

SERVICES REPORT ELECTRICAL RETICULATION



ERF 915 SIMONDIUM

MAY 2018
REVISION 0

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SERVICES REPORT FOR THE ELECTRICAL RETICULATION ERF 915, SIMONDIUM

1. SCOPE

This revised layouts and scope of works are based on the drawings as issued to us on 9 April 2018. The general layout drawings were utilized to compile a provisional reticulation diagram and routes for the electrical reticulation for the proposed industrial and office development in Simondium.

1.1 Purpose of this cost report

- Provide the basic information parameters on which the preliminary design is based.
- Provide the guideline for the electrical reticulation.

1.2 Assumptions

The following assumptions have been made for the basis of this report :

- A 25x25m area was provided for the council switching substation, as part of the Portion 1337 development.
- The ring network for Erf 1337 will also serve Erf 915 in future.
- The internal electrical layouts will be in accordance with municipal standards.
- Servitudes for services will be registered along the roads.

1.3 Scope of Works

The following scope of works is included in this report :

- Extend medium voltage network from Portion 1337.
- 11kV ring network in Portion 915, closing the ring.
- Miniature substations positioned such to cater for different building usages and layouts.
- Metering at the bulk supply point, and at all minisubs and buildings.

2. BULK SERVICES

The area is currently supplied with electricity by Drakenstein Municipality.

We had a meeting at Drakenstein Municipality, where their requirements were clarified and agreed.

We allowed for a medium voltage connection to the open ends of the 11kV-cable feeding Portion 1337. The complete installation will be in accordance with the municipality's technical requirements. This will enable the network to be taken over by the municipality, should the buildings be sold off in future.

The detail of the cabling routes, sizes and capacity allowed will be finalised with the municipality during the detail design of the development.

Drakenstein Municipality confirmed that there is sufficient electricity capacity available for the proposed development on Erf 915 and Erf 1337, including the proposed offices in the southern corner, provided the new substation is built and commissioned.

The estimated power requirement for the residential, offices and industrial components is 1778kVA.

3. LOW-VOLTAGE ELECTRICITY SUPPLY

Tall buildings will be fed from miniature substations located in central areas, allowing for sufficient capacity being available for the layout as depicted.

Each building will be supplied with their own main distribution board, fitted with metering.

4. METERING

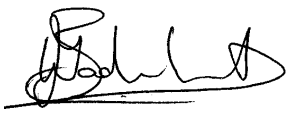
The complete site (Erf 915 and Erf 1337) will be bulk-metered by Drakenstein Municipality.

We have allowed sufficient space in the distribution boards in all buildings for the provision of split meters. The client can administrate the meter readings, or alternatively make use of PEC Metering Services (or any other 3rd party metering service provider).

5. SWITCHING SUBSTATION

The provision of an 11kV-switching substation is a requirement by the council. Phase 1 of the development on stand 1337 may proceed without the substation, as agreed to by the council (to assist in cash-flow). Once phase-2 or office development proceeds, the construction of the switching substation shall also proceed.

A dedicated area of 25x25m will be determined by the developer, for approval by council.



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