

VOLUME 1



SENQU LOCAL MUNICIPALITY

TECHNICAL SERVICES

PROJECT NO.

FOR

**REPAIRING OF 4,5 KM GRAVEL ROADS AND
STORMWATER CHANNELS IN Ward: 17
Joveleni, Hinana and Voyizana**

VOLUME 1

TENDER DRAWINGS

FEBRUARY 2025

DRAWINGS COMPILED FOR:

THE MUNICIPAL MANAGER

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DRAWING LIST

NO.	DESCRIPTION	PAGE NO.
	COVER PAGE	1
	P-SM01-PMO-GR-WD17-T-0: DRAWING LIST.....	2

GENERAL PLANS

1. P-SM01-PMO-GR-J-T-01: JOVELENI ROAD 1 LONGSECTION.....	3
2. P-SM01-PMO-GR-J-T-02: JOVELENI ROAD 2 LONGSECTION.....	4
3. P-SM01-PMO-GR-J-T-03: JOVELENI ROAD 3 LONGSECTION.....	5
4. P-SM01-PMO-GR-H-T-01: HINANA ROAD 1 LONGSECTION.....	6
5. P-SM01-PMO-GR-H-T-02: HINANA ROAD 2 LONGSECTION.....	7
6. P-SM01-PMO-GR-H-T-03:HINANA ROAD 3 LONGSECTION.....	8
7. P-SM01-PMO-GR-VY-T-01:VOYIZANA ROAD 1 LONGSECTION.....	9
8. P-SM01-PMO-GR-VY-T-02:VOYIZANA ROAD 2 LONGSECTION.....	10
9. P-SM01-PMO-GR-VY-T-03:VOYIZANA ROAD 3 LONGSECTION.....	11

LEGEND

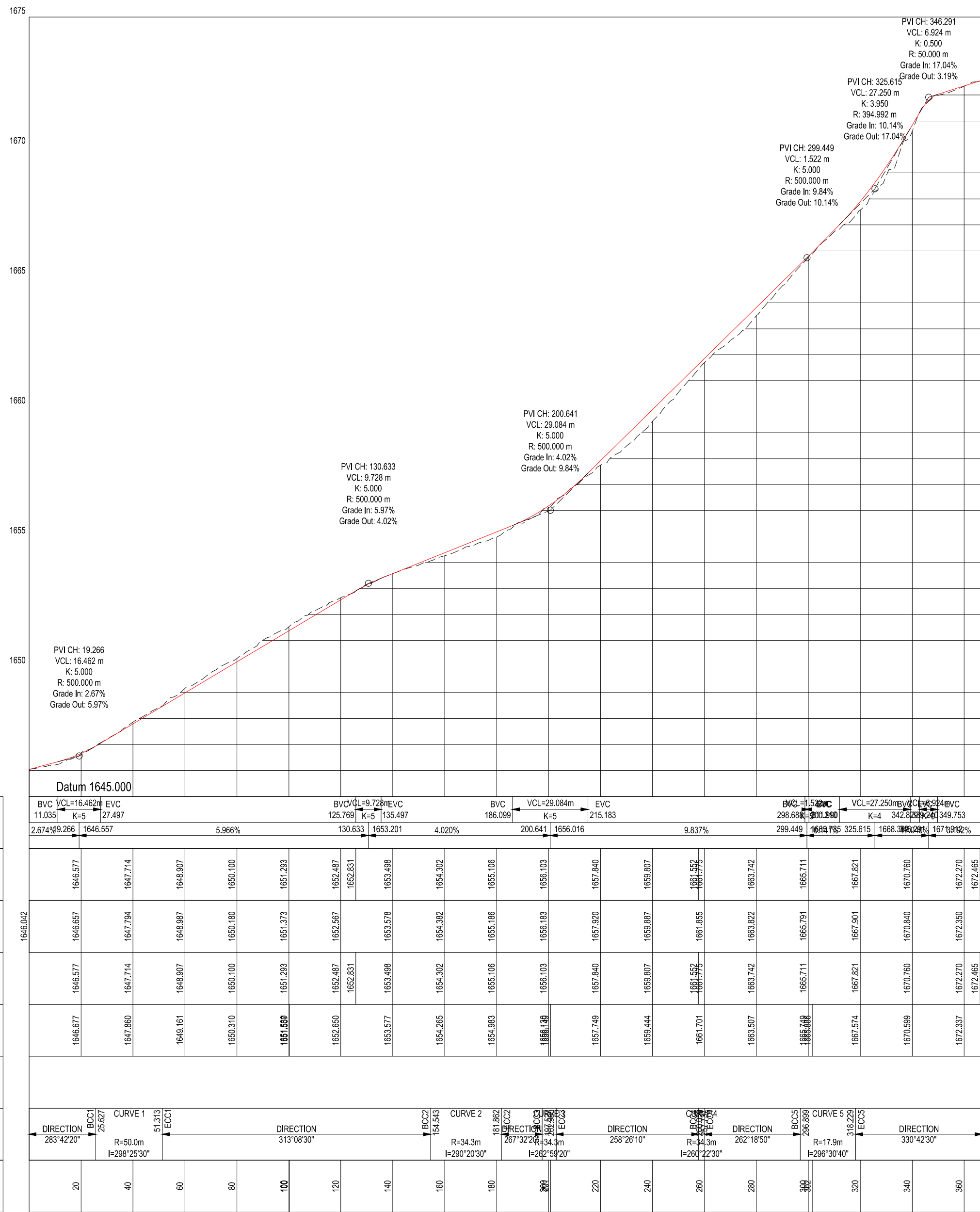
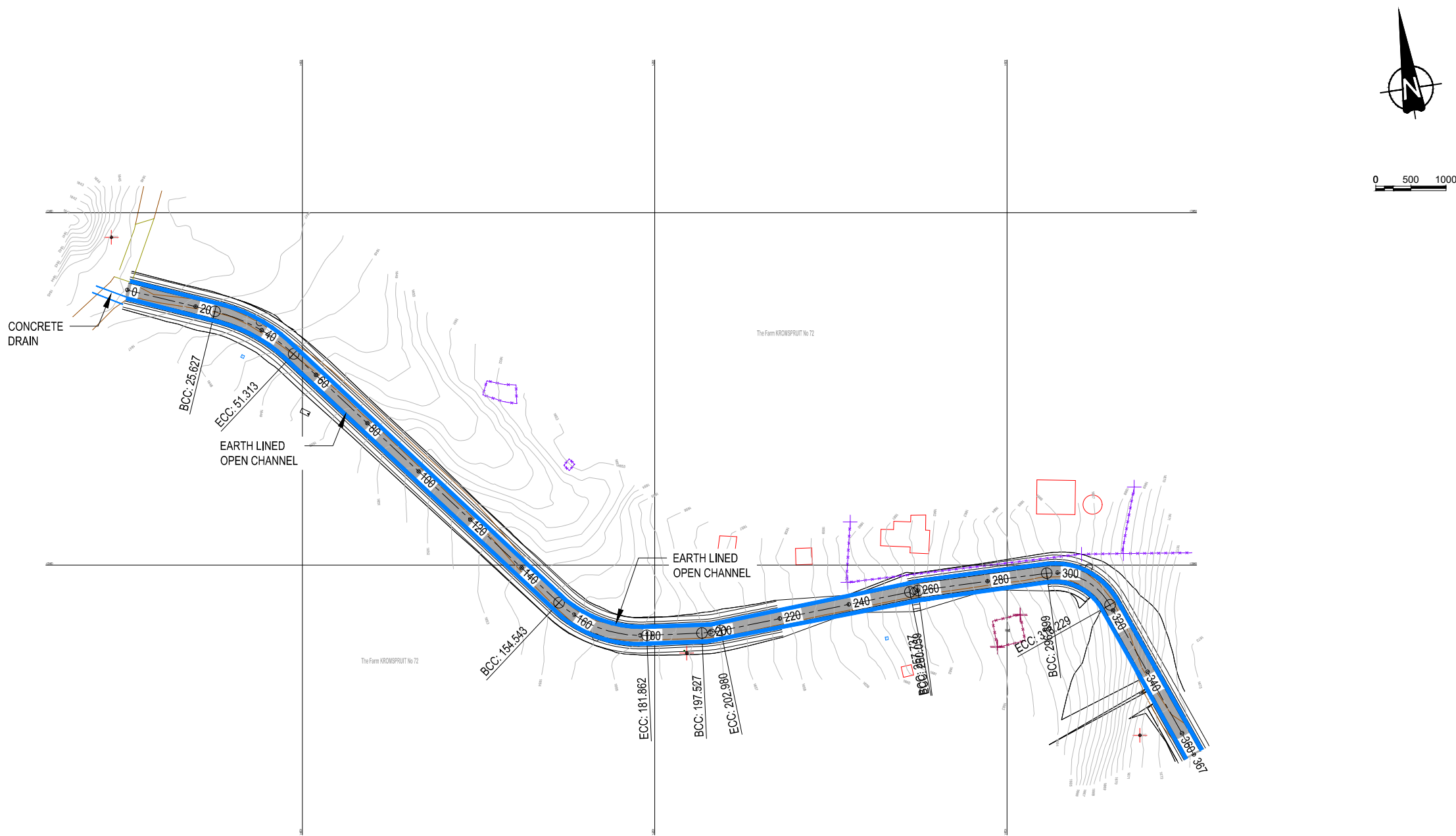
- CENTRELINE
- ESKOMTELKOM POLE
- EXISTING POWER LINE
- ROAD CROSS FALL
- FENCE
- EXISTING TREE
- BUILDING

COORDINATE LIST

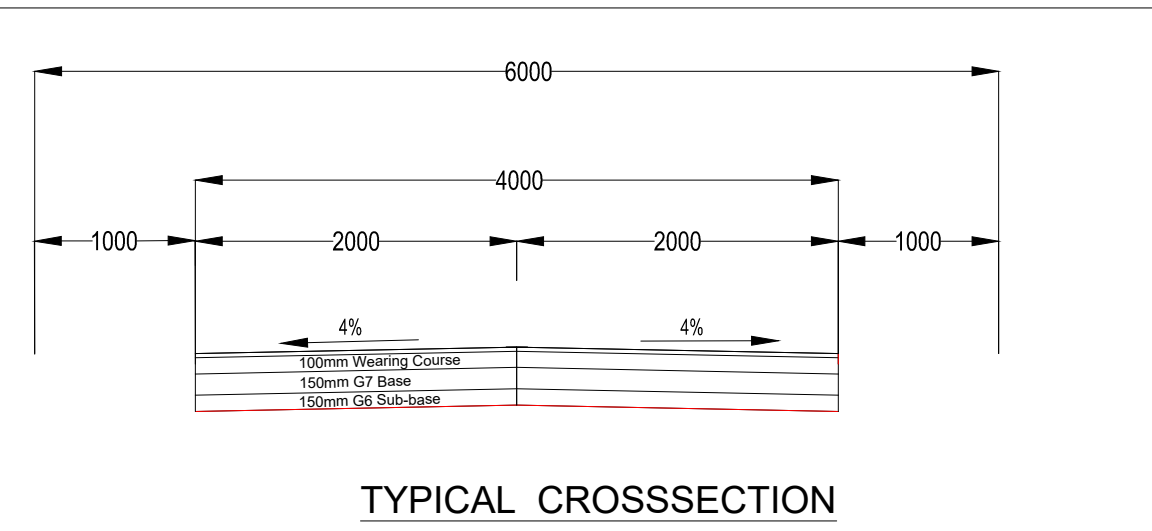
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BM46 -38887.31 3384152.35 1670.73
BM47 -39151.79 3384029.79 1672.35
VOY -38592.48 3384294.20 1657.88

ABBREVIATIONS

- N.G.L. NATURAL GROUND LEVEL
- CL CENTRELINE
- m METERS (UNIT)
- HL LEFT HAND
- HR RIGHT HAND
- BCC BEGINNING OF CURVE CENTRELINE
- ECC END OF CURVE CENTRELINE
- BVC BEGINNING OF VERTICAL CURVE
- EVC END OF VERTICAL CURVE
- R RADIUS
- CH CHAINAGE
- PI POINT OF INTERSECTION



VERTICAL PROFILE GRADES	
FINAL DESIGN ROAD LEVELS	LEFT EDGE (HL)
	CENTRE LINE (CL)
	RIGHT EDGE (HR)
GROUND LEVELS ON CL	
SUPERELEVATION	
HORIZONTAL ALIGNMENT	
DISTANCE (m)	



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DESIGN BY:

R DHLIWAYO

DRAWN BY:

R DHLIWAYO

CHECKED BY:

L. MARAH

APPROVED BY:

L. MARAH

REVISIONS			
REV	DATE	DESCRIPTION	BY

PROJECT NAME

REPAIRING OF 4.5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana

TITLE

JOVELENI ROAD 1 LONGSECTION

PROJECT STATUS:

TENDER

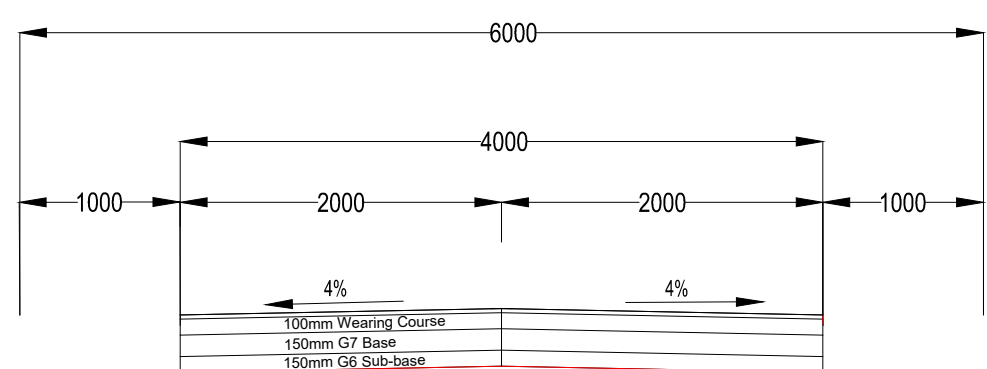
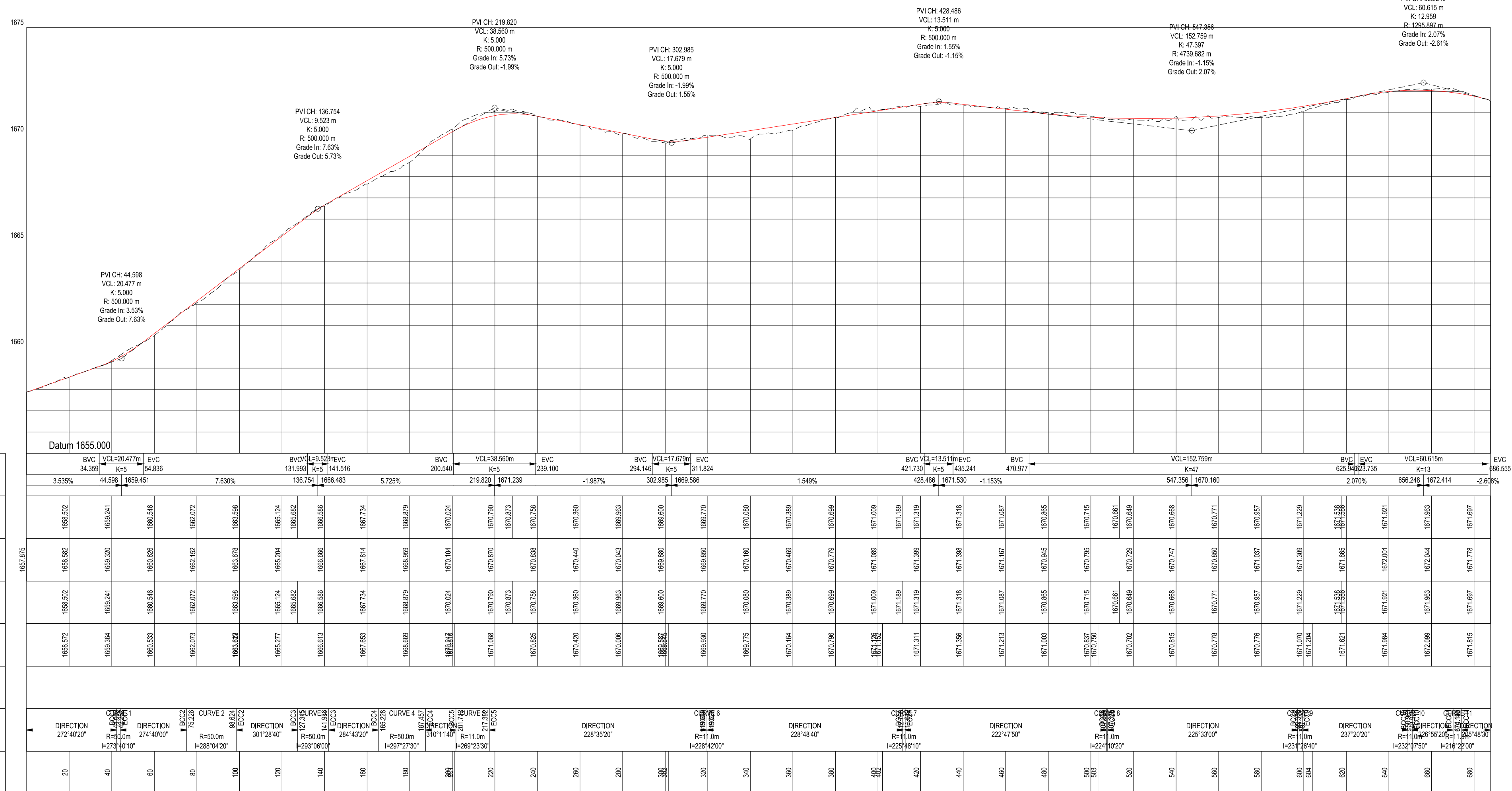
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2025-02-21	N.T.S	1 OF 2	A	A1

DWG NO

P-SM01-PMO-GR-J-T-01

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BM46	-38987.31	3384152.35	1670.7
BM47	-39151.79	3384029.79	1672.3
VOY	-38592.48	3384294.20	1657.8

N.G.L	NATURAL GROUND LEVEL
CL	CENTRELINE
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HL	LEFT HAND
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SIGNATURE

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R DHLIWAYO

L. MARAH

L. MARAH

[illegible]

REPAIRING OF 4,5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana

JOVELENI ROAD 2 LONGSECTION

TENDER

SCALE

N.T.S

101-PMC

100

	9
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SCALE

N.T.S

101-PMC

101-1 MC

P-SM01-PMO-GR-J-T-02

LEGEND

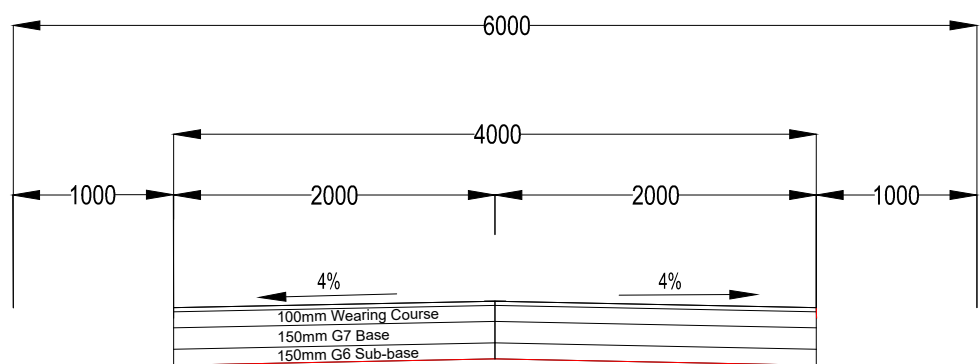
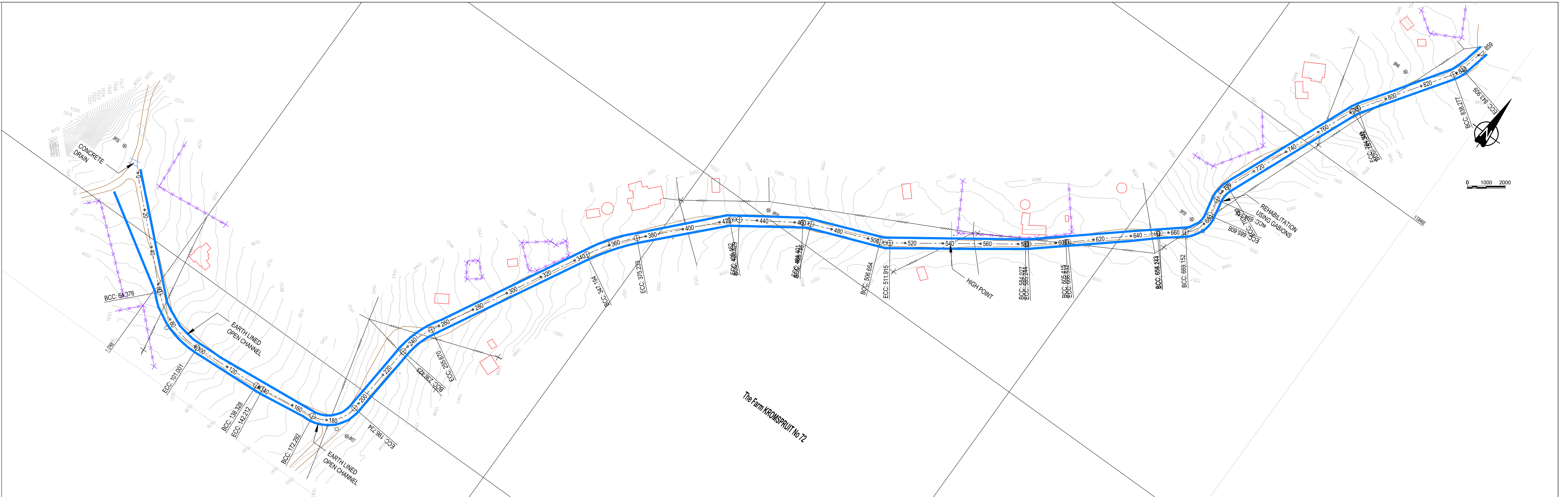
-  CENTRELINE
 ESKOM/TELKOM POLE
 EXISTING POWER LINE
 4% → ROAD CROSS FALL
 FENCE
 EXISTING TREE
 BUILDING

ABBREVIATIONS

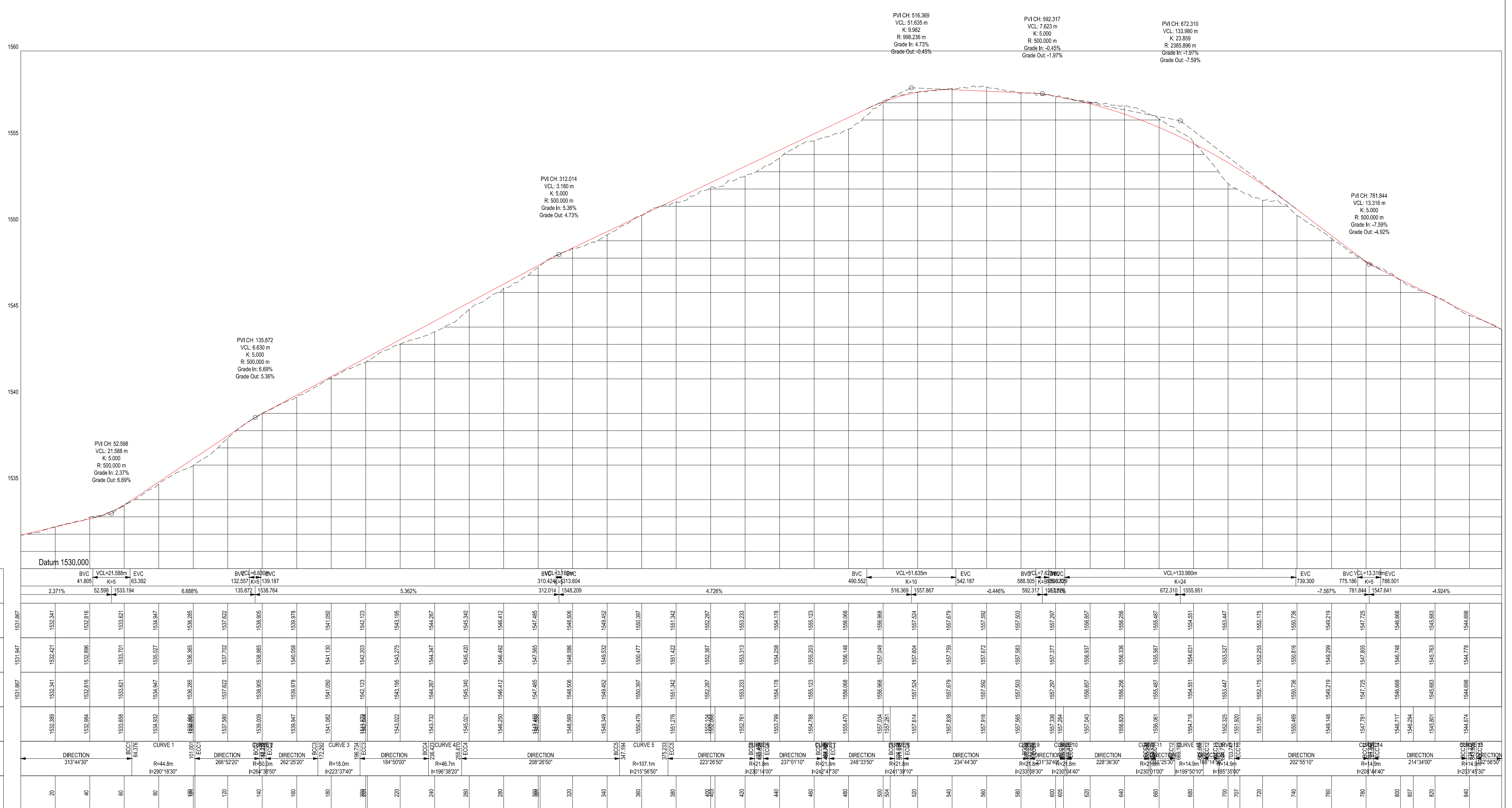
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| CL | CENTRELINE |
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| BCC | BEGINNING OF CURVE CENTRELINE |
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| R | RADIUS |
| CH. | CHAINAGE |
| PI | POINT OF INTERSECTION |

COORDINATE LIST

BM44	-38624.39	3384291.20	1659.1
BM45	-38788.72	3384311.84	1668.4
BM46	-38987.31	3384152.35	1670.7
BM47	-39151.79	3384029.79	1672.3
VOY	-38592.48	3384294.20	1657.88



TYPICAL CROSS SECTION



VERTICAL PROFILE GRADES		BVC=41.805 VCL=+1.589m K=5 EVC=63.392										BVC=132.557 VCL=+1.680m K=5 EVC=138.187										BVC=310.424 VCL=+1.739m K=10 EVC=313.604										BVC=588.505 VCL=+1.839m K=20 EVC=593.029										BVC=778.186 VCL=+1.939m K=24 EVC=783.300										BVC=952.171 VCL=+2.039m K=28 EVC=957.641										BVC=1126.156 VCL=+2.139m K=32 EVC=1131.318										BVC=1300.141 VCL=+2.239m K=36 EVC=1304.878										BVC=1474.126 VCL=+2.339m K=40 EVC=1478.435										BVC=1648.111 VCL=+2.439m K=44 EVC=1651.992										BVC=1822.096 VCL=+2.539m K=48 EVC=1825.549										BVC=1996.081 VCL=+2.639m K=52 EVC=2000.606										BVC=2170.066 VCL=+2.739m K=56 EVC=2174.663										BVC=2344.051 VCL=+2.839m K=60 EVC=2348.720										BVC=2518.036 VCL=+2.939m K=64 EVC=2522.777										BVC=2692.021 VCL=+3.039m K=68 EVC=2696.834										BVC=2866.006 VCL=+3.139m K=72 EVC=2870.891										BVC=3040.000 VCL=+3.239m K=76 EVC=3044.948										BVC=3213.985 VCL=+3.339m K=80 EVC=3219.005										BVC=3387.970 VCL=+3.439m K=84 EVC=3393.062										BVC=3561.955 VCL=+3.539m K=88 EVC=3567.119										BVC=3735.940 VCL=+3.639m K=92 EVC=3741.176										BVC=3909.925 VCL=+3.739m K=96 EVC=3915.233										BVC=4083.910 VCL=+3.839m K=100 EVC=4089.290										BVC=4257.895 VCL=+3.939m K=104 EVC=4263.347										BVC=4431.880 VCL=+4.039m K=108 EVC=4437.404										BVC=4605.865 VCL=+4.139m K=112 EVC=4611.461										BVC=4779.850 VCL=+4.239m K=116 EVC=4785.518										BVC=4953.835 VCL=+4.339m K=120 EVC=4959.575										BVC=5127.820 VCL=+4.439m K=124 EVC=5133.632										BVC=5301.805 VCL=+4.539m K=128 EVC=5307.689										BVC=5475.790 VCL=+4.639m K=132 EVC=5481.746										BVC=5649.775 VCL=+4.739m K=136 EVC=5655.803										BVC=5823.760 VCL=+4.839m K=140 EVC=5829.860										BVC=5997.745 VCL=+4.939m K=144 EVC=6003.917										BVC=6171.730 VCL=+5.039m K=148 EVC=6177.974										BVC=6345.715 VCL=+5.139m K=152 EVC=6352.031										BVC=6519.700 VCL=+5.239m K=156 EVC=6526.088										BVC=6693.685 VCL=+5.339m K=160 EVC=6700.145										BVC=6867.670 VCL=+5.439m K=164 EVC=6874.202										BVC=7041.655 VCL=+5.539m K=168 EVC=7048.259										BVC=7215.640 VCL=+5.639m K=172 EVC=7222.316										BVC=7389.625 VCL=+5.739m K=176 EVC=7396.373										BVC=7563.610 VCL=+5.839m K=180 EVC=7570.430										BVC=7737.595 VCL=+5.939m K=184 EVC=7744.487										BVC=7911.580 VCL=+6.039m K=188 EVC=7918.544										BVC=8085.565 VCL=+6.139m K=192 EVC=8092.601										BVC=8259.550 VCL=+6.239m K=196 EVC=8266.658										BVC=8433.535 VCL=+6.339m K=200 EVC=8440.715										BVC=8607.520 VCL=+6.439m K=204 EVC=8614.772										BVC=8781.505 VCL=+6.539m K=208 EVC=8788.829										BVC=8955.490 VCL=+6.639m K=212 EVC=8962.886										BVC=9129.475 VCL=+6.739m K=216 EVC=9136.943										BVC=9303.460 VCL=+6.839m K=220 EVC=9310.999										BVC=9477.445 VCL=+6.939m K=224 EVC=9485.056										BVC=9651.430 VCL=+7.039m K=228 EVC=9659.113										BVC=9825.415 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VCL=+16.039m K=588 EVC=25324.280										BVC=25484.665 VCL=+16.139m K=592 EVC=25498.337										BVC=25658.650 VCL=+16.239m K=596 EVC=25672.394										BVC=25832.635 VCL=+16.339m K=600 EVC=25846.451										BVC=26006.620 VCL=+16.439m K=604 EVC=26020.508										BVC=26180.605 VCL=+16.539m K=608 EVC=26194.565										BVC=26354.590 VCL=+16.639m K=612 EVC=26368.622										BVC=26528.575 VCL=+16.739m K=616 EVC=26542.679										BVC=26702.560 VCL=+16.839m K=620 EVC=26716.736										BVC=26876.545 VCL=+16.939m K=624 EVC=26890.793										BVC=27050.530 VCL=+17.039m K=628 EVC=27064.850										BVC=27224.515 VCL=+17.139m K=632 EVC=27238.907										BVC=27398.500 VCL=+17.239m K=636 EVC=27412.964										BVC=27572.485 VCL=+17.339m K=640 EVC=27587.021										BVC=27746.470 VCL=+17.439m K=644 EVC=27761.078										BVC=27920.455 VCL=+17.539m K=648 EVC=27935.135										BVC=28094.440 VCL=+17.639m K=652 EVC=28109.192										BVC=28268.425 VCL=+17.739m K=656 EVC=28283.249										BVC=28442.410 VCL=+17.839m K=660 EVC=28457.306										BVC=28616.395 VCL=+17.939m K=664 EVC=28631.363										BVC=28790.380 VCL=+18.039m K=668 EVC=28805.420										BVC=28964.365 VCL=+18.139m K=672 EVC=28979.477										BVC=29138.350 VCL=+18.239m K=676 EVC=29153.534										BVC=29312.335 VCL=+18.339m K=680 EVC=29327.591										BVC=29486.320 VCL=+18.439m K=684 EVC=29501.648										BVC=29660.305 VCL=+18.539m K=688 EVC=29675.705										BVC=29834.290 VCL=+18.639m K=692 EVC=29849.762										BVC=30008.275 VCL=+18.739m K=696 EVC=30023.819										BVC=30182.260 VCL=+18.839m K=700 EVC=30197.876										BVC=30356.245 VCL=+18.939m K=704 EVC=30371.933										BVC=30530.230 VCL=+19.039m K=708 EVC=30545.990										BVC=30704.215 VCL=+19.139m K=712 EVC=30720.047										BVC=30878.200 VCL=+19.239m K=716 EVC=30894.104										BVC=31052.185 VCL=+19.339m K=720 EVC=31068.161										BVC=31226.170 VCL=+19.439m K=724 EVC=31242.218										BVC=31400.155 VCL=+19.539m K=728 EVC=31416.275										BVC=31574.140 VCL=+19.639m K=732 EVC=31590.332										BVC=31748.125 VCL=+19.739m K=736 EVC=31764.389										BVC=31922.110 VCL=+19.839m K=740 EVC=31938.446										BVC=32096.095 VCL=+19.939m K=744 EVC=32112.503										BVC=32270.080 VCL=+20.039m K=748 EVC=32286.560										BVC=32444.065 VCL=+20.139m K=752 EVC=32460.617										BVC=32618.050 VCL=+20.239m K=756 EVC=32634.674										BVC=32792.035 VCL=+20.339m K=760 EVC=32808.731										BVC=32966.020 VCL=+20.439m K=764 EVC=32982.788										BVC=33140.005 VCL=+20.539m K=768 EVC=33156.845										BVC=33313.990 VCL=+20.639m K=772 EVC=33330.902										BVC=33487.975 VCL=+20.739m K=776 EVC=33504.959										BVC=33661.960 VCL=+20.839m K=780 EVC=33679.016										BVC=33835.945 VCL=+20.939m K=784 EVC=33853.073										BVC=34009.930 VCL=+21.039m K=788 EVC=34027.130										BVC=34183.915 VCL=+21.139m K=792 EVC=34201.187										BVC=34357.900 VCL=+21.239m K=796 EVC=34375.244										BVC=34531.885 VCL=+21.339m K=800 EVC=34549.301										BVC=34705.870 VCL=+21.439m K=804 EVC=34723.358										BVC=34879.855 VCL=+21.539m K=808 EVC=34897.415										BVC=35053.840 VCL=+21.639m K=812 EVC=35071.472										BVC=35227.825 VCL=+21.739m K=816 EVC=35245.529										BVC=35401.810 VCL=+21.839m K=820 EVC=35419.586										BVC=35575.795 VCL=+21.939m K=824 EVC=35593.643										BVC=35749.780 VCL=+22.039m K=828 EVC=35767.700										BVC=35923.765 VCL=+22.139m K=832 EVC=35941.757										BVC=36097.750 VCL=+22.239m K=836 EVC=36115.814										BVC=36271.735 VCL=+22.339m K=840 EVC=36289.871										BVC=36445.720 VCL=+22.439m K=844 EVC=36463.928										BVC=36619.705 VCL=+22.539m K=848 EVC=36637.985										BVC=36793.690 VCL=+22.639m K=852 EVC=36812.042										BVC=36967.675 VCL=+22.739m K=856 EVC=36986.099										BVC=37141.660 VCL=+22.839m K=860 EVC=37160.156										BVC=37315.645 VCL=+22.939m K=864 EVC=37334.213										BVC=37489.630 VCL=+23.039m K=868 EVC=37508.270										BVC=37663.615 VCL=+23.139m K=872 EVC=37682.327										BVC=37837.600 VCL=+23.239m K=876 EVC=37856.384										BVC=38011.585 VCL=+23.339m K=880 EVC=38030.441										BVC=38185.570 VCL=+23.439m K=884 EVC=38204.498										BVC=38359.555 VCL=+23.539m K=888 EVC=38378.555										BVC=38533.540 VCL=+23.639m K=892 EVC=38552.612										BVC=38707.525 VCL=+23.739m K=896 EVC=38726.669										BVC=38881.510 VCL=+23.839m K=900 EVC=38900.726										BVC=39055.495 VCL=+23.939m K=904 EVC=39074.783										BVC=39229.480 VCL=+24.039m K=908 EVC=39248.840										BVC=39403.465 VCL=+24.139m K=912 EVC=39422.897										BVC=39577.450 VCL=+24.239m K=916 EVC=39596.954										BVC=39751.435 VCL=+24.339m K=920 EVC=39771.011										BVC=3									
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CLIENT:



19 Murray Street
Lady Grey
9755

Tel: (051) 603 1449
Email:

vanzylt@senqu.gov.za

CONSULTANT:

THEWO & SMMMS - JV



58 Brebner Road
Westdene
Bloemfontein
9301

PROFESSIONAL ENGINEER:

PROF. Reg.No:
920281

DATE:

SIGNATURE:

DESIGN BY:

R DHLWAYO

DRAWN BY:

CHECKED BY _____

APPROVED BY _____

R DHLWAYO

B. DHILIMAYO

CHECKED BY _____

APPROVED BY _____

[illegible]

PROJECT NAME	
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REPAIRING OF 4,5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana

TITLE	
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JOVELENI ROAD 3 LONGSECTION

PROJECT STATUS:	
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TENDER

DATE _____

2025-02-21

SCALE

N.T.S

SHEE

[illegible]

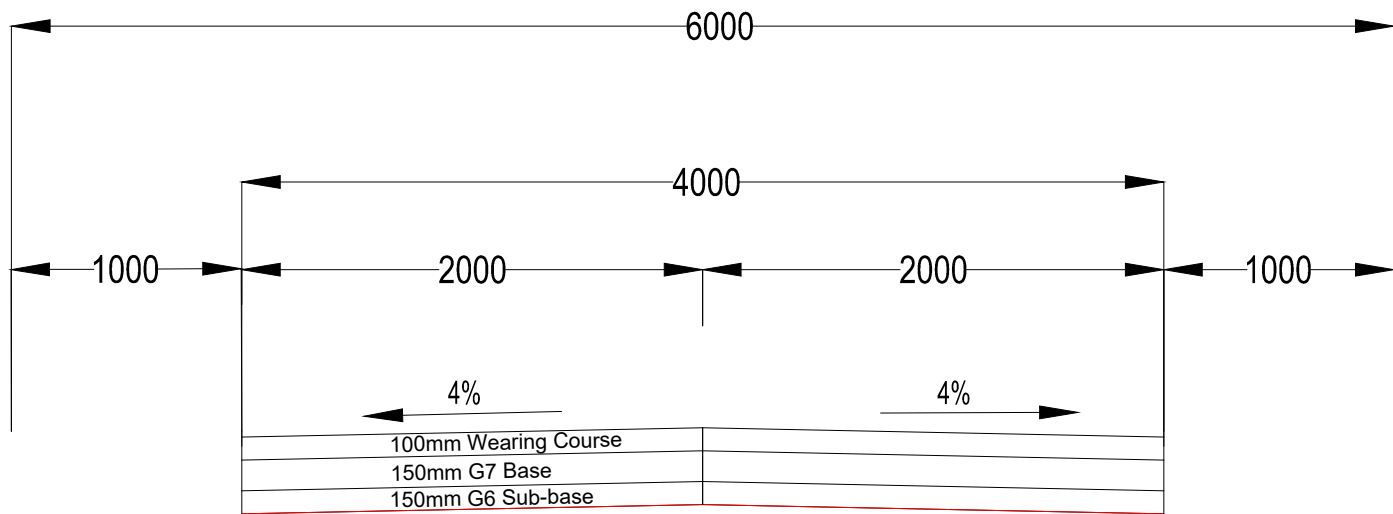
P-SM01-PMO-GR-J-T-03

LEGEND

- CENTRELINE
- ESKOM/TELKOM POLE
- EXISTING POWER LINE
- ROAD CROSS FALL
- FENCE
- EXISTING TREE
- BUILDING

ABBREVIATIONS

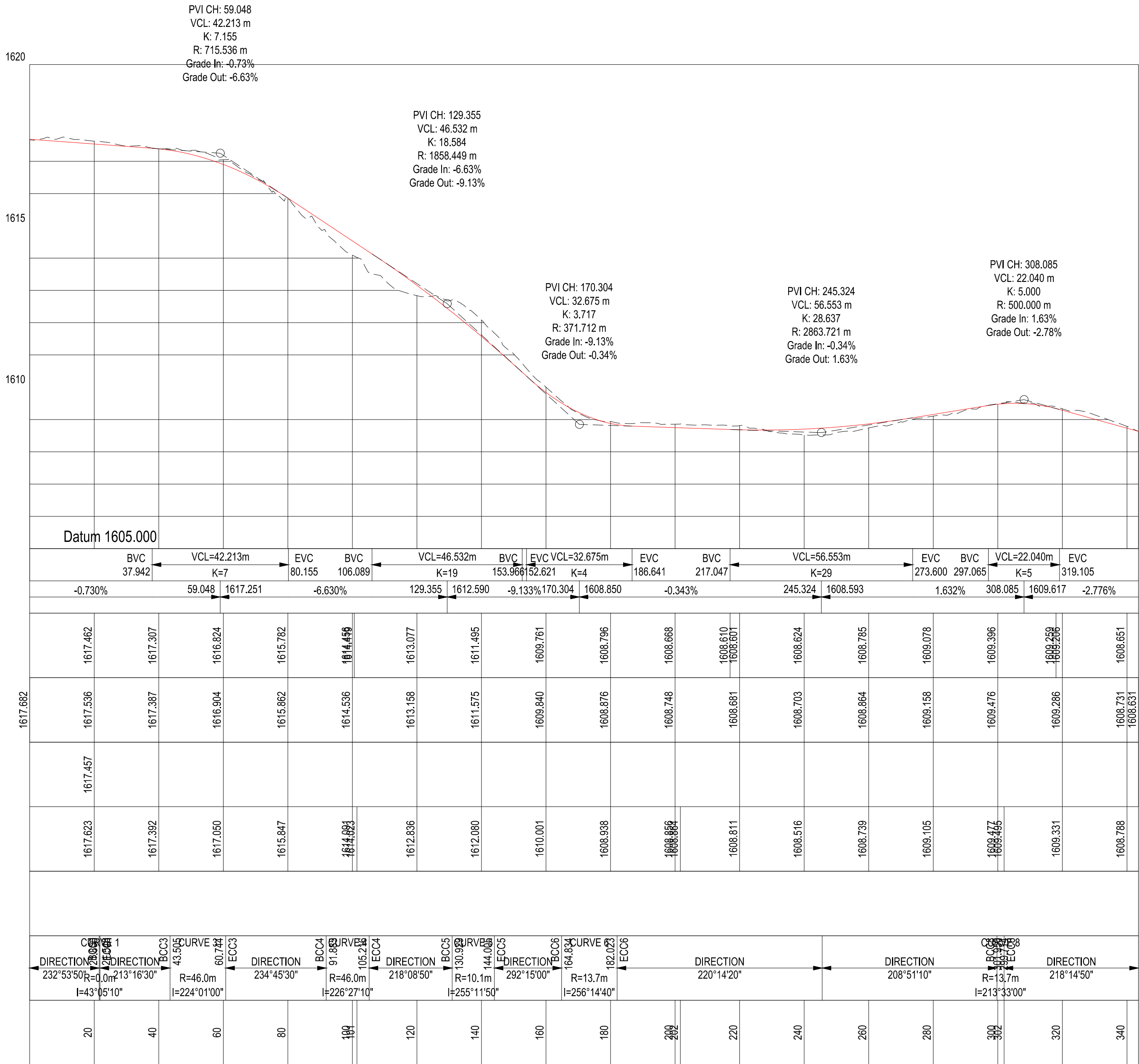
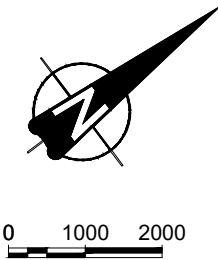
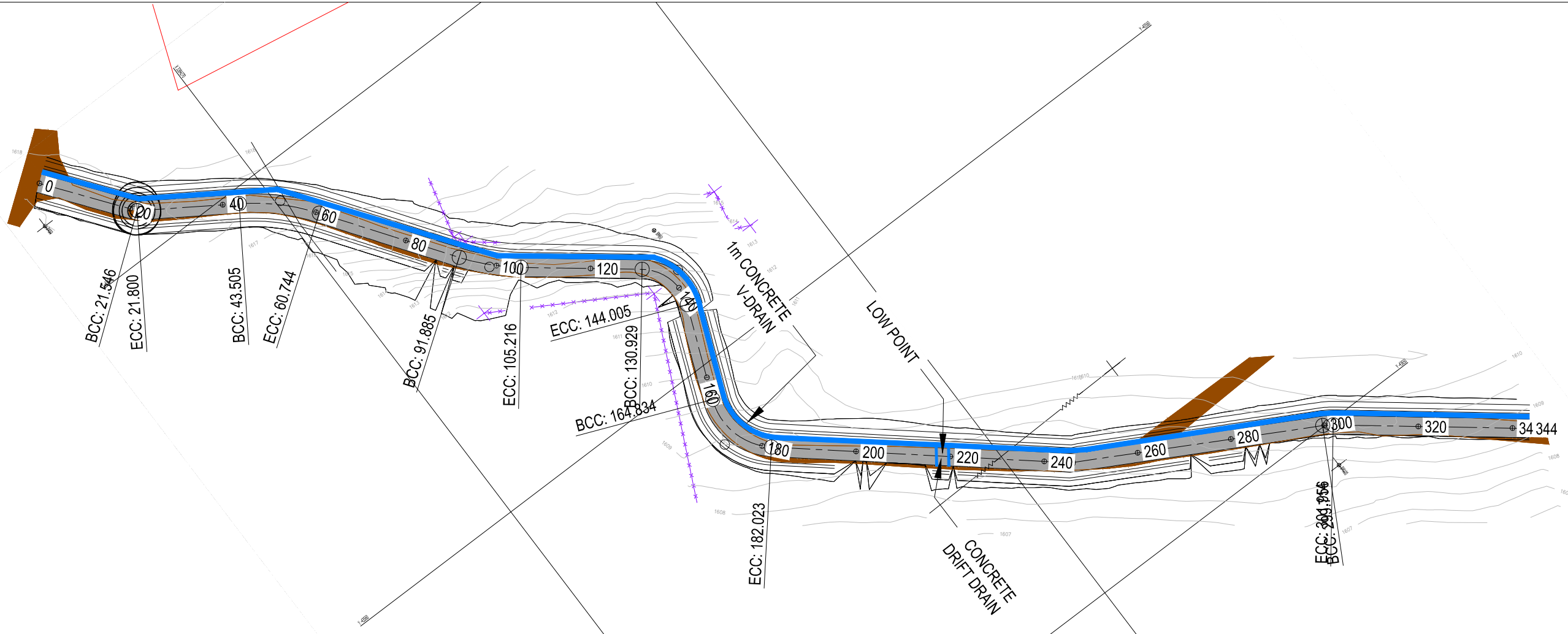
- N.G.L NATURAL GROUND LEVEL
- CL CENTRELINE
- m METERS (UNIT)
- HL LEFT HAND
- HR RIGHT HAND
- BCC BEGINNING OF CURVE CENTRELINE
- ECC END OF CURVE CENTRELINE
- BVC BEGINNING OF VERTICAL CURVE
- EVC END OF VERTICAL CURVE
- R RADIUS
- CH. CHAINAGE
- PI POINT OF INTERSECTION



TYPICAL CROSSECTION

COORDINATE LIST

BM57 -43168.25 3384280.01 1632.59
BM58 -43133.53 3384417.41 1634.99



VERTICAL PROFILE GRADES	
FINAL DESIGN ROAD LEVELS	LEFT EDGE (HL)
	CENTRE LINE (CL)
	RIGHT EDGE (HR)
GROUND LEVELS ON CL	
SUPERELEVATION	
LEFT RIGHT ---	
HORIZONTAL ALIGNMENT	
DISTANCE (m)	

CLIENT:  19 Murray Street Lady Grey 9755 Tel: (051) 603 1449 Email: vanzyll@senqu.gov.za	CONSULTANT: THEWO & SMMS - JV  58 Brebner Road Westdene Bloemfontein 9301	PROFESSIONAL ENGINEER: L. MARAH PROF. Reg.No: 920281 DATE: SIGNATURE:	DESIGN BY: R DHLIWAYO DRAWN BY: R DHLIWAYO CHECKED BY: L. MARAH APPROVED BY: L. MARAH	REVISIONS <table><thead><tr><th>REV</th><th>DATE</th><th>DESCRIPTION</th><th>BY</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>	REV	DATE	DESCRIPTION	BY																													PROJECT NAME REPAIRING OF 4,5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana TITLE HINANA ROAD 1 LONGSECTION	PROJECT STATUS: TENDER <table><thead><tr><th>DATE</th><th>SCALE</th><th>SHEET</th><th>REV</th><th>A1</th></tr></thead><tbody><tr><td>2025-02-21</td><td>N.T.S</td><td>1 OF 1</td><td>0</td><td>A1</td></tr></tbody></table> DWG NO P-SM01-PMO-GR-H-01	DATE	SCALE	SHEET	REV	A1	2025-02-21	N.T.S	1 OF 1	0	A1
REV	DATE	DESCRIPTION	BY																																													
DATE	SCALE	SHEET	REV	A1																																												
2025-02-21	N.T.S	1 OF 1	0	A1																																												

LEGEND

- CENTRELINE
- ESKOM/TELKOM POLE
- EXISTING POWER LINE
- ROAD CROSS FALL
- FENCE
- EXISTING TREE
- BUILDING

ABBREVIATIONS

- N.G.L

NATURAL GROUND LEVEL
- CL

CENTRELINE
- m

METERS (UNIT)
- HL

LEFT HAND
- HR

RIGHT HAND
- BCC

BEGINNING OF CURVE CENTRELINE
- ECC

END OF CURVE CENTRELINE
- BVC

BEGINNING OF VERTICAL CURVE
- EVC

END OF VERTICAL CURVE
- R

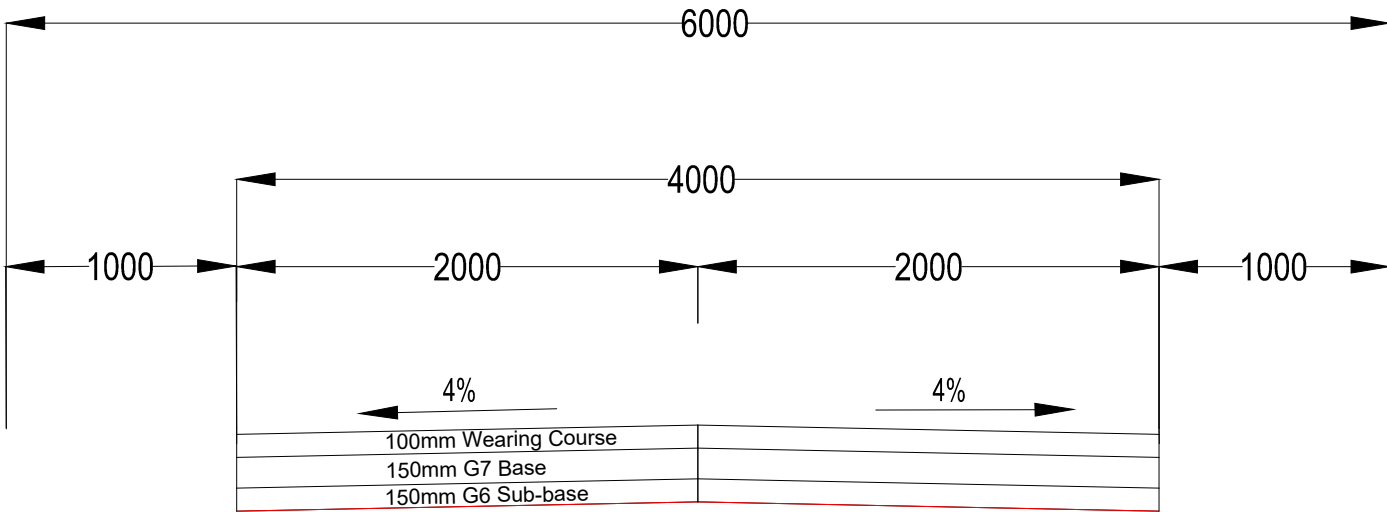
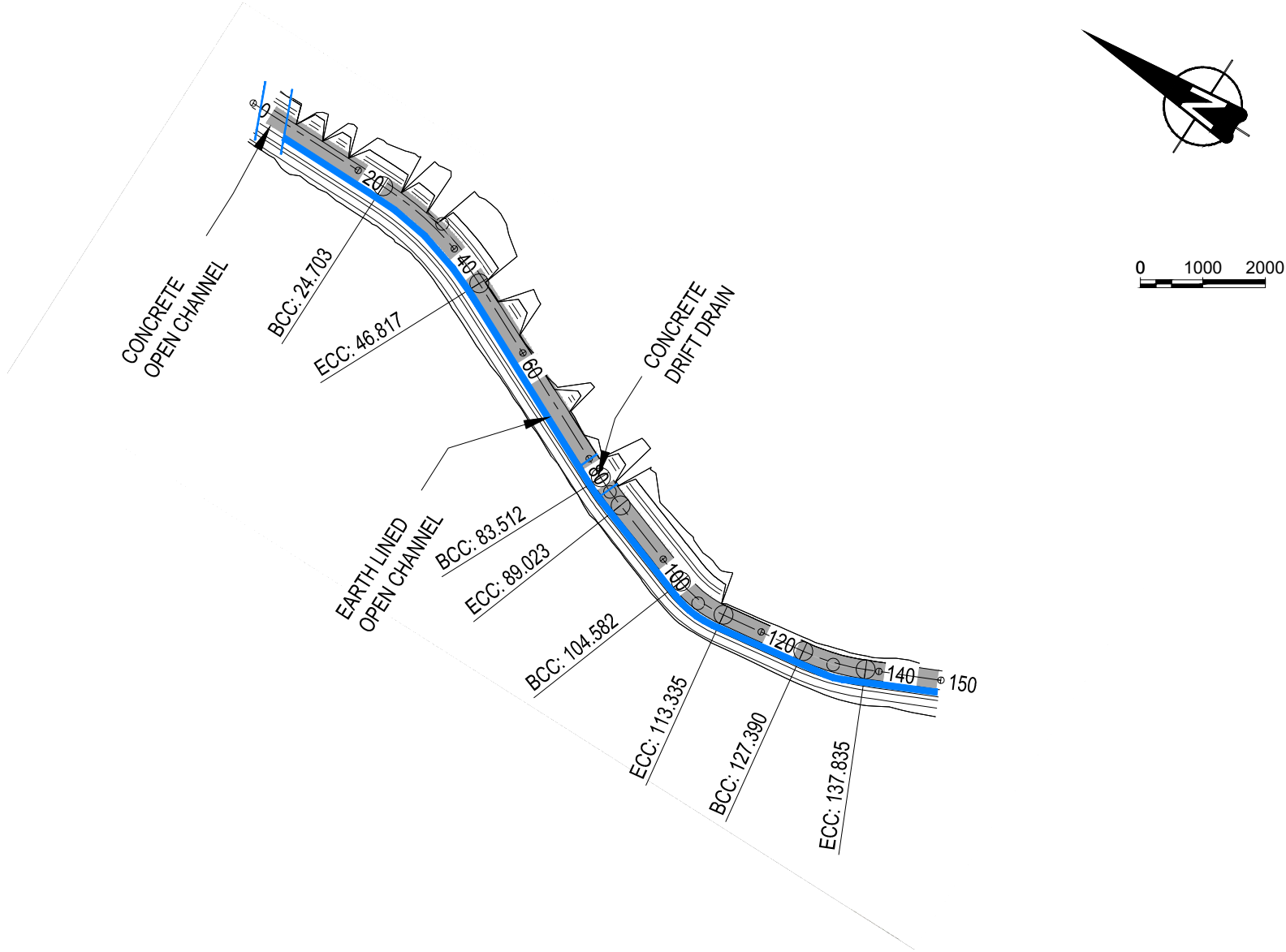
RADIUS
- CH.

CHAINAGE
- PI

POINT OF INTERSECTION

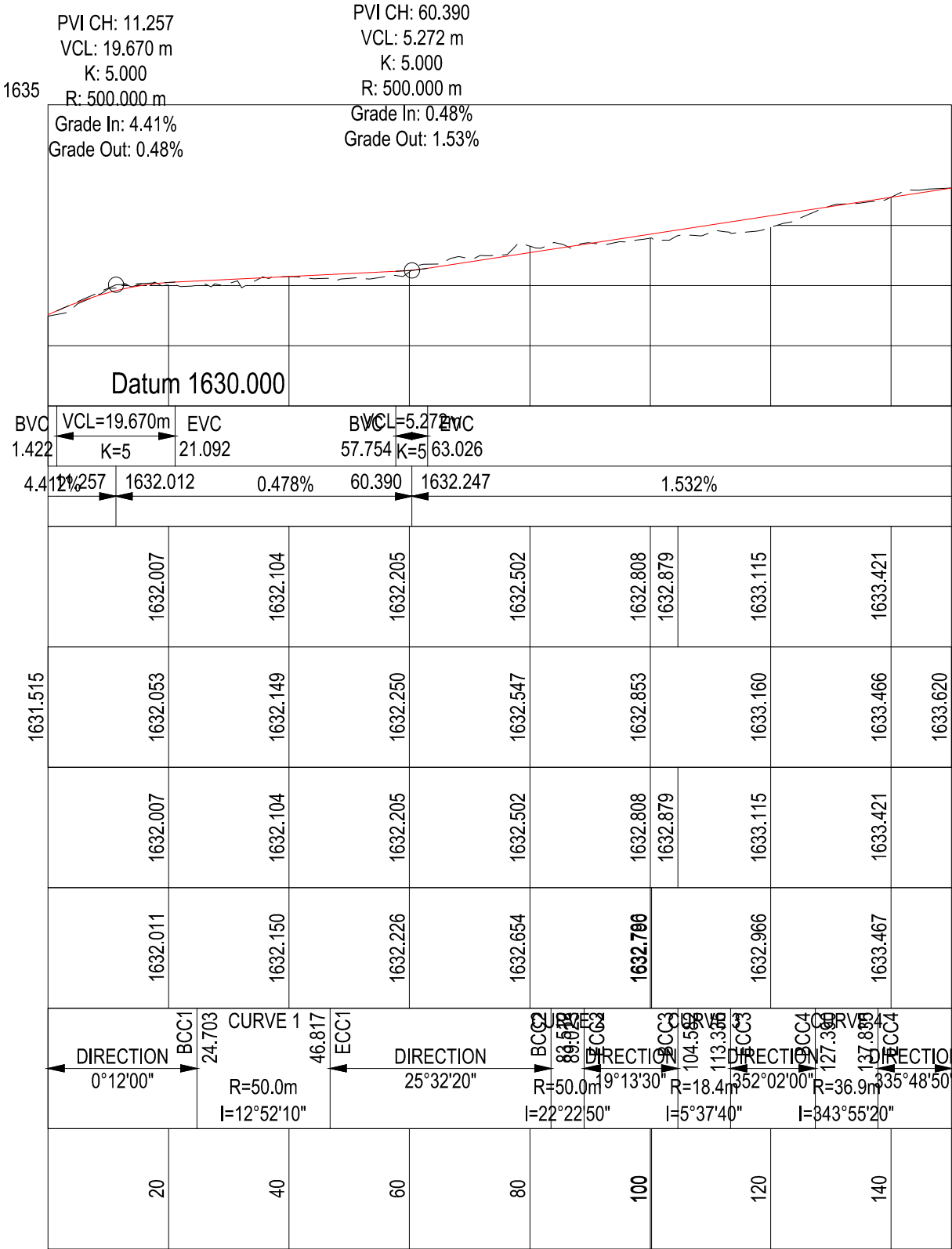
COORDINATE LIST

BM57 -43168.25 3384280.01 1632.59
BM58 -43133.53 3384417.41 1634.99



TYPICAL CROSSECTION

VERTICAL PROFILE GRADES	
FINAL DESIGN ROAD LEVELS	LEFT EDGE (HL)
	CENTRE LINE (CL)
	RIGHT EDGE (HR)
GROUND LEVELS ON CL	
HORIZONTAL ALIGNMENT	
DISTANCE (m)	





CLIENT:

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CONSULTANT:

THEWO & SMMS - JV



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Westdene
Bloemfontein
9301

PROFESSIONAL ENGINEER:

L. MARAH
PROF. Reg.No:
920281
DATE:

SIGNATURE:

DESIGN BY:

R.DHLIWAYO
DRAWN BY:
R.DHLIWAYO
CHECKED BY:
L. MARAH
APPROVED BY:
L. MARAH

REVISIONS			
REV	DATE	DESCRIPTION	BY

PROJECT NAME

REPAIRING OF 4,5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana

TITLE

HINANA ROAD 2 LONGSECTION

PROJECT STATUS:

TENDER

DATE	SCALE	SHEET	REV	
2025-02-21	N.T.S	1 OF 1	0	A1

DWG NO
P-SM01-PMO-GR-H-02

LEGEND

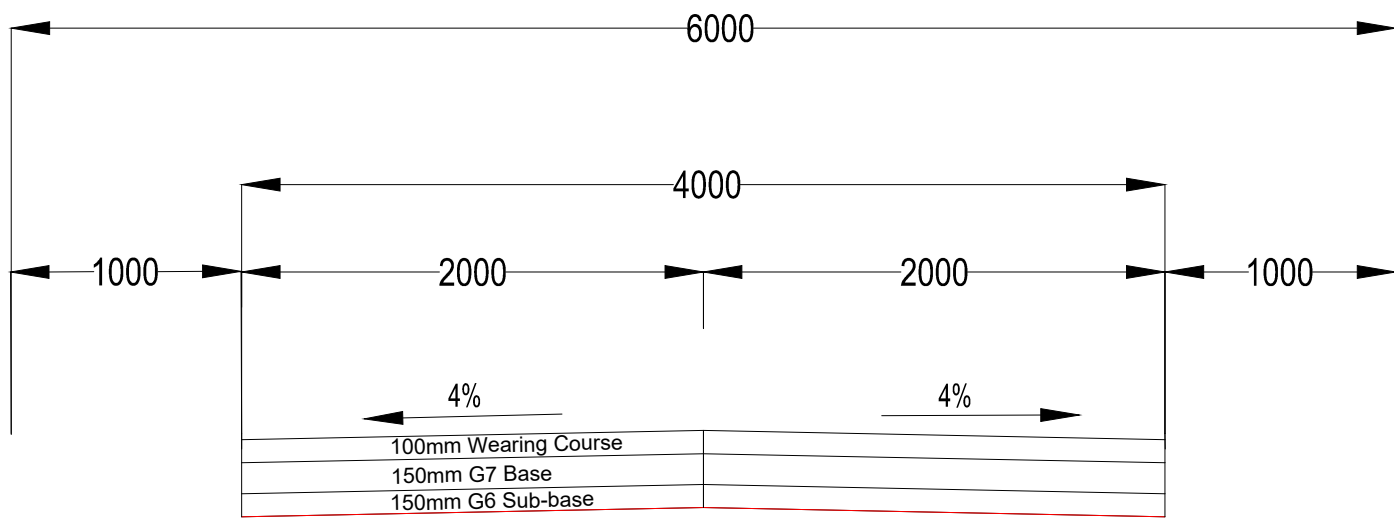
- CENTRELINE
- ESKOM/TELKOM POLE
- EXISTING POWER LINE
- ROAD CROSS FALL
- FENCE
- EXISTING TREE
- BUILDING

ABBREVIATIONS

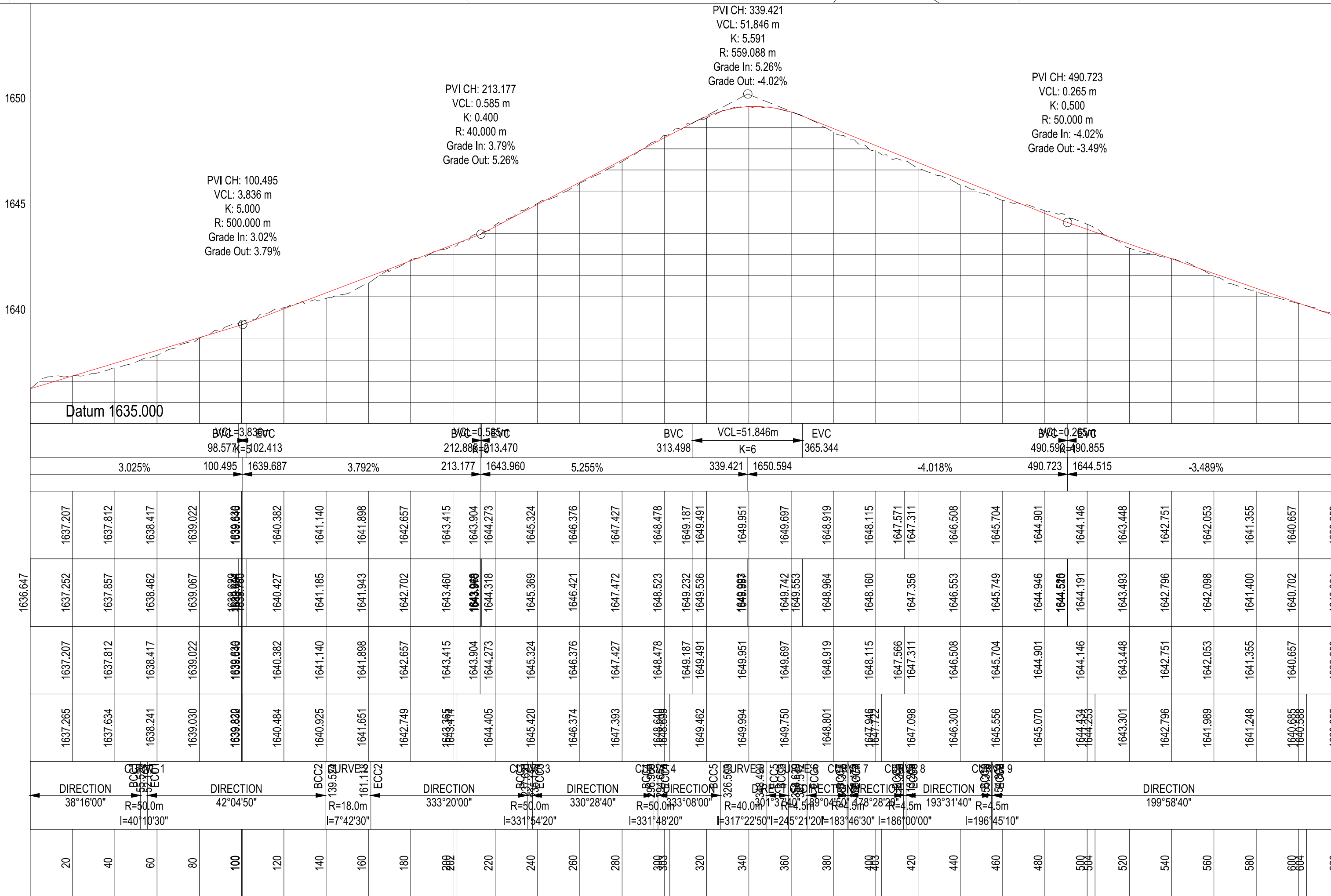
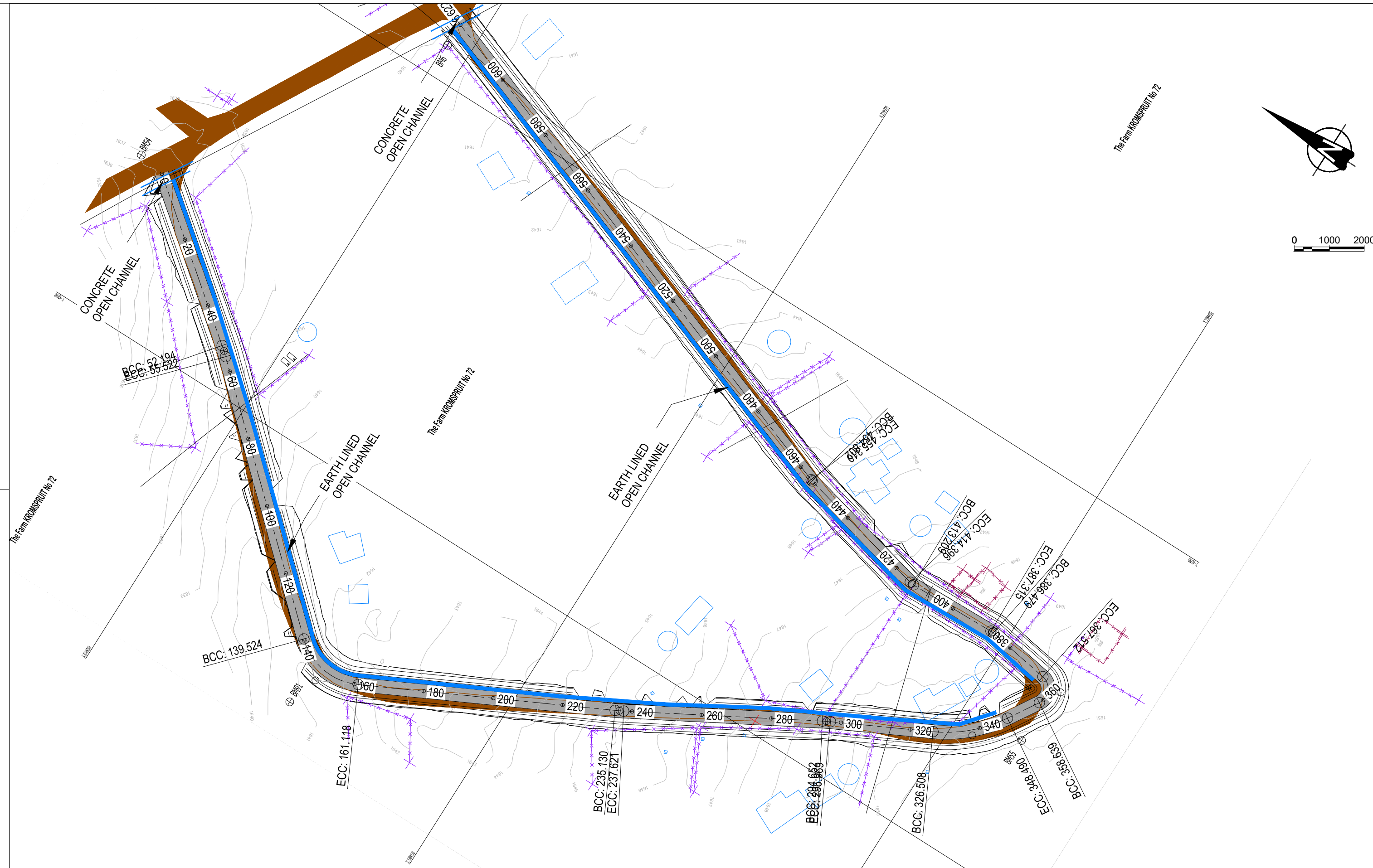
- N.G.L. NATURAL GROUND LEVEL
- CL CENTRELINE
- m METERS (UNIT)
- HL LEFT HAND
- HR RIGHT HAND
- BCC BEGINNING OF CURVE CENTRELINE
- ECC END OF CURVE CENTRELINE
- BVC BEGINNING OF VERTICAL CURVE
- EVC END OF VERTICAL CURVE
- R RADIUS
- CH. CHAINAGE
- PI POINT OF INTERSECTION

COORDINATE LIST

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BM91	-42616.53	3384316.06	1640.93



TYPICAL CROSSECTION



VERTICAL PROFILE GRADES		
FINAL DESIGN ROAD LEVELS	LEFT EDGE (HL)	
	CENTRE LINE (CL)	
	RIGHT EDGE (HR)	
GROUND LEVELS ON CL		
HORIZONTAL ALIGNMENT		
DISTANCE (m)		

CLIENT:

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PROFESSIONAL ENGINEER:

L. MARAH

PROF. Reg.No: 920281

DATE:

SIGNATURE:

DESIGN BY:

R.DHLIWAYO

DRAWN BY:

R.DHLIWAYO

CHECKED BY:

L. MARAH

APPROVED BY:

L. MARAH

REV	DATE	DESCRIPTION	BY

PROJECT NAME

REPAIRING OF 4,5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana

TITLE

HINANA ROAD 3 LONGSECTION

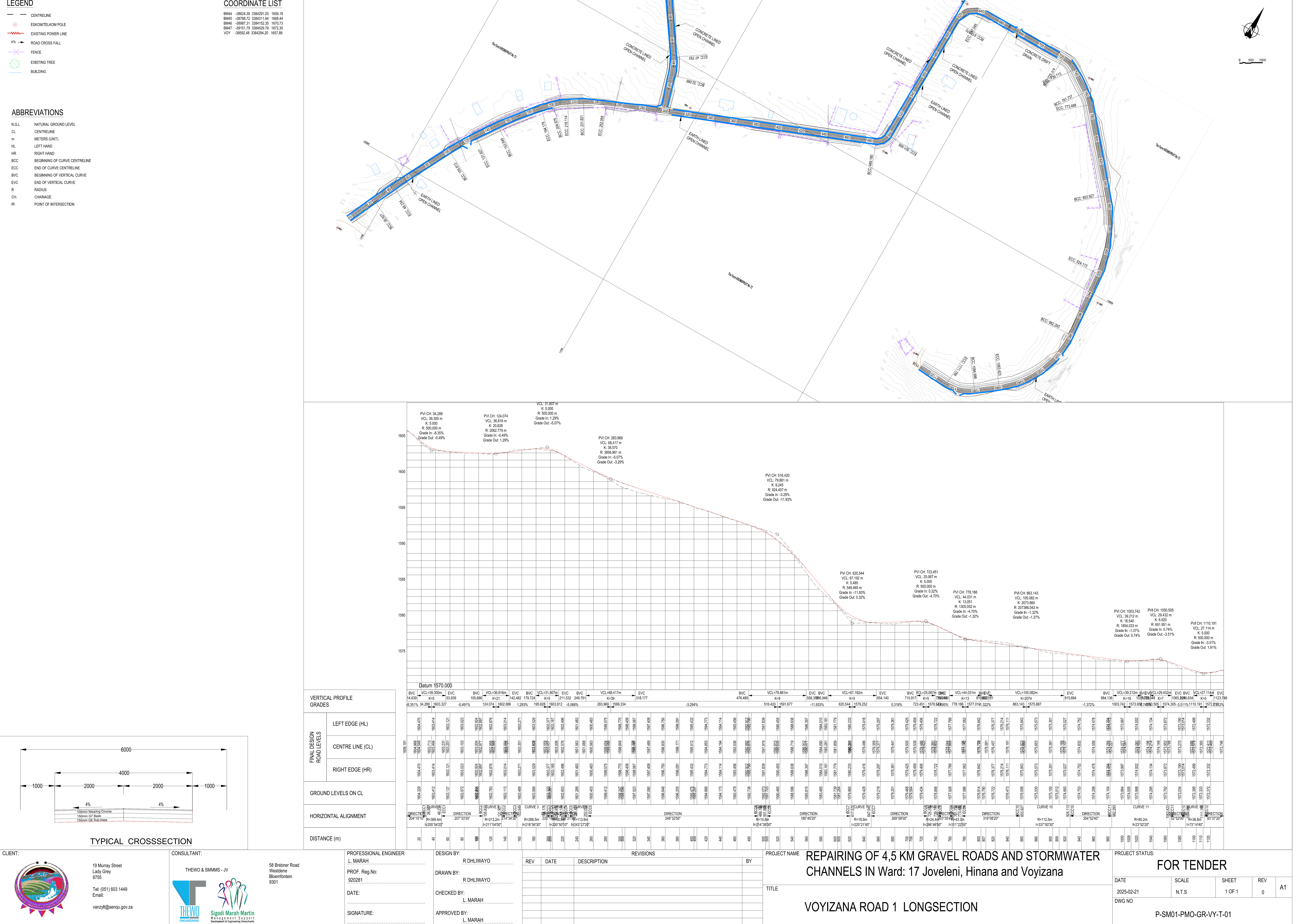
PROJECT STATUS:

TENDER

DATE	SCALE	SHEET	REV	A1
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DWG NO

P-SM01-PMO-GR-H-T-09



LEGEND

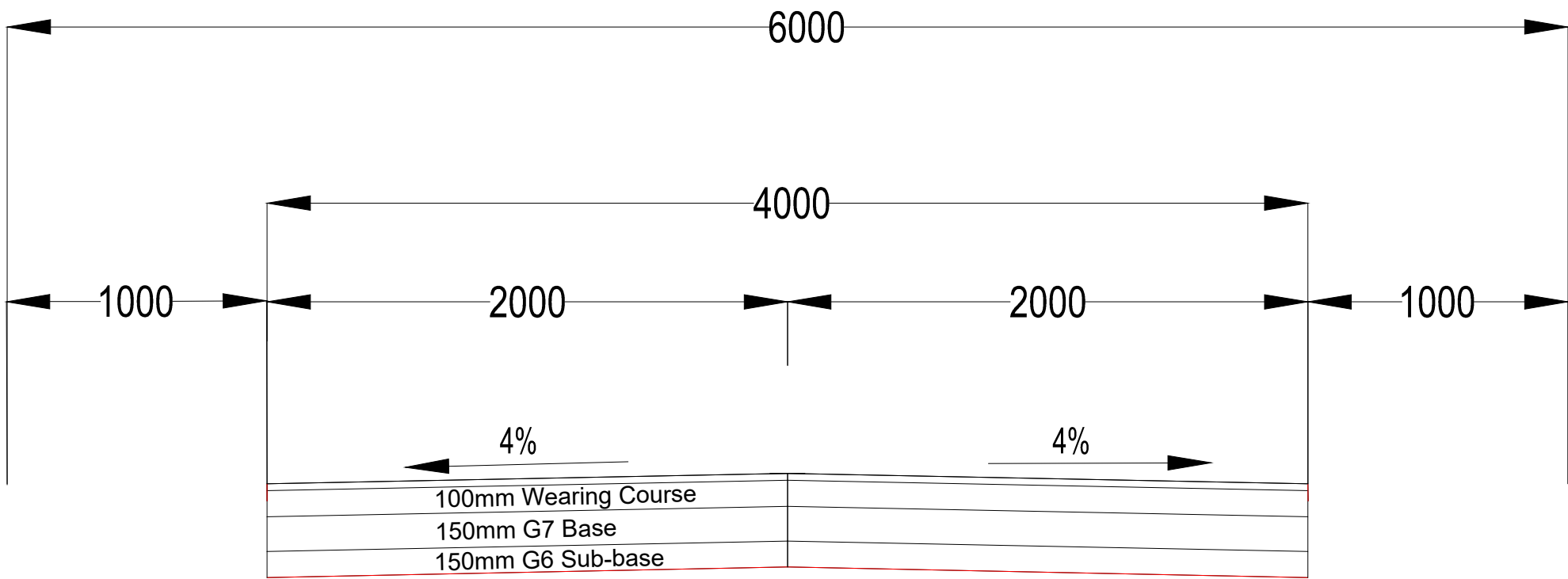
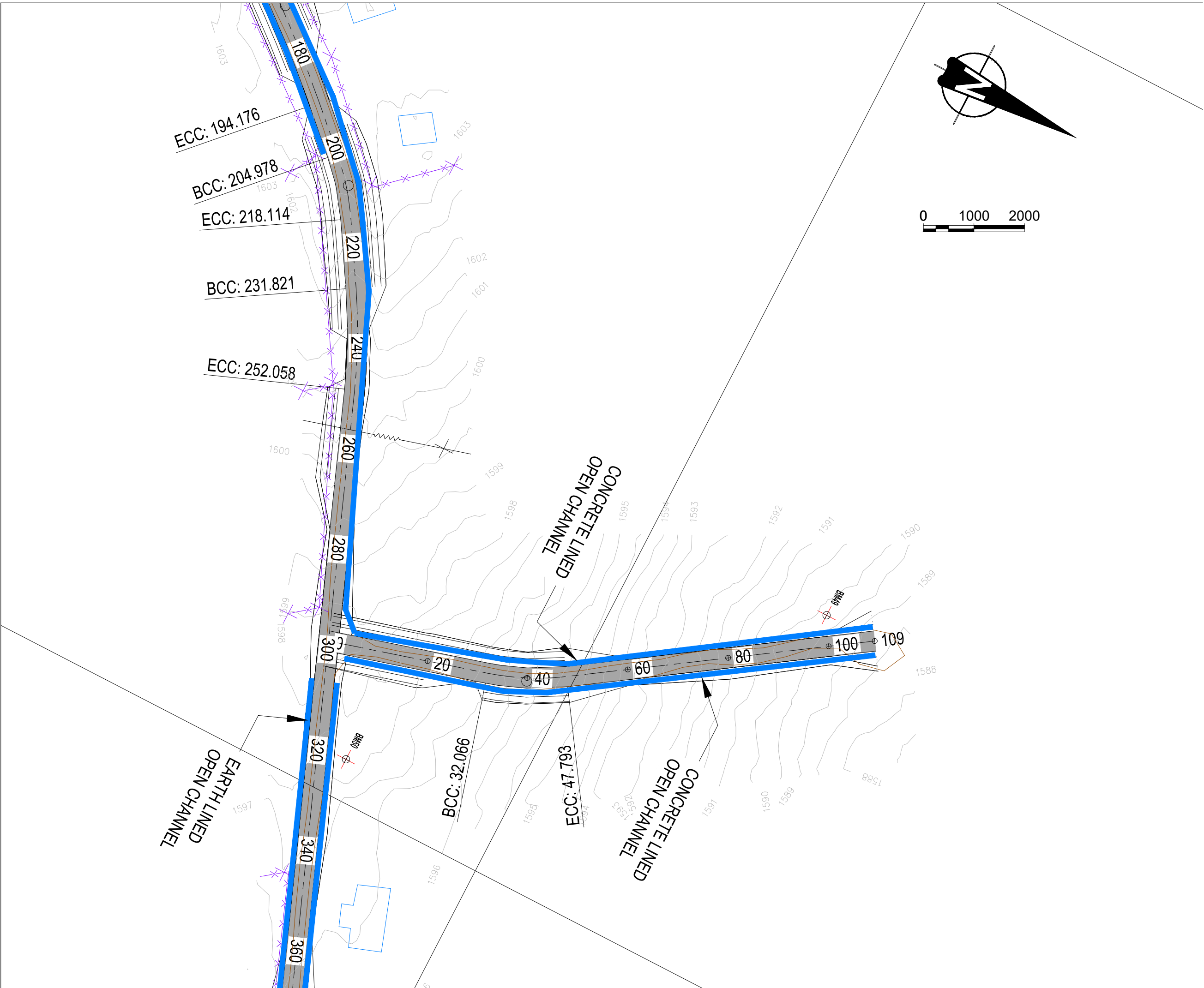
- CENTRELINE
- ESKOM/TELKOM POLE
- EXISTING POWER LINE
- 4% ROAD CROSS FALL
- FENCE
- EXISTING TREE
- BUILDING

ABBREVIATIONS

- N.G.L NATURAL GROUND LEVEL
- CL CENTRELINE
- m METERS (UNIT)
- HL LEFT HAND
- HR RIGHT HAND
- BCC BEGINNING OF CURVE CENTRELINE
- ECC END OF CURVE CENTRELINE
- BVC BEGINNING OF VERTICAL CURVE
- EVC END OF VERTICAL CURVE
- R RADIUS
- CH. CHAINAGE
- PI POINT OF INTERSECTION

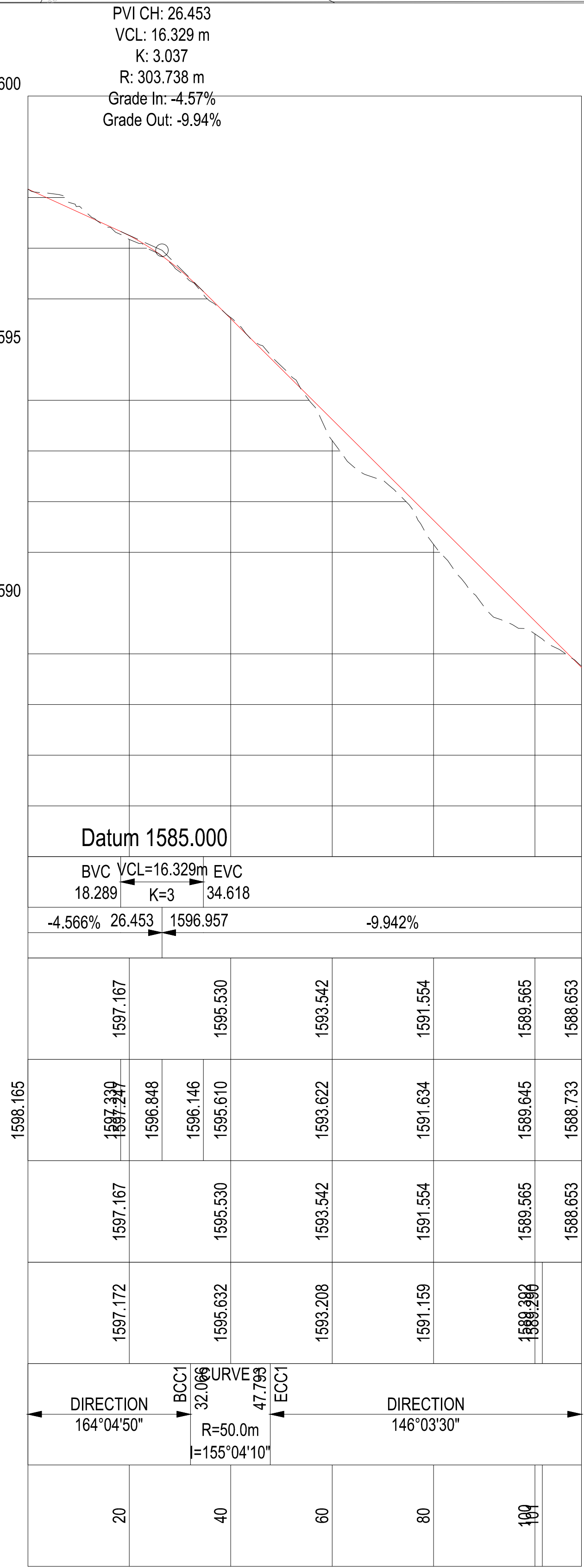
COORDINATE LIST

BM57 -43168.25 3384280.01 1632.59
BM58 -43133.53 3384417.41 1634.99



TYPICAL CROSSECTION

VERTICAL PROFILE GRADES	
FINAL DESIGN ROAD LEVELS	LEFT EDGE (HL)
	CENTRE LINE (CL)
	RIGHT EDGE (HR)
GROUND LEVELS ON CL	
HORIZONTAL ALIGNMENT	
DISTANCE (m)	





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Sigodi Marah Martin
Management Support
Development & Engineering Consultants

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PROF. Reg.No:
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DATE:

SIGNATURE:

DESIGN BY:
R DHLIWAYO

DRAWN BY:
R DHLIWAYO

CHECKED BY:
L. MARAH

APPROVED BY:
L. MARAH

REV	DATE	DESCRIPTION	BY

PROJECT NAME

REPAIRING OF 4,5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana

TITLE

VOYZANA ROAD 2 LONGSECTION

PROJECT STATUS:

TENDER

DATE	SCALE	SHEET	REV	
2025-02-21	N.T.S	1 OF 1	0	A1

DWG NO

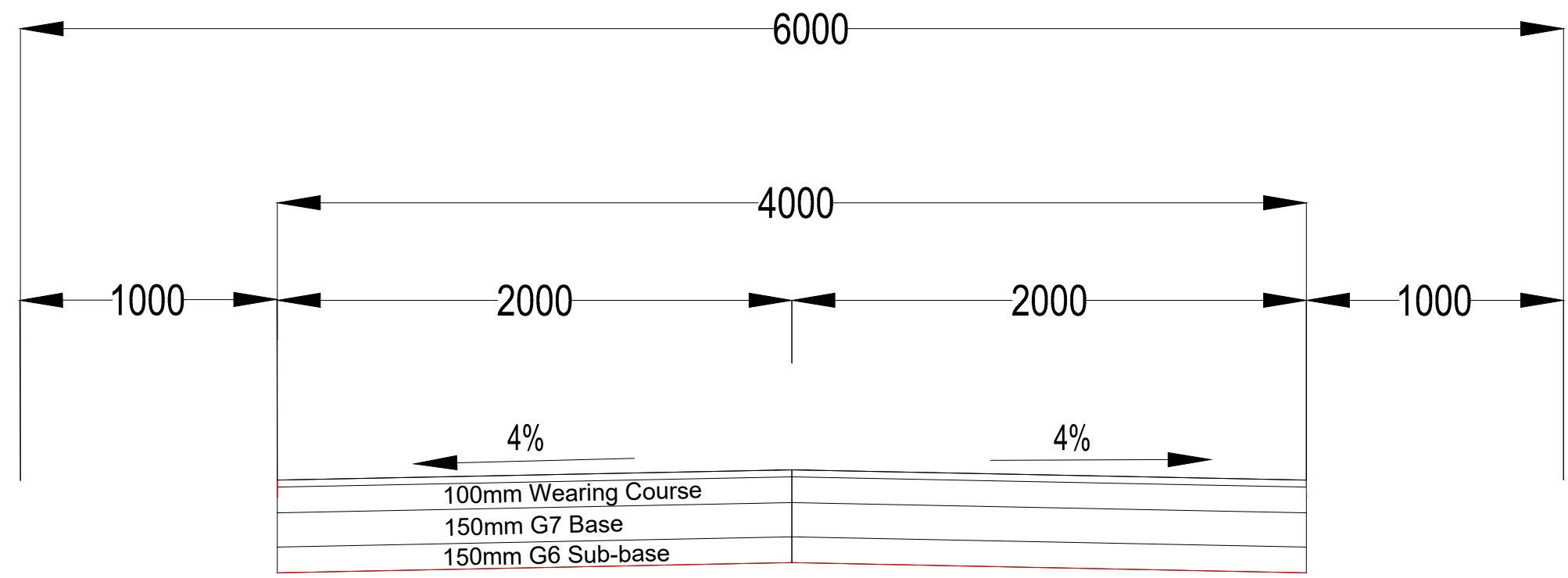
P-SM01-PMO-GR-VY-T-02

LEGEND

- CENTRELINE
- ESKOM/TELKOM POLE
- EXISTING POWER LINE
- ROAD CROSS FALL
- FENCE
- EXISTING TREE
- BUILDING

ABBREVIATIONS

- N.G.L. NATURAL GROUND LEVEL
- CL CENTRELINE
- m METERS (UNIT)
- HL LEFT HAND
- HR RIGHT HAND
- BCC BEGINNING OF CURVE CENTRELINE
- ECC END OF CURVE CENTRELINE
- BVC BEGINNING OF VERTICAL CURVE
- EVC END OF VERTICAL CURVE
- R RADIUS
- CH. CHAINAGE
- PI POINT OF INTERSECTION



TYPICAL CROSSSECTION

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CONSULTANT:



PROFESSIONAL ENGINEER:

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REV	DATE	DESCRIPTION			

PROJECT NAME

REPAIRING OF 4,5 KM GRAVEL ROADS AND STORMWATER CHANNELS IN Ward: 17 Joveleni, Hinana and Voyizana

TITLE

VOYZANA ROAD 3 LONGSECTION

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DATE	SCALE	SHEET	REV	
2025-02-21	N.T.S	1 OF 1	0	A1
DWG NO P-SM01-PMO-GR-VY-T-03				

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