

ANNEXURE A

DEVELOPMENT SPECIFICATIONS

1 WATER NETWORK

1.1 Reticulation

Average demand	650ℓ/day for Res 2 erven
Peak Factor	4
Fire Risk	Moderate risk
Minimum flow of fire hydrants	6 000 ℓ/min
Minimum water pressure	22 m
Pipe size - internal network	As designed by Professional Engineer
Pipe Material	uPVC (Class 12)
Hydrants	Municipal standard WTD-80 / 80mm x 65mm Right Angle Tamperproof with Double Lug Instantaneous Outlet
Valves	AVK or equivalent approved gate valves
Cover	Road reserves 1 m, otherwise 800 mm
Bulk Water Meters	As per Engineering Design Drawings

1.2 Erf Connections / Plumbing

Minimum pipe size	25mm
Pipe material	HDPE
Water meter installation Arrangements.	By Developer under supervision of Municipality
Water meter type	Kent (Woltmann Type)

2 SEWER RETICULATION

2.1 Reticulation

Average daily flow	500ℓ/day / household minimum or per design
Extraneous flow	15%
Minimum pipe size	160 mm
Pipe material	Heavy Duty underground PVC sewer pipe (400kPa)
Maximum manhole spacing	80 m
Peak factor	2,5 per design
Minimum flow speed	0,7 m/s
Manhole construction	Precast rings or brickwork or alternative material of same standard. Concrete covers & lids.
Cover	Road reserves 1 m, otherwise 800 mm

2.2 Erf Connections / Plumbing

Minimum pipe size	110 mm
Pipe material	Heavy Duty underground PVC sewer pipe (400kPa)

3 ROADS

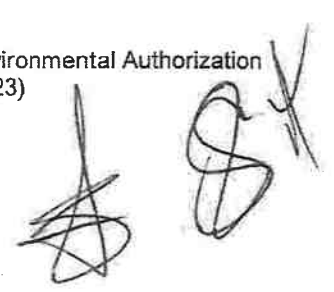
Widths	5.5m for internal streets and 15.5m at main entrance per design of Engineer
Surfacing	Concrete Block Paving or Bitumen Asphalt as per design
Layer works	As per the Professional Engineer's design and specification

4 STORM-WATER

Design flows	1 in 5-year storm design.
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5 ENVIRONMENT

Environmental Authorization (EA) requirements	All work must comply with approved Environmental Authorization (NWP/EIA/112/2022, Dated 27 June 2023)
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6 ELECTRICAL SERVICES

6.1 ADMD Calculation

Method

Diversity

Unbalance

Res = 4.5kVA; Bus/Com = 80W/m²

Empirical

AMEU

AMEU

6.2 Design Philosophy

Voltage Drop

Cable Thermal Loading

MSS Thermal Loading

±10%

80%

80%

6.3 Equipment Specification

MV Cable

LV Cable

LV Service Connections

MSS

Metering Kiosks

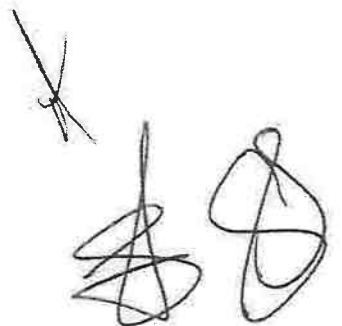
150mm², 3 Core, 11/6,35kV, Cu, PILC, Belted, PVC/STA/PVC, SANS 97-Table 17

16 / 35 / 70 / 90 / 120mm², 4 Core, 600/1000V, PVC/SWA/PVC/PVC, Cu, SANS 1507-3

10 / 16mm², 3 Core, 600/1000V, PVC/SWA/PVC/PVC, Cu, SANS 1507-3PVC, (2x1mm Com)

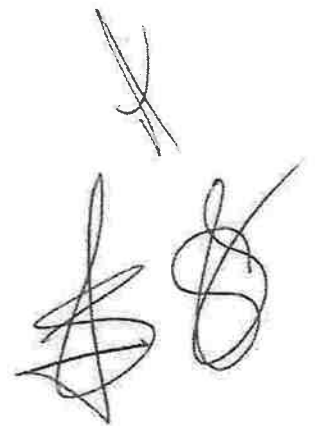
500kVA

12 Way



ANNEXURE B: APPENDICES

- A : Bulk Water & Sewer Services Layout Plan No 4063/C/1
- B : Access & Bulk Storm Water Services Layout Plan No 4063/C/5
- C : Surveyor General Plan of van der Hoffpark X82
- D : Township Layout Plan of van der Hoffpark X82

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