

Portion 135 of the farm Boschhoek No 103 JQ

Electrical Services Report Rev A

Prepared for:

JJJ Swarts


Report date:

12 April 2021

Prepared by:

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Approval

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Accepted by:			

Amendment History

Rev	Date	Amendment Section / Chapter / Page	Checked By: Name And Initial
A	12/04/2021	First Issue	M Stoltz

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1. INTRODUCTION

1.1 BACKGROUND

LTZ Consulting was appointed by JJJ Swarts to conduct an electrical services investigation and deliver a detailed services report to support the formal application for rezoning.

The purpose of this application is to support the Rezoning Application for the purpose of Mixed use.

Portion 135 (a portion of Portion 104) of the farm Boschhoek No. 103 – JQ was previously zoned as “High Potential/ Unique Agricultural”. Thereafter the property was rezoned to “Business 1” for the purpose of shops.

However, the landowner now wishes to develop a Filling Station (with ancillary shops) on the property. Therefore, an application to rezone (to SPECIAL use) will be submitted to the relevant Authorities with the consideration of previous conditions of approvals.

1.2 SITE LOCATION

The area under consideration is portion 135 of the farm Boschhoek No 103-JQ, Rustenburg, North West.



Figure 1 - Location map

1.3 LAYOUT

Below is the SG Diagram of portion 135

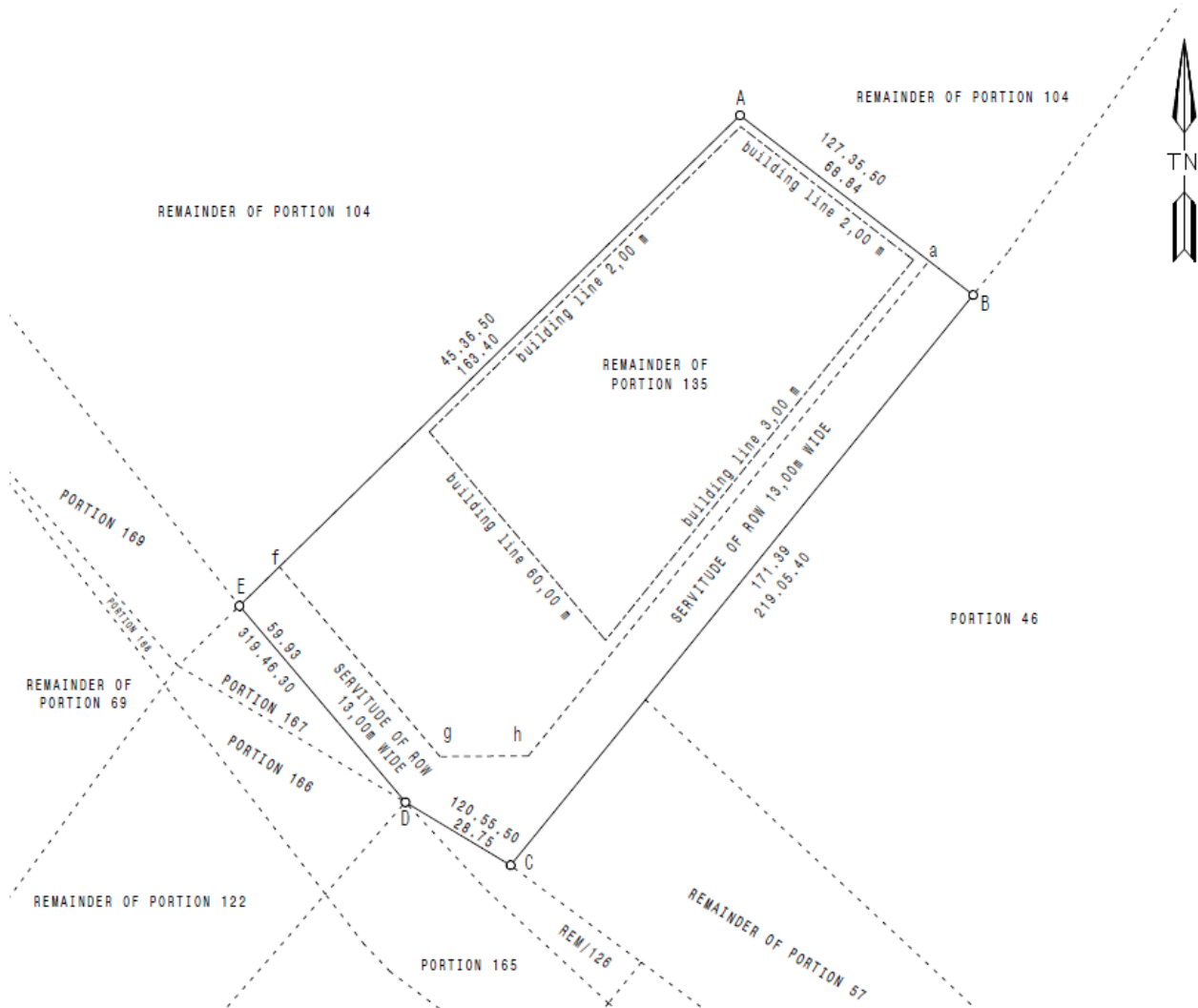


Figure 2 – SG Diagram

2. ELECTRICAL NETWORK

2.1 EXISTING NETWORK

The site is currently supplied with a 3-phase connection directly from Eskom. The Existing supply is assumed to be 50kVA and only a single house is currently built on the property.

2.2 LOAD REQUIREMENTS

The load requirement calculation was done based on planned site operation. The site to be developed will consist of a diesel depot, with associated shops. The load calculation was done to allow for the following:

- | | |
|---------------------|-------|
| 1. Diesel Depot | 70kVA |
| 2. Associated shops | 35kVA |
| 3. Future expansion | 35kVA |

The total estimated load required for the proposed site is **140 kVA**, and the request was communicated with Eskom for an upgrade in supply to 150kVA

2.3 NETWORK UPGRADE

The supply authority in the area is Eskom. No upgrade of any services is required as was confirmed that sufficient capacity on installed transformer is available.

3. BULK SERVICES

3.1 EXISTING SERVICES

The site is currently serviced directly with a bulk connection from Eskom. The main electrical service connection is via overhead line and pole mount transformer, supplying the 2 sites. Eskom confirmed that spare capacity is available on the transformer.

	
OHL	The Site

3.2 SUPPLY UPGRADE

The availability of supply was confirmed with Eskom. From the correspondence, the existing 300kVA pole mount transformer do have sufficient spare capacity to upgrade the site supply to 150kVA, or 200A 400V.

This Eskom representative that confirmed the capacity is Tshepo and can be contacted at 082 373 0723

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 rezoning application can proceed as all electrical services are in order and sufficient for the purpose of rezoning

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