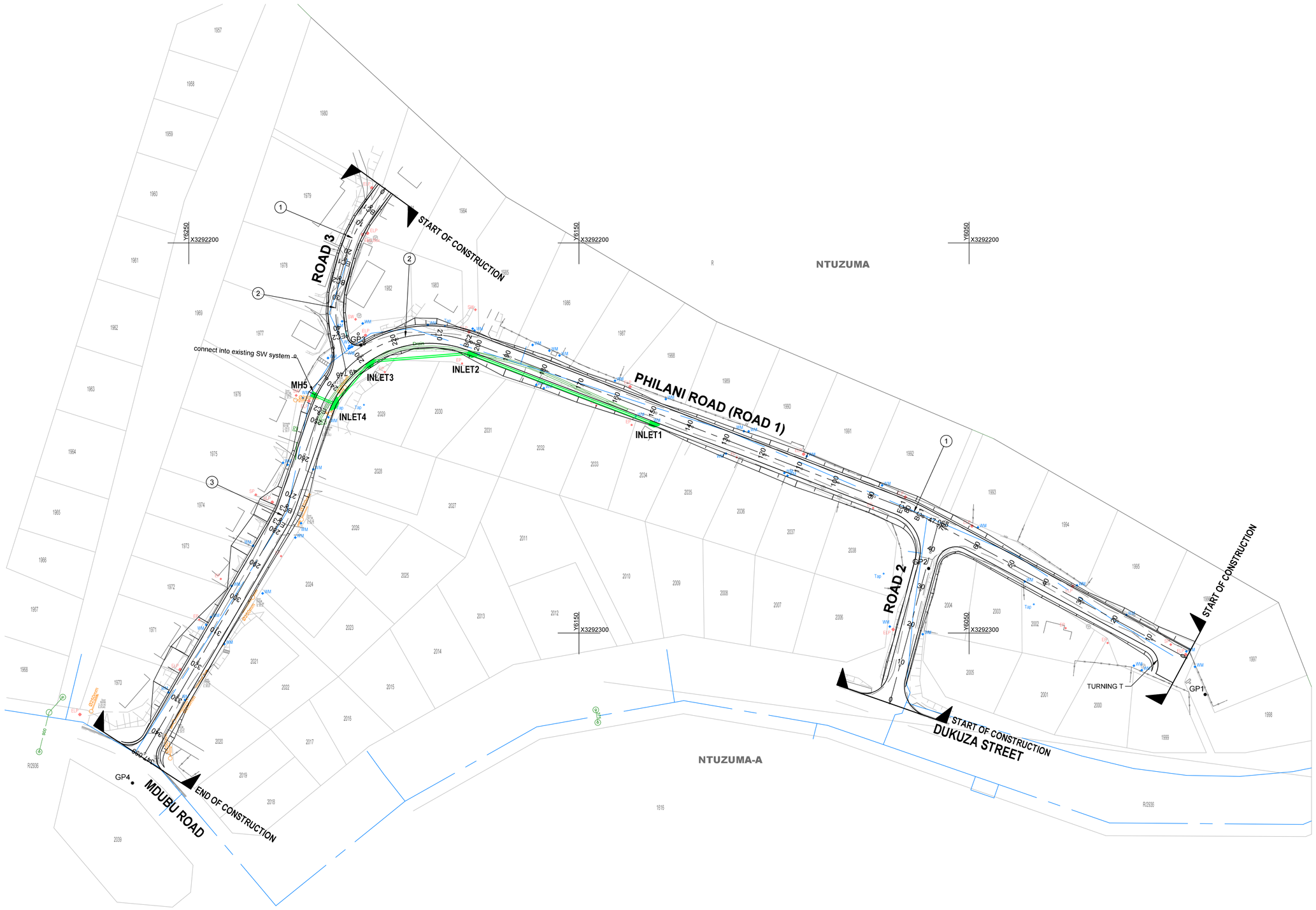


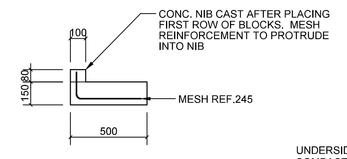
DESIGN PLAN
Scale 1 : 500

RETAINING WALL NOTES :

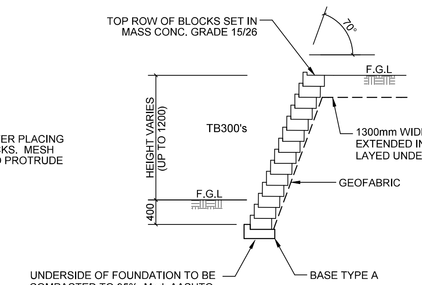
1. BLOCK TYPE : INFRASET "TERRACE BLOCK" OR SIMILAR APPROVED.
2. ALL FOUNDATION TRENCHES TO BE APPROVED BY THE ENGINEER ON SITE PRIOR TO CASTING OF CONCRETE.
3. BOTTOM ROW OF BLOCKS TO BE PLACED WHILE THE BASE CONCRETE IS STILL WORKABLE.
4. FILL BEHIND WALL TO BE COMPACTED IN LAYERS TO 95% MOD AASHTO.
5. CONCRETE IN WALL BASE - GR. 25/26 OR AS SPECIFIED
6. STABILISED FILL, IF REQUIRED - 10:1 CLEAN COARSE SAND : CEMENT , WELL RAMMED BETWEEN BLOCKS, IN BLOCKS AND 500mm BEHIND BLOCKS AS DETAILED.
7. MINIMUM OF 8 BLOCKS TO BE LAID PER SQ M.
8. CONTRACTOR TO MAKE ALLOWANCE FOR +/- 70mm "STEP BACK" WITH EACH 180mm STEP UP WHEN SETTING OUT THE BASE.
9. CONTRACTOR TO REFER TO DETAILED SURVEY DRAWINGS FOR THE LOCATION OF SERVICES, PROPERTY BOUNDARIES ETC.
10. LEVELS AND DIMENSIONS INDICATED ON THIS DRAWING ARE ONLY A GUIDE AND THESE NEED TO BE CONFIRMED BY THE ENGINEER ON SITE.
11. POSITION OF RETAINING WALLS TO BE CONFIRMED BY ENGINEER ON SITE.
12. WALLS LESS THAN 1m HIGH TO BE BLOCK TYPE TB300. BOTTOM ROW LAYED ON 75mm THICK BLINDING LAYER, 400mm WIDE AND AS DIRECTED TO DO SO BY ENGINEER ON SITE.
13. ALL RETAINING WALLS AS PER STRUCTURES DEPARTMENT DETAILS (ISSUED SEPARATELY IF REQUIRED).

CO-ORDINATE SYSTEM WG31 BASED ON WGS 84 ELLIPSOID

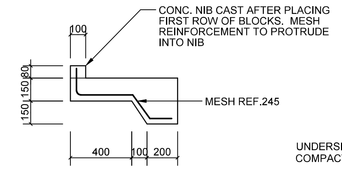
NAME	Y	X	Z	DESCRIPTION
GP1	5989.486	3292315.762	269.865	16mm Iron peg in Earth
GP2	6060.367	3292283.450	270.556	Nail in Tar
GP3	6205.925	3292226.161	261.684	Nail in Tar
GP4	6264.461	3292338.453	263.515	16mm Iron peg in Earth



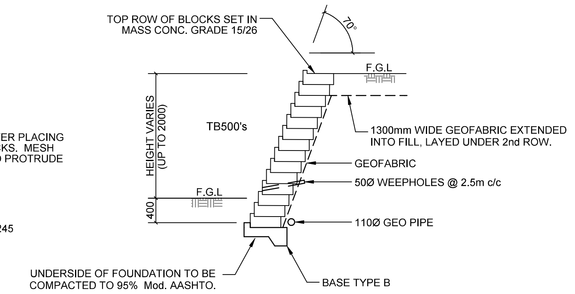
BASE TYPE 'A'
Scale 1 : 20



WALL TYPE 'A'
Scale 1 : 50



BASE TYPE 'B'
Scale 1 : 20



WALL TYPE 'B'
Scale 1 : 50

TYPICAL SECTION FOR RETAINING WALL

PHILANI ROAD 1 - CENTRE LINE DETAILS

No.		CHAINAGE	Y Co-Ord	X Co-Ord	CURVE DETAILS	REMARKS
START		0.000	5994.323	3292306.367	—	—
Curve No. 1	BC1	76.614	6061.831	3292270.141	R = 40.000m	
	EC1	81.686	6066.439	3292268.032	IA = 7° 15' 53"	
	PI1		6064.068	3292268.940	TL = 2.539m	—
	CC1		6080.745	3292305.386	AL = 5.072m	
Curve No. 2	BC2	200.728	6177.608	3292225.459	R = 30.000m	
	EC2	248.910	6216.714	3292243.741	IA = 92° 01' 15"	
	PI2		6206.630	3292214.345	TL = 31.077m	—
	CC2		6188.337	3292253.475	AL = 48.182m	
Curve No. 3	BC3	273.856	6224.808	3292267.337	R = 20.000m	
	EC3	277.773	6226.433	3292270.895	IA = 11° 13' 19"	
	PI3		6225.446	3292269.196	TL = 1.965m	—
	CC3		6243.726	3292260.848	AL = 3.917m	
END		347.099	6261.259	3292330.839	—	—

PHILANI ROAD 2 - CENTRE LINE DETAILS

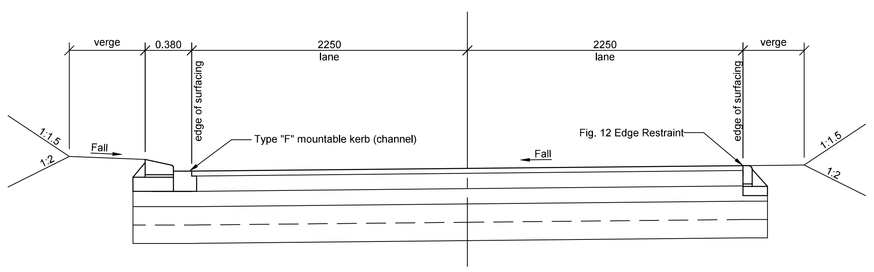
No.	CHAINAGE	Y Co-Ord	X Co-Ord	CURVE DETAILS	REMARKS
START	0.000	6070.349	329231.948	—	—
END	47.068	6058.097	3292272.503	—	—

PHILANI ROAD 3 - CENTRE LINE DETAILS

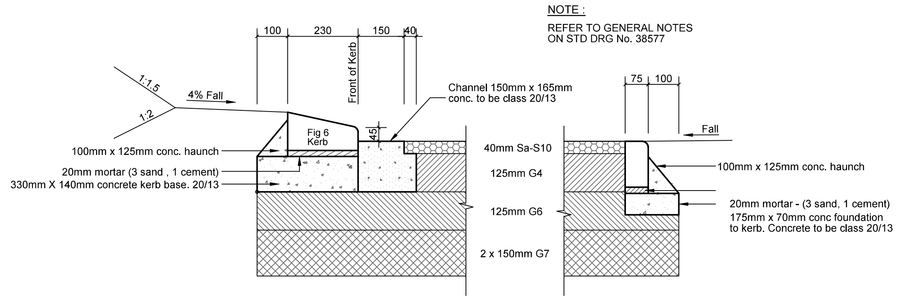
No.		CHAINAGE	Y Co-Ord	X Co-Ord	CURVE DETAILS	REMARKS
START		0.000	6199.768	3292186.084	—	—
Curve No. 1	BC1	5,709	6203.225	3292190.627	R = 40.000m	
	EC1	20.814	6209.913	3292204.070	IA = 21° 38' 08"	
	PI1		6207.854	3292196.709	TL = 7.643m	—
	CC1		6171.394	3292214.850	AL = 15.105m	
Curve No. 2	BC2	25.805	6211.259	3292208.876	R = 30.000m	
	EC2	40,136	6211.742	3292223.063	IA = 27° 22' 14"	
	PI2		6213.227	3292215.911	TL = 7.305m	—
	CC2		6182.369	3292216.962	AL = 14.331m	
END		49,746	6209.787	3292232.473	—	—

GENERAL NOTES:

1. CONTRACTOR TO EXERCISE EXTREME CARE AND CAUTION WHILST WORKING IN THE VICINITY OF ALL SERVICES.
2. CONTRACTOR TO ENSURE EXISTING SERVICES ARE TO BE EXPOSED PRIOR TO ANY CONSTRUCTION COMMENCING.
3. CONTRACTOR TO ENSURE THAT ANY BOUNDARY BEACONS DISLODGED ARE TO BE REPLACED IN ITS EXACT POSITION AFTER CONSTRUCTION AT CONTRACTORS OWN COST.
4. THE COST OF ANY DEVIATIONS (TRAFFIC) NOT PROVIDED OR SHOWN ON THE PLAN AND IN THE SCHEDULE AND REQUIRED BY THE CONTRACTOR TO ENABLE HIM TO COMPLY WITH THE NECESSARY TRAFFIC REQUIREMENTS ETC. SHALL BE AT THE CONTRACTORS OWN EXPENSE.
5. FINAL POSITION AND EXTENT OF BELLMOUTH TO BE CONFIRMED ON SITE BY ENGINEER
6. ALL DRIVEWAY ACCESSES TO BE MAINTAINED AND REGRADED TO SUITE NEW ROAD LEVELS WHERE REQUIRED FOR ENTIRE CONTRACT DURATION.
7. CONTRACTOR TO ENSURE EXISTING GRAVES, IF PRESENT, ARE PROTECTED AND NOT DISTURBED.
8. REMOVAL OF EXISTING TREES AND FENCES TO BE CONFIRMED WITH ENGINEER ON SITE PRIOR TO ANY CONSTRUCTION COMMENCING.
9. CONTRACTOR IS NOT ALLOWED TO UTILISE WATER FROM ANY RIVER OR STREAM FOR CONSTRUCTION.
10. VERGES AND EMBANKMENTS ARE TO BE TRIMMED AND SHAPED TO SPECIFICATION PRIOR TO ROAD ASPHALT BEING LAID.



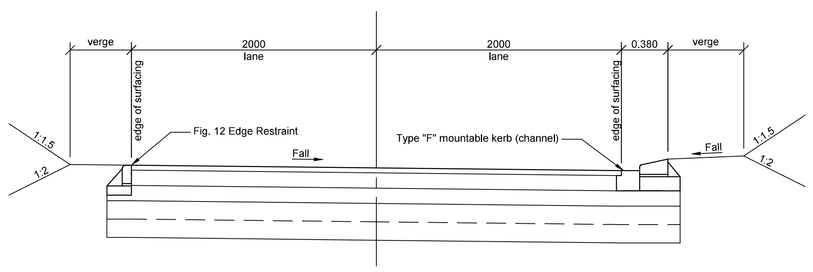
TYPICAL CROSS SECTION
(ROAD 1 & 2)
Scale 1 : 25



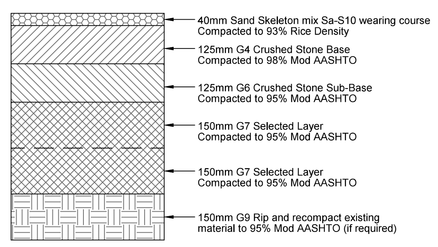
NOTE :
REFER TO GENERAL NOTES ON STD DRG No. 38577

TYPE F MOUNTABLE KERB WITH FILLET/CHANNEL
Scale 1 : 10

FIG. 12 KERB - EDGE RESTRAINT
Scale 1 : 10



TYPICAL CROSS SECTION
(ROAD 3)
Scale 1 : 25



PAVEMENT DESIGN LAYERS
Scale 1 : 10

PHILANI ROAD - STORMWATER DRAINAGE DETAILS

APPROX. CHAINAGE	INLET/OUTLET NUMBER	INLET/OUTLET TYPE	COVER LEVEL	INVERT LEVEL	DEPTH	DISTANCE	PIPE GRADE	BEDDING DETAILS	PIPE SIZE & CLASS SPIGOT & SOCKET	REMARKS
150.000	INLET1	S2	269.980	268.560	1.420m					
						50.000m	%	C	450mm Ø 100D	
200.00	INLET2	S2	264.780	263.360	1.420m					
						30.000m	%	C	450mm Ø 100D	
230.000	INLET3	S2	261.200	259.780	1.420m					
						15.000m	%	C	450mm Ø 100D	
245.000	INLET4	D3	260.850	259.430	1.420m					
						15.000m	%	B	450mm Ø 100D	
245	MH5	TYPE 'A' MANHOLE	259.930	258.510	1.420m					CONNECT INTO EXISTING SW SYSTEM

STORMWATER NOTES:

1. FOR DETAILS ON INLETS, MANHOLES AND HEADWALLS REFER TO STD DRAWING No's. 38571, 38572, 38573 AND 38576.
2. FINAL INLET, MANHOLE AND HEADWALL POSITION AND LEVELS TO BE DETERMINED ON SITE BY ENGINEER.
3. EXTENT OF RENO MATTRESS PROTECTION TO BE CONFIRMED ON SITE BY ENGINEER.

DRAUGHTING SYMBOLS

DETAIL	Proposed	Existing
CENTERLINE		
WATERMAIN DUCT		
TELKOM CABLE DUCT		
ELECTRIC CABLE DUCT		
ELECTRIC CABLES		
ELECTRIC LIGHT POLE	ELP	ELP
TRAFFIC SIGNAL	TS	TS
CONSUMER DISTRIB. UNIT	CDU	CDU
TELKOM CABLES	TEL	TEL
TELEPHONE POLE	TP	TP
SEWER	S	S
STORMWATER DRAIN	SWD	SWD
STORMWATER INLET		
SCOOP		
KERB AND CHANNEL		
EARTH EMBANKMENT		
WATERMAIN		
VALVE / Air Valve	V / AV	V / AV
FIRE PLUG	FP	FP
STANDARD HYDRANT	SH	SH
EXISTING M.H. TO BE CONVERTED TO CATCHPIT		
EXISTING CATCHPIT TO BE CONVERTED TO M.H.		

FOR TENDER PURPOSES ONLY

New Road Area ..... m²

Unsurfaced to Surfaced ..... km's

AS BUILT

Date ..... Sign .....

eTHEKWINI MUNICIPALITY

ENGINEERING UNIT
ROADS PROVISION DEPARTMENT

PLAN DESCRIPTION	DWG. NO.	
CONTINUED FROM		
CONTINUED ON		
CROSS SECTIONS		
TYPICAL CROSS SECTION		
SURVEY LAYOUT		

REDUCED PLAN USE SCALE BELOW

0 10 20 30 40 50 60 70

70mm ON ORIGINAL PLAN

DRAWN IN ALLYWINDOWS

WG31

Revision	Date	Description

NOTE:
No construction work to commence until land and servitude acquisitions have been completed

Acquisitions completed

Date ..... Engineer .....

NORTH POINT

UNDERGROUND SERVICES CHECKED

SERVICE	DATE	SIGNATURE
S.W.DRAINS		
SEWERS		
WATER MAINS		
G.P.O.CABLES		
ELECTRIC CABLES		
S.A.R. CABLES		
E.S.C. CABLES		
OIL PIPE LINE		

NOTE:
Only underground services affected by new construction work are shown. Care must be taken during excavations for road foundations, trenches etc., to avoid damage to underground services such as sewers, drains, cables, water mains and connections. Wherever possible these must be located before work proceeds.

1R-47239
Contract No

Project Title

THE UPGRADE OF PHILANI ROAD IN NTUZUMA WARD 38

Drawing Title

SERVICES PLAN FOR SERVICE OWNER

Scales	Reference
AS SHOWN	

Designed	Date
T.SHABALALA	08 SEPTEMBER 2021
Checked	Drawn in AllyWindows by
A.DELLAR	D.NAIDOO

Manager RD (N)

D/H : RP

G.Evans — Head : Engineering

Drawing No	Sheet
48956	01 of 01 Sheets