

REFER TO DRAWING NO
H-347691-0000-10-014-0002-005
FOR CONTINUATION

REFER TO DRAWING NO
H-347691-0000-10-014-0002-002
FOR CONTINUATION

R22	HORIZONTAL CURVE DATA				
Start	3000.00	71169.818	3099663.323		
Elements of curve No. 3 (P3)			Radius 2000.000		
			In	Out	
Back straight	274.42	14	Tangents	0.000	0.000
Front straight	267.05	36	Transitions	133.628	133.628
Intersect angle	7	35.39	Trans. Shift	0.000	0.000
Curve direction	LEFT		Arc length	255.684	
Chaignage			X	Y	
P3	69691.198	3097984.992			
CC3	69677.019	3097780.819			
BC3	4350.590	696822.777	3099774.083		
EC3	4616.254	696858.342	3099778.246		
End	4907.897	69366.945	3099768.528		

ACCESS ROAD 2		HORIZONTAL ALIGNMENT	
Start	0.000	71045.239	3099673.574
Elements of Curve No. 1 (P1)		Radius 140.000	
		In	Out
Back straight	4.42 14	Transitions	0.000
Front straight	270.00 00	Tangents	151.993 151.993
Intersect angle	94.42 14	Trans. Shift	0.000 0.000
Curve direction	LEFT	Arc length	231.405
Chainage		X	Y
PC1		71067.019	3099938.272
CC1		70915.028	3099798.272
BC1	113.600	71054.555	3099786.791
EC1	345.005	70939.131	3099831.929
End	475.513	70784.518	3099938.272

MR2-8 Horizontal Curve Data				
Start	0.000	70792.278	3100319.622	
Elements of curve No. 1 (P11)		Radius 765.00		
Back sight	182.2634	Transitions	In	Out
Front sight	162.5834	Tangents	131.450	131.450
Intersect angle	19.300	Trans. Shift	0.000	
Curve direction	Left	Arc length	260.358	
Chainage	Y	X		
P11	70774.892	30999.1873		
CC1	71544.957	3100018.151		
BC1	268.672	70780.671	3100051.200	
EC1	529.030	70813.477	3099794.183	
End	536.263	70815.594	3099787.263	

STORMWATER ABBREVIATIONS

GI -	GRID INLET
FI -	FIELD INLET
SI -	SIDE INLETS
WW -	WING WALL
KI -	KERB INLET

						CONSTRUCTION RECORD
						<u>WORKS CONTRACT ENGINEER</u>
						Name P.HENDENDERSON
						Prof. Reg. No. 06950185
						Date -
						SANJAL PROJECT MANAGER
V2	FEB 2022	SCANNED ORIGINAL WITH SIGNATURE	P.H.			
V1	FEB 2016	ORIGINAL VERSION	F.S			
No.	DATE	REVISION	CONSULT. ENG.			Name M. NEPHEMBANI Date -

 25 Richeford Circle Ridgeside Office Park Umhlanga South Africa 4319 Tel: (031) 536 9400	 Thekwini Geocivils CC 4 Suite 6 Westway Office Park Spine Road Westville Durban 3630 Tel: (031) 265 1777
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DESIGNED BY	
NAME	_____
	A. MOTHILAL
Prof. Reg. No.	
CHECKED BY	
NAME	_____
	P. HENDERSON
Prof. Reg. No.	20050185
DRAWN BY	
NAME	E ROY

CONSULTANT APPROVAL

Name : P.HENDERSON

Prof. Reg. No. : 20050185

Date : -



2022-02-28

HEAD OFFICE

Val de Grace
Pretoria
0184

PO Box 415
Pretoria 0001
South Africa

Tel: (012) 844 8000

SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD



**BUILDING SOUTH AFRICA
THROUGH BETTER ROADS**

REG NO 19603/0000/04

EASTERN REGION 58 van Eck Place Pietermaritzburg 3201 PO Box 100410 Scottsville 3209 Tel: (033) 392 8100	<u>ACCEPTANCE</u> THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING  for CEO: SA NATIONAL ROADS AGENCY SLOC LTD Date: 12 JUNE 2024
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SETTING OUT POINTS PROPOSED ROAD RESERVE R22 RIGHT HAND SIDE		
POINT	Y	X
	WSG 84 L6 33	
R15		
R16	+71073.319	+3099711.2
R17	+71082.033	+3099815.8
R18	+71065.255	+3098971.5
R19	+71034.423	+3099915.2
R20	+70996.203	+3099943.3

[illegible]

R30	+7099.342	+3099710.2
R31	+7094.001	+3099710.0
R32	+7088.526	+3099716.7
R38	+70867.17	+3099713.3
R40	+70818.176	+3099717.3
R41	+7079.875	+3099726.05
R42	+70707.911	+3099734.6
R43	+70640.859	+3099738.8
R44	+70529.383	+3099743.6
R45	+70230.051	+3099765.7
R46	+70232.655	+3099797.3
R47	+70202.432	+3099795.9
R48	+70200.152	+3099768.1

SETTING OUT CO-ORDINATES ROAD R22			
CHAINAGE	Y	X	DESCRIPTION
	WGS 84 Le 33		
3000.00	71169.818	3099663.323	PI A2
3100.00	71070.155	3099671.524	
3125.00	71045.239	3099673.574	
3200.00	70970.492	3099679.725	
3300.00	70870.828	3099687.926	
3400.00	70771.165	3099696.127	
3500.00	70671.502	3099704.327	PI A3
3600.00	70571.839	3099712.528	
3700.00	70472.176	3099720.729	
3800.00	70372.513	3099728.930	

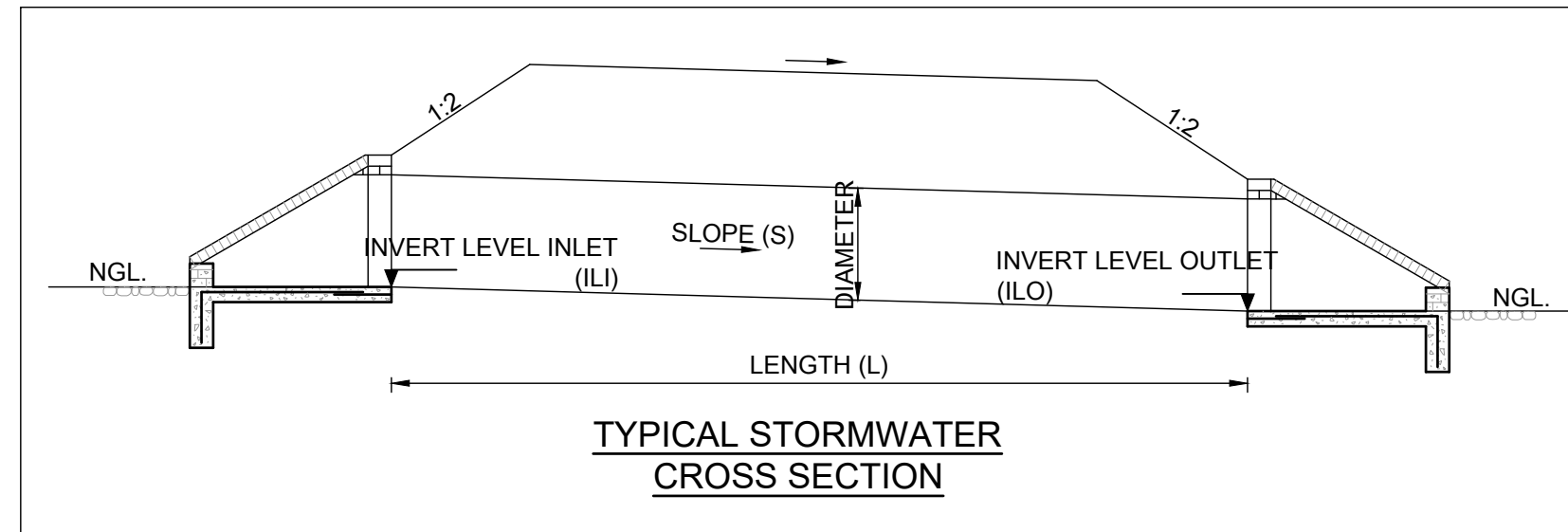
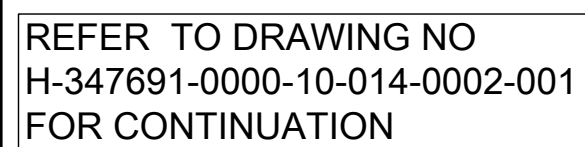
71	4000.000	70173.186	3099745.331	
72	SETTING OUT CO ORDINATES			
72	ACCESS ROAD 2			
72	Y	X		DESCRIPTION
40	WGS 84 Le 33			
72	0.000	71045.239	3099763.574	PI R22
72	100.000	71053.440	3099737.237	
72	113.600	71054.555	3099786.791	BC1
72	200.000	71035.461	3099869.655	
58	300.000	70959.260	3099931.100	
75	345.005	70915.026	3099938.272	EC1
75	400.000	70860.031	3099938.272	
15	475.513	70784.518	3099938.272	PI MR2-8
01	SETTING OUT CO ORDINATES			
01	MR2-8 ROAD			

62		Y	X	
33	CHAINAGE	WGS 84 Lo 33		DESCRIPTION
15	0.000	70792.278	3100319.622	
42	100.000	70767.958	3100219.715	
11	200.000	70785.638	3100119.809	
58	268.672	70780.671	3100051.200	BC1
78	300.000	70779.959	3100019.883	
26	381.770	70784.518	3099938.272	PI AR2
36	400.000	70786.260	3099920.153	
90	500.000	70805.506	3099822.095	
40	529.030	70813.477	3099974.183	EC1
97	536.263	70815.594	3099787.267	

POINT	Y	X	Z
	WGS 84 Ls 33		
R22-WW1.1	71068.864	3099663.323	65.000
R22-WW1.2	71059.352	3099659.488	64.800
R22-WW2.2	71057.565	3099684.197	66.300
R22-K12.1	71051.778	3099683.225	66.427
R22-K13.1	71032.987	3099703.981	66.170
R22-WW3.2	71026.340	3099708.782	65.961
R22-K14.1	70941.783	3099683.225	66.147
R22-WW4.2	70942.743	3099701.744	63.144
R22-S15.1	70939.565	3099672.601	66.178

TD2-WW5.2	70398.590	+3096663.260	61.811
TD2-K17.1	70391.594	+3096955.221	66.064
TD2-WW7.2	70392.110	+3096708.199	60.795
TD2-SI6.1	70389.673	+3096677.965	66.078
TD2-WW6.2	70389.103	+3096665.477	60.075
TD2-K19.1	70371.825	+3097070.909	65.495
TD2-WW9.2	70773.253	+3098271.454	58.022
TD2-SI8.1	70773.258	+3096688.146	65.495
TD2-WW8.2	70769.001	+3096680.433	56.369
TD2-WW10.2	70616.382	+3096716.616	62.859
TD2-WW11.2	70616.038	+3096734.614	63.481
TD2-SI10.1	70616.033	+3096700.855	62.675
TD2-WW10.2	70614.556	+3096883.851	62.254
TD2-K13.1	70447.851	+3096730.553	57.294
TD2-WW13.2	70448.901	+3096742.941	52.207
TD2-SI12.1	70446.594	+3096714.808	57.226
TD2-WW12.2	70446.598	+3096702.581	51.246
TD2-K15.1	70253.865	+3096746.525	51.160
TD2-WW15.2	70254.378	+3096753.486	48.988
TD2-SI14.1	70242.593	+309793.593	50.921
TD2-WW14.2	70242.313	+309728.031	48.294
TD2-WW16.1	70815.900	+3096956.129	60.655
TD2-WW16.2	70810.126	+3096927.775	60.540
TD2-WW17.1	70220.957	+3096757.956	48.481
TD2-WW17.2	70208.831	+3096758.954	48.375
TD2-WW18.1	70202.886	+3096766.455	47.318
TD2-WW18.2	70204.385	+3096748.676	47.060

PROJECT NUMBER		R.022-020-2013/1	
DRAWING LOCATION DATA		START	END
ROUTE		R22	R22
SECTION		01	01
DRAWING km DISTANCE		3.0	4.0
DRAWING TYPE		ROADS - LAYOUT PLAN	
BRIDGE/STRUCTURE No.			
CONSULTANT DRAWING No.		H347691-0000-10-014-0002-001	
SANRAL DOCUMENT #		17590880	



R22		HORIZONTAL CURVE DATA	
Start	3000.000	71169.818	3099663.323
Elements of curve	No. 3 (PI3)	Radius	2000.000
Back straight	274.4214	Transitions	0.000
Straight	267.0536	Trans. Shift	133.028
Intersect angle	7.3639	Trans. Shift	0.000
Curve direction	LEFT	Arc length	285.654
Chainage	Y	X	
PI3	69691.198	3099784.992	
CC3	69658.761	3097780.819	
BC3	4350.590	69823.777	3099774.083
EC3	4616.254	69558.342	3099778.246
End	4807.897	69366.945	3099768.528

STORMWATER ABBREVIATIONS

GI -	GRID INLET
FI -	FIELD INLET
SI -	SIDE INLETS
WW -	WING WALL
KI -	KERB INLET

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CONSULTANT APPROVAL

Name : P.HENDERSON

Prof. Reg. No. : 20050185

Date : -



2022-02-28

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ACCEPTANCE

THIS ACCEPTANCE IS FOR PROCEDURAL AND
ADMINISTRATIVE REVIEW PURPOSES ONLY
AND DOES NOT ATTRACT LEGAL LIABILITY OR
LIABILITY OF ANY KIND FROM WHATSOEVER
CAUSE OR HOWEVER ARISING



for CEO: SA NATIONAL ROADS AGENCY SOC LTD

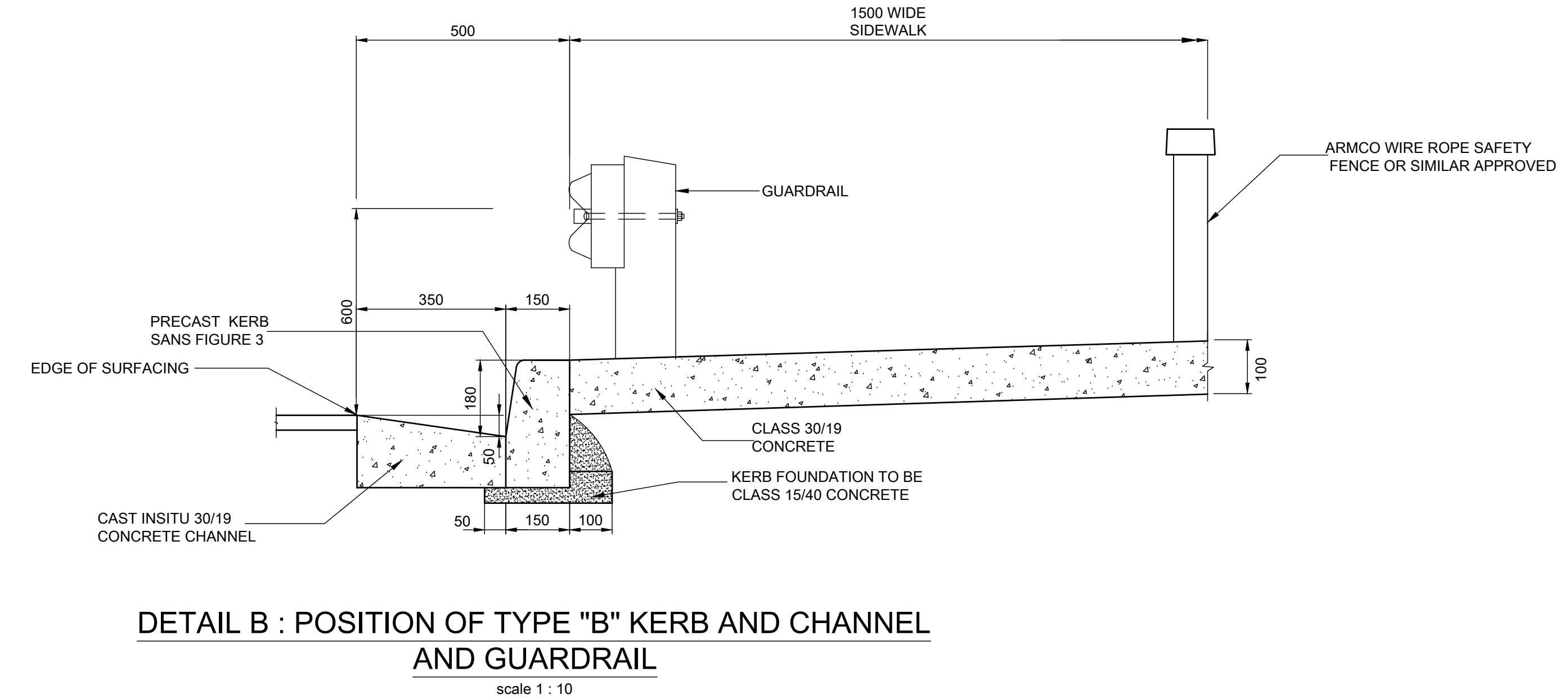
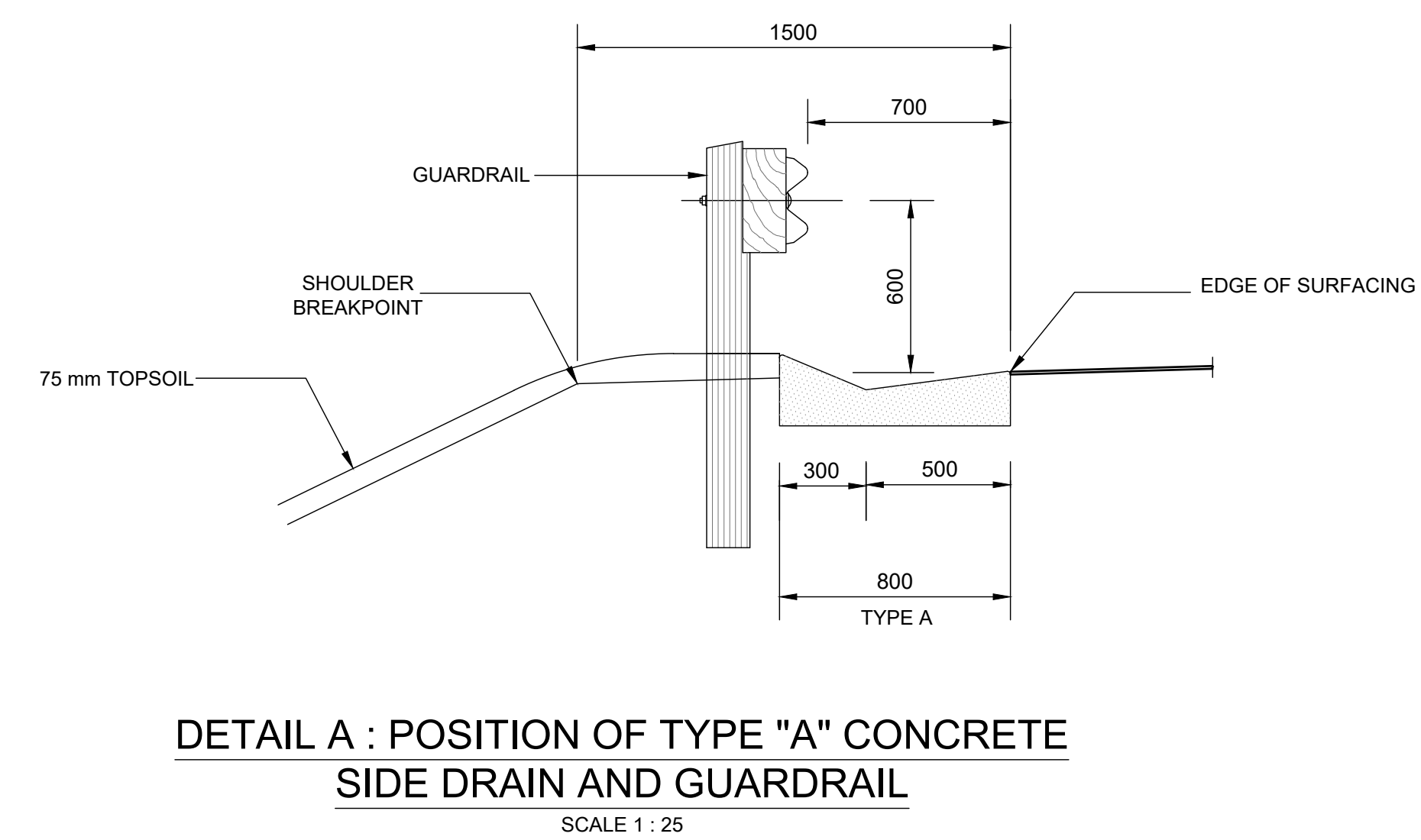
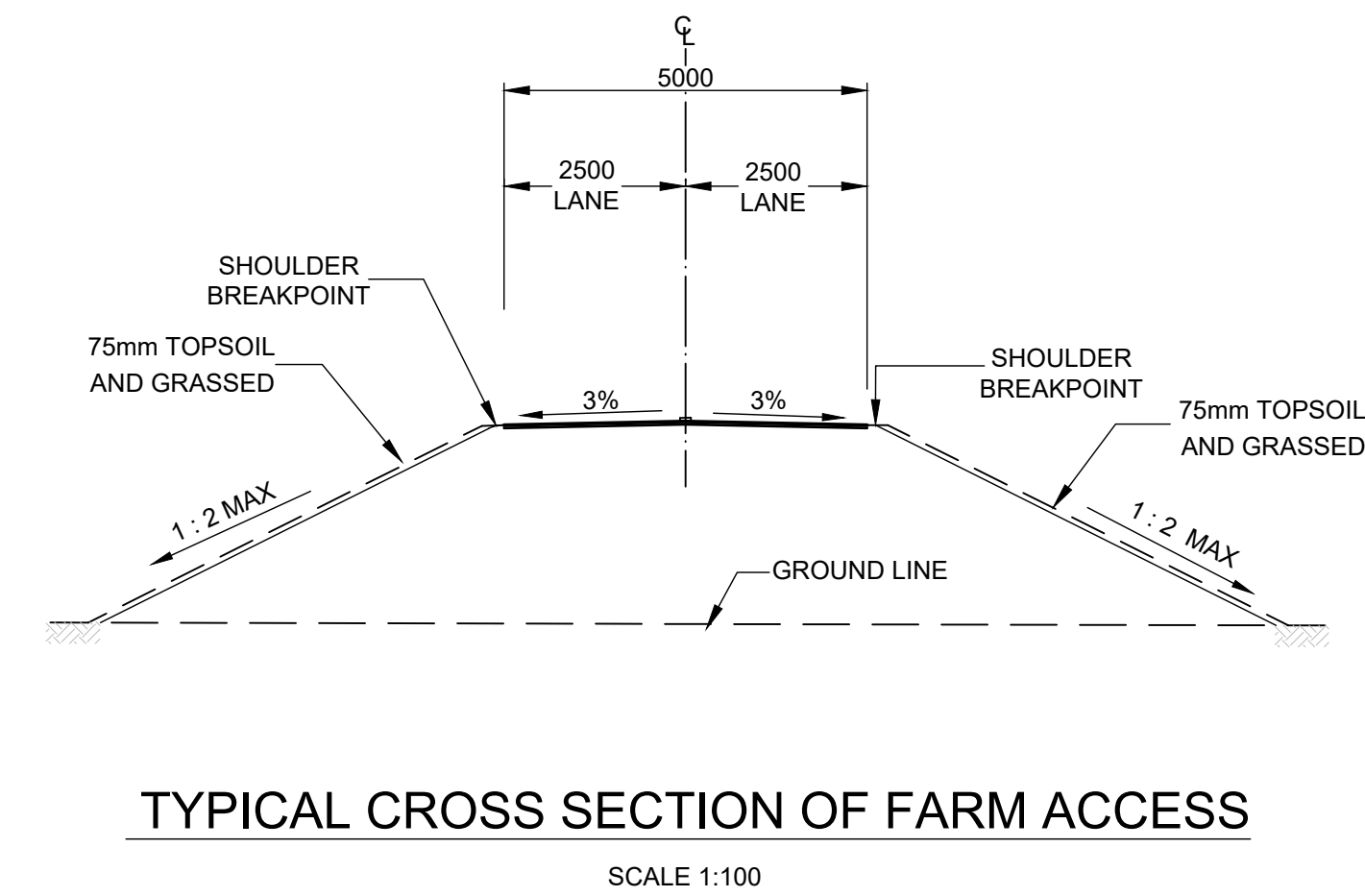
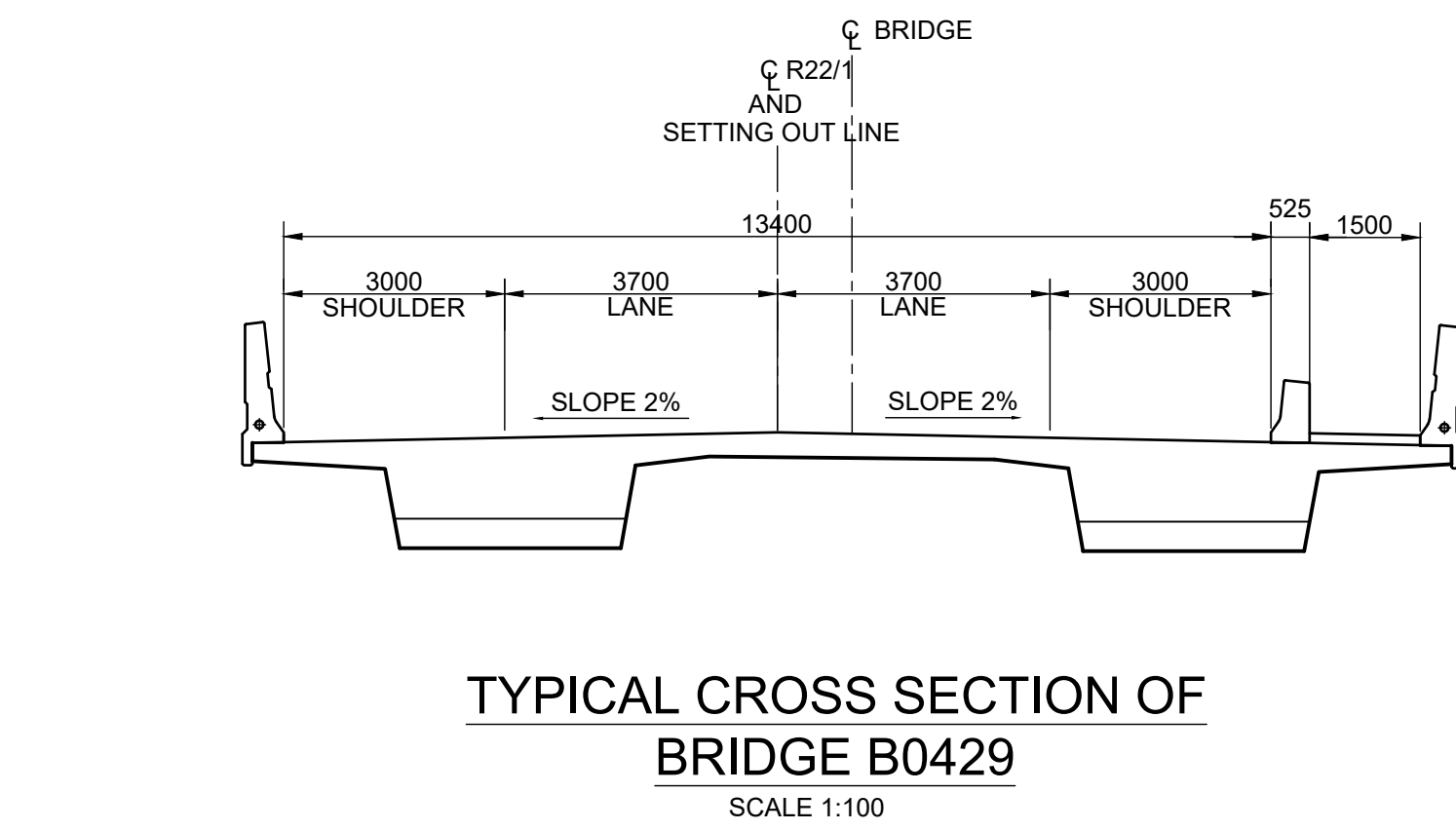
Date: 12 JUNE 2024

SETTING OUT CO ORDINATES ROAD R22			
CHAINAGE	Y	X	DESCRIPTION
	WGS 84 L3 33		
4000.000	70173.186	30959745.331	
4100.000	70173.523	30959735.532	
4200.000	69871.860	30959761.733	
4300.000	69874.197	30959769.934	
4350.590	69872.477	30959774.083	BC3
4400.000	69873.389	30959777.526	
4500.000	69674.552	30959780.765	
4600.000	69674.578	30959779.074	
4616.254	69558.342	30959778.246	EC3
4700.000	69474.703	30959773.999	
4800.000	69373.832	30959768.928	
4807.897	69366.945	30959768.928	

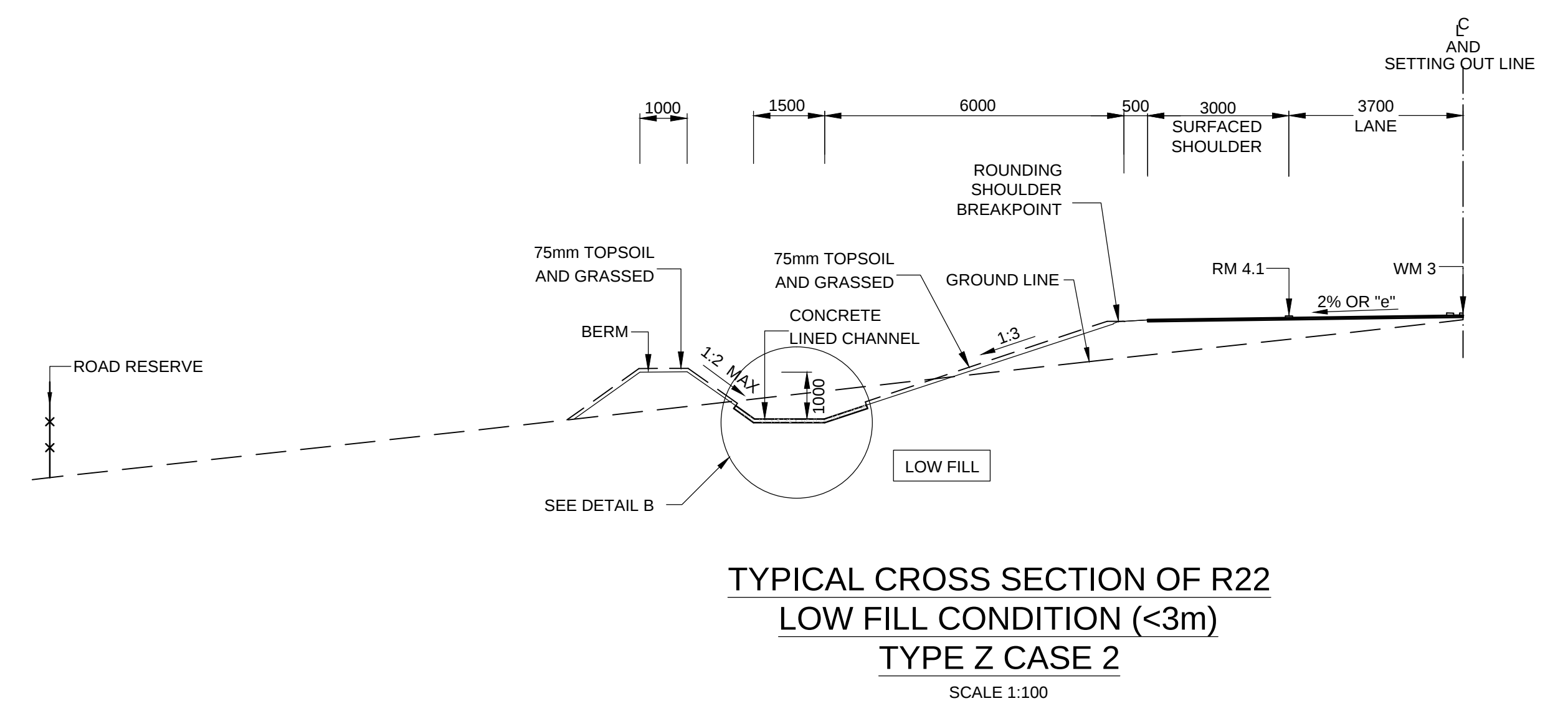
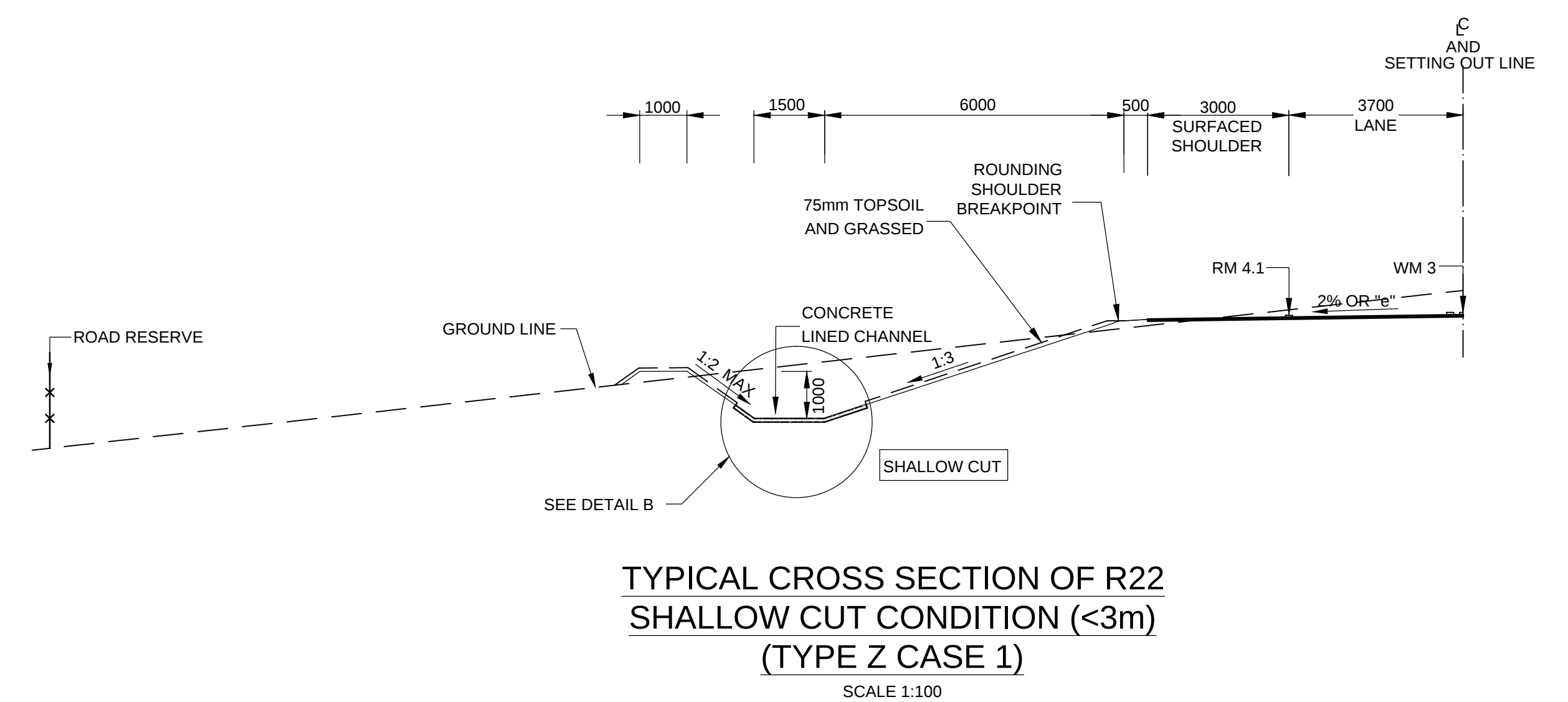
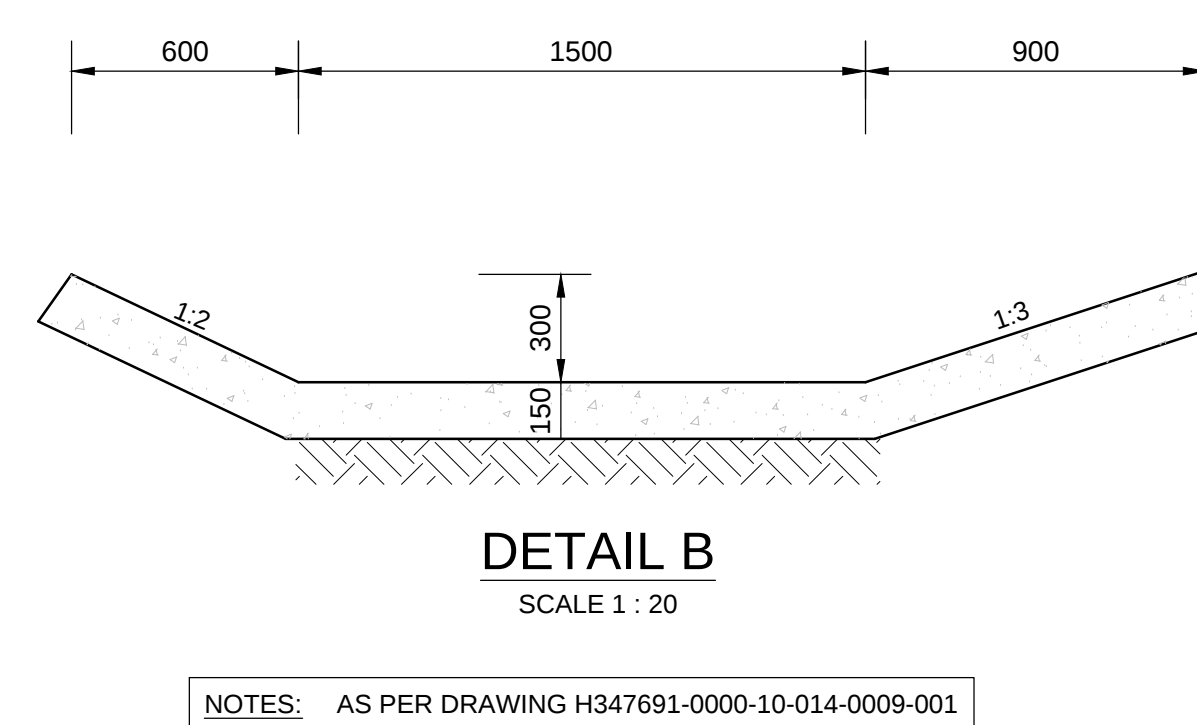
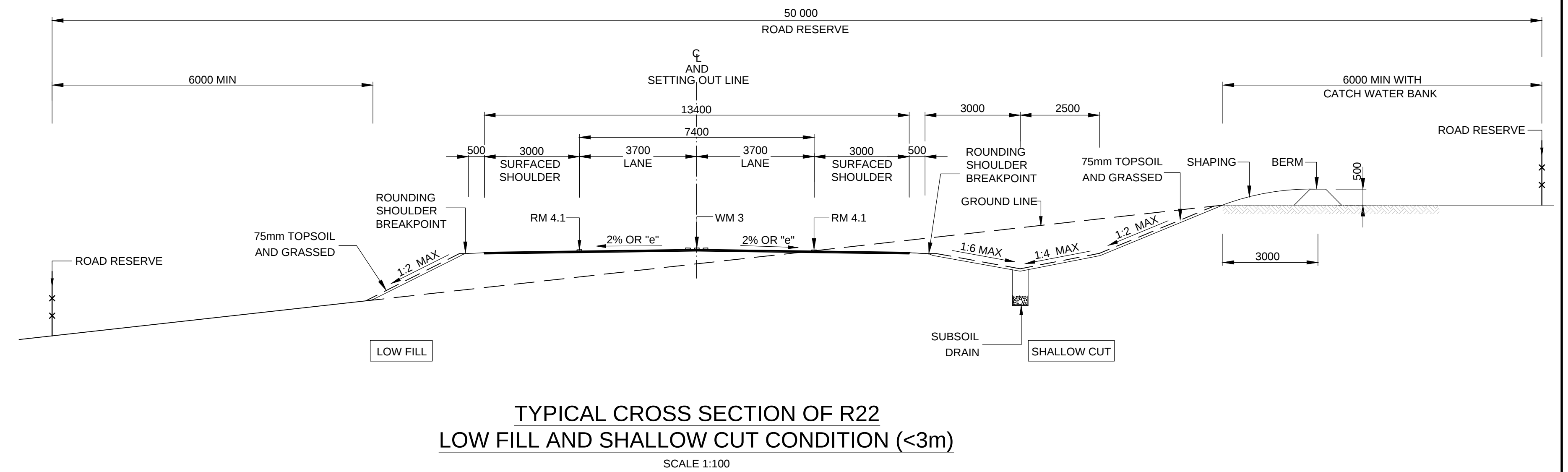
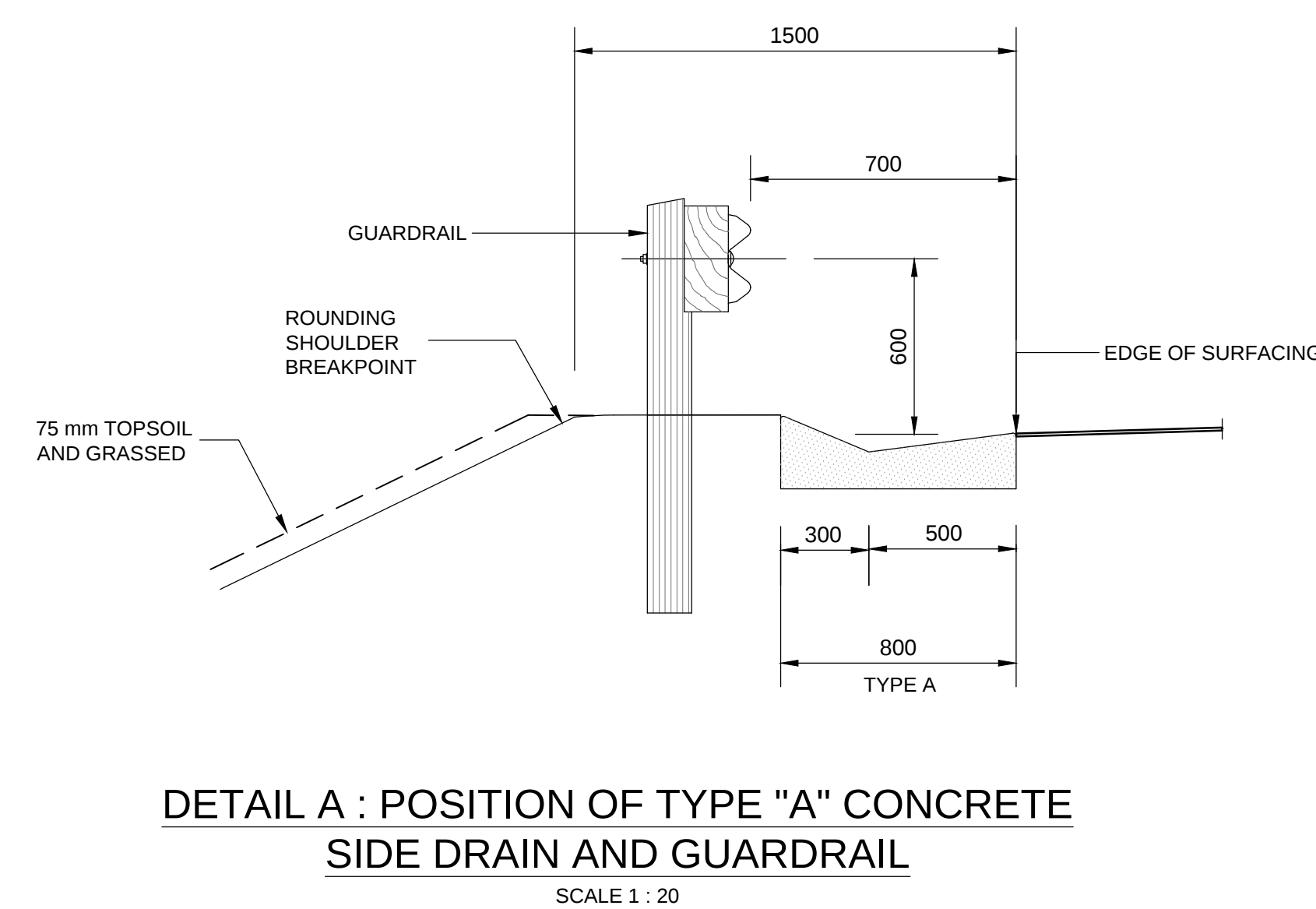
STORMWATER SETTING OUT POINTS				
POINT	Y	X		Z
		WGS 84 Le 33		
D22-WW1-1	71068.864	+3099683.323		65.000
D22-WW1-2	71059.352	+3099659.488		64.800
D22-WW2-2	71057.565	+3099684.197		66.300
D22-KI2-1	71051.778	+3099693.255		66.427
D22-KI3-1	71032.987	+3099703.981		66.170
D22-WX3-2	71026.340	+3099708.782		65.961
D22-KI4-1	70941.783	+3099693.225		66.147
D22-WX4-2	70942.743	+3099701.744		63.144
D22-SI5-1	70939.565	+3099672.601		66.178
D22-WX5-2	70938.590	+3099663.260		61.811
D22-KI7-1	70891.594	+3099695.221		66.064
D22-WW7-2	70892.110	+3099708.199		60.795
D22-SI6-1	70889.673	+3099677.965		66.078
D22-WX6-2	70888.036	+3099665.477		60.075
D22-KI9-1	70771.825	+3099703.909		65.495
D22-WX9-2	70773.253	+3099721.454		58.022
D22-SI8-1	70770.528	+3099688.146		65.495
D22-WX8-2	70769.001	+3099669.433		56.389
D22-KI11-1	70617.328	+3099716.618		62.689
D22-WX11-2	70618.682	+3099733.304		55.461
D22-SI10-1	70616.033	+3099700.858		62.655
D22-WX10-2	70614.556	+3099683.851		52.254
D22-KI13-1	70447.901	+3099730.553		57.264
D22-WX12-2	70448.851	+3099742.941		52.207
D22-SI12-1	70446.584	+3099714.808		57.226
D22-WX12-2	70445.598	+3099702.581		51.246
D22-KI15-1	70253.365	+3099876.525		51.160
D22-WX15-2	70254.378	+3099753.486		48.808
D22-SI14-1	70242.593	+3099731.593		50.921
D22-WX14-2	70242.313	+3099726.031		48.294
D22-WX16-1	70815.900	+3099956.129		60.565
D22-WX16-2	70810.126	+3099927.775		60.420
D22-WX17-1	70220.957	+3099757.956		48.481
D22-WX17-2	70208.831	+3099758.954		48.375
D22-WX18-1	70022.886	+3099766.455		47.318
D22-WX18-2	70024.385	+3099748.676		47.060

PROJECT DESCRIPTION			
ELIMINATION OF THE AT-GRADE RAILWAY CROSSING ON NATIONAL ROUTE R22 SECTION 1 AT KM 5.5			
DESCRIPTION			
GEOMETRIC AND DRAINAGE LAYOUT PLANS KM 4.00 TO KM 4.808			
SCALE :	1:1000	SHEET	5 OF 5

PROJECT NUMBER		R.022-020-2013/1	
DRAWING LOCATION DATA		START	END
ROUTE		R22	R22
SECTION		01	01
DRAWING km DISTANCE		3.9	4.808
DRAWING TYPE		ROADS LAYOUT PLAN	
BRIDGE/STRUCTURE No.			
CONSULTANT DRAWING No.		H347691-0000-10-014-0002-002	
SANRAL DOCUMENT #		17591209	



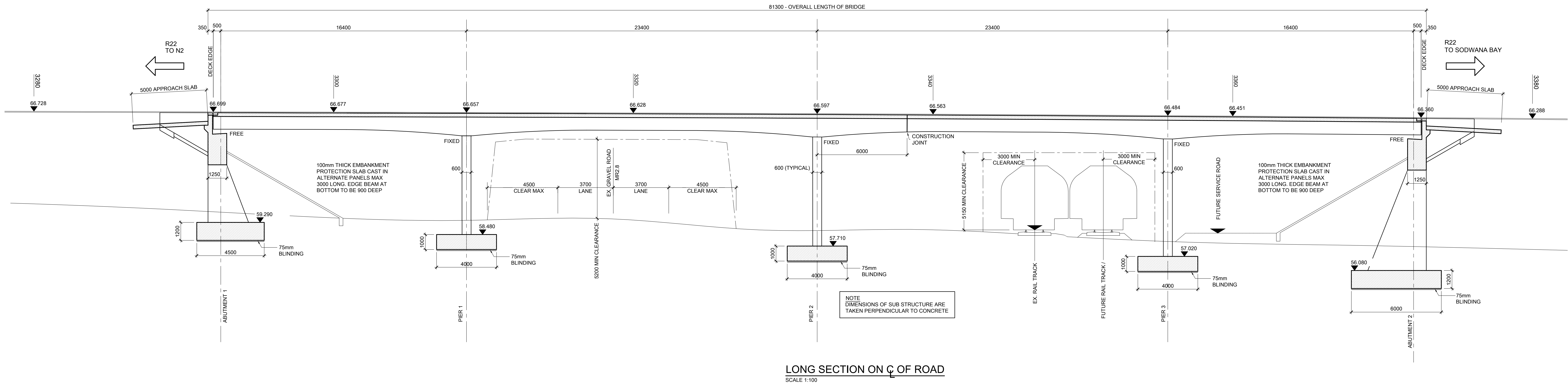
NOTE:
WIDTHS OF ALL CROSS SECTIONAL ELEMENTS TO BE READ IN
CONJUNCTION WITH THE SETTING OUT DETAILS.



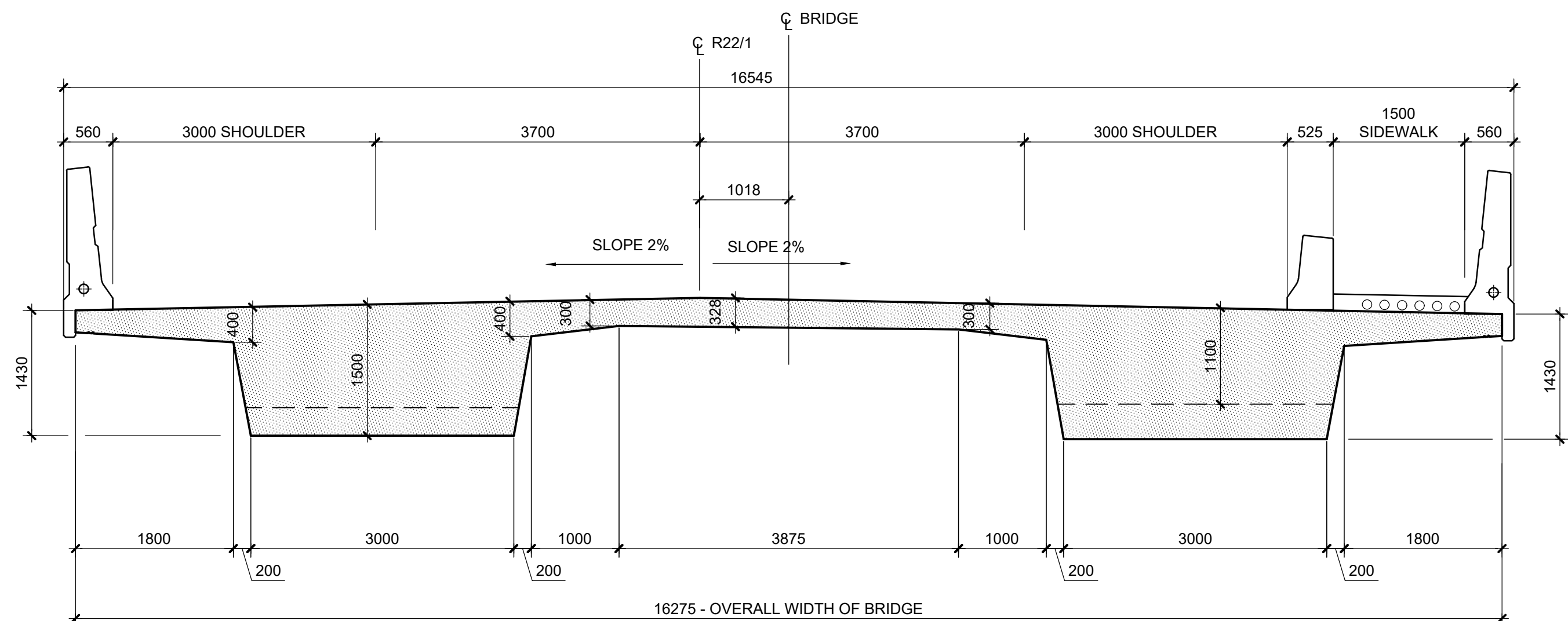
NOTE:
WIDTHS OF ALL CROSS SECTIONAL ELEMENTS TO BE READ IN
CONJUNCTION WITH THE SETTING OUT DETAILS.

				CONSTRUCTION RECORD WORKS CONTRACT ENGINEER		HATCH		Thekwini Geocivics CC		DESIGNED BY NAME G. PAYNE Prof. Reg No. 20050185 CHECKED BY NAME P. HENDERSON Prof. Reg No. 20050185		CONSULTANT APPROVAL NAME P. HENDERSON Prof. Reg No. 20050185 Date		HEAD OFFICE Val de Grace Pretoria 0184 PO Box 415 Pretoria 0001 South Africa Tel: (012) 844 8000		SANRAL SOUTH AFRICAN NATIONAL ROADS AGENCY SOC. LTD 00000000000000000000 EASTERN REGION 58 van Eck Place Pietermaritzburg 3201 PO Box 100410 Scottsville 3209 Tel: (031) 392 8100		ACCEPTANCE THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATEVER CAUSE OR HOWSOEVER ARISING For: CEO, NATIONAL ROADS AGENCY SOC. LTD Date: 12 JUL 2024		PROJECT DESCRIPTION ELIMINATION OF THE AT-GRADE RAILWAY CROSSING ON NATIONAL ROUTE R22 SECTION 1 AT KM 5.5 DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1				PROJECT NUMBER R.022-020-2013/1			
				NAME P. HENDERSON Prof. Reg. No. 20050185 Date		25 Richefond Circle Spine Ridge Office Park Umhlanga South Africa 4319 Tel: (031) 536 9400		4 Suite 6 Westway Office Park Spine Road Westville Durban 3630 Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
				SANRAL PROJECT MANAGER NAME M. NEMPEMBANI Date		Tel: (031) 536 9400		Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
				NAME P. HENDERSON Prof. Reg. No. 20050185 Date		Tel: (031) 536 9400		Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
				NAME P. HENDERSON Prof. Reg. No. 20050185 Date		Tel: (031) 536 9400		Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
				NAME P. HENDERSON Prof. Reg. No. 20050185 Date		Tel: (031) 536 9400		Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
				NAME P. HENDERSON Prof. Reg. No. 20050185 Date		Tel: (031) 536 9400		Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
				NAME P. HENDERSON Prof. Reg. No. 20050185 Date		Tel: (031) 536 9400		Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
				NAME P. HENDERSON Prof. Reg. No. 20050185 Date		Tel: (031) 536 9400		Tel: (031) 265 1777		NAME P. HENDERSON Prof. Reg No. 20050185		PO Box 100410 Scottsville 3209		PO Box 100410 Scottsville 3209		DESCRIPTION TYPICAL CROSS SECTIONS ROAD R22 AND ACCESS ROAD 1		PROJECT NUMBER R.022-020-2013/1									
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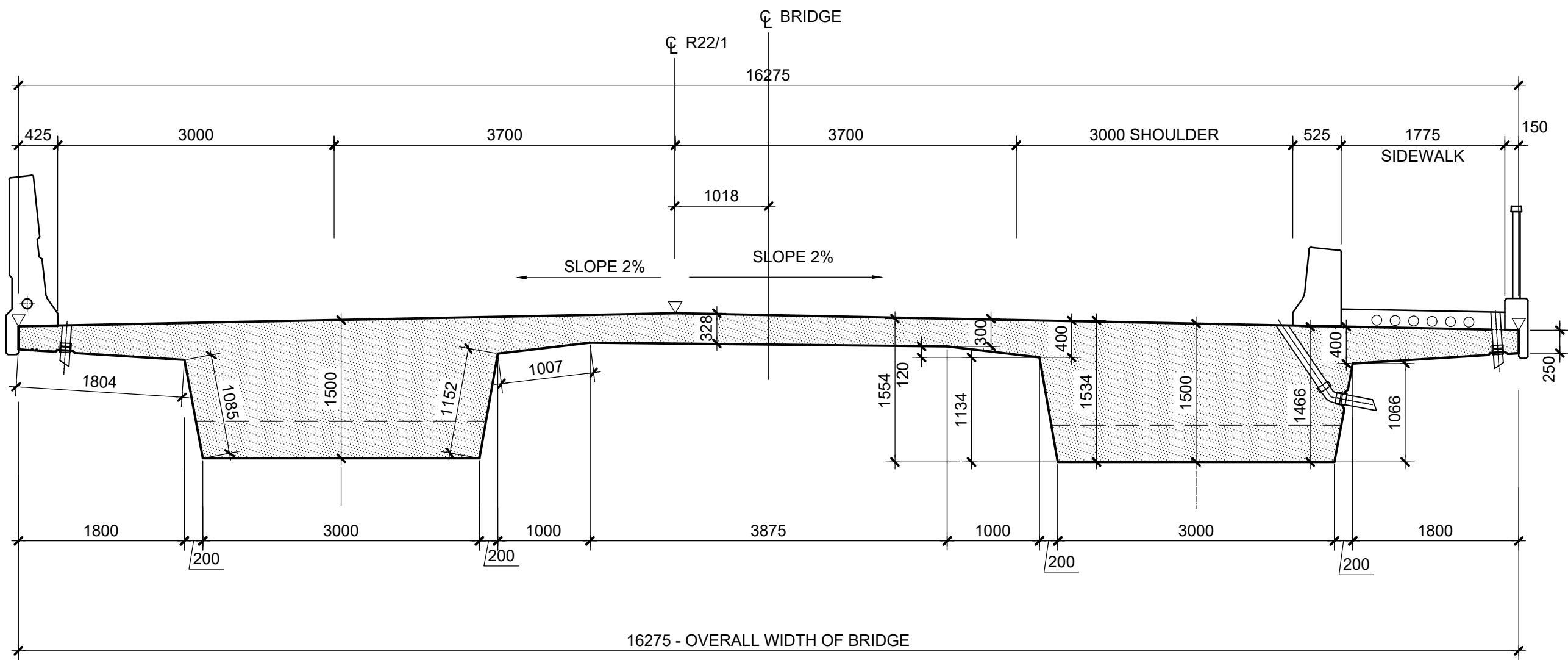
LONG SECTION ON C OF ROAD
SCALE 1:100



CROSS SECTION THROUGH DECK ABOVE RAILWAYS

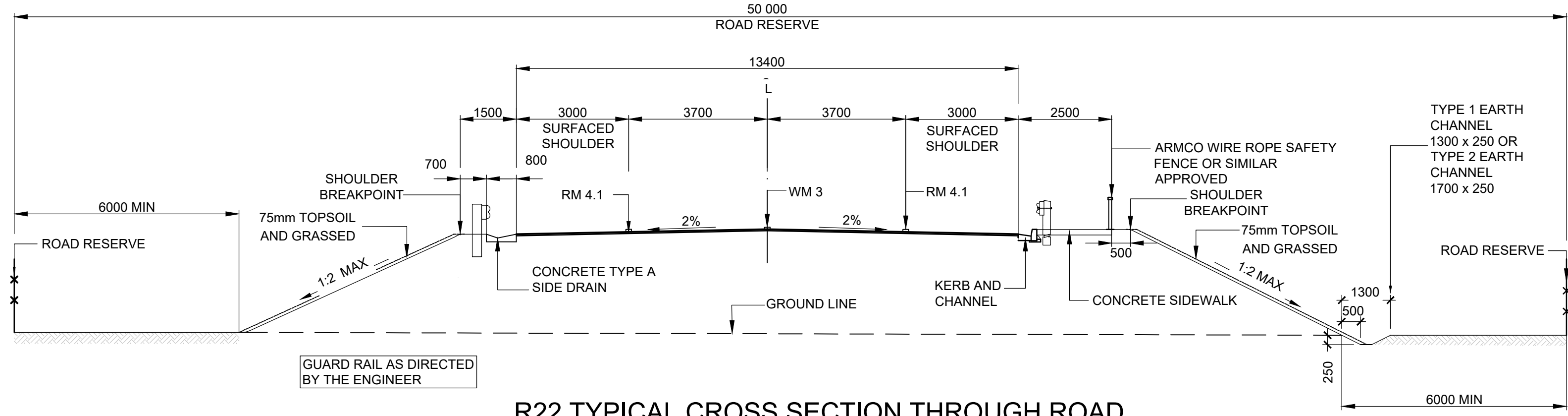
SCALE 1:50

INDICATES POSITION OF LEVELS ON PLAN



CROSS SECTION THROUGH DECK AT PIERS

SCALE 1:50



R22 TYPICAL CROSS SECTION THROUGH ROAD
WITH SIDEWALK

SCALE 1:100

DESIGN NOTES AND DATA

1. DESCRIPTION

THE BRIDGE COMPRISES OF PRESTRESSED VARIABLE DEPTH CAST IN-SITU SPINE BEAMS SUPPORTED ON WALL TYPE PIERS AND SPILL THROUGH ABUTMENTS.

2. DESIGN METHOD

- a) STRUCTURE LIMIT STATE TO TMH 7 PART 3
b) PARAPET DRAWINGS / TD-S-P-1001-1-V1
c) COMPUTER PROGRAMS PROCON / RM BRIDGE

3. DESIGN LOADING

- a) TMH7 PARTS 1 AND 2 AS AMENDED
b) LIVE LOADS NA, NB36, NC
c) DEAD LOAD CONCRETE SELFWEIGHT 25 kN/m³
d) EARTH PRESSURE Ka = 6.6 kPa/m DEPTH
Ko = 10 kPa/m DEPTH
e) INTERNAL ANGLE OF FRICTION 30°
f) IN-SITU DENSITY 20kN/m³

4. DESIGN PARAMETERS

- a) YOUNG'S MODULUS CONCRETE CLASS 30 - 28 GPa
CONCRETE CLASS 40 - 31 GPa
REINFORCING STEEL - 200 GPa

5. MATERIAL STRENGTH AND STRESSES

- a) CONCRETE
BLINDING - C12/15-20
SLOPE PROTECTION SLABS - C25/30-20
FOUNDATIONS - D25/30-20-XC1
APPROACH SLABS - D25/30-20-XC1
ABUTMENTS - D25/30-20-XC1
PIERS - D25/30-20-XC1
DECK - D32/40-20-XC4
PARAPET - D25/30-20-XC4
MILD STEEL - 250MPa
HIGH YIELD STEEL - 450MPa

6. FOUNDATIONS

- a) SPREAD FOOTINGS ON SOFT ROCK
b) ALLOWABLE LOAD 500kPa
c) DESIGN LOAD 450kPa

7.FINISHES

- a) SUBSTRUCTURE, BURIED SURFACES F1 U2
b) SUBSTRUCTURE, VISIBLE SURFACES F3 U2
c) DECK, HIDDEN SURFACES F1 U2
d) DECK, VISIBLE SURFACES F3
e) DECK TOP SURFACE F3 U1
f) PARAPETS F3 U3
g) 25mm CHAMFERS TO ALL SHARP CORNERS

8. CONCRETE COVER

- a) FOUNDATIONS - 50mm
b) PIERS - 40mm
c) ABUTMENTS - 40mm
d) DECK TOP SLAB - 50mm
e) PARAPETS - 40mm
f) DECK SOFFIT - 40mm

9. MISCELLANEOUS

- a) BEARINGS POT TYPE
b) JOINTS 80mm GLAND AND CLAW

10. CONSTRUCTION SEQUENCE

- a) ERECT STAGING AND FORMWORK AND CAST FIRST DECK SEGMENT FROM ABUTMENT 1 TO CONSTRUCTION JOINT. COMPLETE PRESTRESSING FOR FIRST SEGMENT.
b) ERECT STAGING AND FORMWORK AND CAST SECOND DECK SEGMENT FROM CONSTRUCTION JOINT TO ABUTMENT 2. COMPLETE PRESTRESSING FOR DECK

				CONSTRUCTION RECORD						Thekwini Geocivics CC				HEAD OFFICE		EASTERN REGION		ACCEPTANCE		PROJECT DESCRIPTION				PROJECT NUMBER		R.022-020-2013/1					
				WORKS CONTRACT ENGINEER																		ELIMINATION OF THE AT-GRADE RAILWAY CROSSING ON NATIONAL ROUTE R22 SECTION 1 AT KM 5.5				DRAWING LOCATION DATA		START		END	
				Name : P. HENDERSON				25 Richeford Circle Ridgeway Office Park Umlanga South Africa 4319		4 Suite 6 Westway Office Park Spine Road Westville Durban 3630				Val de Grace Private 0184		PO Box 100410 Scottsville 3201		THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATEVER CAUSE OR HOWEVER ARISING				DESCRIPTION BRIDGE B0429 GENERAL ARRANGEMENT SHEET 2				DRAWING km DISTANCE		3.332		3.332	
				Prof. Reg. No. : 20001050																											
				Date :																											
				SANRAL PROJECT MANAGER																											
				Name : M. NEPHEMBANI																											
				Date :																											
				CONSULT. ENG.																											
				Name : H. JACOBS																											
				Date :																											
				MINOR AMENDMENTS																											
				SCANNED ORIGINAL WITH SIGNATURES																											
				DETAILED DESIGN REVIEW																											
				ORIGINAL VERSION																											
				CONSULT. ENG.																											
				Name : H. JACOBS																											
				Date :																											
				DRAWN																											
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