

Rockdale Erf 1051

Electrical Services Report Rev A

Prepared for:

Urban Dynamics

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Approval

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1. INTRODUCTION

1.1 BACKGROUND

The project was initiated by the need for rezoning of erf 1051 for the purpose of developing a shopping centre.

The development will include some anchor shops and several smaller outlets. Technical detail of the development given below:

Table 1 - Development Details

Land Use	Zoning	Number of stands	Area
Retail	Commercial / retail	1	4100m ²

This report addresses the electrical load required and concept supply configuration

1.2 SITE LOCATION

The area under consideration is erf 1051, Rockdale, Middelburg, Mpumalanga.



Figure 1 - Location map

2. INTERNAL ELECTRICAL NETWORK

2.1 INTERNAL NETWORK

The internal electrical reticulation network will be designed during the next phase of the project. It is proposed to have a single bulk supply to the site, and then internally distributed and metered.

2.2 LOAD REQUIREMENTS

The load requirement calculation was done based on latest layouts. A load estimate was done according to IEC loading per area.

The estimated load for the total retail area was calculated:

Commercial / retail buildings of 4100m² based on average of 60VA/m²

An additional allowance of 60VA/m² is made for HVA

This high-level estimate shall be refined during detail design and when specific store details are available. For planning purposes, an allowance is made for a maximum demand of 500kVA

2.3 PROPOSED SUPPLY

It is proposed to supply the stand with a dedicated minisub. From information received, an 11kV network is present in the area that can be routed to feed the minisub.

The location of the minisub can also be changed if final layout and details become available.

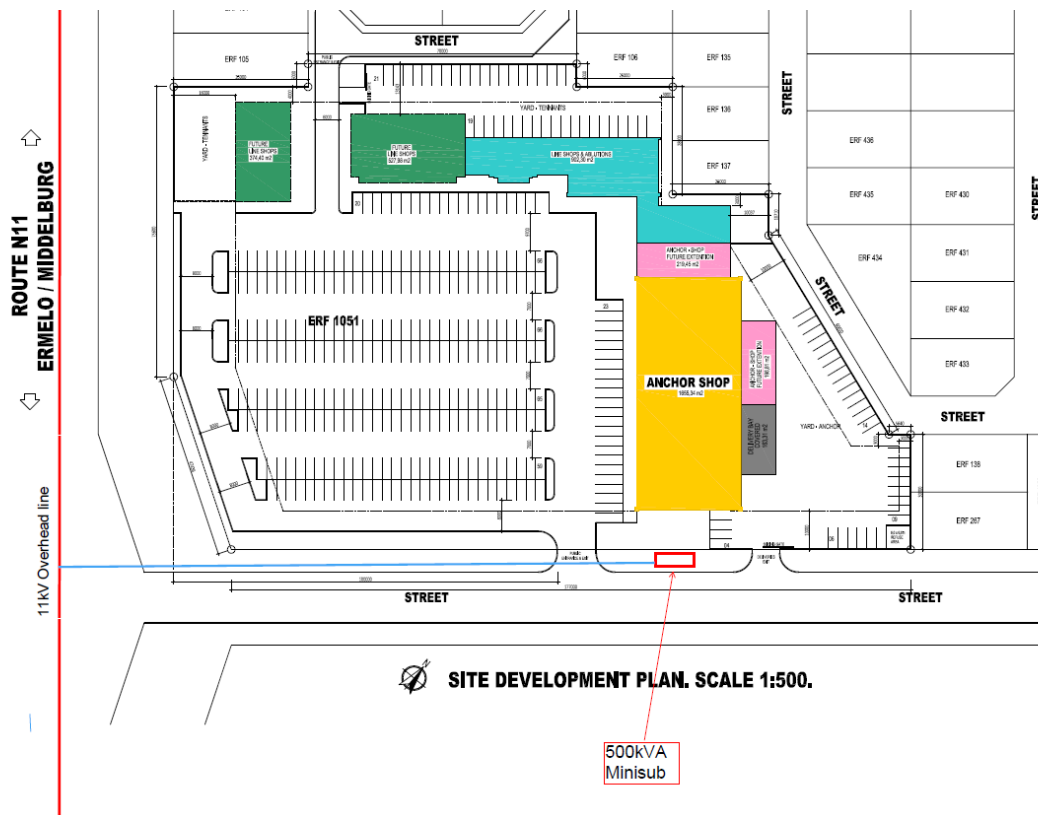


Figure 2 - Proposed supply

3. BULK SERVICES

3.1 EXISTING SERVICES

The surrounding area are currently serviced by Steve Tshwete Municipality. An 11kV bundle conductor overhead line runs on the boundary of the proposed development. Another overhead line runs on the opposite side of the N11 in close proximity.

3.2 CONFIRMATION OF AVAILABLE CAPACITY

According to Steve Tshwete local municipality, sufficient capacity will be available to supply the demand. As the details of the supply can only be established after a formal application, no written confirmation can be obtained at this stage.

According to council, it is their commitment to supply any requirement from customers. Once the rezoning is approved, a formal application will be launched and details of the point of connection as well as costing can be established.

3.3 APPLICATION PROCESS

The formal process to be followed can only be done when rezoning is approved.

4. CONCLUSION

This report gives a summary of the findings in terms of load requirement and availability. From an electrical services point of view, the proposed development can continue and serviced will be available for the proposed use.

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