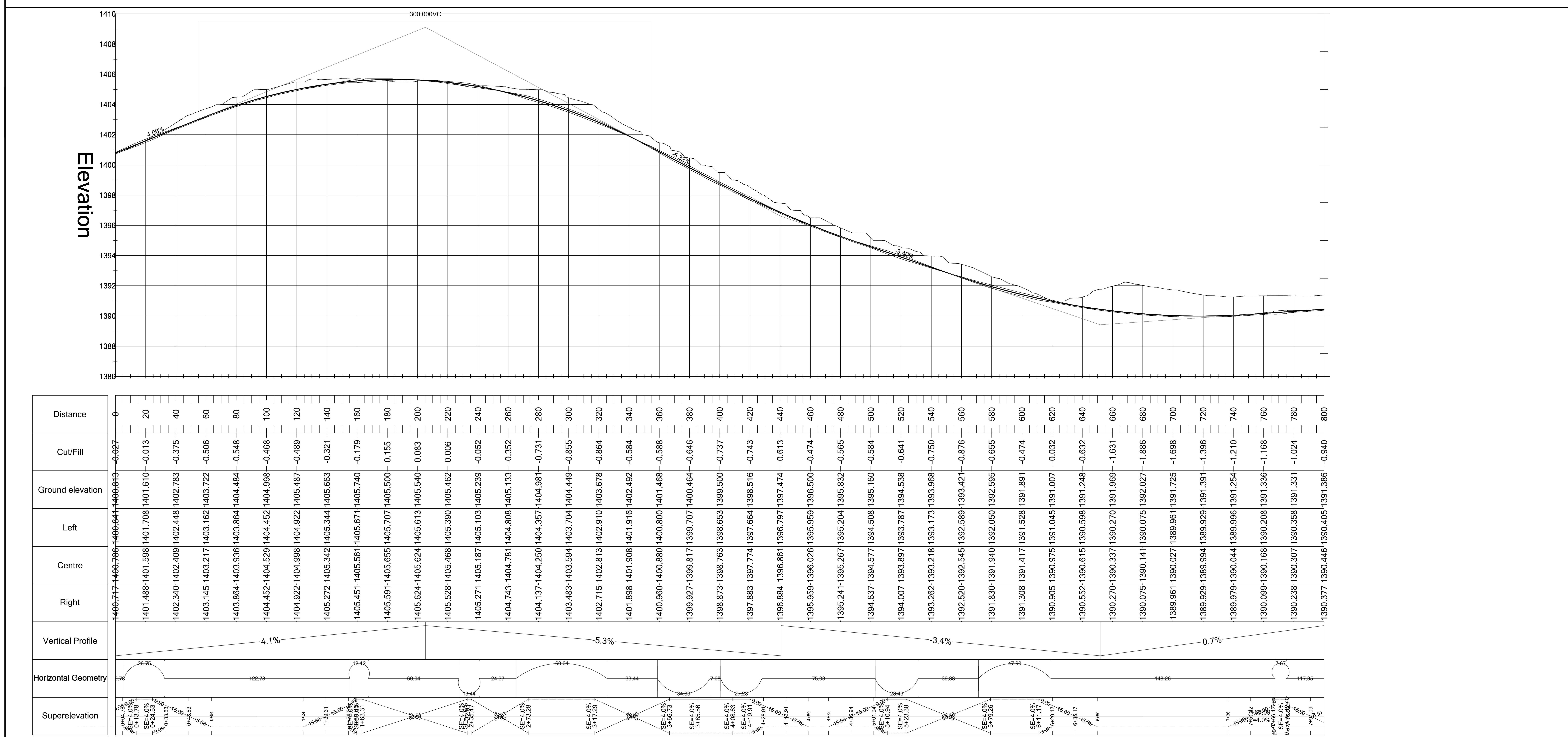
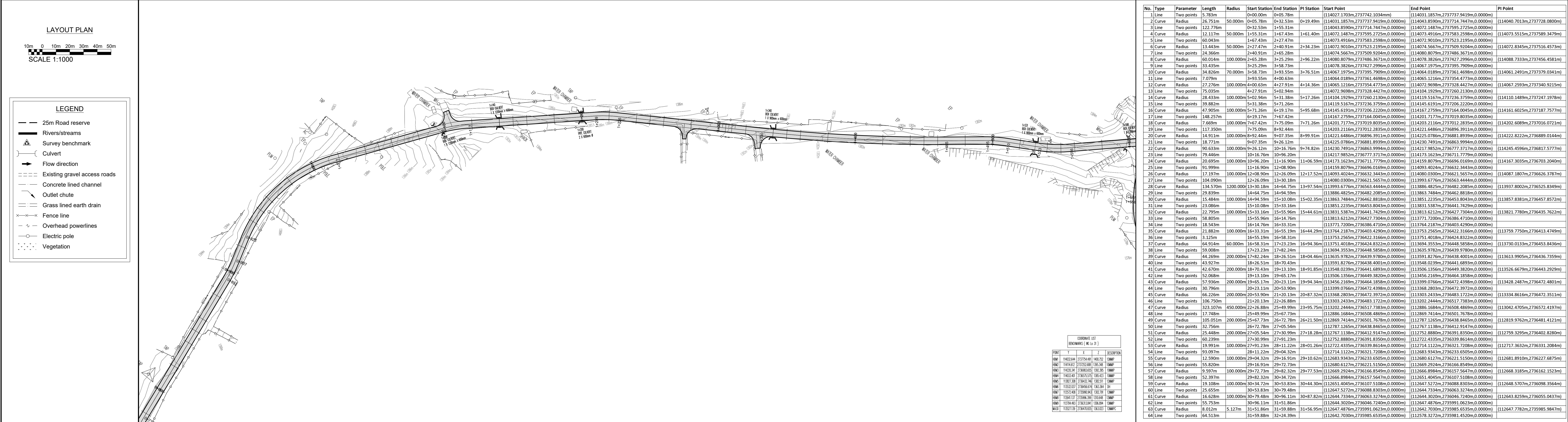




CTION SIGN IDER	CONSULTANTS DETAIL		Baitseanape Consulting Engineers 70 Selborne Avenue Lytelton Manor Ext 3 Lytelton, Centurion 0157		P.O. Box 11598 Centurion 0046		Tel: (012) 644 1728 Fax: (012) 644 1292 email: ephraim@baitseanape.co.za	
								



DESIGN SPEED 60 km/h	
LONGITUDINAL SECTION	
SCALE HOR 1:1000 VERT 1:200	
LEGEND : --- GROUND PROFILE — DESIGN PROFILE	
TYPICAL CROSS-SECTION	

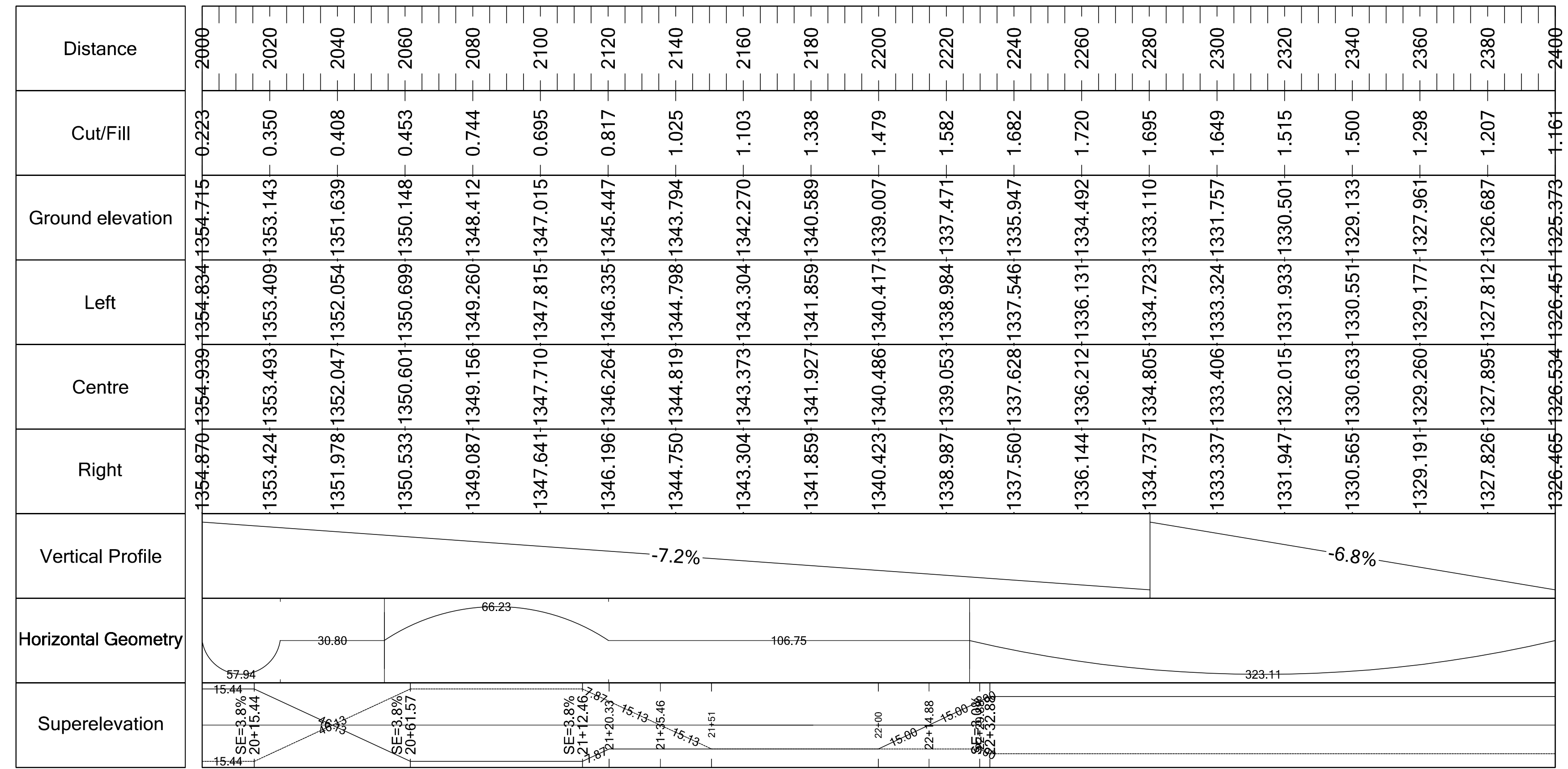
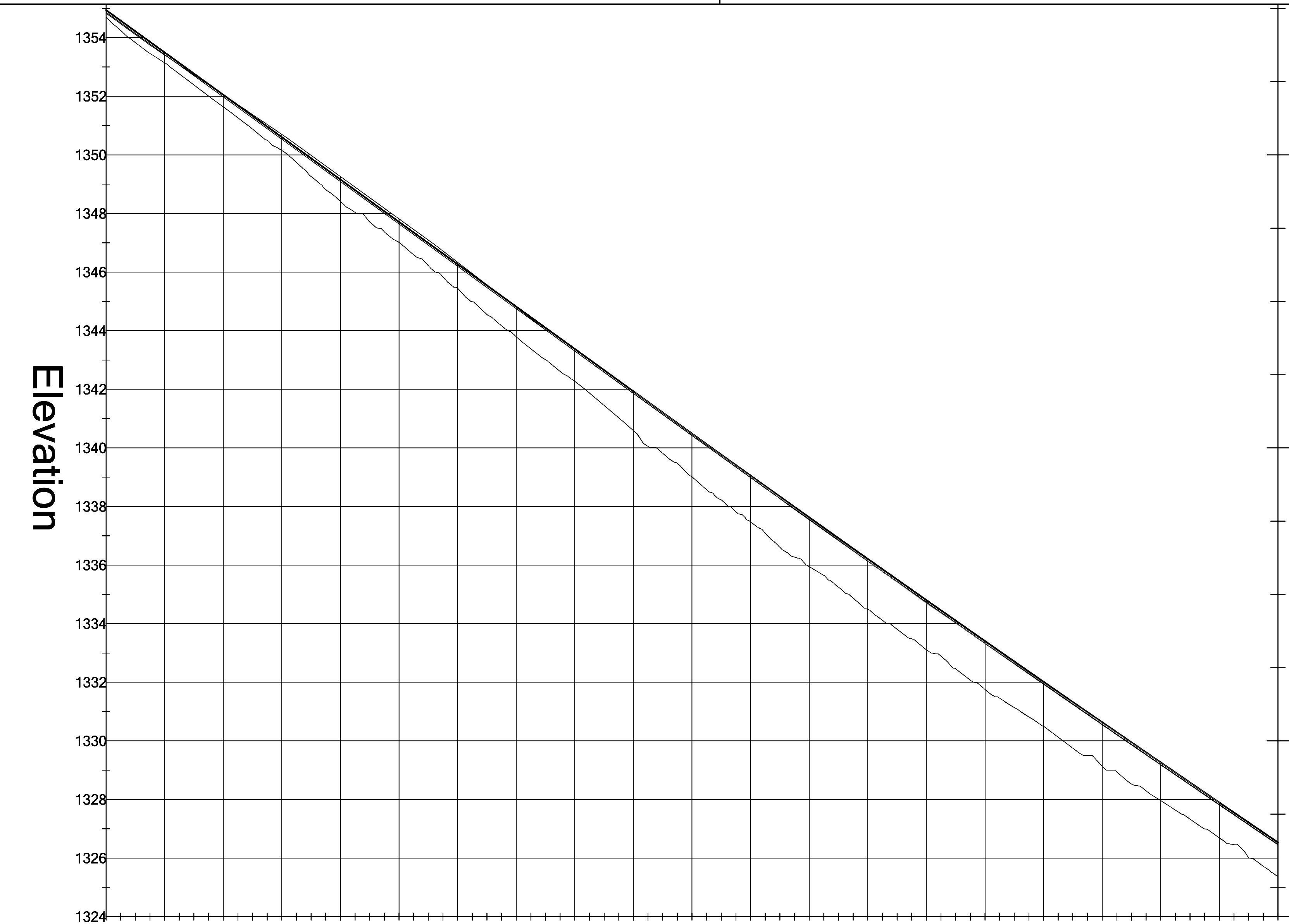
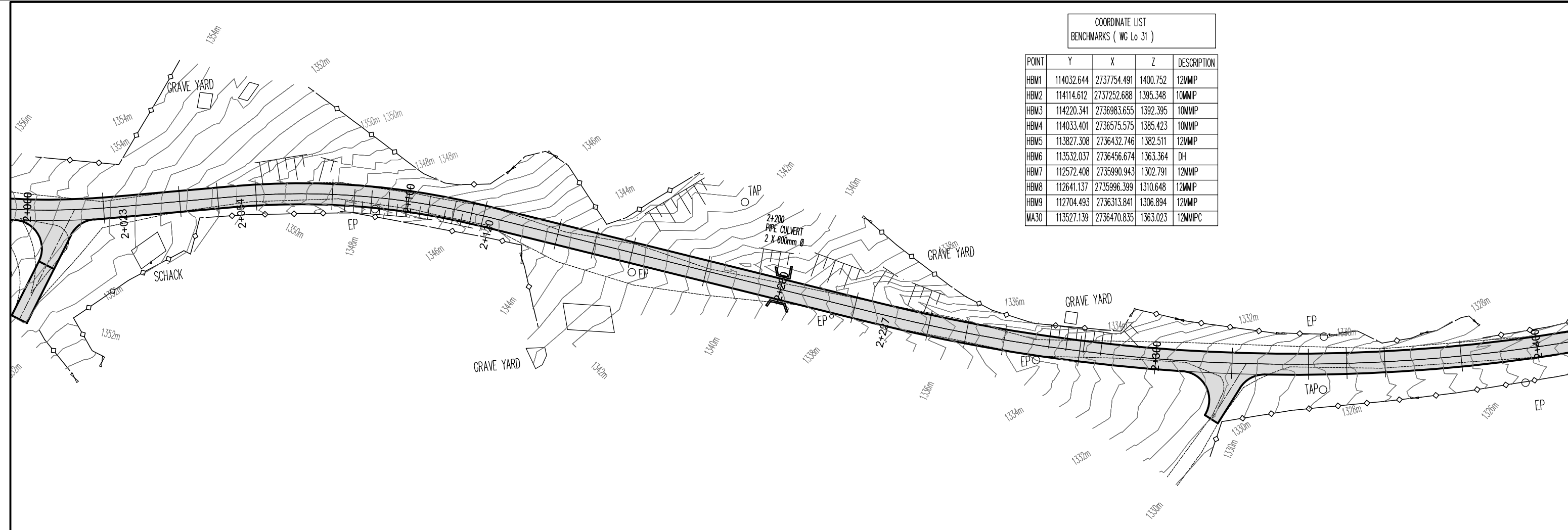
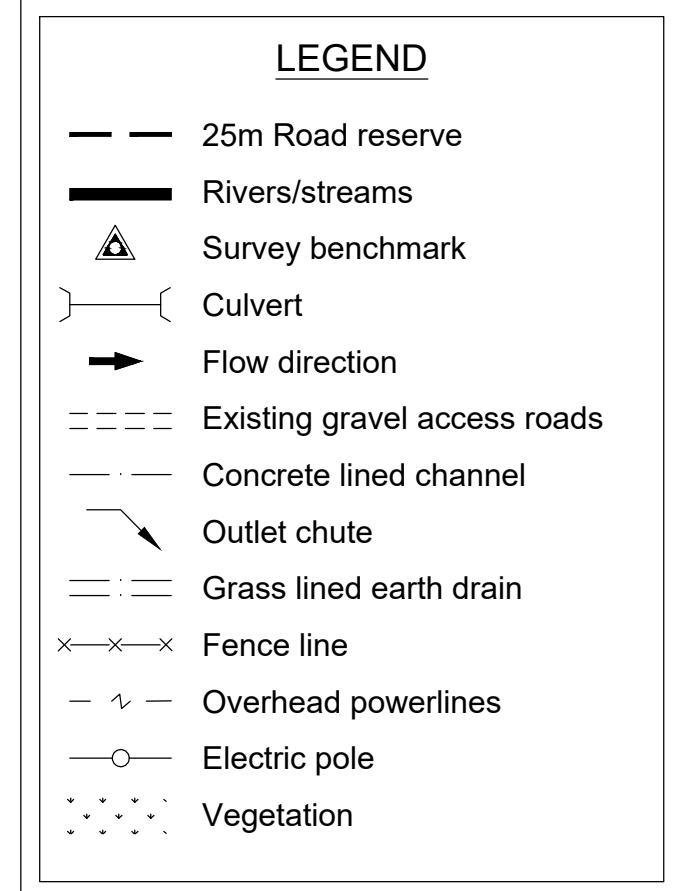
Elevation

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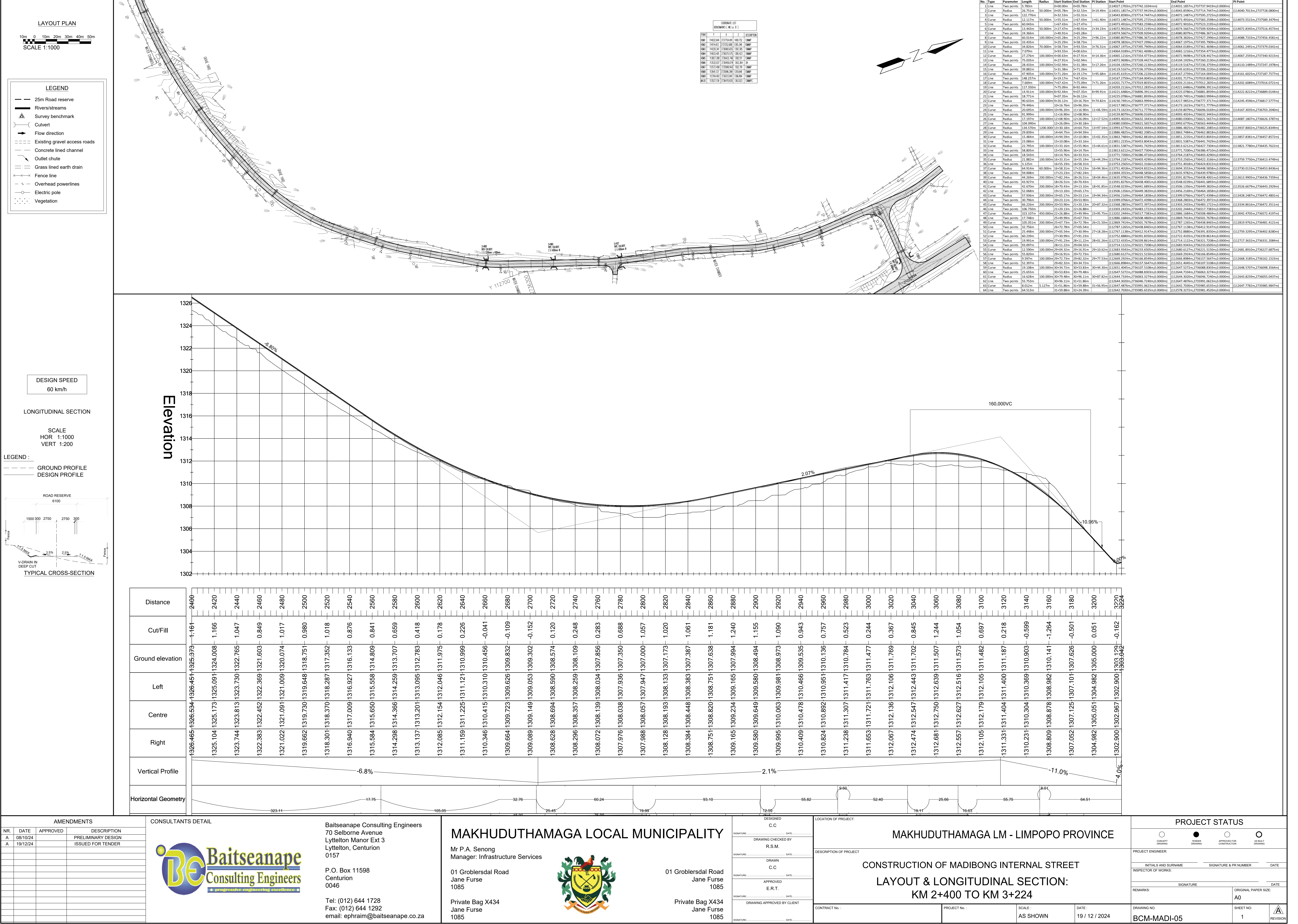
100.000VC

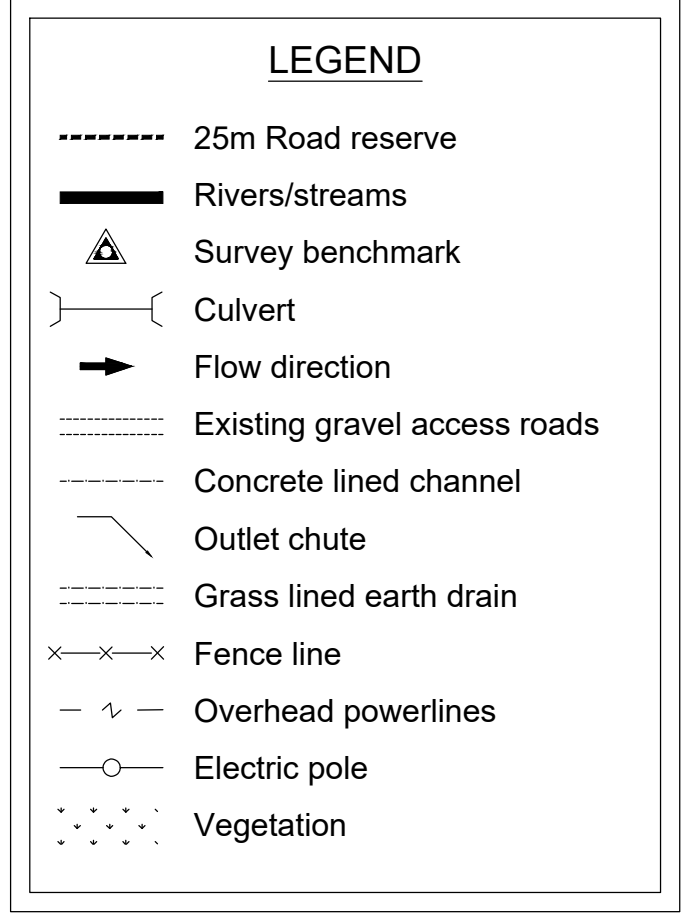
Grades: 0.69%, 5.47%, 1.14%, 1.80%, -0.55%

Distance	800	820	840	860	880	900	920	940	960	980	1000	1020	1040	1060	1080	1100	1120	1140	1160	1180	1200	1220	1240	1260	1280	1300	1320	1340	1360	1380	1400	1420	1440	1460	1480	1500	1520	1540	1560	1580	1600		
Cut/Fill	-0.940	-0.939	-0.642	-0.444	-0.344	-0.374	-0.563	-0.519	-0.183	-0.343	-0.557	-0.786	-0.747	-0.313	-0.261	-0.367	0.108	0.130	-0.256	-0.721	-1.178	-1.233	-0.880	-0.713	-0.129	0.150	0.374	0.433	0.385	0.415	0.420	0.645	0.534	0.569	0.561	0.424	0.532	0.463	-0.096	-0.641	-0.913		
Ground elevation	1390.405	1390.516	1390.654	1390.793	1391.017	1391.249	1391.260	1391.207	1390.995	1390.525	1389.791	1388.838	1387.681	1386.534	1385.566	1384.867	1384.453	1384.354	1384.498	1384.673	1384.726	1384.636	1384.480	1384.176	1383.797	1383.416	1383.119	1382.904	1382.654	1382.464	1382.323	1382.213	1382.102	1381.992	1381.798	1381.601	1381.582	1381.584	1381.425	1381.223	1381.056		
Left	1390.405	1390.516	1390.654	1390.793	1391.017	1391.249	1391.260	1391.207	1390.995	1390.525	1389.791	1388.838	1387.681	1386.534	1385.566	1384.867	1384.453	1384.354	1384.498	1384.673	1384.726	1384.636	1384.480	1384.176	1383.797	1383.416	1383.119	1382.904	1382.654	1382.464	1382.323	1382.213	1382.102	1381.992	1381.798	1381.601	1381.582	1381.584	1381.425	1381.223	1381.056		
Centre	1390.446	1390.584	1390.723	1390.862	1391.001	1391.139	1391.278	1391.322	1391.109	1390.636	1389.903	1388.909	1387.750	1386.594	1385.634	1384.952	1384.548	1384.422	1384.567	1384.746	1384.799	1384.803	1384.739	1384.553	1384.246	1383.865	1383.484	1383.130	1382.830	1382.584	1382.393	1382.255	1382.144	1382.075	1381.965	1381.854	1381.702	1381.602	1381.481	1381.378	1381.302	1381.191	1381.048
Right	1390.377	1390.516	1390.654	1390.793	1391.017	1391.249	1391.260	1391.207	1390.995	1390.525	1389.791	1388.838	1387.681	1386.534	1385.566	1384.867	1384.453	1384.354	1384.498	1384.673	1384.726	1384.636	1384.480	1384.176	1383.797	1383.416	1383.119	1382.904	1382.654	1382.464	1382.323	1382.213	1382.102	1381.992	1381.798	1381.601	1381.582	1381.584	1381.425	1381.223	1381.056		
Vertical Profile	Grades: 0.7%, 5.8%, 1.1%, 1.9%, 0.6%																																										
Horizontal Geometry	Curve lengths: 117.35, 18.77, 90.63, 79.45, 20.68, 92.00, 17.20, 104.09, 134.57, 29.84, 16.48, 23.09, 58.81																																										
Superelevation	Superelevation percentages: SE=4.0%, SE=																																										

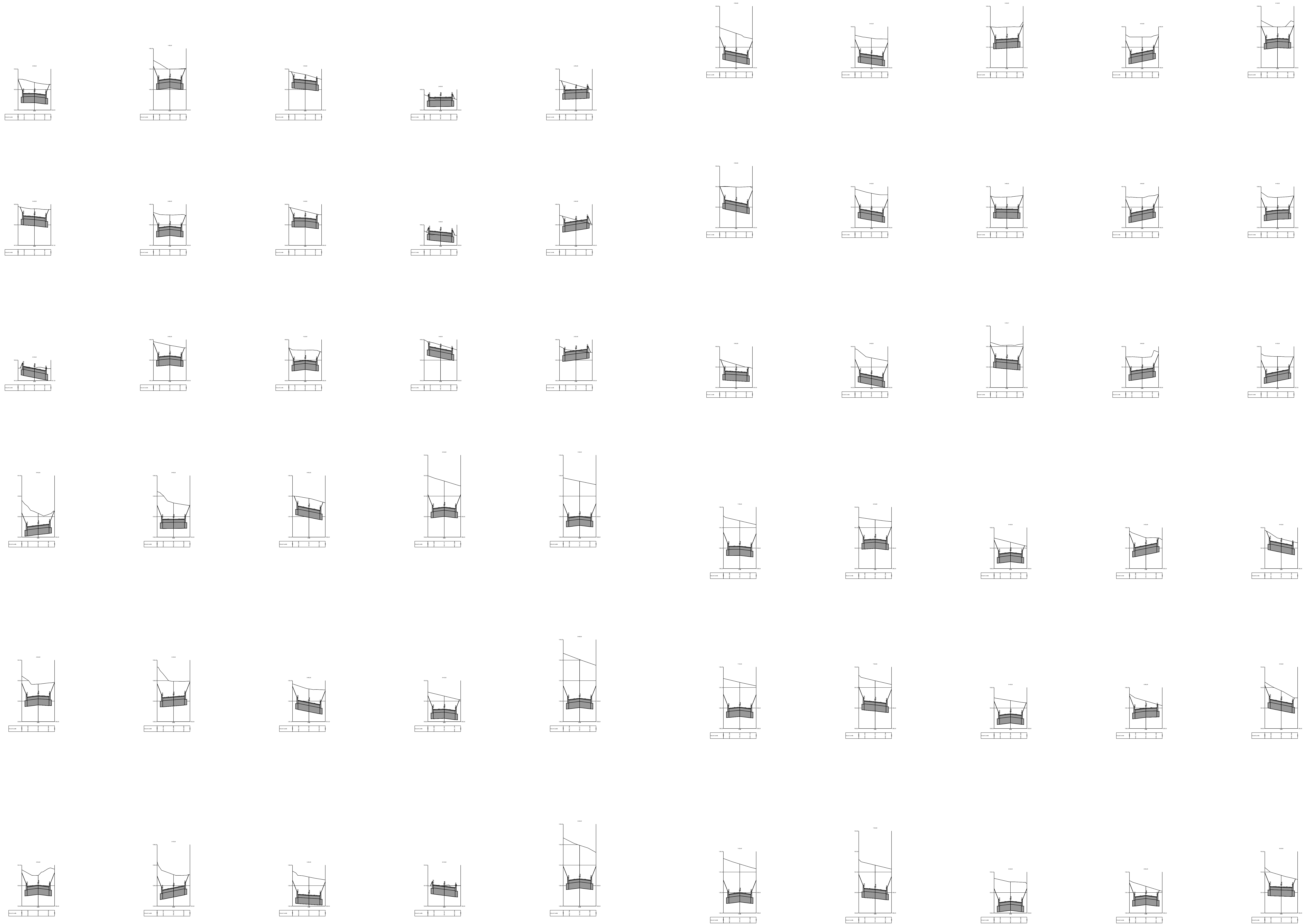


PROJECT STATUS			
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PROJECT ENGINEER: _____			
INITIALS AND SURNAME _____	SIGNATURE & PR NUMBER _____		DATE _____
INSPECTOR OF WORKS: _____			
SIGNATURE _____		DATE _____	
REMARKS: _____		ORIGINAL PAPER SIZE: A0	
DRAWING NO. _____		SHEET NO. _____	 REVISION
BCM-MADI-04		1	





The diagram illustrates a typical cross-section of a road. The total width of the road reserve is 6100mm. The cross-section includes a 1500mm shoulder on the left, a 300mm shoulder on the right, and two 2750mm wheel tracks. The road surface slopes at 2.5% on both sides, meeting at a central V-drain in the deep cut. The slopes are labeled T-1.5 MAX. The road is flanked by fences on both sides.

[illegible]

CONSULTANTS DETAIL



Tel: (012) 644 1728
Fax: (012) 644 1292
email: ephraim@baitseanape.co.za

Private Bag X434
Jane Furse
1085

DESIGNED C.C	
SIGNATURE: _____	DATE: _____
DRAWING CHECKED BY R.S.M.	
SIGNATURE: _____	DATE: _____
DRAWN C.C	
SIGNATURE: _____	DATE: _____
APPROVED E.T.	
SIGNATURE: _____	DATE: _____
DRAWING APPROVED BY CLIENT	
SIGNATURE: _____	DATE: _____

LOCATION OF PROJECT:

DESCRIPTION OF PROJECT

CONTRACT No. :

PROJECT No. :

SCALE :
AS SHOWN

DATE :
19 / 12 / 2024

	PROJECT STATUS
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 CONCEPT DRAWING	 TENDER DRAWING	 APPROVED FOR CONSTRUCTION	 AS BUILT DRAWING
PROJECT ENGINEER: _____			
INITIALS AND SURNAME _____		SIGNATURE & PR NUMBER _____	
DATE _____		DATE _____	
INSPECTOR OF WORKS: _____			
SIGNATURE _____		DATE _____	
REMARKS: _____		ORIGINAL PAPER SIZE: A0	
DRAWING NO: BCM-MADI-06		SHEET NO: 1	 REVISION

[illegible]

AMENDMENTS				CONSULTANTS DETAIL		MAKHUDUTHAMAGA LOCAL MUNICIPALITY		DESIGNED				LOCATION OF PROJECT:				PROJECT STATUS					
NR.	DATE	APPROVED	DESCRIPTION	 Baitseanape Consulting Engineers <i>progressive engineering excellence</i> Baitseanape Consulting Engineers 70 Selborne Avenue Lyttelton Manor Ext 3 Lyttelton, Centurion 0157 P.O. Box 11598 Centurion 0046 Tel: (012) 644 1728 Fax: (012) 644 1292 email: ephraim@baitseanape.co.za		Mr P.A. Senong Manager: Infrastructure Services 01 Groblersdal Road Jane Furse 1085  01 Groblersdal Road Jane Furse 1085 Private Bag X434 Jane Furse 1085		C.C		MAKHUDUTHAMAGA LM - LIMPOPO PROVINCE		PROJECT ENGINEER:		CONCEPT DRAWING		TASKSET DRAWING		APPROVED FOR CONSTRUCTION		AS BUILT DRAWING	
A	08/10/24		PRELIMINARY DESIGN					P.O. Box 11598 Centurion 0046		01 Groblersdal Road Jane Furse 1085		C.C		CONSTRUCTION OF MADIBONG INTERNAL STREET		INITIALS AND SURNAME		SIGNATURE & PR NUMBER		DATE	
A	19/12/24		ISSUED FOR TENDER					E.R.T.		CROSS SECTIONS 0+960 - 1+950		INSPECTOR OF WORKS:									
								DRAWING APPROVED BY CLIENT				REMARKS:				ORIGINAL PAPER SIZE:		A0			
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																		 REVISION			

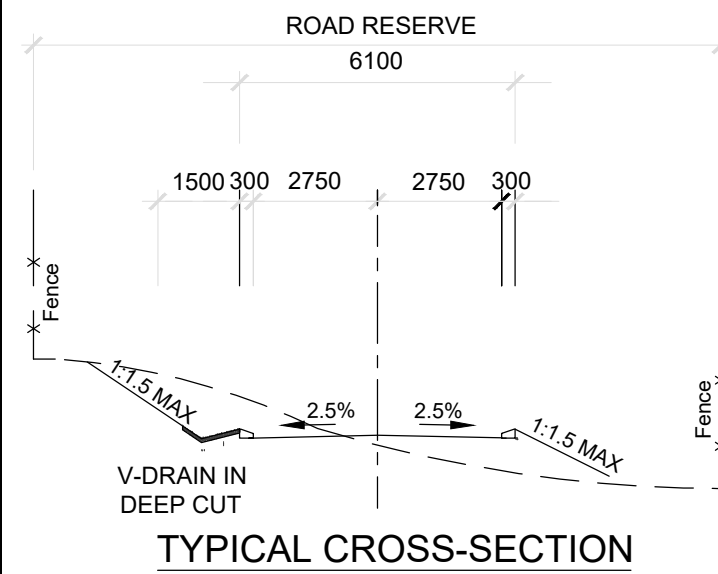
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SCALE 1:1000

 25m Road reserve
 Rivers/streams
 Survey benchmark
 Culvert
 Flow direction
 Existing gravel access roads
 Concrete lined channel
 Outlet chute
 Grass lined earth drain
 Fence line
 Overhead powerlines
 Electric pole
 Vegetation

LONGITUDINAL SECTION

SCALE
HOR 1:1000
VERT 1:200

GROUND PROFILE
DESIGN PROFILE

[illegible]

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email: ephraim@baitseanape.co.za

Private Bag X434
Jane Furse
1085

DESIGNED C.C	
SIGNATURE: _____	DATE: _____
DRAWING CHECKED BY R.S.M.	
SIGNATURE: _____	DATE: _____
DRAWN C.C	
SIGNATURE: _____	DATE: _____
APPROVED E.R.T.	
SIGNATURE: _____	DATE: _____
DRAWING APPROVED BY CLIENT	
SIGNATURE: _____	DATE: _____

DESCRIPTION OF PROJECT

CONSTRUCTION OF MADIBONG INTERNAL STREET CROSS SECTIONS 1+960 - 2+950

CONTRACT No. :

PROJECT No. :

SCALE :
AS SHOWN

DATE :
19 / 12 / 2024

 CONCEPT
DESIGNED
 TENDER
DESIGNED
 APPROVED FOR
CONSTRUCTION
 AS BUILT
PERMANENT

PROJECT ENGINEER:

INITIALS AND SURNAME

INSPECTOR OF WORKS:

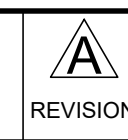
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REMARKS:	ORIGINAL PAPER SIZE
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DRAWING NO.
BCM-MADI-08

SHEET NO:
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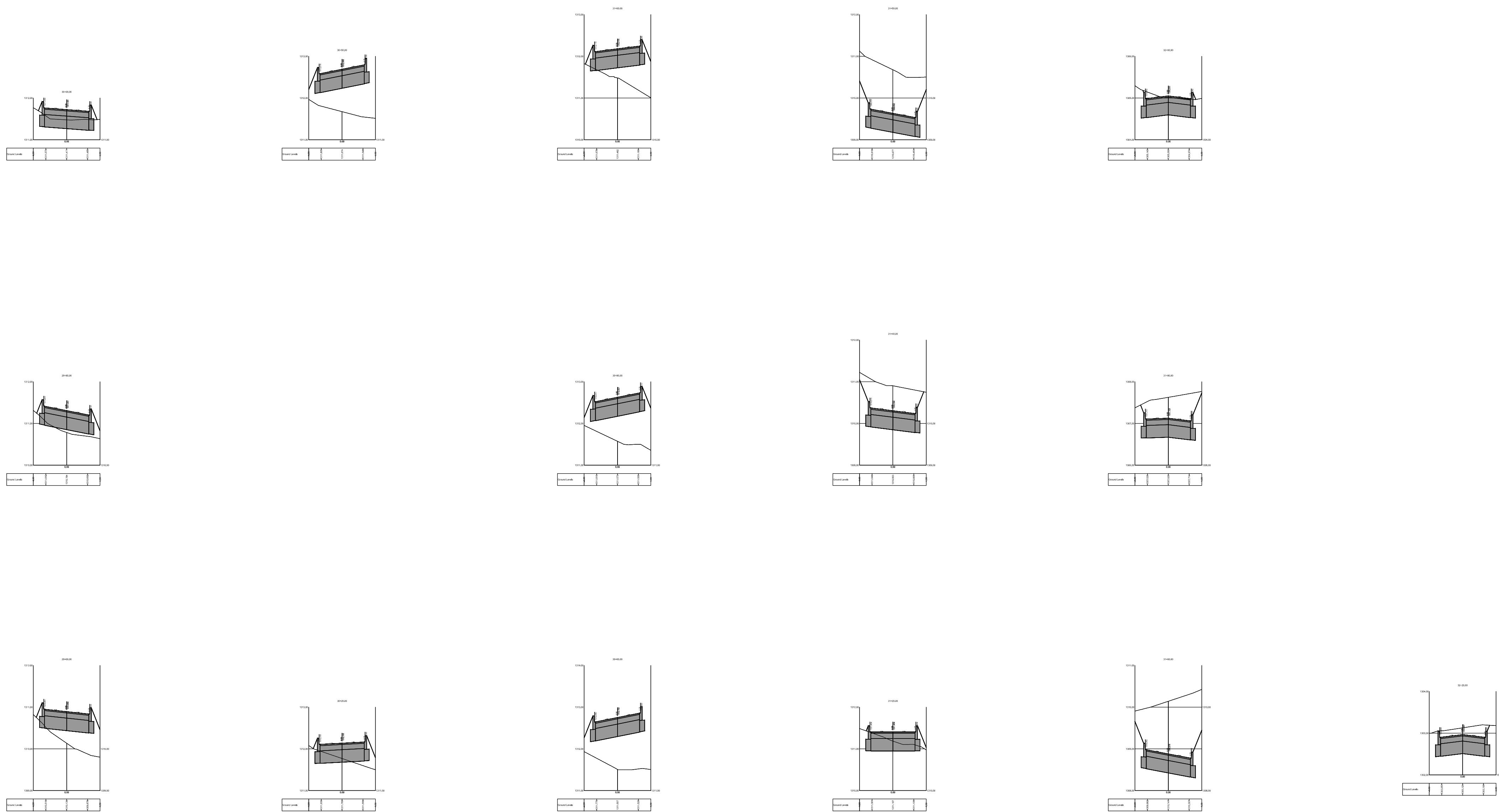
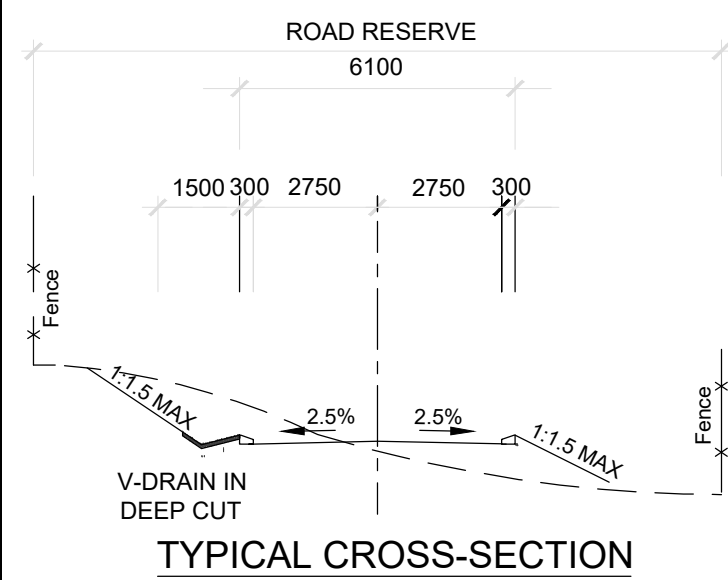
10m 0 10m 20m 30m 40m 50m
SCALE 1:1000

 25m Road reserve
 Rivers/streams
 Survey benchmark
 Culvert
 Flow direction
 Existing gravel access roads
 Concrete lined channel
 Outlet chute
 Grass lined earth drain
 Fence line
 Overhead powerlines
 Electric pole
 Vegetation

60 km/h

VERT 1:200

GROUND PROFILE
DESIGN PROFILE

[illegible]

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Jane Furse
1085

DESIGNED C.C	
SIGNATURE: _____	DATE: _____
DRAWING CHECKED BY R.S.M.	
SIGNATURE: _____	DATE: _____
DRAWN C.C	
SIGNATURE: _____	DATE: _____
APPROVED E.T.	
SIGNATURE: _____	DATE: _____
DRAWING APPROVED BY CLIENT	
SIGNATURE: _____	DATE: _____

CONSTRUCTION OF MADIBONG INTERNAL STREET
CROSS SECTIONS 2+960 - 3+220

CONTRACT No. :

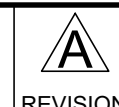
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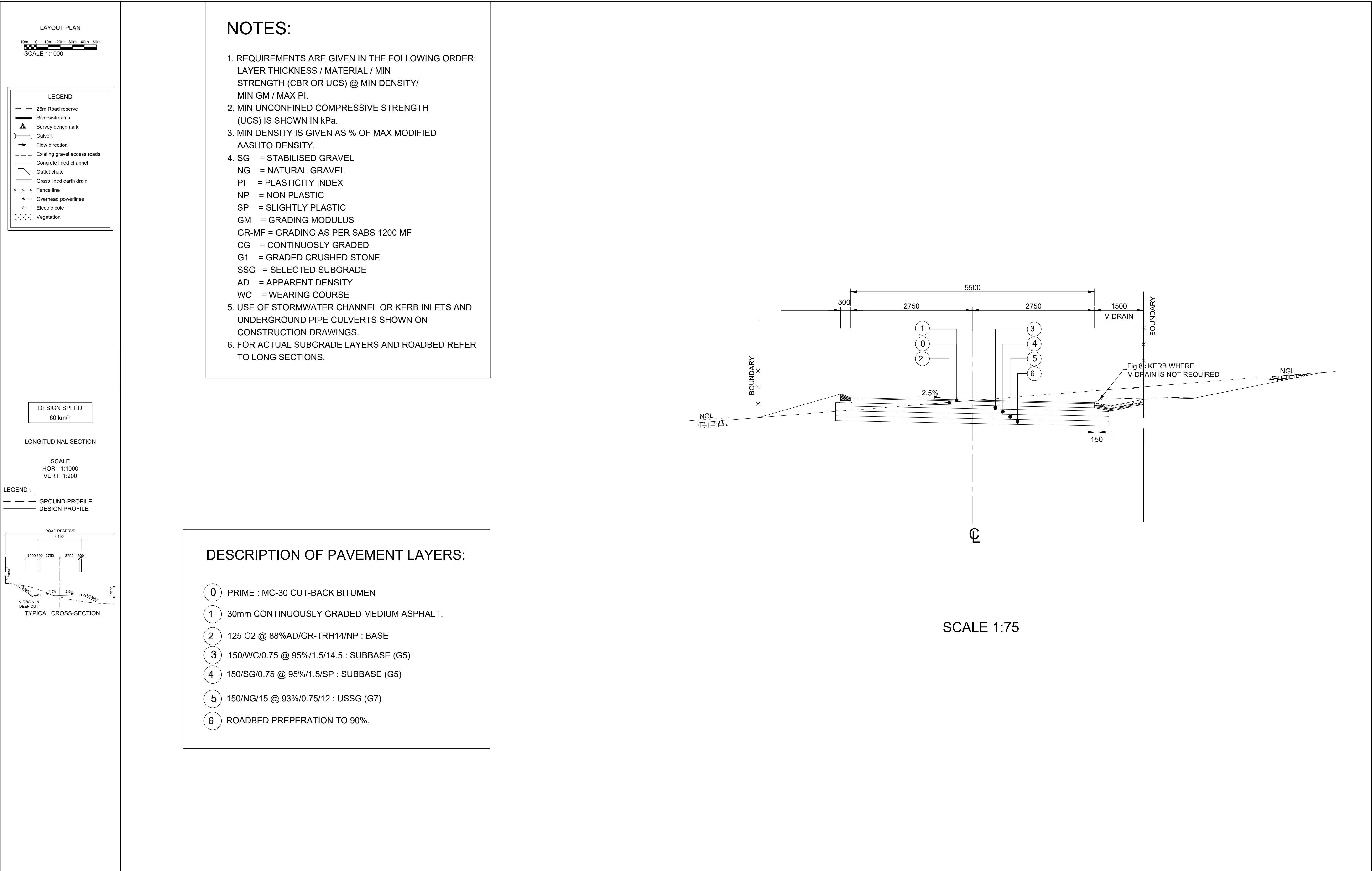
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AS SHOWN

DATE :
19 / 12 / 2024

DRAWING NO.
BCM-MADI-09

SHEET NO:
1





 25m Road reserve
 Rivers/streams
 Survey benchmark
 Culvert
 Flow direction
 Existing gravel access roads
 Concrete lined channel
 Outlet chute
 Grass lined earth drain
 Fence line
 Overhead powerlines
 Electric pole
 Vegetation

LONGITUDINAL SECTION

LEGEND :

ROAD RESERVE
6100

1500 300 2750 2750 300

Fence

2.5% 2.5%

V-DRAIN IN DEEP CUT

TYPICAL CROSS-SECTION

CHAINAGE	STRUCTURE	(SPAN (S) X HEIGHT (H)	CLASS	LENGTH	DESCRIPTION
0+627	BOX CULVERT	1 X 1200mm x 600mm	150S	11.0m	REPLACE EXISTING CULVERT
0+720	BOX CULVERT	1 X 900mm x 600mm	175S	11.5m	NEW CULVERT
1+096	BOX CULVERT	1 X 1200mm x 600mm	150S	11.5m	REPLACE EXISTING CULVERT
1+140	BOX CULVERT	1 X 1200mm x 600mm	150S	11.0m	NEW CULVERT
1+200	SPIGOT AND SOCKET PIPE CULVERT	2 X 600mm Ø	100D	10.5m	CLASS C BEDDING
1+340	BOX CULVERT	1 X 900mm x 600mm	175S	11.5m	NEW CULVERT
1+531	BOX CULVERT	1 X 900mm x 600mm	175S	11.5m	NEW CULVERT
1+598	BOX CULVERT	1 X 1200mm x 600mm	150S	11.5m	REPLACE EXISTING CULVERT
1+800	SPIGOT AND SOCKET PIPE CULVERT	2 X 600mm Ø	100D	10.5	CLASS C BEDDING
2+200	SPIGOT AND SOCKET PIPE CULVERT	2 X 600mm Ø	100D	10.5	CLASS C BEDDING
2+800	BOX CULVERT	1 X 1200mm x 600mm	150S	11.5m	NEW CULVERT
2+860	SPIGOT AND SOCKET PIPE CULVERT	2 X 600mm Ø	100D	11.5	CLASS C BEDDING
2+927	SPIGOT AND SOCKET PIPE CULVERT	2 X 600mm Ø	100D	10.5	CLASS C BEDDING
3+206	SPIGOT AND SOCKET PIPE CULVERT	2 X 600mm Ø	100D	10.5	CLASS C BEDDING

LONGITUDINAL SECTION

LEGEND :

ROAD RESERVE
6100

1500 300 2750 2750 300

Fence

1:1.5 MAX

2.5%

2.5%

1:1.5 MAX

V-DRAIN IN DEEP CUT

Fence

TYPICAL CROSS-SECTION

[illegible]

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DESIGNED S.C.C	
SIGNATURE: _____	DATE: _____
DRAWING CHECKED BY R.S.M.	
SIGNATURE: _____	DATE: _____
DRAWN S.C.C	
SIGNATURE: _____	DATE: _____
APPROVED E.T.	
SIGNATURE: _____	DATE: _____
DRAWING APPROVED BY CLIENT	
SIGNATURE: _____	DATE: _____

DESCRIPTION OF PROJECT

CONTRACT No. :

PROJECT No. :

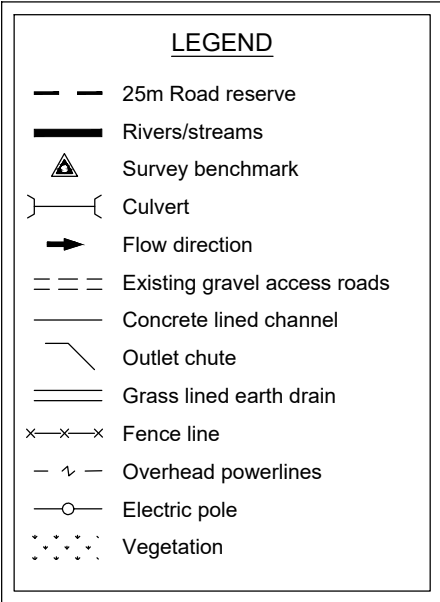
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DATE :
13 / 03 / 2025

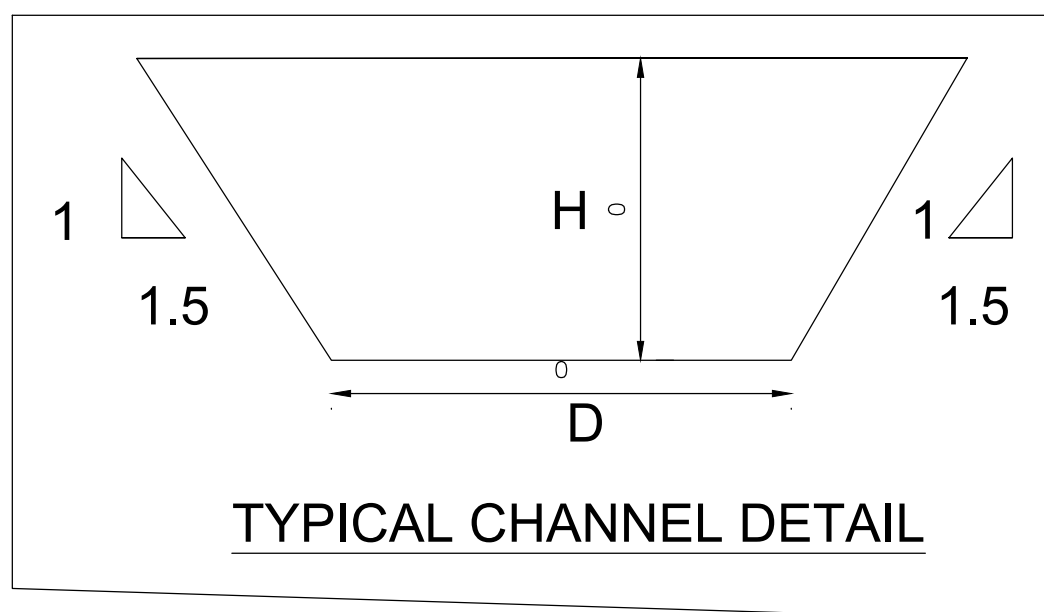
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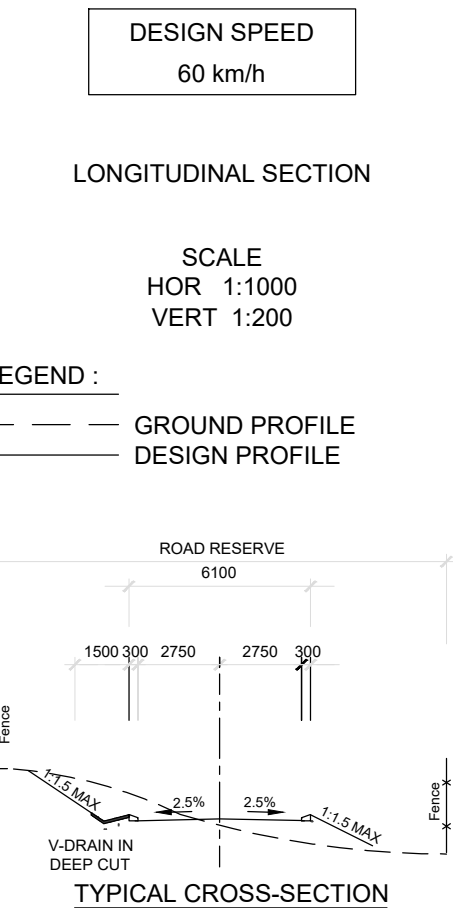




STORMWATER CHANNELS SCHDULE					
TYPE	H	D	THICKNESS	SLOPES (1:15)	
1	0.3300	0.3000	200	1.5000	
2	0.5400	0.5000	200	1.5000	
3	0.5500	0.5000	200	1.5000	
4	0.6600	0.1500	200	1.5000	
5	0.2500	0.5000	200	1.5000	

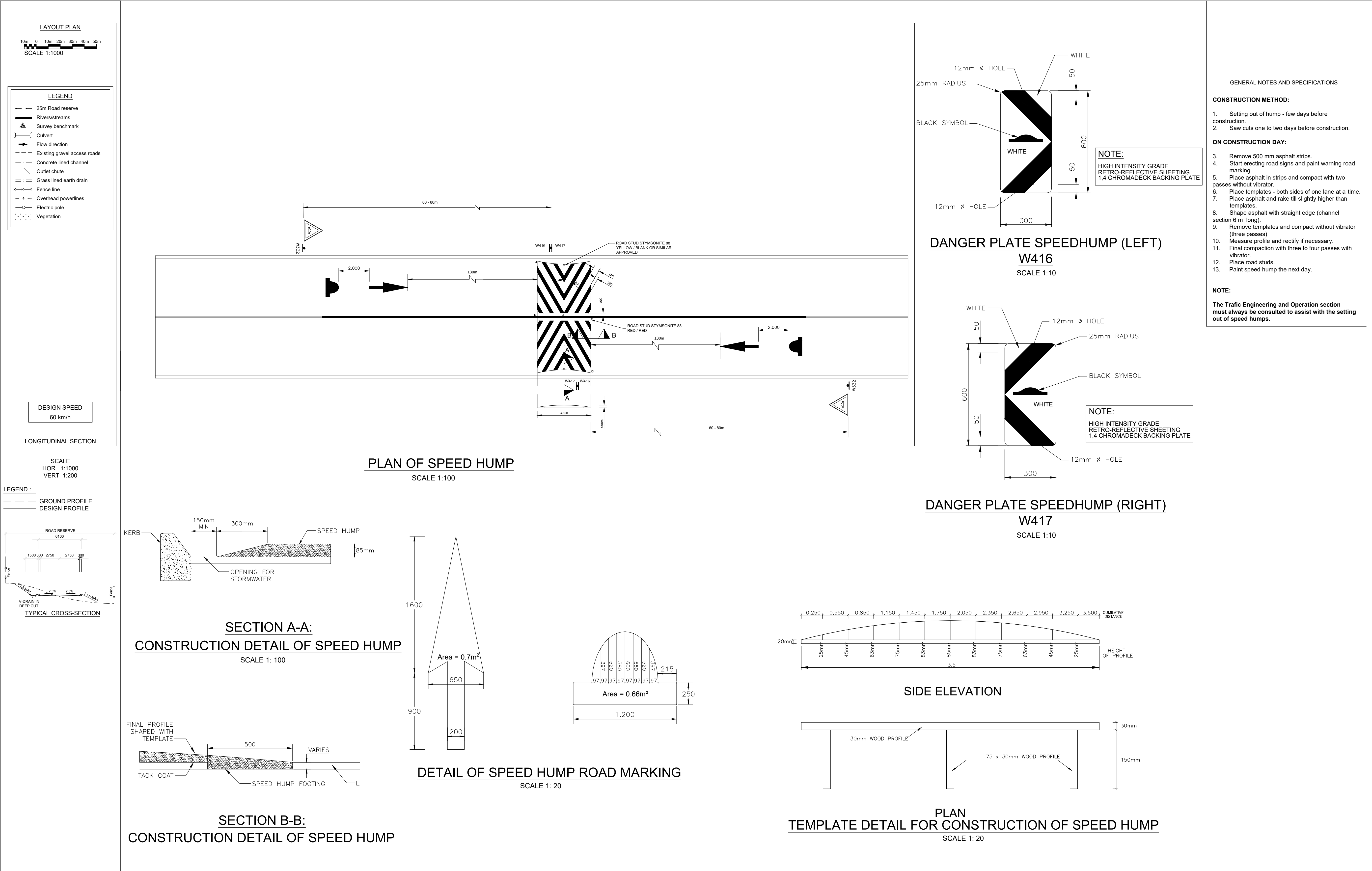


- ## GENERAL NOTES AND SPECIFICATIONS
1. STORMWATER SIDE DRAIN
 - 1.1 MINIMUM LONGITUDINAL SECTION IS 0.67%
 - 1.2 MAXIMUM LONGITUDINAL SLOPE SHOULD BE SUCH THAT FLOW VELOCITIES DO NOT EXCEED 3.5 m/s.
 - 1.3 MAXIMUM DEPTH FOR TYPE 4 AND 5 SIDE DRAINS IS 500mm, OTHER TYPES AS INDICATED.
 - 1.4 UNLINED SIDE DRAINS ARE ONLY PERMITTED WHERE THE FLOW VELOCITY IS LESS THAN 1.5 m/s FOR MINOR STORM (12 YEAR RECURRENT INTERVAL).
 - 1.5 IF NOT POSSIBLE TO LIMIT FLOW VELOCITIES IN SIDE DRAINS TO 3.5 m/s, OR AVAILABLE SPACE WITHIN THE ROAD RESERVE RESTRICT THE CONSTRUCTION OF THE REQUIRED SIZE TYPE 5 SIDE DRAIN, PIPES OR CULVERTS MUST BE INSTALLED.
 - 1.6 SLOPE BOARD FILLED JOINTS (10mm) TO BE PROVIDED AT MAX. 3m CENTRES.
 - 1.7 THIS DRAWING ONLY INDICATES THE DETAIL OF SIDE DRAINS AND DOES NOT LIMIT THE USE OF PIPE OR BOX CULVERTS, IF SO REQUIRED BY THE DESIGN OR COST CONSIDERATIONS.
 - 1.8 ALSO REFER TO SECTION 504 OF THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, 3rd EDITION 2005.

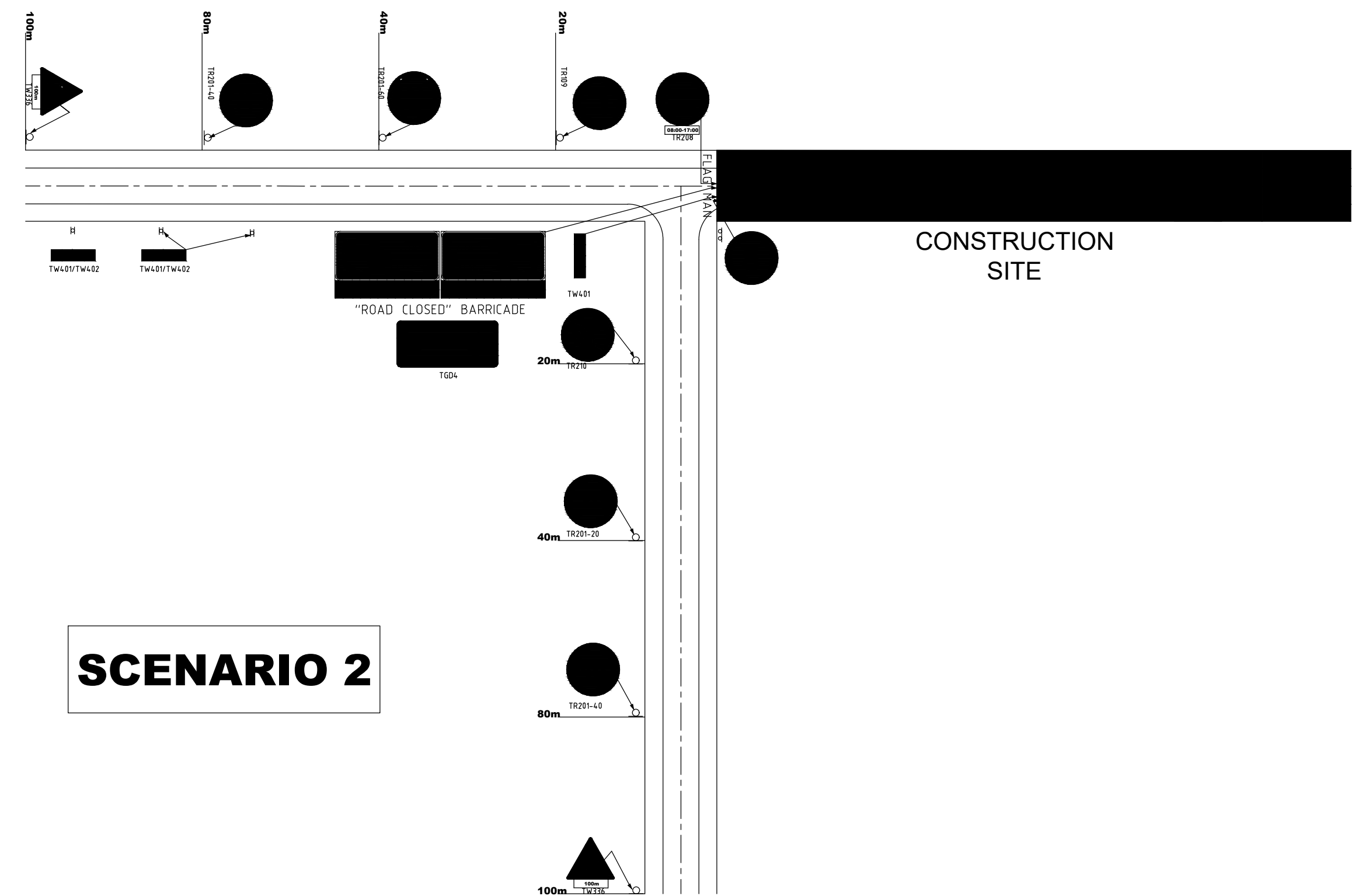


AMENDMENTS				CONSULTANTS DETAIL		MAKHUDUTHAMAGA LOCAL MUNICIPALITY		MADIBONG - LIMPOPO PROVINCE				PROJECT STATUS			
NR.	DATE	APPROVED	DESCRIPTION	 Baitseanape Consulting Engineers 70 Selborne Avenue Lyttelton Manor Ext 3 Lyttelton, Centurion 0157 P.O. Box 11598 Centurion 0046 Tel: (012) 644 1728 Fax: (012) 644 1292 email: ephraim@baitseanape.co.za	Mr P.A. Senong Manager: Infrastrucure Services 01 Groblersdal Road Jane Furse 1085  01 Groblersdal Road Jane Furse 1085 Private Bag X434 Jane Furse 1085		CONSTRUCTION OF MADIBONG ROAD SIDE DRAINS				☐ CONCEPT DRAWINGS☒ TENDER DRAWING☐ APPROVED FOR CONSTRUCTION☐ AS BUILT DRAWING				
A	13/12/24		For Tender purposes												
				DESIGNED S.C.C		LOCATION OF PROJECT:									
				SIGNATURE: _____ DATE: _____		DESCRIPTION OF PROJECT									
				DRAWING CHECKED BY R.S.M.											
				SIGNATURE: _____ DATE: _____											
				DRAWN S.C.C											
				SIGNATURE: _____ DATE: _____											
				APPROVED E.R.T.											
				SIGNATURE: _____ DATE: _____											
				DRAWING APPROVED BY CLIENT											
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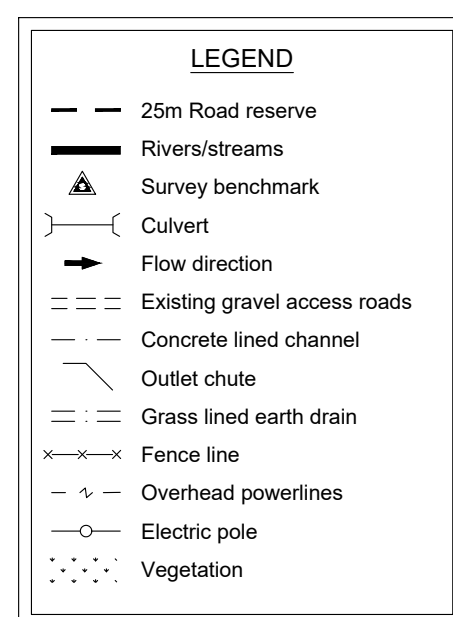
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PROJECT ENGINEER: _____			
INITIALS AND SURNAME _____		SIGNATURE & PN NUMBER _____	
INSPECTOR OF WORKS: _____			
SIGNATURE _____		DATE _____	
REMARKS: _____		ORIGINAL PAPER SIZE: A1	
DRAWING NO. BCE-MADI-14		SHEET NO. 1 OF 1	
		 REVISION	



AMENDMENTS				CONSULTANTS DETAIL		MAKHUDUTHAMAGA LOCAL MUNICIPALITY		PROJECT STATUS			
NR.	DATE	APPROVED	DESCRIPTION	Baitseanape Consulting Engineers 70 Selborne Avenue Lytelton Manor Ext 3 Lytelton, Centurion 0157 P.O. Box 11598 Centurion 0046 Tel: (012) 644 1728 Fax: (012) 644 1292 email: ephraim@baitseanape.co.za Mr P.A. Senong Manager: Infrastructure Services 01 Groblersdal Road Jane Furse 1085 01 Groblersdal Road Jane Furse 1085 Private Bag X434 Jane Furse 1085	DESIGNED S.C.C		LOCATION OF PROJECT:		PROJECT ENGINEER:		
A	13/12/24		For Tender purposes		DRAWING CHECKED BY R.S.M.		MADIBONG - LIMPOPO PROVINCE				
					DRAWN S.C.C		DESCRIPTION OF PROJECT				
					APPROVED E.R.T.		CONSTRUCTION OF MADIBONG ROAD TRAFFIC CALMING MEASURES				
					DRAWING APPROVED BY CLIENT		REMARKS:				
					CONTRACT No. :		SIGNATURE				
					PROJECT No. :		DATE				
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							REVISION				



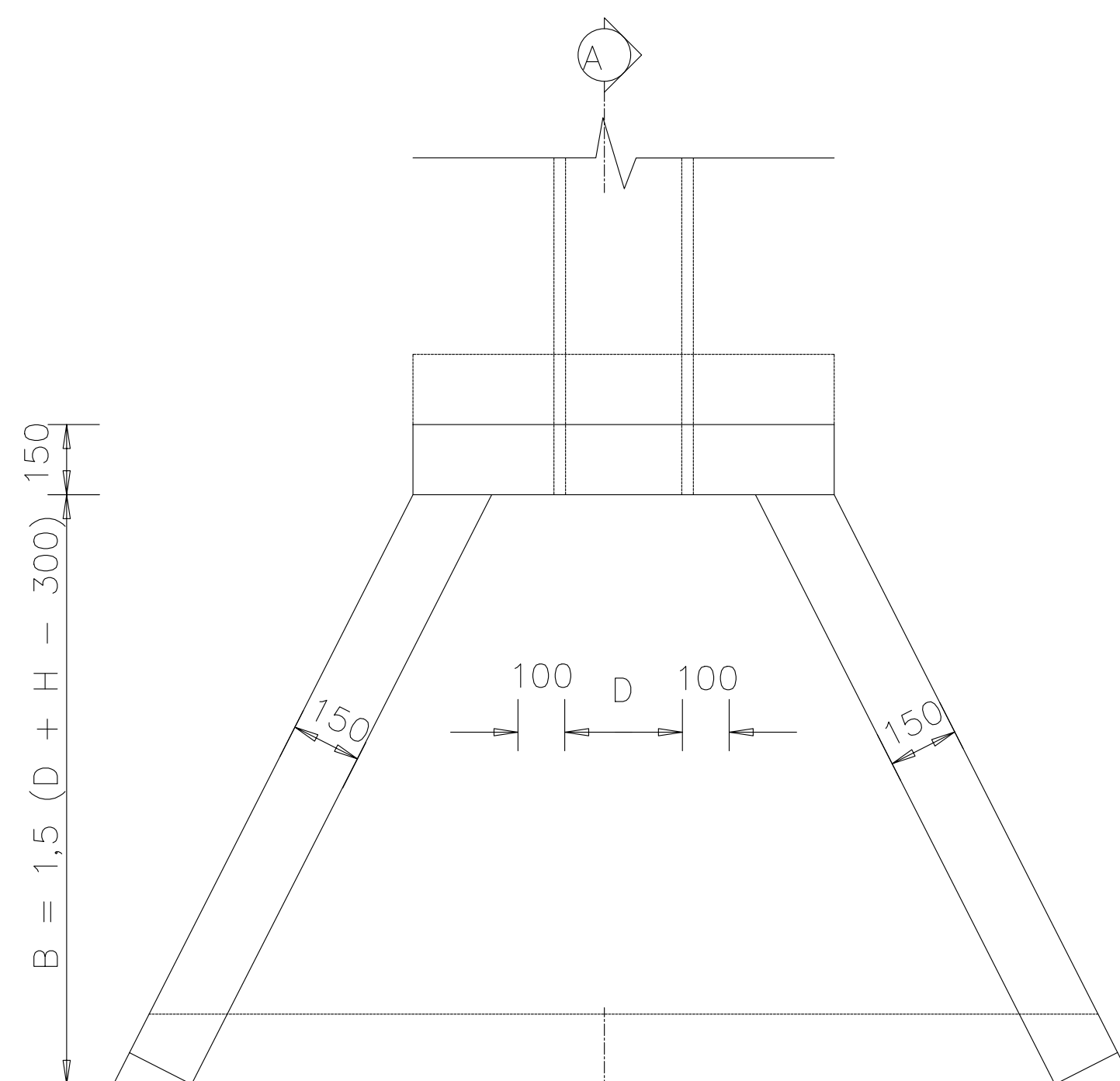
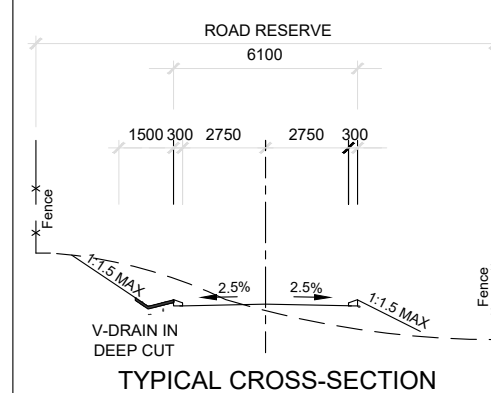
AMENDMENTS				CONSULTANTS DETAIL		Baitseanape Consulting Engineers 70 Selborne Avenue Lyttelton Manor Ext 3 Lyttelton, Centurion 0157 P.O. Box 11598 Centurion 0046 Tel: (012) 644 1728 Fax: (012) 644 1292 email: ephraim@baitseanape.co.za		DESIGNED S.C.C SIGNATURE: _____ DATE: _____ DRAWING CHECKED BY R.S.M. SIGNATURE: _____ DATE: _____ DRAWN S.C.C SIGNATURE: _____ DATE: _____ APPROVED E.R.T. SIGNATURE: _____ DATE: _____ DRAWING APPROVED BY CLIENT SIGNATURE: _____ DATE: _____		LOCATION OF PROJECT MADIBONG - LIMPOPO PROVINCE DESCRIPTION OF PROJECT CONSTRUCTION OF MADIBONG ROAD ACCOMODATION OF TRAFFIC CONTRACT No.: _____ PROJECT No.: _____ SCALE: 1:500 DATE: 13 / 03 / 2025		PROJECT STATUS ☐ CONCEPT DRAWING ☒ TENDER DRAWING ☐ APPROVED FOR CONSTRUCTION ☐ AS-BUILT DRAWING PROJECT ENGINEER: _____ INITIALS AND SURNAME: _____ SIGNATURE & PR NUMBER: _____ DATE: _____ INSPECTOR OF WORKS: _____ SIGNATURE: _____ DATE: _____ REMARKS: _____ ORIGINAL PAPER SIZE: A0 DRAWING NO: BCE-MADI-17 SHEET NO: 1 REVISION: 	
						MAKHUDUTHAMAGA LOCAL MUNICIPALITY Mr P.A. Senong Manager: Infrastructure Services 01 Groblersdal Road Jane Furse 01 Groblersdal Road Jane Furse 0185 Private Bag X434 Jane Furse 0185 							



DESIGN SPEED
60 km/h

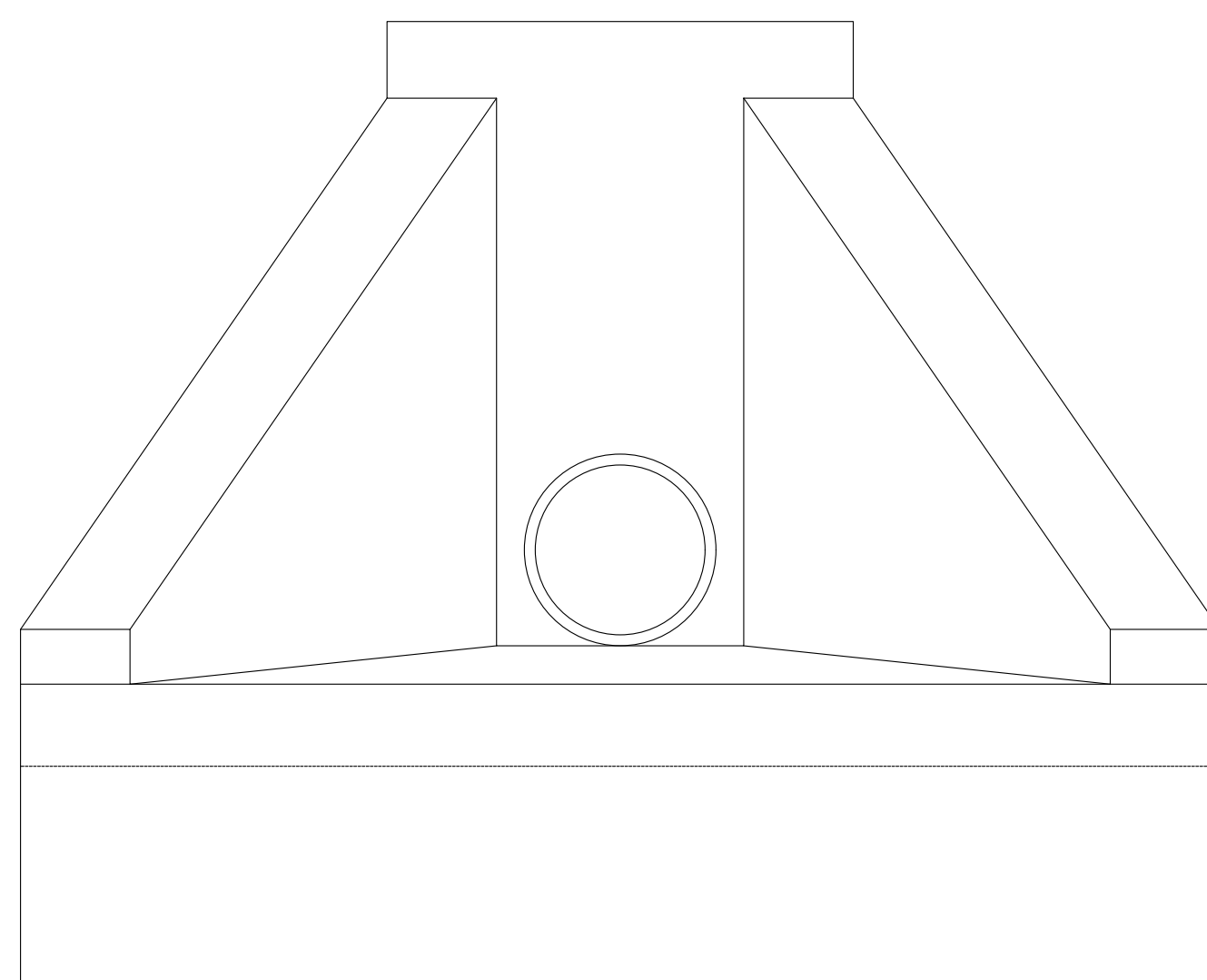
SCALE
HOR 1:1000
VERT 1:200

— — — — — GROUND PROFILE
————— DESIGN PROFILE



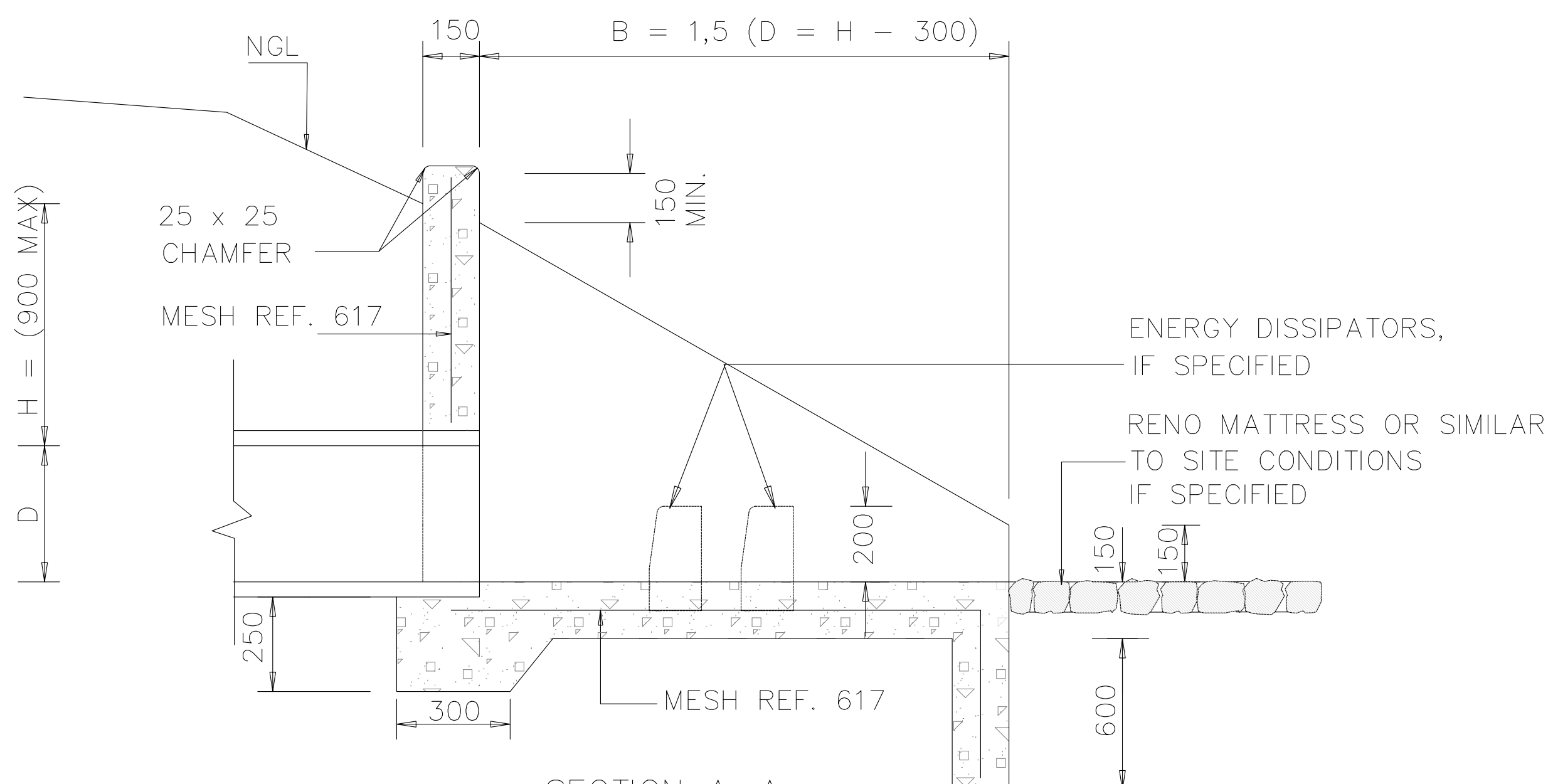
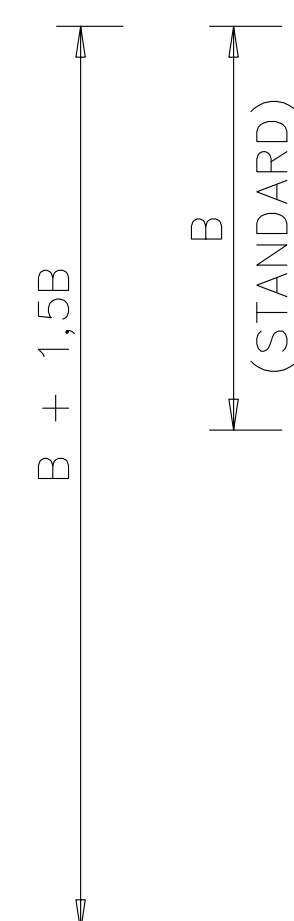
A dimension line with arrows at both ends, indicating the distance from the center of the hole to the edge of the plate. The dimension is labeled as $0,5B$ on the left and $0,5B$ on the right. The total distance between the two vertical center lines is labeled as $D + 200$.

PLAN



FRONT ELEVATION

F H > 1200mm A DESIGNED CONCRETE
STRUCTURE MUST BE PROVIDED



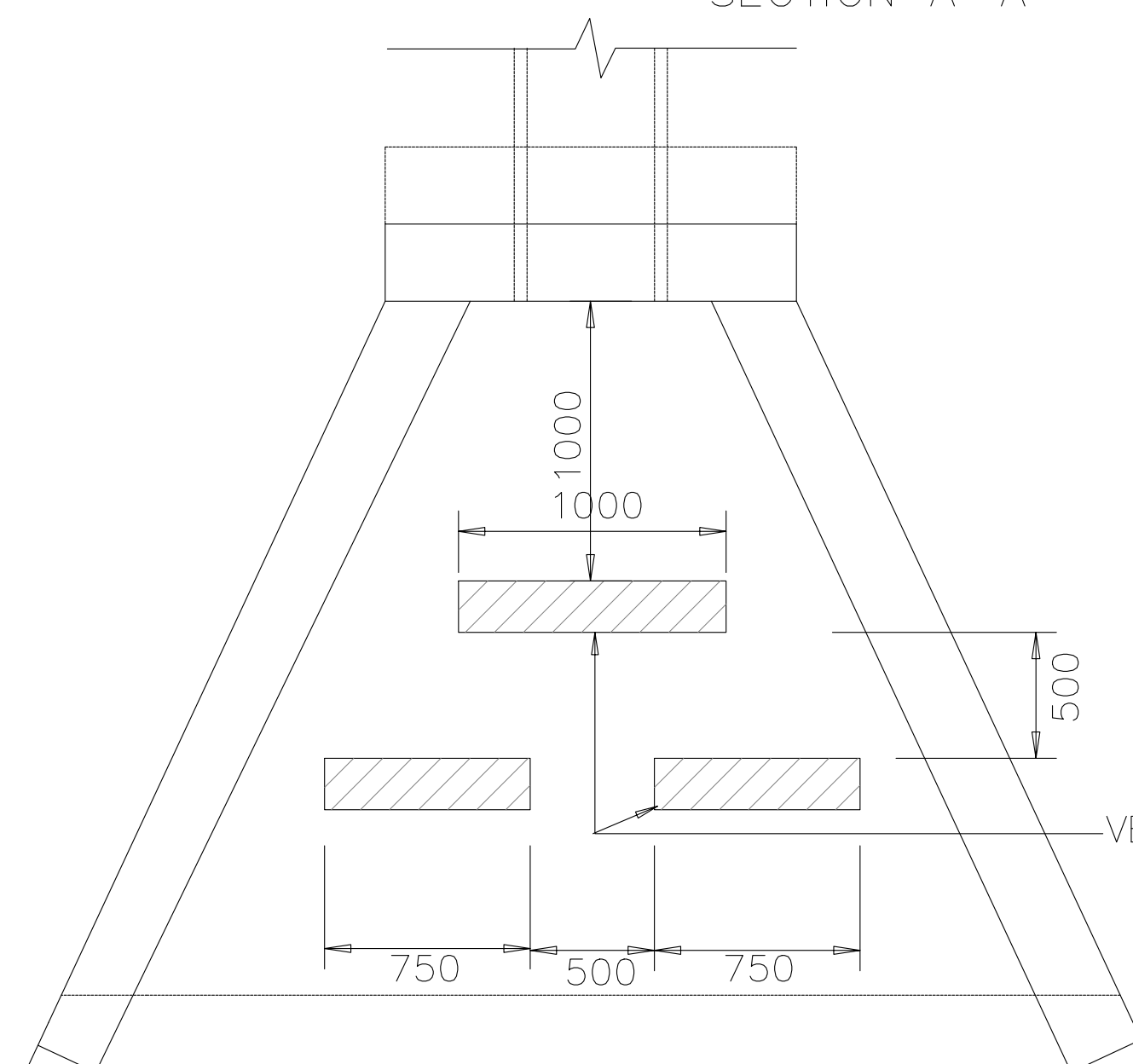
SECTION A-A



150

1. ALL CONCRETE IN INLET AND OUTLET STRUCTURE TO BE CLASS 20/19 WITH A WOOD FLOAT FINISH WITH 25 x 25 CHAMFER ON ALL EXPOSED EDGES.
2. MINIMUM COVER TO REINFORCEMENT = 25mm OR 40mm ON THE GROUND.
3. ALL ROAD WORKS TO COMPLY WITH SABS 1200 SPECIFICATIONS.

—VERTICAL KERBING, FIG. 3



PLAN
(SPECIAL STORMWATER OUTLET FOR USE
WHEN OUTLET VELOCITY EXCEEDS 2,0 m/s)

[illegible]

CONSULTANTS DETAIL



Baitseanape Consulting Engineers
70 Selborne Avenue
Lyttelton Manor Ext 3
Lyttelton, Centurion
0157

P.O. Box 11598
Centurion
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Tel: (012) 644 1728
Fax: (012) 644 1292
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MAKHUDUTHAMAGA LOCAL MUNICIPALITY

Mr P.A. Senong
Manager: Infrastructure Services
01 Groblersdal Road
Jane Furse
1085



01 Groblersdal Road
Jane Furse
1085

Private Bag X434
Jane Furse
1085

Y	DESIGNED
	S.C.C
SIGNATURE: _____	DATE: _____
DRAWING CHECKED BY	
R.S.M.	
SIGNATURE: _____	DATE: _____
DRAWN	
S.C.C	
SIGNATURE: _____	DATE: _____
APPROVED	
E.R.T.	
SIGNATURE: _____	DATE: _____
DRAWING APPROVED BY CLIENT	
SIGNATURE: _____	DATE: _____

LOCATION OF PROJECT:

MADIBONG - LIMPOPO PROVINCE

	DESCRIPTION OF PROJECT
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CONSTRUCTION OF MADIBONG ROAD INLET AND OUTLET STRUCTURES

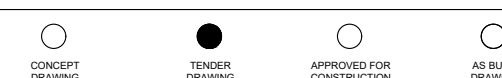
CONTRACT No. 1

PROJECT No. :

SCALE :

DATE : _____

PROJECT STATUS



PROJECT ENGINEER:	
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INITIALS AND SURNAME	SIGNATURE & PR NUMBER	DATE
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REMARKS:	ORIGINAL PAPER SIZE:
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DRAWING NO.
BCE-MADI-18

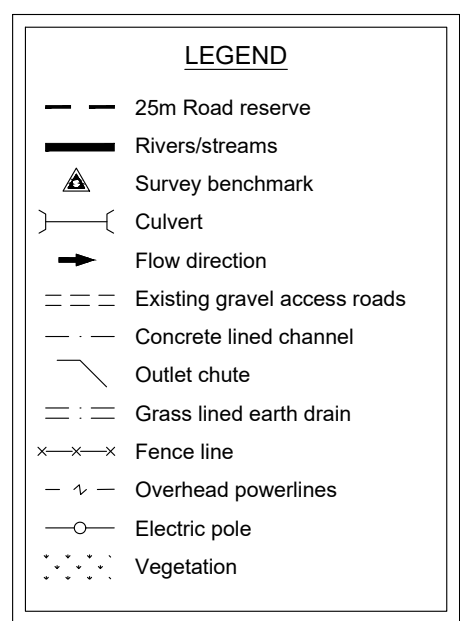
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ISSUED FOR CONSTRUCTION



REVISION



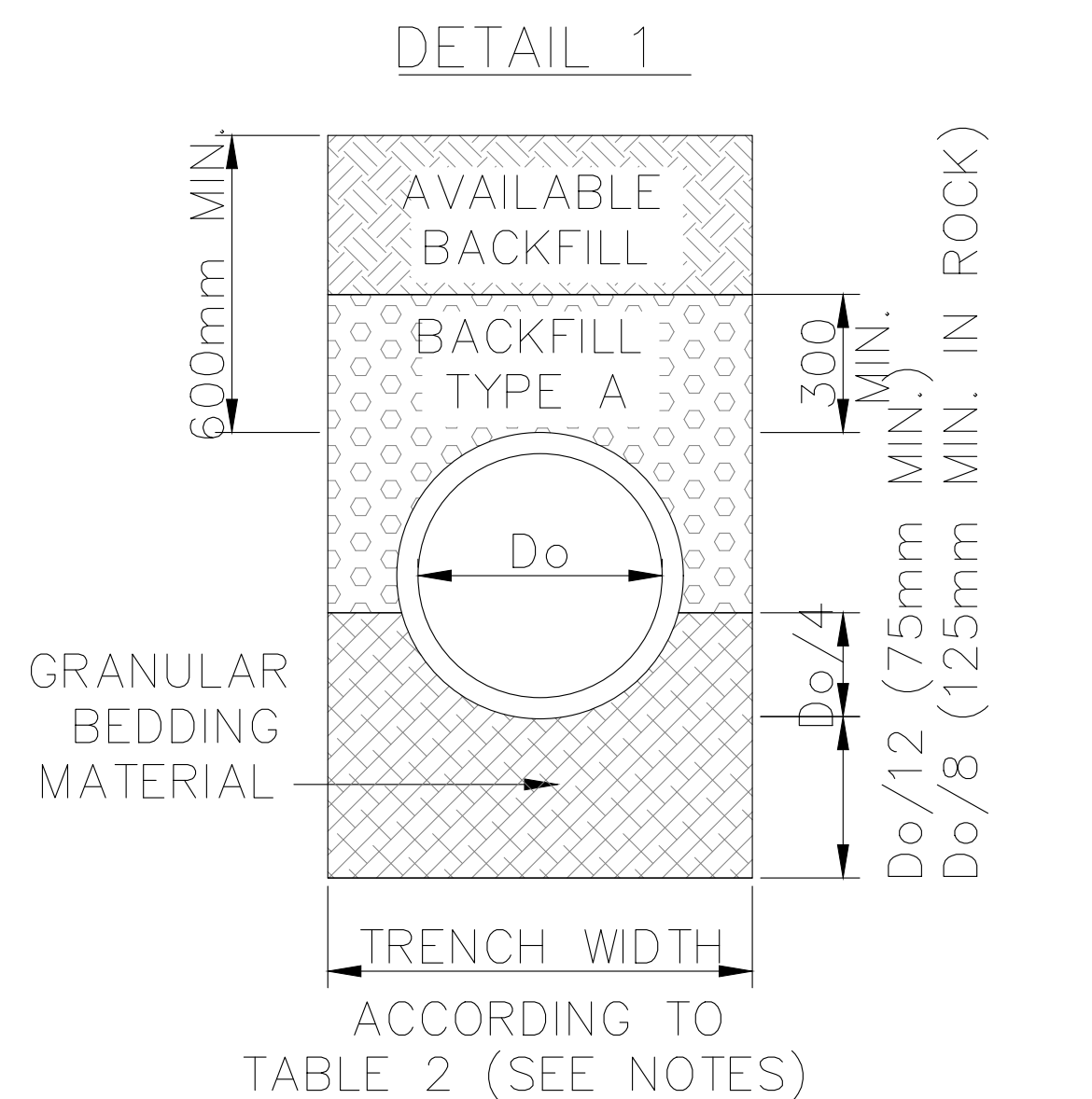
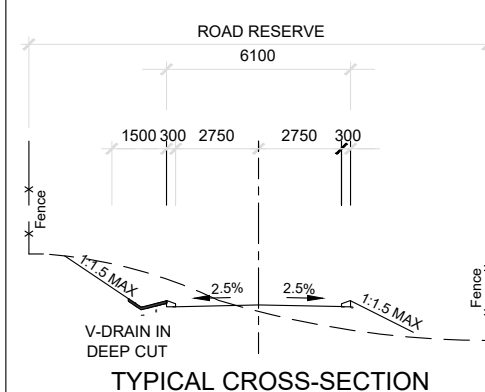
DESIGN SPEED
60 km/h

LONGITUDINAL SECTION

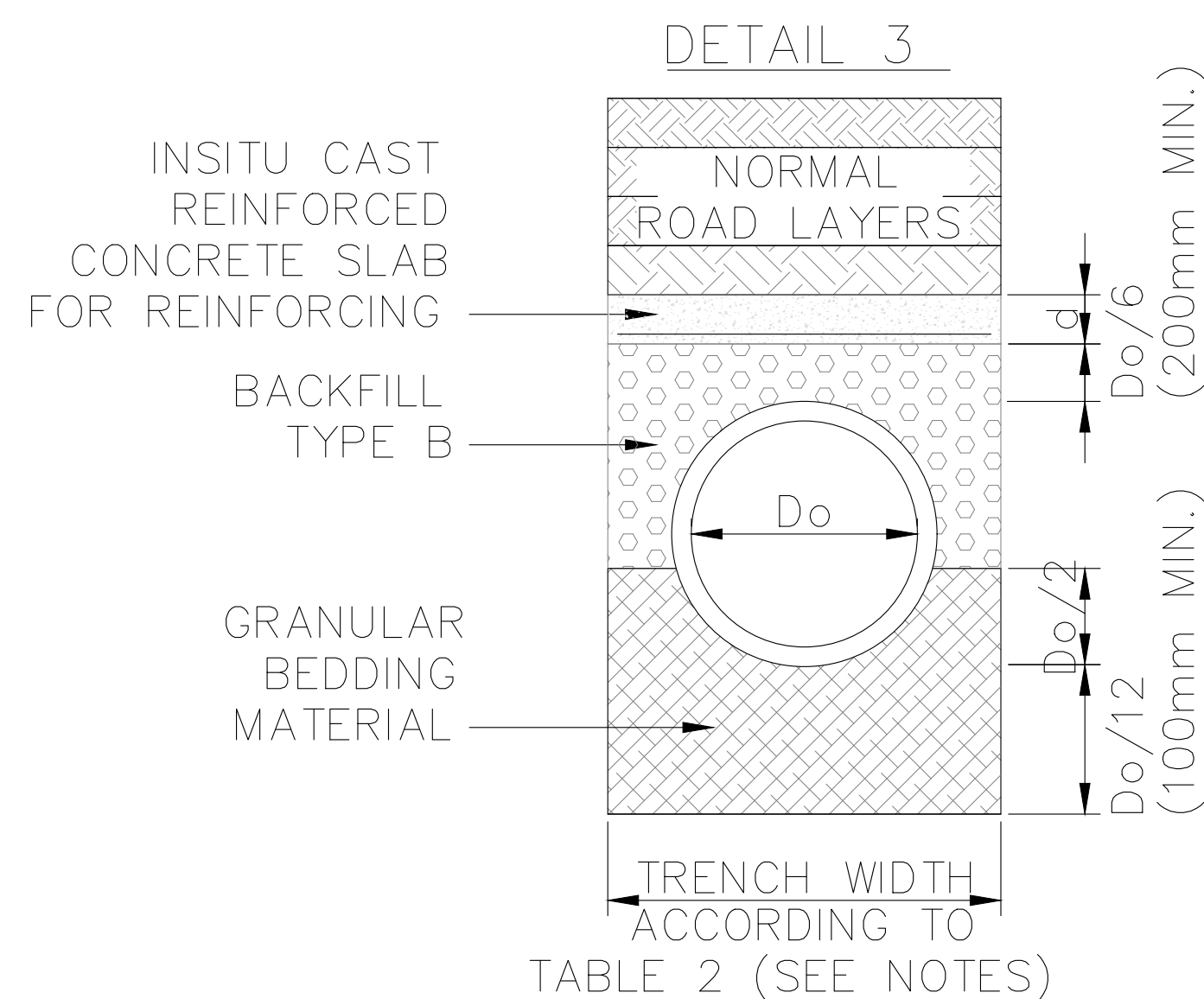
SCALE
HOR 1:1000
VERT 1:200

LEGEND :

— — — GROUND PROFILE
————— DESIGN PROFILE



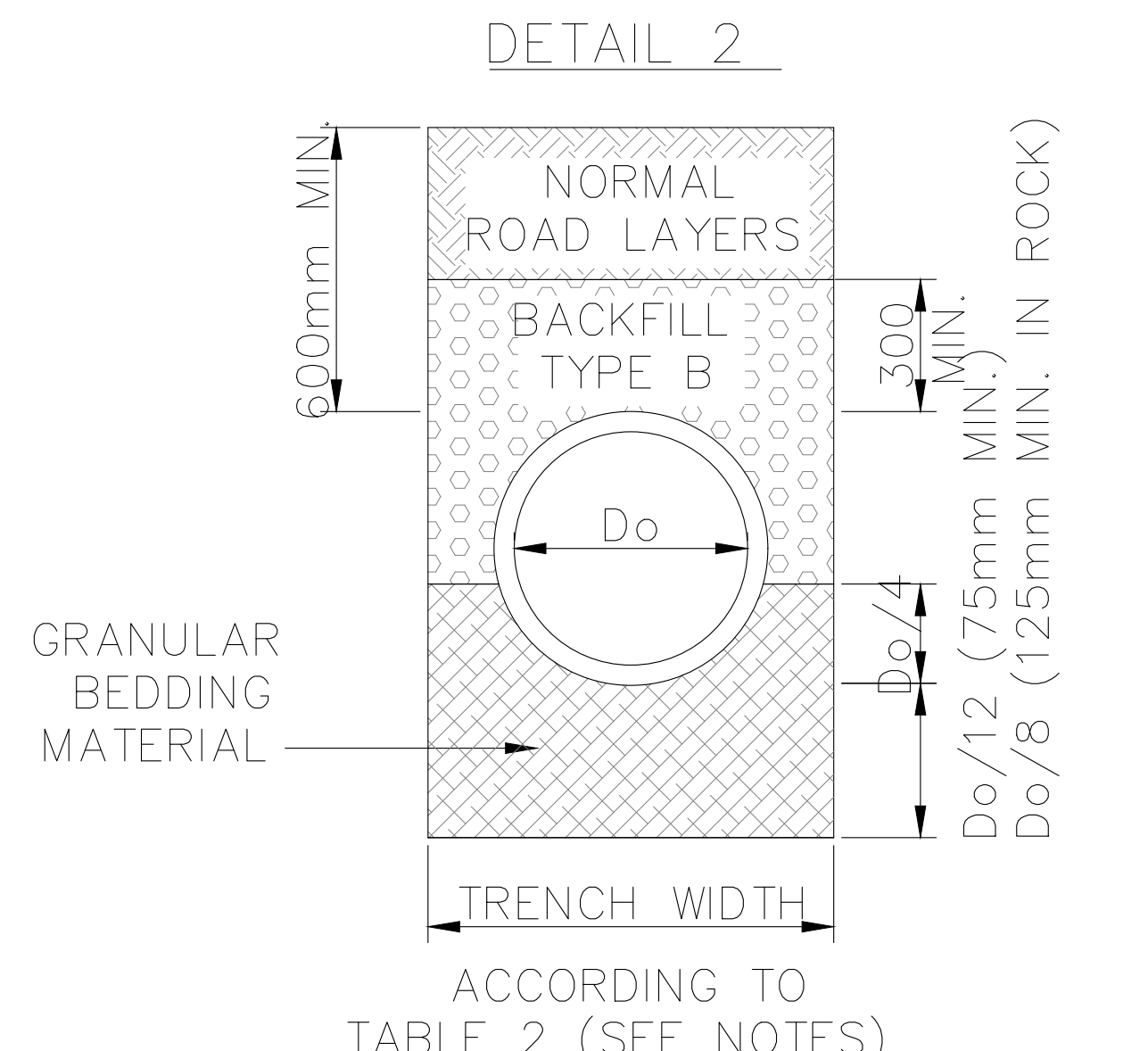
STORMWATER PIPES UNDER
SIDEWALK)



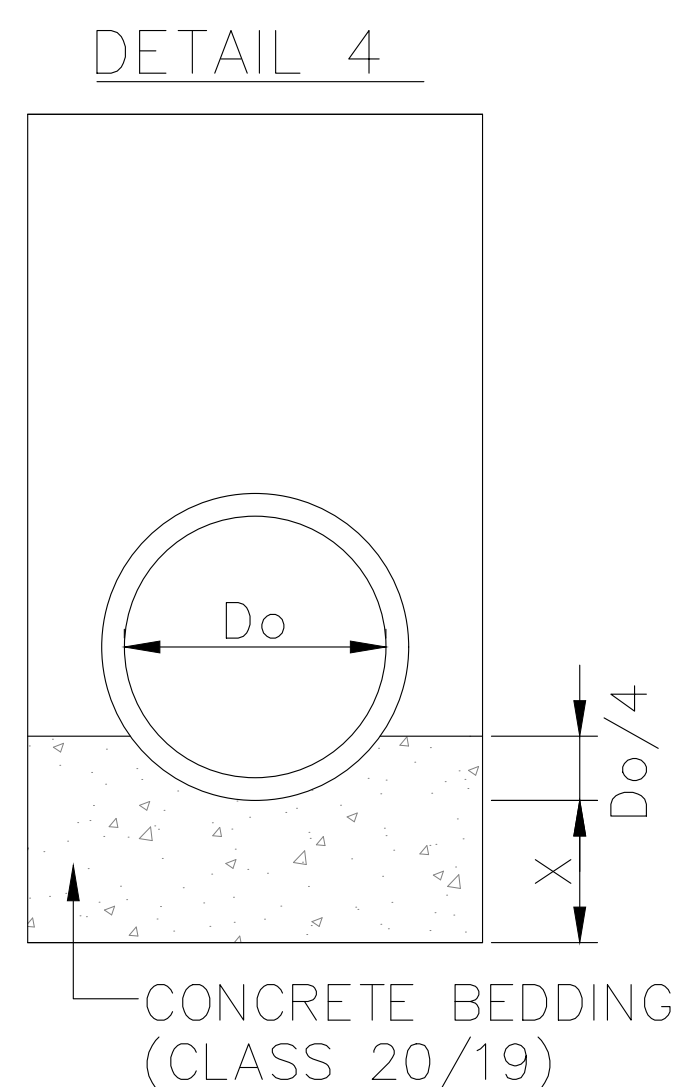
SITUATIONS WHERE A CONCRETE SLAB IS REQUIRED

STORMWATER PIPES UNDERNEATH MAIN ROUTES
UNDER THE FOLLOWING CIRCUMSTANCES

1. COVER < 800mm FOR $D_o \leq 750\text{mm}$
2. COVER < 900mm FOR $D_o > 750\text{mm}$



STORMWATER PIPES
UNDERNEATH ROADS,
ACCESS ROADS & PARKING AREAS



X = D_o/4 WHEN TRENCH IS IN GRAVEL-SOIL
X = D_o/8 WHEN TRENCH IS IN ROCK

SITUATIONS WHERE A CONCRETE BEDDING IS REQUIRED

NOTES

1. ALL PIPES BELOW SIDEWALKS & OPEN AREAS TO BE CLASS 50 'D' EXCEPT WHERE COVER < 2.m ON 1200mmØ AND GREATER THE CLASS OF THE PIPES ARE TO BE INCREASED TO 75 'D'.
2. FOR STORMWATER PIPES BELOW STREETS & MAIN ROUTES SEE TABLE 2 ON DRAWING NO JRA-SD-S025A.
3. THE CONTRACTOR SHALL AT ALL TIMES ADHERE TO THE SAFETY PRECAUTIONS AS SET OUT IN SABS 1200 D-1988

AMENDMENTS				CONSULTANTS DETAIL				 Baitseanape Consulting Engineers progressive engineering excellence Baitseanape Consulting Engineers 70 Selborne Avenue Lytelton Manor Ext 3 Lytelton, Centurion 0157 P.O. Box 11598 Centurion 0046 Tel: (012) 644 1728 Fax: (012) 644 1292 email: ephraim@baitseanape.co.za				MAKHUDUTHAMAGA LOCAL MUNICIPALITY Mr P.A. Senong Manager: Infrastructure Services 01 Groblersdal Road Jane Furse 1085  01 Groblersdal Road Jane Furse 1085 Private Bag X434 Jane Furse 1085				DESIGNED S.C.C SIGNATURE: _____ DATE: _____ DRAWING CHECKED BY R.S.M. SIGNATURE: _____ DATE: _____ DRAWN S.C.C SIGNATURE: _____ DATE: _____ APPROVED E.R.T. SIGNATURE: _____ DATE: _____ DRAWING APPROVED BY CLIENT SIGNATURE: _____ DATE: _____				LOCATION OF PROJECT: MADIBONG - LIMPOPO PROVINCE DESCRIPTION OF PROJECT CONSTRUCTION OF MADIBONG ROAD BEDDING FOR STORMWATER PIPES CONTRACT No. : PROJECT No. : SCALE : 1:500 DATE : 13 / 03 / 2025				PROJECT STATUS ☐ CONCEPT DRAWING ☒ TENDER DRAWING ☐ APPROVED FOR CONSTRUCTION ☐ AS BUILT DRAWING PROJECT ENGINEER: INITIALS AND SURNAME _____ SIGNATURE & PR NUMBER _____ DATE _____ INSPECTOR OF WORKS: INITIALS AND SURNAME _____ SIGNATURE _____ DATE _____ REMARKS: SIGNATURE _____ DATE _____ DRAWING NO. RCF-MADI-20 ORIGINAL PAPER SIZE: A0 SHEET NO. 1 REVISION ☐			
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