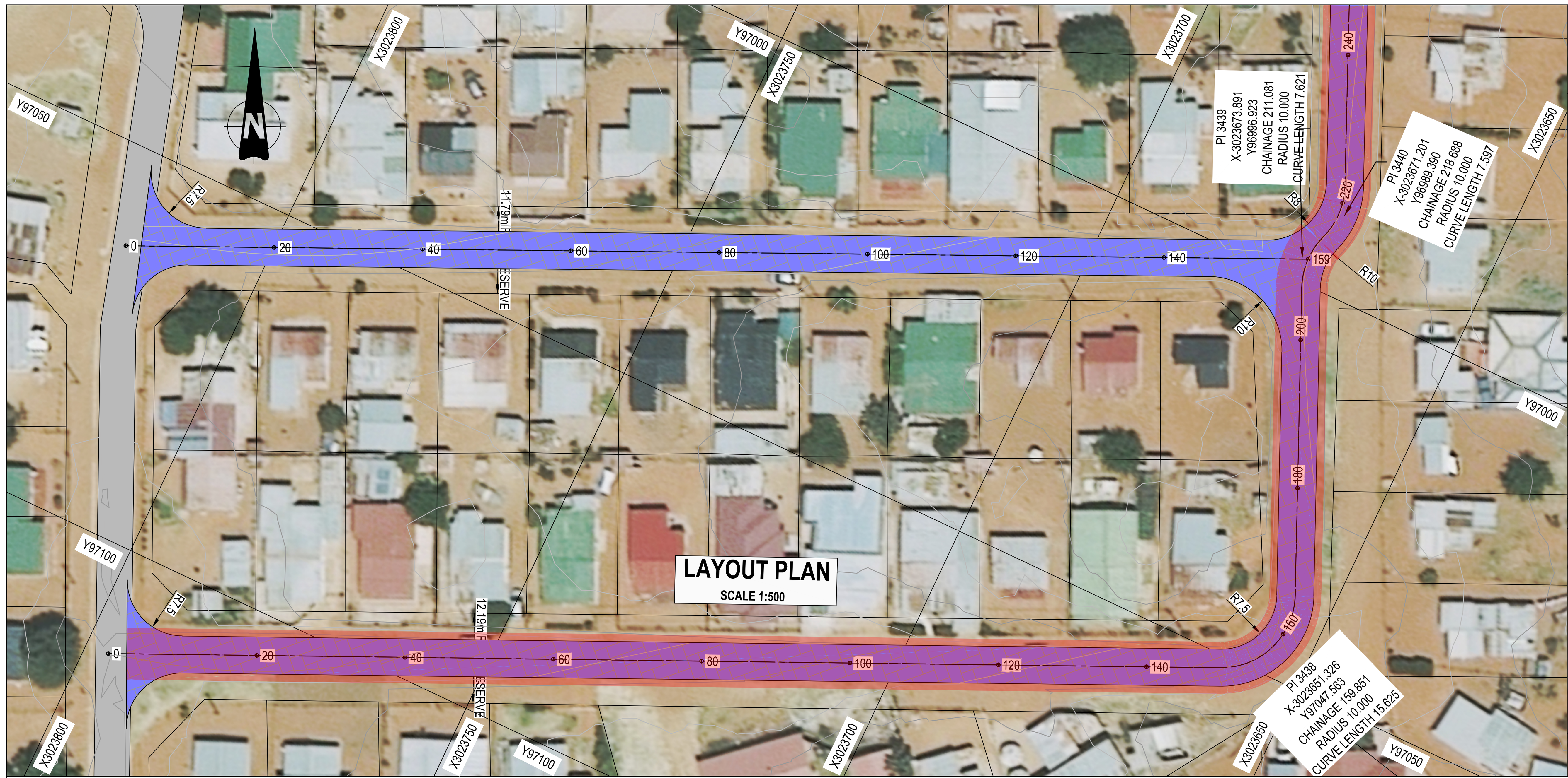
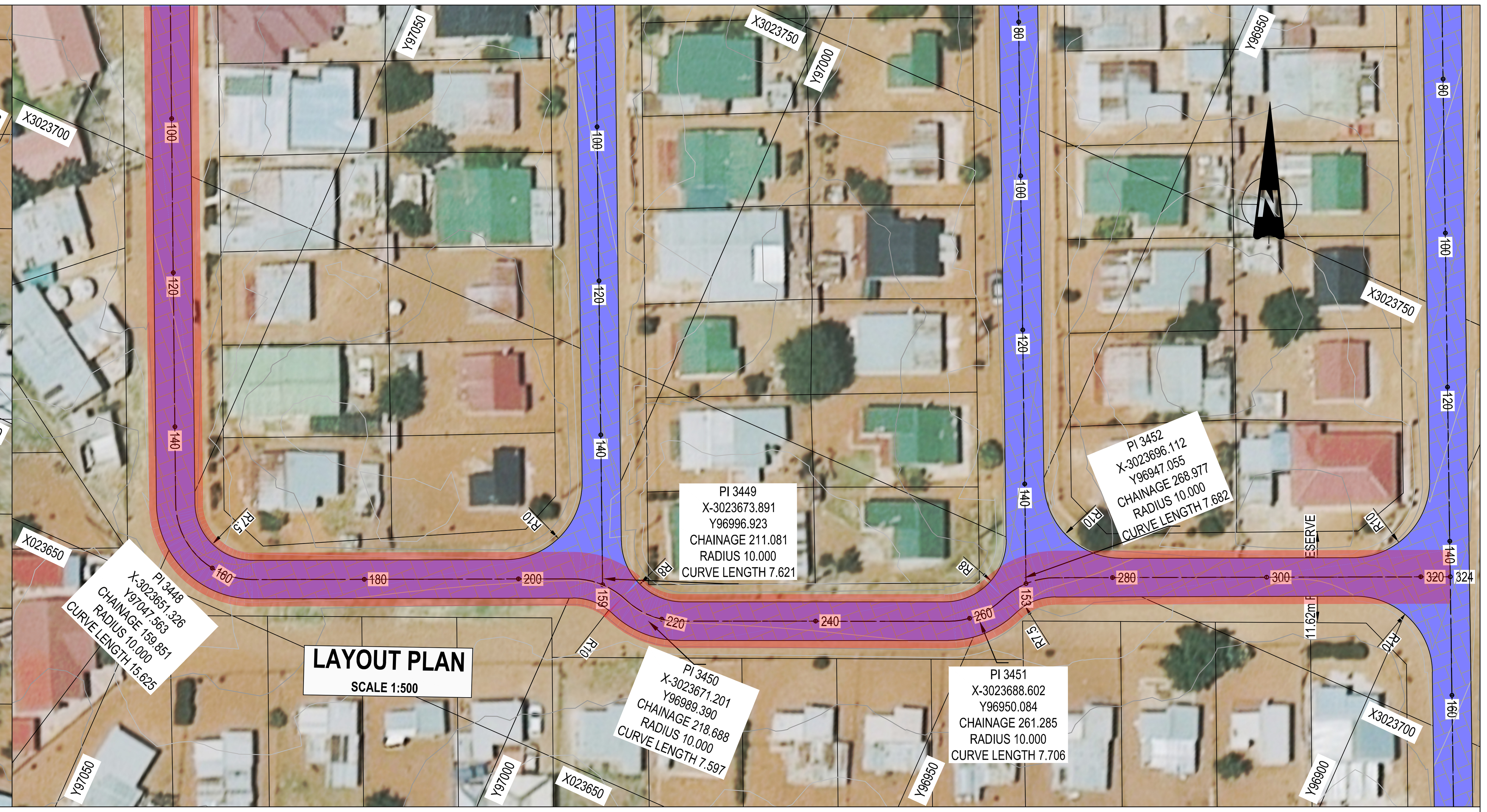


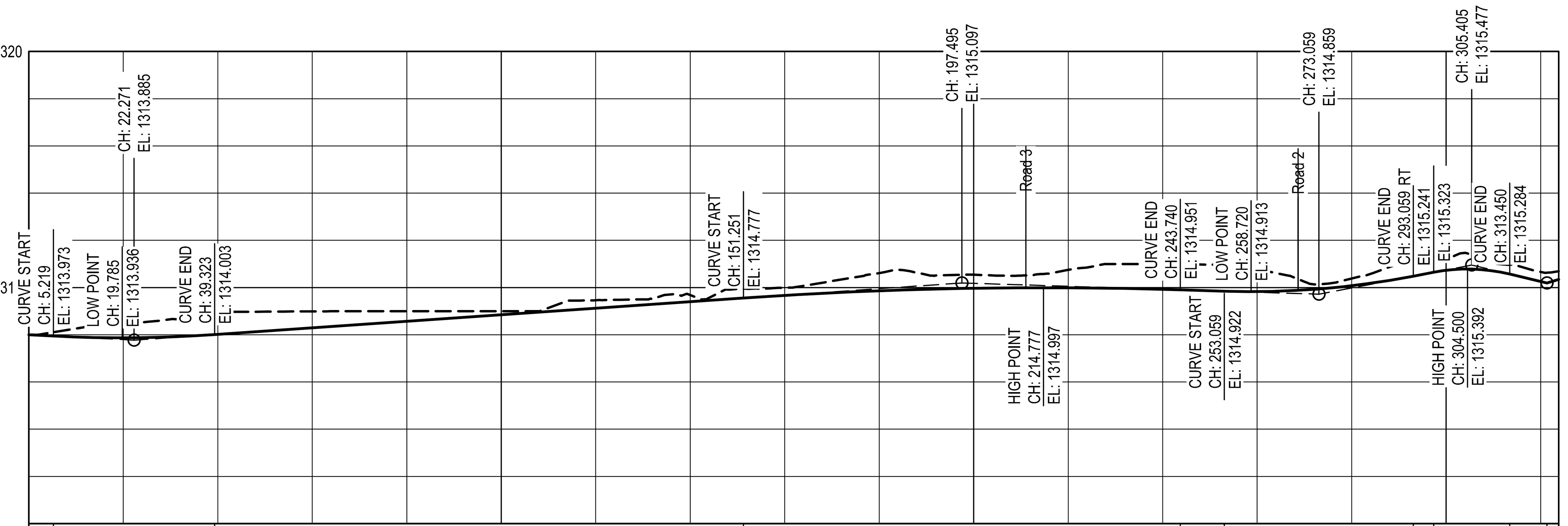


LONGSECTION ALIGNMENT MOLALE
FROM 0.000 TO 323.827

NGL - - - - -
ROAD ———

SCALES:
Horizontal 1:1000
Vertical 1:100

DATUM 1310.000



VERTICAL PROFILE GRADES

BVC 5.219 — VCL=34.104m, K=28 — EVC 39.323; BVC 151.251 — VCL=92.489m, K=92 — EVC 243.740; BVC 253.059 — VCL=40.000m, K=18 — EVC 293.059; BVC 297.360 — VCL=16.090m, K=4 — EVC 313.450

-0.516% | 22.271 | 1313.885 | 0.692% | 197.495 | 1315.097 | -0.315% | 273.059 | 1314.859 | 1.912% | 305.405 | 1315.477 | -2.397%

FINAL DESIGN ROAD LEVELS / GROUND LEVELS ON CL / DISTANCE (m)

DISTANCE (m)	LEFT EDGE (HL)	CENTRE LINE (CL)	RIGHT EDGE (HR)	GROUND LEVELS ON CL
0		1314.000		1314.000
5	1313.898	1313.973	1314.048	1314.054
20	1313.861	1313.936	1314.011	1314.250
22	1313.862	1313.937	1314.012	1314.250
39	1313.928	1314.003	1314.078	1314.439
40	1313.933	1314.008	1314.083	1314.451
60	1314.071	1314.146	1314.221	1314.496
80	1314.209	1314.284	1314.359	1314.499
100	1314.348	1314.423	1314.498	1314.500
120	1314.486	1314.561	1314.636	1314.731
140	1314.624	1314.699	1314.774	1314.842
151	1314.702	1314.777	1314.852	1314.975
160	1314.758	1314.833	1314.908	1314.996
180	1314.856	1314.931	1315.006	1315.306
197	1314.905	1314.980	1315.055	1315.270
200	1314.910	1314.985	1315.060	1315.274
220	1314.920	1314.995	1315.070	1315.374
240	1314.887	1314.962	1315.037	1315.495
244	1314.876	1314.951	1315.026	1315.493
253	1314.847	1314.922	1314.997	1315.480
260	1314.838	1314.913	1314.988	1315.383
273	1314.895	1314.970	1315.045	1315.066
280	1314.964	1315.039	1315.114	1315.192
293	1315.166	1315.241	1315.316	1315.498
297	1315.248	1315.323	1315.398	1315.594
300	1315.289	1315.364	1315.439	1315.649
305	1315.315	1315.390	1315.465	1315.700
313		1315.284		1315.484
320		1315.127		1315.331
321		1315.096		1315.316
324		1315.171		1315.347

SUPERELEVATION — LEFT · · · · · · · RIGHT — —

HORIZONTAL ALIGNMENT

DIRECTION 155°30'20" — BCC 149.934 CURVE 165.558 ECC R=10.0m I=110°44'40" — DIRECTION 65°59'00" — BCC 207.074 / 214.696 / 222.29[illegible] ECC R=10.0m R=10.0m I=87°49'00" 43°53'10" — DIRECTION 66°07'10" — BCC 257.230 / 264.936 / 272.618 ECC R=10.0m R=10.0m I=44°02'40" 43°58'30" — DIRECTION 65°59'00"

HORIZONTAL ALIGNMENT SETTING OUT DATA-Alignment Molale

NAME	CH	Y	X	DETAILS
START	0.000	-97 113.839	3 023 796.790	L 149.934m
BCC1 PI1 ECC1	149.934 165.558	-97 051.675 -97 047.563 -97 038.504	3 023 660.351 3 023 651.326 3 023 655.363	R 10.000m DA 89°31'20" TL 9.917m AL 15.625m
BCC2 PI2 ECC2	207.074 214.696	-97 000.583 -96 996.923 -96 993.150	3 023 672.260 3 023 673.891 3 023 672.544	R 10.000m DA 43°40'00" TL 4.006m AL 7.621m
BCC3 PI3 ECC3	214.696 222.293	-96 993.150 -96 989.390 -96 985.739	3 023 672.544 3 023 671.201 3 023 672.818	R 10.000m DA 43°31'40" TL 3.993m AL 7.597m
BCC4 PI4 ECC4	257.230 264.936	-96 953.793 -96 950.084 -96 948.567	3 023 686.960 3 023 688.602 3 023 692.364	R 10.000m DA 44°09'10" TL 4.056m AL 7.706m
BCC5 PI5 ECC5	264.936 272.618	-96 948.567 -96 947.055 -96 943.363	3 023 692.364 3 023 696.112 3 023 697.757	R 10.000m DA 44°00'50" TL 4.042m AL 7.682m
END	323.827	-96 896.588	3 023 718.600	L 51.209m

Vertical Alignment: Alignment 04 VA
Description:
Station Range: Start: 0.000, End: 323.827

Vertical Curve Information:(sag curve)

PVC Station:	5.219	Elevation:	1,313.973m
PVI Station:	22.271	Elevation:	1,313.885m
PVT Station:	39.323	Elevation:	1,314.003m
Low Point:	19.785	Elevation:	1,313.936m
Grade in:	-0.52%	Grade out:	0.69%
Change:	1.21%	K:	28.254m
Curve Length:	34.104m	Curve Radius	2,825.359m
Headlight Distance:			

Vertical Curve Information:(crest curve)

PVC Station:	151.251	Elevation:	1,314.777m
PVI Station:	197.495	Elevation:	1,315.097m
PVT Station:	243.740	Elevation:	1,314.951m
High Point:	214.777	Elevation:	1,314.997m
Grade in:	0.69%	Grade out:	-0.32%
Change:	1.01%	K:	91.867m
Curve Length:	92.489m	Curve Radius	9,186.738m
Passing Distance:	570.377m	Stopping Distance:	385.084m

Vertical Curve Information:(sag curve)

PVC Station:	253.059	Elevation:	1,314.922m
PVI Station:	273.059	Elevation:	1,314.859m
PVT Station:	293.059	Elevation:	1,315.241m
Low Point:	258.720	Elevation:	1,314.913m
Grade in:	-0.32%	Grade out:	1.91%
Change:	2.23%	K:	17.958m
Curve Length:	40.000m	Curve Radius	1,795.792m
Headlight Distance:	507.444m		

Vertical Curve Information:(crest curve)

PVC Station:	297.360	Elevation:	1,315.323m
PVI Station:	305.405	Elevation:	1,315.477m
PVT Station:	313.450	Elevation:	1,315.284m
High Point:	304.500	Elevation:	1,315.392m
Grade in:	1.91%	Grade out:	-2.40%
Change:	4.31%	K:	3.734m
Curve Length:	16.090m	Curve Radius	373.393m
Passing Distance:	130.502m	Stopping Distance:	87.211m

MAQUASSI HILLS LOCAL MUNICIPALITY
PRIVATE BAG X3 TEL: 018 596 1068
WOLMARANSSTAD FAX: 018 596 1555
2630

AMENDMENTS

REV	DATE	APPROVED	DESCRIPTION
A	SEP 2026	G. A. M	ISSUE FOR TENDER

CONSULTANT DETAIL
DITLOU CONSULTING CC
OFFICE 19 EAST 202
SANLYNN OFFICE PARK
CNR ALKANTRAND & LYNNWOOD ROAD
PO BOX 15684
LYNN EAST
0039
TEL: (012)548-0196
FAX: (012)548-0298
EMAIL: info@ditloucon.co.za

I, G. MANYIKA Prof Reg Nr 2024301981
HEREBY CERTIFY THAT THE SERVICES WILL BE INSTALLED ACCORDING TO THE DRAWING
DATE SIGNATURE

DESIGNED
NAME: L. MODISHA Prof Reg No:
SIGNATURE: DATE:
DRAWN
NAME: O. BALOYI
SIGNATURE: DATE:
CHECKED
NAME: G. MANYIKA Prof Reg No: 2024301981
SIGNATURE: DATE:
INFORMATION OFFICE CHECKED
NAME:
SIGNATURE: DATE:
DESIGN OFFICE APPROVAL
NAME: Prof Reg No:
SIGNATURE: DATE:

CONTRACT No. 8/1/2 N.J. MBONANI
PROJECT No. 1145K-2
SHEET No. 1
PAPER SIZE A1
SCALE AS SHOWN
DATE:

LOCATION OF PROJECT
DESIGN AND SUPERVISION OF UPGRADING OF GRAVEL ROAD TO BLOCK PAVING AT KALANGA, MOLALE, WILLIAM OLIFANT STREETS IN LEBALENG

DRAWING NAME:
LONGSECTION LAYOUT

CONTRACT NUMBER:
8/1/2 N.J. MBONANI
DRAWING NUMBER
1145K-2-03L03
REVISION A

PROJECT STATUS

CONCEPT DRAWING | TENDER DRAWING (●) | CONSTRUCTION DRAWING | AS BUILT DRAWING

PROJECT ENGINEER of MHLM:
NAME SIGNATURE
Prof Reg No. DATE
INSPECTOR OF WORKS of MHLM:
SIGNATURE
NAME DATE