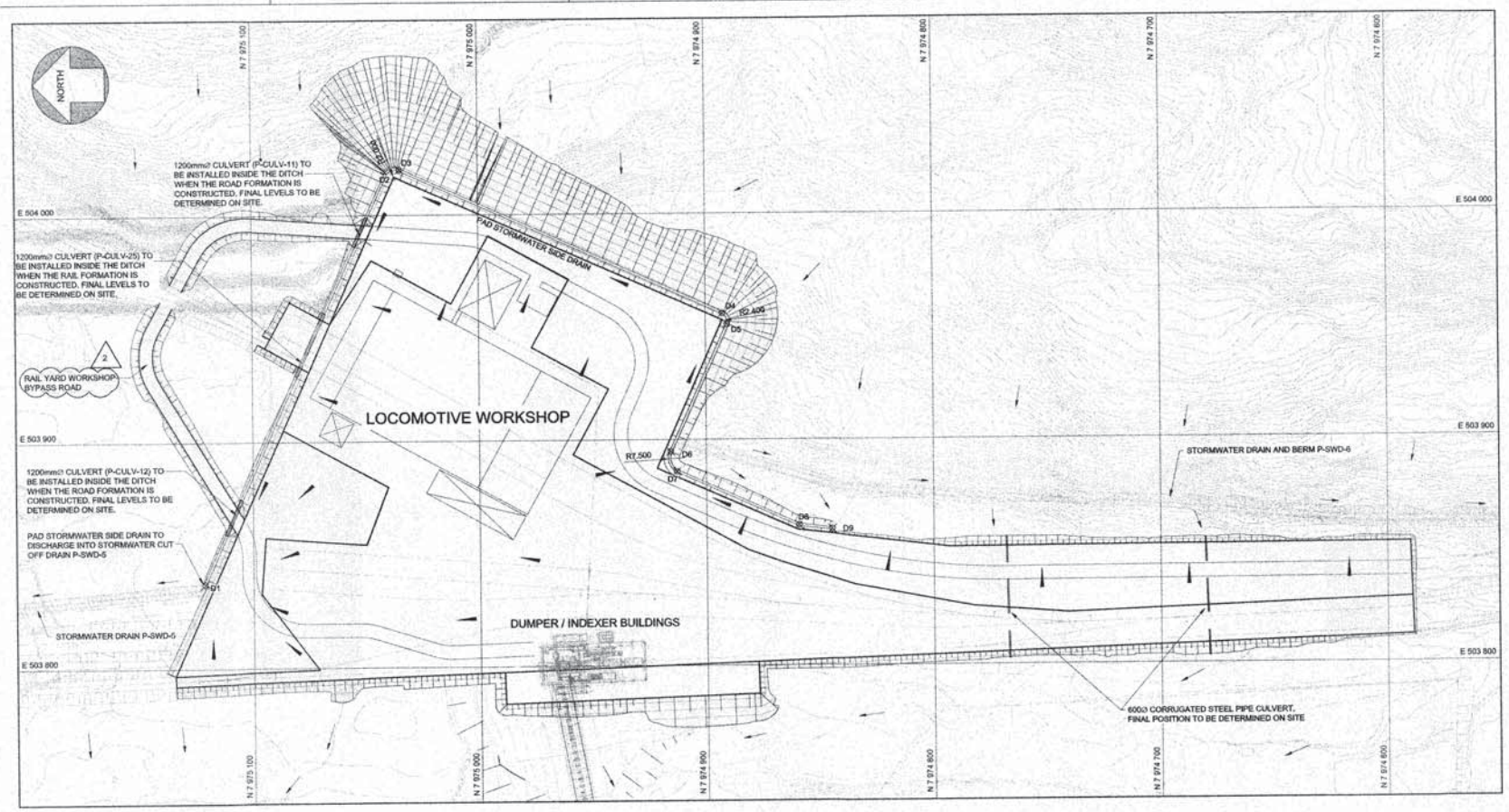
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20/07/2018	PH	PH	20/07/2018

ROLE	NAME	SIGNATURE	DATE
DRAFTSPERSON	I. BARNARD		06/07/2018
CHECKER	F. HUGO		06/07/2018
DESIGN COORD.	H. HERBST		20/07/2018
RESP. ENGR.	R. HALLIM		20/07/2018
LEAD DESIG. ENGR.	A. GROBBELAAR		20/07/2018
AREA LEAD	V. LAVRIC		20/07/2018
ENGR. MANAGER	R. GOESSEN		20/07/2018
AREA MANAGER	T. ATINA		20/07/2018

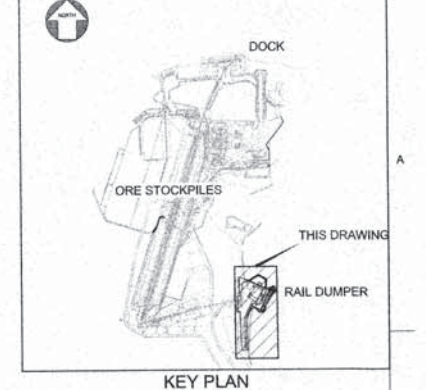
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DWG. No. H353004-40000-221-272-0009-0001
REV 2

Baffinland
BAFFINLAND IRON MINES LP
MARY RIVER EXPANSION PROJECT
PORT SITE
LOCOMOTIVE WORKSHOP PAD
PLAN LAYOUT

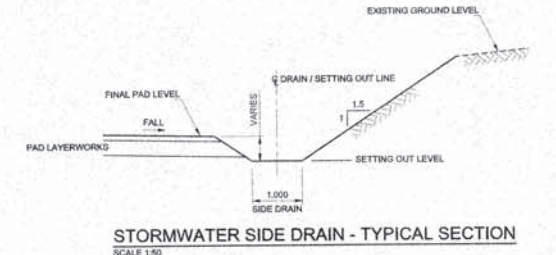
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10/10/2019



PLAN ON LOCOMOTIVE WORKSHOP PAD
SCALE 1:1000



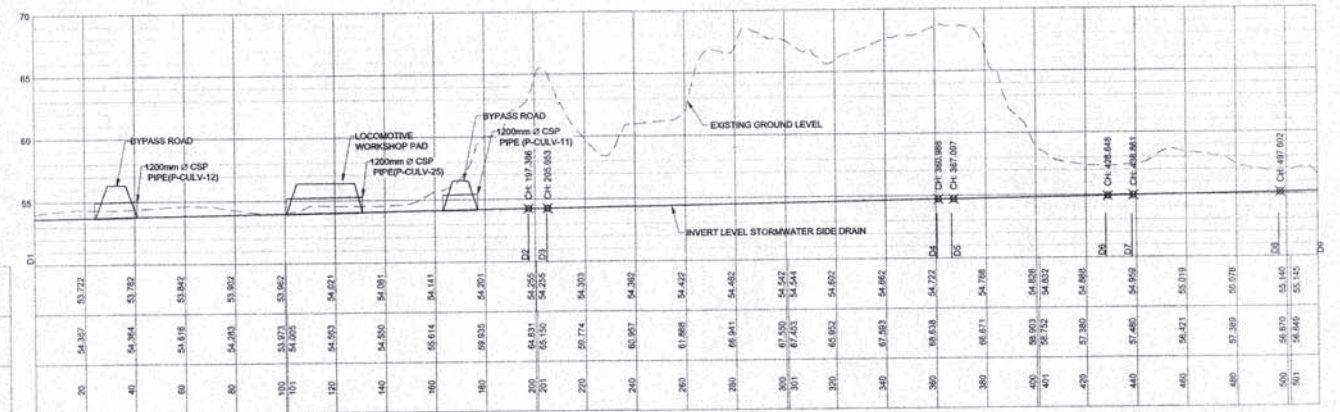
- NOTES:**
1. LIDAR SURVEY PROVIDED BY PHOTOSAT (2018)
 2. CO-ORDINATE GRID IS SHOWN IN UTM (NAD83), ZONE 17 AND IS METERS.
 3. CONTOURS ARE IN METERS, THE CONTOUR INTERVAL IS 0.5M.
 4. ALL DIMENSIONS SHOWN ARE IN METERS, UNLESS OTHERWISE NOTED.
- LEGEND:**
- OFF PAD FLOW DIRECTION
 - ON PAD FLOW DIRECTION



STORMWATER SIDE DRAIN - TYPICAL SECTION
SCALE 1:50

SCALES:
HORIZONTAL 1:1000
VERTICAL 1:200
DATUM 50.000

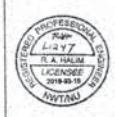
CENTRE LINE (CL)
GROUND LEVELS ON CL
DISTANCE (m)



PROFILE OF PAD STORMWATER SIDE DRAIN

STORMWATER SIDE DRAIN SETTING OUT CO-ORDINATES			
POINT	E	N	INVERT LEVEL
D1	503 837.164	7 975 121.371	53.662
D2	504 017.428	7 975 040.957	54.253
D3	504 020.097	7 975 034.585	54.258
D4	503 955.683	7 974 882.577	54.725
D5	503 950.912	7 974 890.508	54.730
D6	503 894.777	7 974 915.753	54.914
D7	503 885.931	7 974 912.940	54.955
D8	503 961.847	7 974 859.360	55.132
D9	503 860.020	7 974 644.713	55.177
D14	503 799.208	7 975 071.183	56.374

DRAWING No.	DRAWING TITLE
H353004-40000-228-272-0001-0001	RAIL WORKSHOP - GENERAL ARRANGEMENT
H353004-40000-228-272-0001-0002	STORMWATER DIVERSION P-SWD-6 - LAYOUT, PROFILE AND DETAILS
H353004-40000-228-272-0001-0003	STORMWATER DIVERSION P-SWD-5 - LAYOUT, PROFILE AND DETAILS
H353004-40000-221-272-0009-0001	LOCOMOTIVE WORKSHOP PAD - PLAN
H353004-40000-221-272-0009-0002	LOCOMOTIVE WORKSHOP PAD - PROFILE
H353004-40000-221-272-0009-0003	STANDARD DRAWINGS - TYPICAL PAD, DITCH AND BERM SECTIONS
H353004-40000-221-272-0009-0004	STANDARD DRAWINGS - EARTHWORKS AND DRAINAGE DETAILS



FOR CONSTRUCTION	
1	CULVERT ADDED
2	RAIL YARD WORKSHOP BYPASS ROAD ADDED
3	APPROVED FOR CONSTRUCTION
4	APPROVED FOR CONSTRUCTION
5	APPROVED FOR CONSTRUCTION
6	APPROVED FOR CONSTRUCTION
7	APPROVED FOR CONSTRUCTION
8	APPROVED FOR CONSTRUCTION

HATCH	
DRAFTSPERSON: J. BARNARD	
DESIGNER: F. HUIJO	
CHECKER: H. HERBST	
DESIGN COORD: R. COCKEN	
RESP. ENG: R. HALIM	
LEAD DISC. ENG: A. GROBBELAAR	
V. LAURIC	
R. COCKEN	
T. ATIBA	
DATE: 06/06/2019	
ROLE: AREA MANAGER	
NAME: T. ATIBA	
SIGNATURE: [Signature]	
DATE: 06/06/2019	
SCALE: AS NOTED	
DWG. No: H353004-40000-228-272-0009-0001	
SHEET SIZE: A	

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WATKINS	
Date: 06/06/2019	
PERMIT NUMBER: P 512	
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