SETTING OUT DATA-Main road

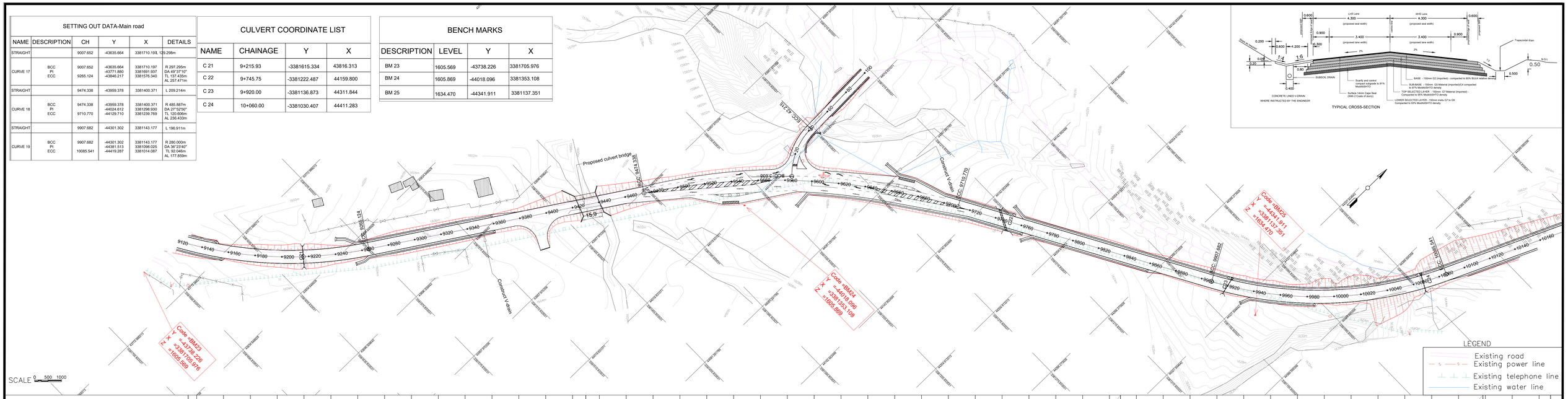
NAME	DESCRIPTION	CH	Y	X	DETAILS
STRAIGHT		9007.652	-43635.664	3381710.197	L 129.298m
CURVE 17	BCC PI ECC	9007.652 9265.124	-43635.664 -43771.880 -43846.217	3381710.197 3381691.937 3381576.340	R 297.295m DA 49°37'10" TL 137.435m AL 257.471m
STRAIGHT		9474.338	-43959.378	3381400.371	L 209.214m
CURVE 18	BCC PI ECC	9474.338 9710.770	-43959.378 -44024.612 -44129.710	3381400.371 3381298.930 3381229.769	R 485.887m DA 27°52'50" TL 120.606m AL 236.433m
STRAIGHT		9907.682	-44301.302	3381143.177	L 196.911m
CURVE 19	BCC PI ECC	9907.682 10085.541	-44301.302 -44381.513 -44419.287	3381143.177 3381098.025 3381014.087	R 280.000m DA 36°23'40" TL 92.046m AL 177.859m

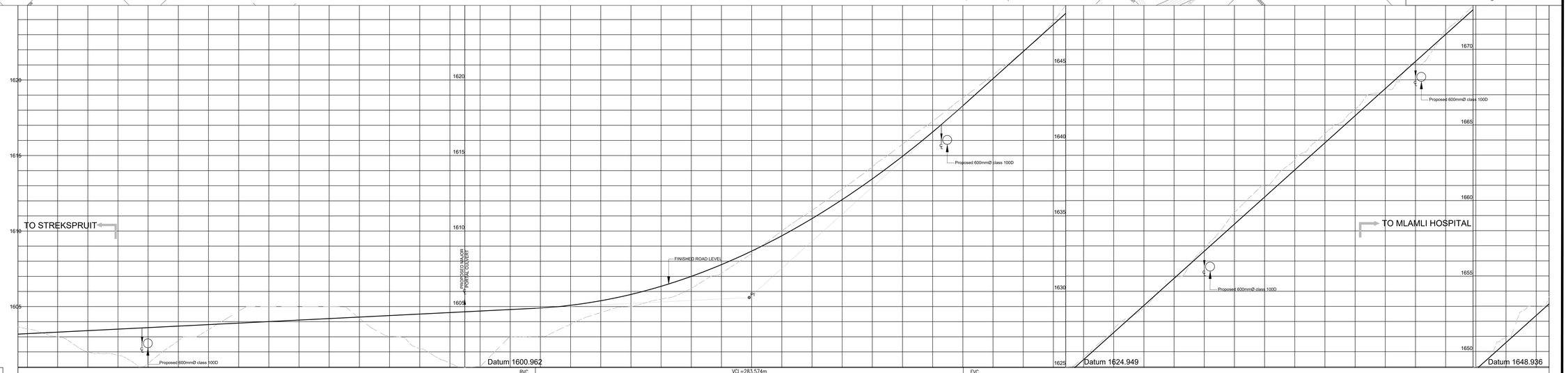
CULVERT COORDINATE LIST

NAME	CHAINAGE	Y	X
C 21	9+215.93	-3381615.334	43816.313
C 22	9+745.75	-3381222.487	44159.800
C 23	9+920.00	-3381136.873	44311.844
C 24	10+060.00	-3381030.407	44411.283

BENCH MARKS

DESCRIPTION	LEVEL	Y	X
BM 23	1605.569	-43738.226	3381705.976
BM 24	1605.869	-44018.096	3381353.108
BM 25	1634.470	-44341.911	3381137.351





KEY LEGEND
- Finished level
- Existing level
- Left edge
- Centre line
- Right edge

DESIGN SPEED 80km/h

4.9 4.9
2% 2%

SCALES:
Horizontal 1:1000
Vertical 1:100

Datum 1600.962

VERTICAL PROFILE GRADES: BVC 9476.669 — VCL=283.574m K=33 — EVC 9760.243; 0.500% / 9618.456 / 1605.597 / 8.971%

FINAL DESIGN ROAD LEVELS — LEFT EDGE (HL)

CH	HL
9134	1602.802
9140	1602.833
9160	1602.933
9180	1603.033
9200	1603.133
9220	1603.233
9240	1603.355
9260	1603.522
9280	1603.756
9300	1603.907
9320	1604.007
9340	1604.107
9360	1604.207
9380	1604.307
9400	1604.407
9420	1604.507
9440	1604.666
9460	1604.903
9480	1605.141
9500	1605.380
9520	1605.679
9540	1606.098
9560	1606.638
9580	1607.293
9600	1608.070
9620	1608.967
9640	1609.983
9660	1611.119
9680	1612.374
9700	1613.717
9720	1615.081
9740	1616.558
9760	1618.199
9780	1619.991
9800	1621.765
9820	1623.580
9840	1625.374
9860	1627.168
9880	1628.958
9900	1630.652
9920	1632.312
9940	1634.061
9960	1635.865
9980	1637.649
10000	1639.444
10020	1641.238
10040	1643.032
10060	1644.828
10080	1646.710
10100	1648.641
10120	1650.493
10140	1652.301
10149	1653.114

FINAL DESIGN ROAD LEVELS — CENTRE LINE (CL)

CH	CL
9134	1603.174
9140	1603.206
9160	1603.305
9180	1603.405
9200	1603.505
9220	1603.605
9240	1603.705
9260	1603.855
9280	1603.905
9300	1604.005
9320	1604.105
9340	1604.205
9360	1604.305
9380	1604.405
9400	1604.505
9420	1604.605
9440	1604.765
9460	1604.855
9480	1604.906
9500	1605.086
9520	1605.385
9540	1605.804
9560	1606.342
9580	1606.999
9600	1607.776
9620	1608.673
9640	1609.689
9660	1610.825
9680	1612.080
9700	1613.454
9720	1614.948
9740	1616.562
9760	1618.295
9780	1620.089
9800	1621.883
9820	1623.678
9840	1625.472
9860	1627.266
9880	1629.060
9900	1630.855
9920	1632.649
9940	1634.443
9960	1636.237
9980	1638.032
10000	1639.826
10020	1641.620
10040	1643.414
10060	1645.209
10080	1647.003
10100	1648.797
10120	1650.591
10140	1652.386
10149	1653.154

FINAL DESIGN ROAD LEVELS — RIGHT EDGE (HR)

CH	HR
9134	1603.547
9140	1603.578
9160	1603.678
9180	1603.778
9200	1603.878
9220	1603.978
9240	1604.076
9260	1604.088
9280	1604.053
9300	1604.017
9320	1604.014
9340	1604.107
9360	1604.207
9380	1604.307
9400	1604.407
9420	1604.507
9440	1604.607
9460	1604.690
9480	1604.672
9500	1604.792
9520	1605.091
9540	1605.510
9560	1606.048
9580	1606.705
9600	1607.482
9620	1608.379
9640	1609.395
9660	1610.531
9680	1611.786
9700	1613.192
9720	1614.811
9740	1616.464
9760	1618.197
9780	1619.991
9800	1621.765
9820	1623.580
9840	1625.374
9860	1627.202
9880	1629.126
9900	1631.057
9920	1632.886
9940	1634.825
9960	1636.620
9980	1638.414
10000	1640.208
10020	1642.002
10040	1643.797
10060	1645.589
10080	1647.298
10100	1648.953
10120	1650.611
10140	1652.297
10149	1653.059

GROUND LEVELS ON CL

CH	GL
9134	1603.666
9140	1603.527
9160	1603.005
9180	1602.602
9200	1601.779
9220	1601.244
9240	1602.743
9260	1603.474
9280	1604.691
9300	1605.000
9320	1605.000
9340	1605.000
9360	1604.225
9380	1603.037
9400	1602.221
9420	1601.258
9440	1601.026
9460	1602.887
9480	1603.028
9500	1603.835
9520	1604.600
9540	1605.000
9560	1605.495
9580	1606.209
9600	1607.205
9620	1608.518
9640	1610.002
9660	1611.367
9680	1612.789
9700	1614.250
9720	1615.750
9740	1617.270
9760	1618.808
9780	1620.342
9800	1621.903
9820	1623.862
9840	1625.641
9860	1627.486
9880	1628.888
9900	1630.628
9920	1632.840
9940	1635.207
9960	1637.026
9980	1638.741
10000	1640.434
10020	1642.067
10040	1643.403
10060	1645.110
10080	1647.303
10100	1649.006
10120	1650.924
10140	1652.975
10149	1653.827

SUPERELEVATION: 7.6% / -2.0% / -7.6% / -2.0% / 6.0% / -2.0% / -6.0% / -2.0% / 6.0% / -2.0% / -6.0% / -2.0% / 7.8% / -2.0% / -7.8% / -2.0% / 7.8% / -2.0% / -7.8% / -2.0% / 7.8% / -2.0% / -7.8% / -2.0% / -2.0% / -2.0%

HORIZONTAL ALIGNMENT: BCC 9007.652 — CURVE 17 LEFT R=297.295m I=237° 33' 20" — ECC 9265.124 — DIRECTION 212° 44' 40" — BCC 9474.338 — CURVE 18 RIGHT R=485.887m I=226° 41' 00" — ECC 9710.770 — DIRECTION 240° 37' 30" — BCC 9907.682 — CURVE 19 LEFT R=280.000m I=222° 25' 40" — ECC 10085.541 — DIRECTION 204° 13' 50"

DISTANCE (m): 9134 9140 9160 9180 9200 9220 9240 9260 9280 9300 9320 9340 9360 9380 9400 9420 9440 9460 9480 9500 9520 9540 9560 9580 9600 9620 9640 9660 9680 9700 9720 9740 9760 9780 9800 9820 9840 9860 9880 9900 9920 9940 9960 9980 10000 10020 10040 10060 10080 10100 10120 10140 10149

LONGSECTION MAIN ROAD
From 9134.000 to 10149.000

ISSUED FOR TENDER

Drawing Nr	Reference Drawing	Date	Chkd	Apprv

Rev	Description	Date	Chkd	Apprv

Client: Province of the EASTERN CAPE TRANSPORT

Project: THE COMPLETION OF UPGRADING TO A SURFACE STANDARD DR08606(+/- 12Km) STERKSPRUIT TO MLAMLI

Consultant: MASILAKHE CONSULTING — DEVELOPMENT MANAGERS

Approved: _____
Name S.K.Anthony Date: 07-02-2020

Drawing Title: HORIZONTAL AND VERTICAL ALIGNMENT Ch 9+134.00 TO Ch 10+149.00

Proj. Engineer	S.K.Anthony
Designed	M.Gadlela
Drawn	M.Gadlela
Checked	S.K.Anthony
Proj. Manager	S.K.Anthony

Scale: 1:1000
Sheet No. 10 OF 12
Project No. E 240
Drawing No. H.V.A-001
Revision T