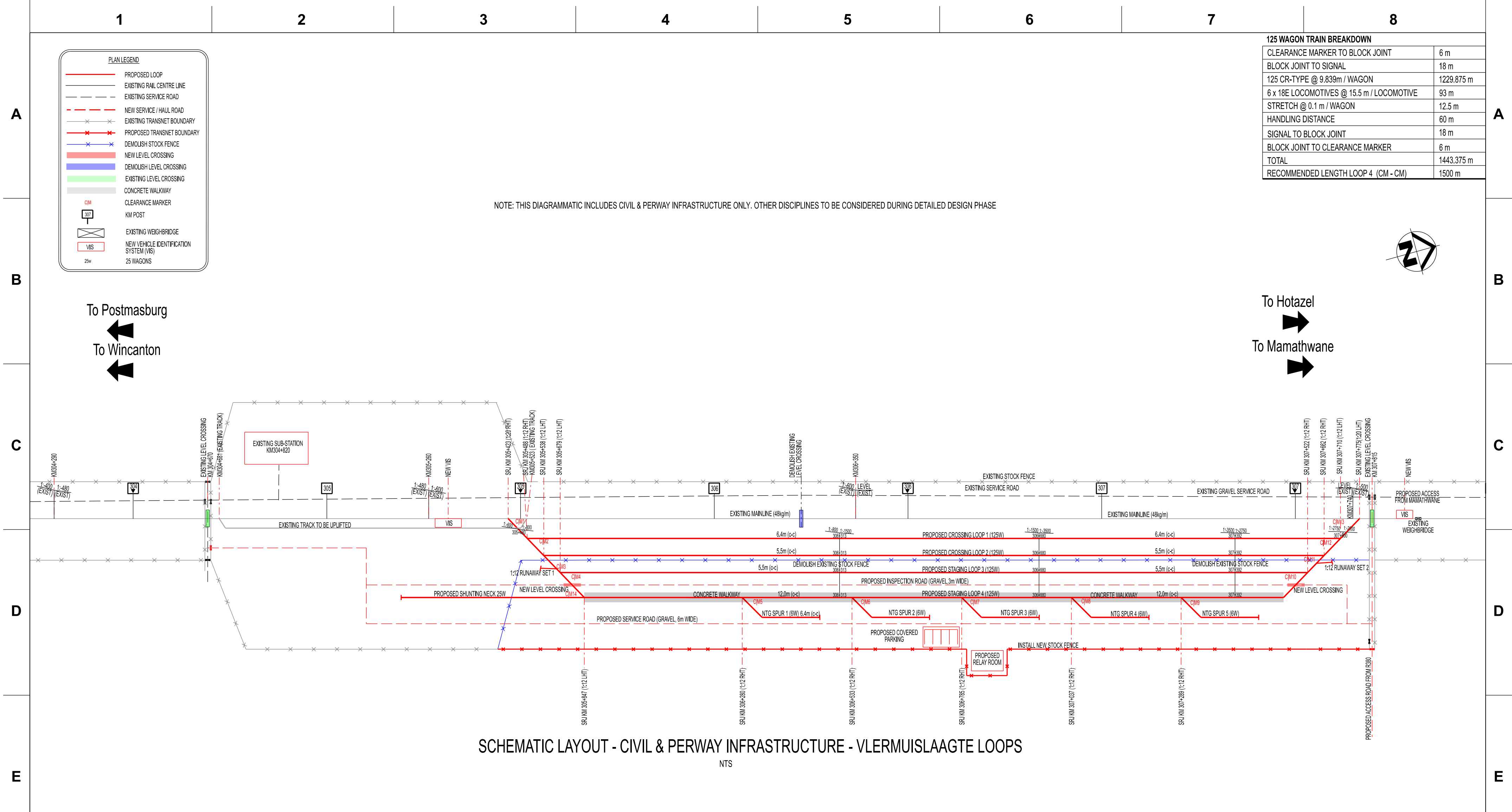




125 WAGON TRAIN BREAKDOWN	
CLEARANCE MARKER TO BLOCK JOINT	6 m
BLOCK JOINT TO SIGNAL	18 m
125 CR-TYPE @ 9.839m / WAGON	1229.875 m
6 x 18E LOCOMOTIVES @ 15.5 m / LOCOMOTIVE	93 m
STRETCH @ 0.1 m / WAGON	12.5 m
HANDLING DISTANCE	60 m
SIGNAL TO BLOCK JOINT	18 m
BLOCK JOINT TO CLEARANCE MARKER	6 m
TOTAL	1443.375 m
RECOMMENDED LENGTH LOOP 4 (CM - CM)	1500 m

NOTE: THIS DIAGRAMMATIC INCLUDES CIVIL & PERWAY INFRASTRUCTURE ONLY. OTHER DISCIPLINES TO BE CONSIDERED DURING DETAILED DESIGN PHASE



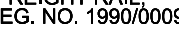
To Postmasburg
←
To Wincanton
←

To Hotazel
➔
To Mamathwane
➔

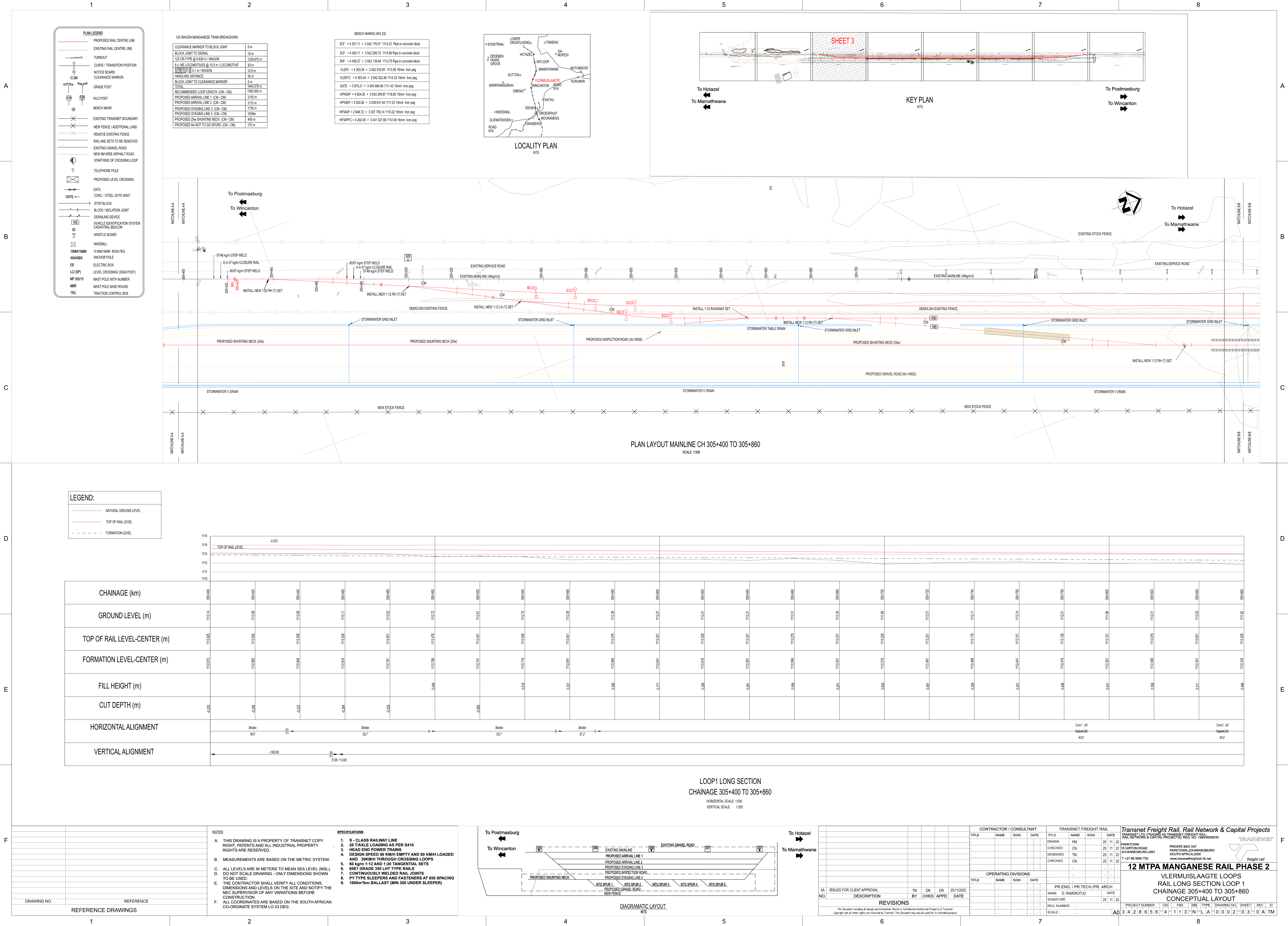
SCHEMATIC LAYOUT - CIVIL & PERWAY INFRASTRUCTURE - VLERMUISLAAGTE LOOPS

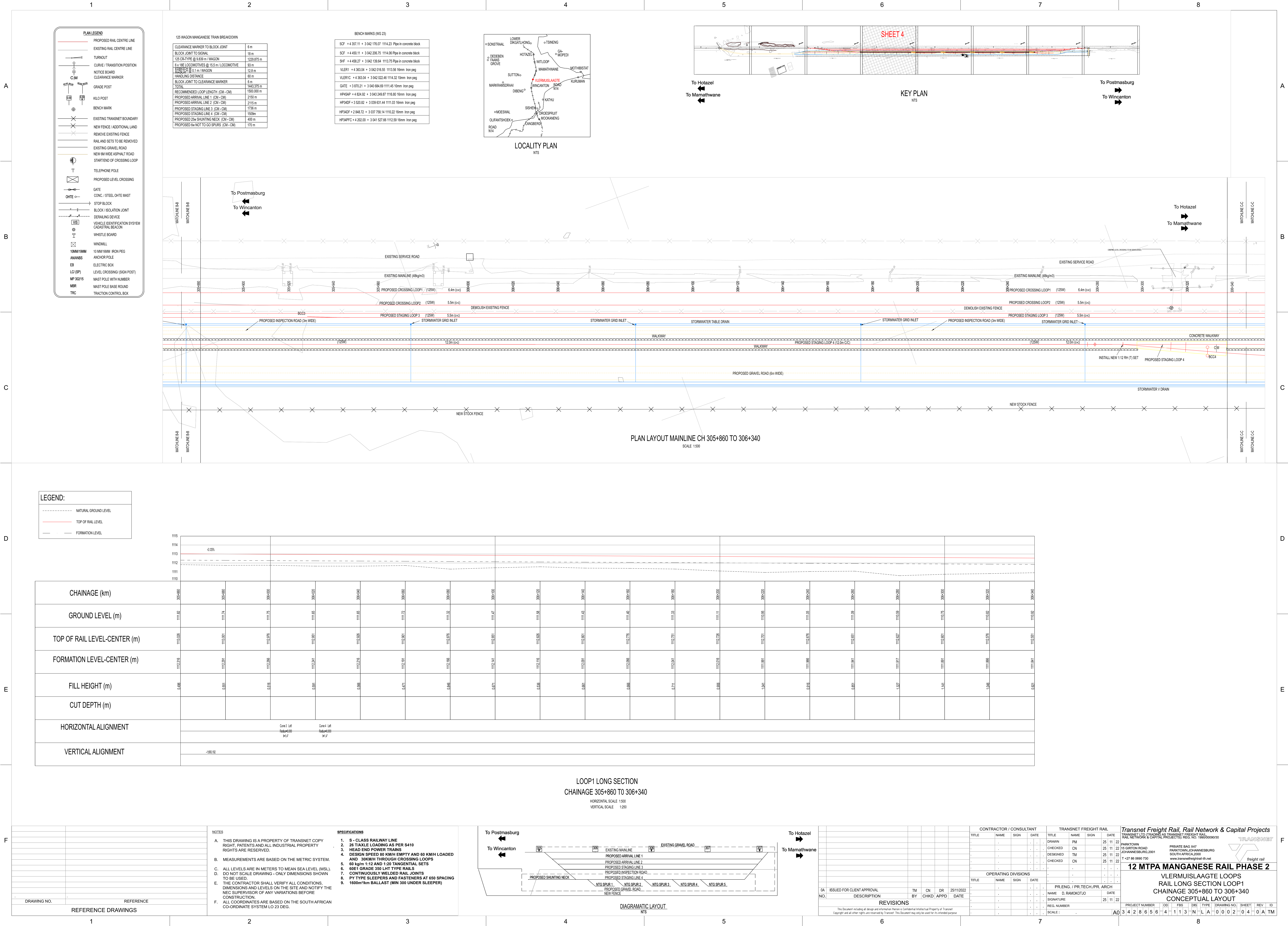
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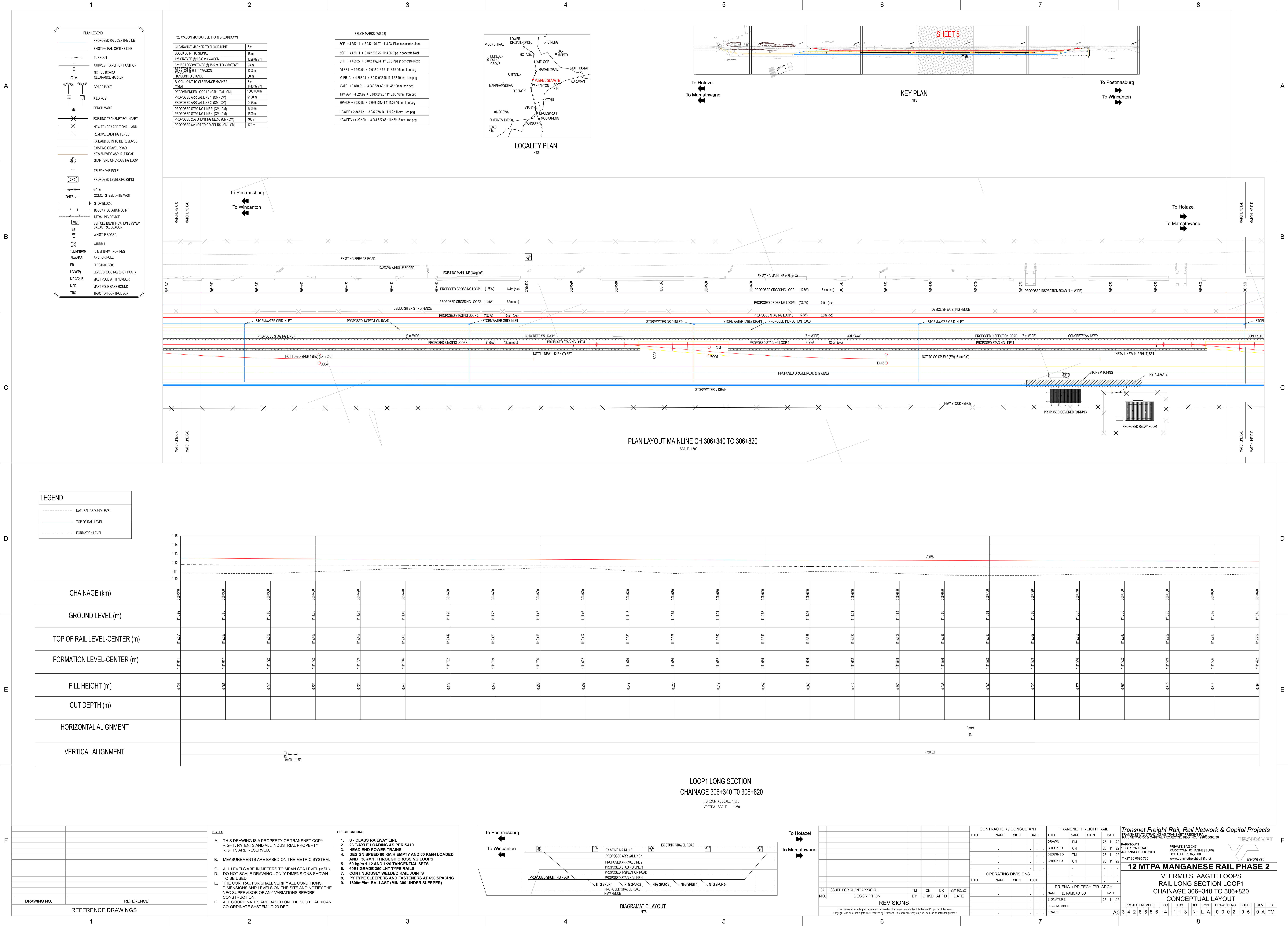
A

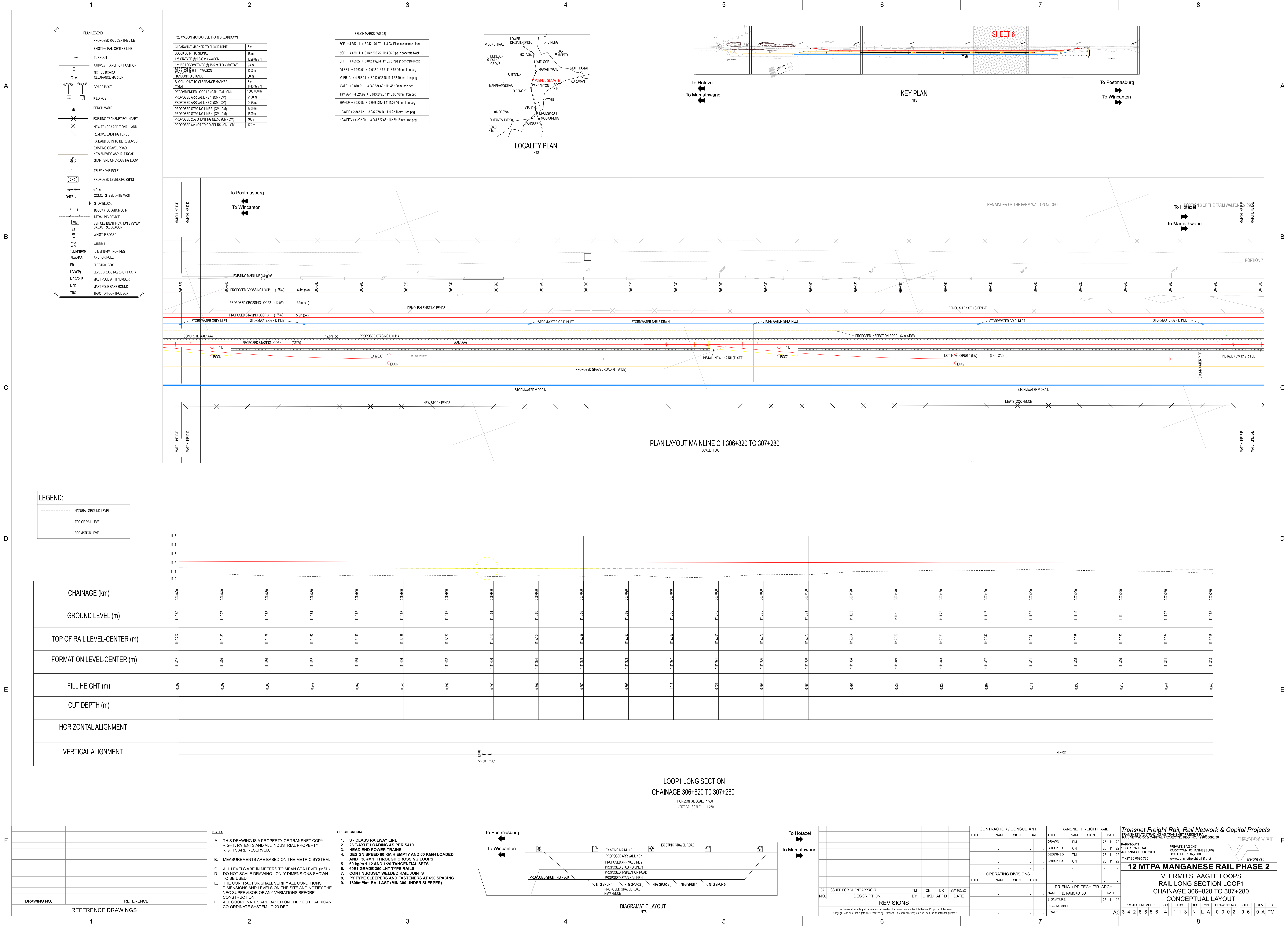
TRANSNET LTD (Trading as) Rail Network & Capital Projects 5 GIRTTON ROAD PARKVIEW HARBURG 2201 +27 86 9690 930		PRIVATE Bldg 347 PARKVIEW HARBURG 2200 SOUTH AFRICA 2020 www.transnetrail-tn.net		 freight rail				
12 MTPA MANGANESE RAIL PHASE 2 VLERMUSLAAGTE LOOPS RAIL LONG SECTION LOOP 1 CHAINAGE 305+040 TO 305+460 CONCEPTUAL LAYOUT								
PROJECT NUMBER	CD	FBS	DIS	TYPE	DRAWING NO	SHEET	REV	ID
34286656			N	L	0002	02	A	M

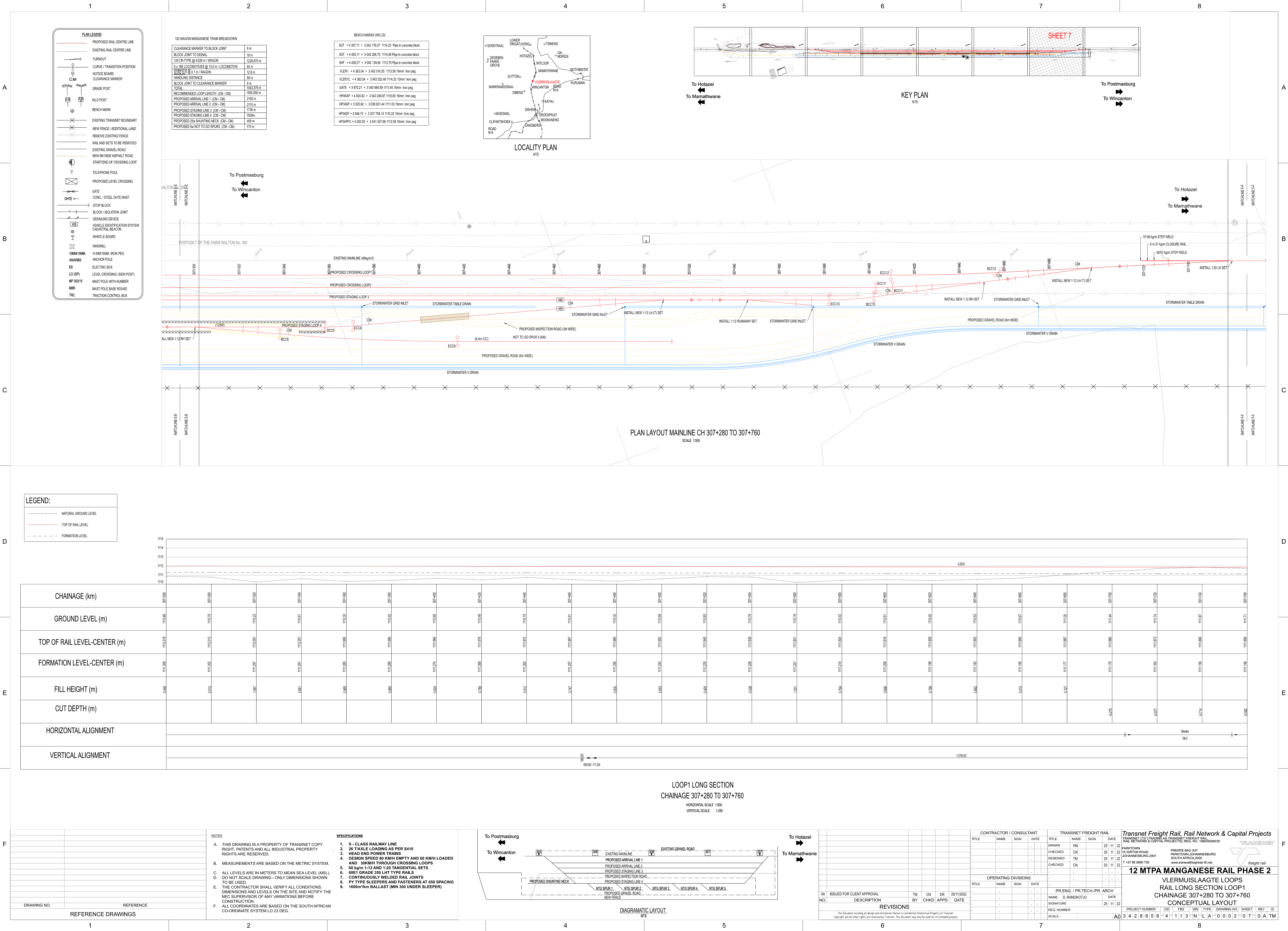
F

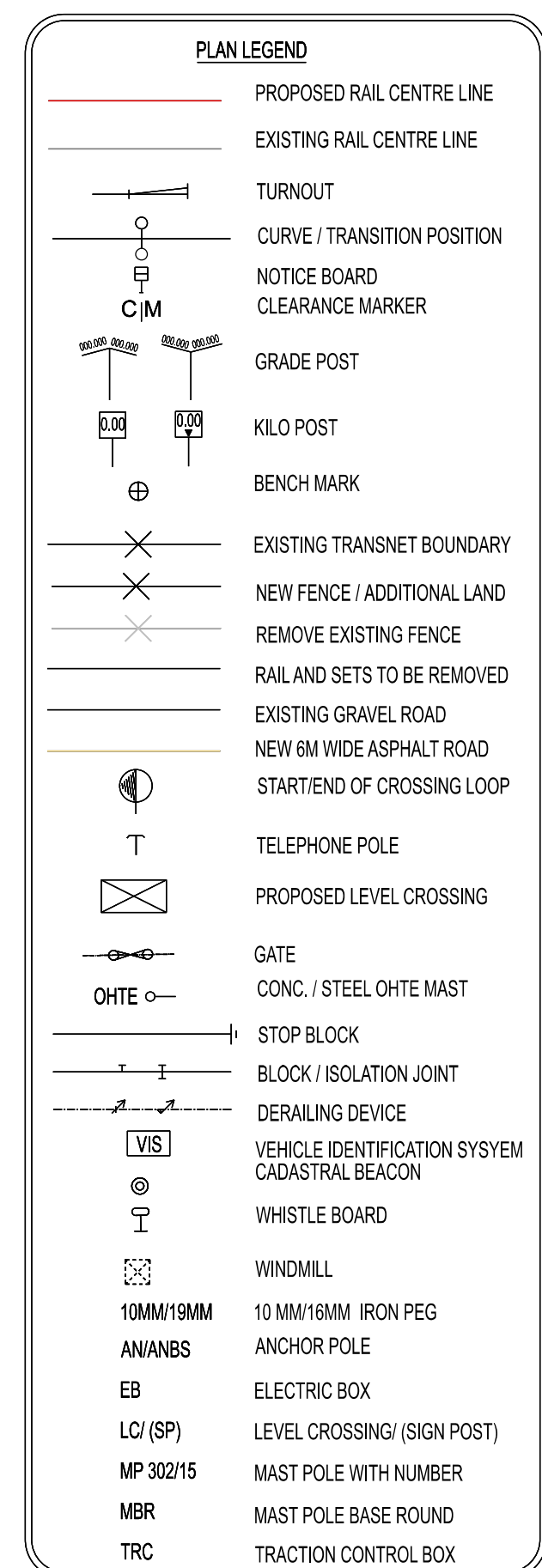






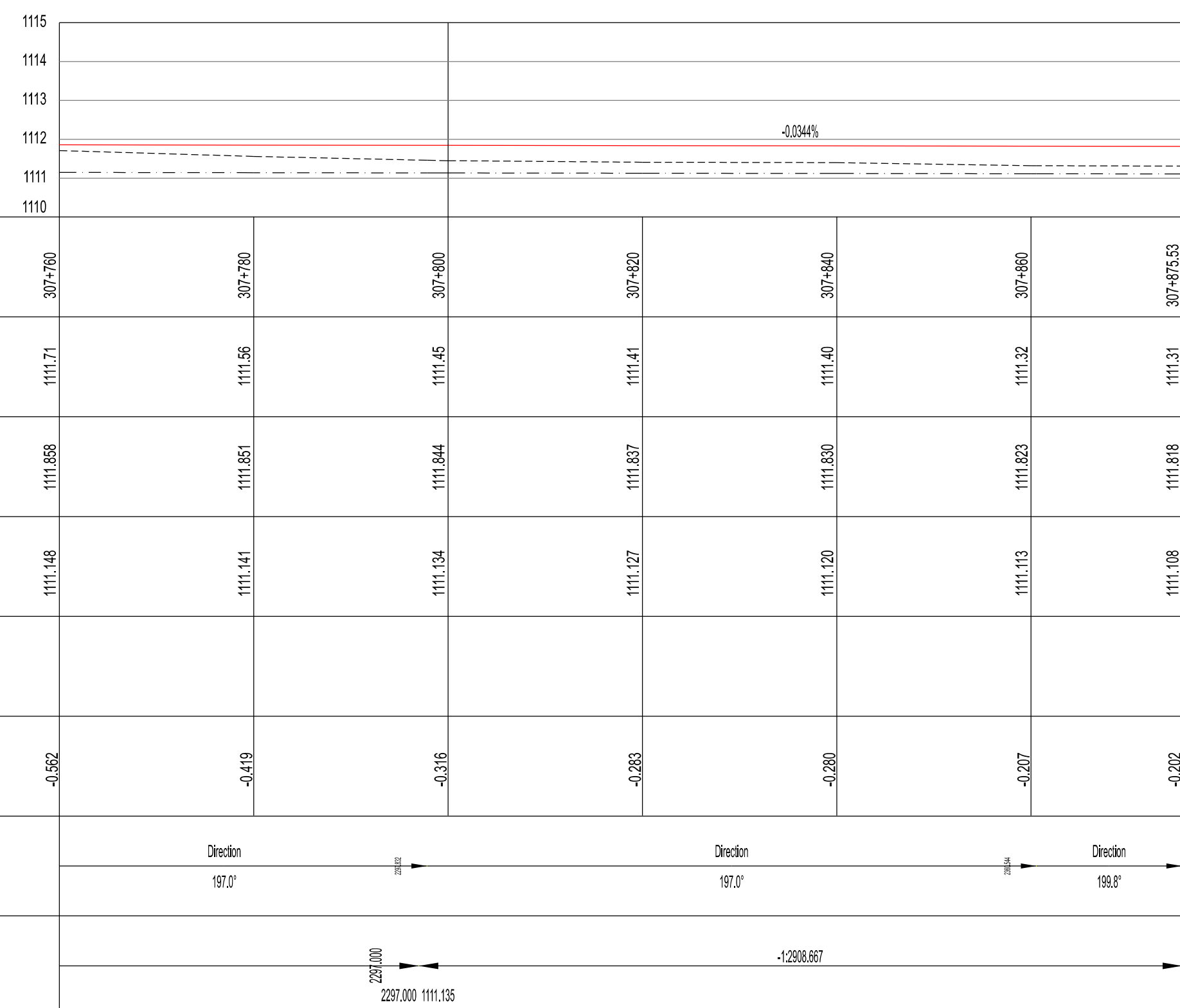
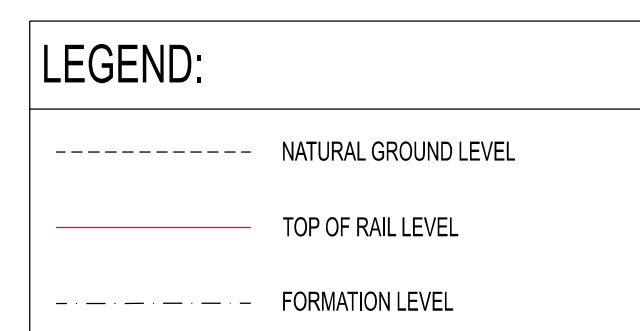
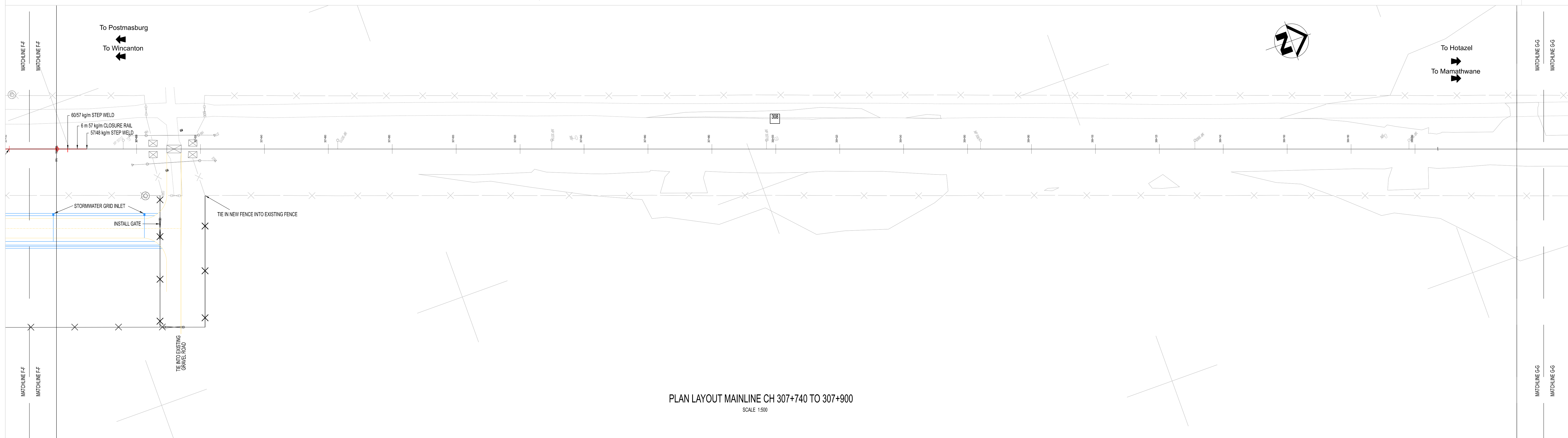
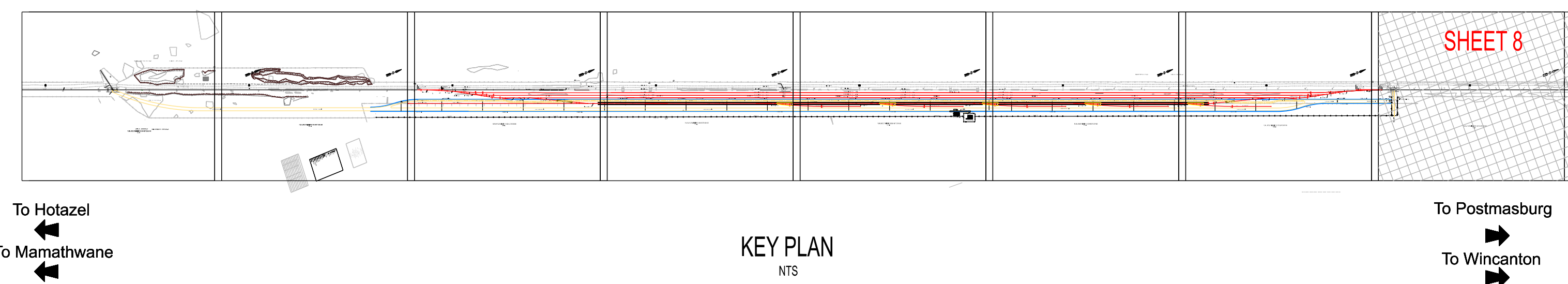
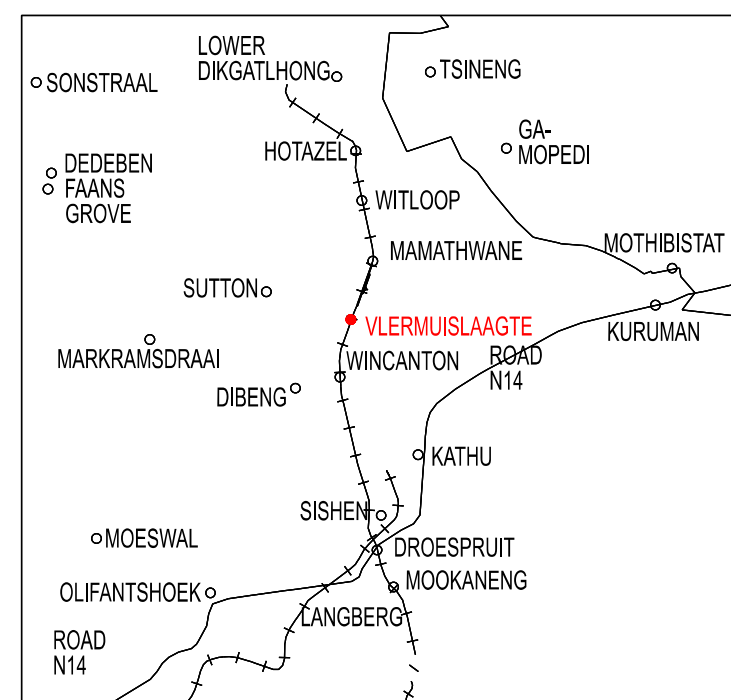




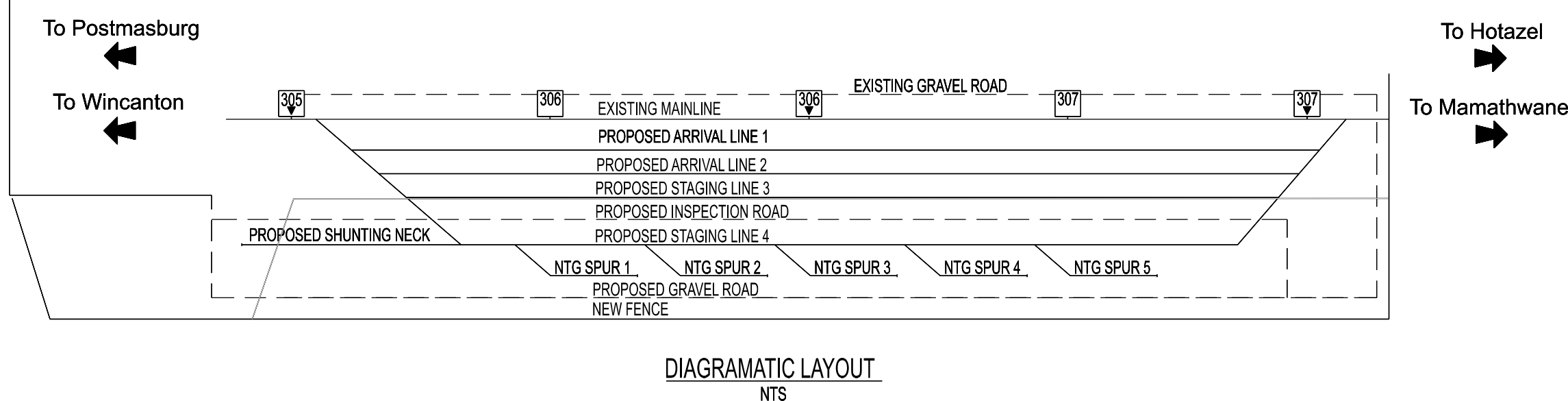


125 WAGON MANGANESE TRAIN BREAKDOWN	
CLEARANCE MARKER TO BLOCK JOINT	18 m
BLOCK JOINT TO SIGNAL	6 m
125 CR-TPY @ 9.53 m / WAGON	1229.875 m
8 x 16E LOCOMOTIVES @ 15.5 m / LOCOMOTIVE	124 m
STRETCH @ 0.1 m / WAGON	12.8 m
HANDLING DISTANCE	60 m
BLOCK JOINT TO CLEARANCE MARKER	1443.375 m
TOTAL	1660.375 m
RECOMMENDED LOCOMOTIVE (CM - CM)	1660.375 m
RECOMMENDED MEDIA LINE 1 (CM - CM)	215 m
PROPOSED ARRIVAL LINE 2 (CM - CM)	215 m
PROPOSED STAGING LINE 1 (CM - CM)	1736 m
PROPOSED STAGING LINE 4 (CM - CM)	1500m
PROPOSED 25m SHUNTING NECK (CM - CM)	400 m
PROPOSED 60 NOT TO GO SPURS (CM - CM)	170 m

BENCHMARKS (WG 23)	
SCF	+ 4 357.11 + 3 042 176.07 1114.23 Pipe in concrete block
SCF	+ 4 550.11 + 3 042 206.75 1114.08 Pipe in concrete block
SHF	+ 4 458.27 + 3 042 139.64 1113.75 Pipe in concrete block
VLER1	+ 4 363.04 + 3 042 016.55 1113.56 16mm Iron pipe
VLERIC	+ 4 363.04 + 3 042 012.45 1114.32 16mm Iron pipe
GATE	+ 3 870.21 + 3 044 680.89 1111.15 10mm Iron pipe
HP5AP	+ 4 824.92 + 3 043 249.87 1116.80 16mm Iron pipe
HP5ADF	+ 3 520.82 + 3 039 631.44 1111.03 16mm Iron pipe
HP5ADF	+ 2 843.72 + 3 037 738.14 1110.22 16mm Iron pipe
HP5APAC	+ 2 402.00 + 3 041 527.66 1112.55 16mm Iron pipe



CHAINAGE (km)	307+530	307+590	307+650	307+710	307+770	307+830	307+890	307+950	308+010
GROUND LEVEL (m)	1111.71	1111.56	1111.45	1111.41	1111.41	1111.41	1111.40	1111.32	1111.21
TOP OF RAIL LEVEL-CENTER (m)	1111.68	1111.651	1111.644	1111.637	1111.637	1111.630	1111.623	1111.618	1111.618
FORMATION LEVEL-CENTER (m)	1111.148	1111.141	1111.134	1111.127	1111.120	1111.120	1111.113	1111.108	1111.108
FILL HEIGHT (m)									
CUT DEPTH (m)	-0.502	-0.419	-0.316	-0.203	-0.200	-0.207	-0.207	-0.207	-0.207
HORIZONTAL ALIGNMENT									
VERTICAL ALIGNMENT									

[illegible]