



OUR REF: GENERAL PROJECTS

JS/JS/2886

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Town and Regional Planners
P.O Box 489
FLORIDA HILLS
1716

PROPOSED TOWNSHIP VALLEY MARIKANA EXT. 14: SITUATED ON PORTION 16, PORTIONS 57 TO 58, PORTIONS 194 TO 196, PORTIONS 198 TO 207 AND PORTION 355 OF THE FARM ROOIKOPPIES 297-JQ

ELECTRICAL ENGINEERING SERVICES

1. BULK AND LINK SERVICES

The proposed township falls within an area supplied with electricity by Eskom from their Tharisa Substation. There is an existing 11kV overhead feeder line from the substation to the proposed township. Please see attached google map plan indicating the existing feeder line route. At the moment it is not known whether there is sufficient capacity available at the substation or on the existing feeder line to supply the proposed township. Eskom will only do a capacity investigation after an official application has been submitted to them. They may decide to provide more than one point of supply to the township.

Based on the development potential we estimate the capacity requirements for the proposed township to be as follows:

Freehold Erven 1 710 erven x 3kVA/erf	5 130kVA
High Density 843 units x 2kVA/unit	1 686kVA
Business	To be confirmed
Total	6 816kVA

The business potential of the township is not known at the moment, but is fairly small and will not add substantially to the capacity requirements of the township.

2. INTERNAL SERVICES

2.1 Design Standards

The design parameters and standards and applicable After Diversity Maximum Demand (ADMD) must still be agreed with Eskom. We believe that the most suitable option for providing the electrical engineering services will be full overhead system as per Eskom's Urban Wood Standard. The internal Medium Voltage (11kV) services will be done by means of overhead bare aluminium conductors and pole-mounted transformers on wooden poles, and the Low Voltage services by means of overhead Aerial Bundle Conductors in the streets. The service connections will be done by means of underground concentric cables. All the meters will be pre-payment electricity meters.

The provision of public lighting will not fall under Eskom, but may be required by the local municipality.

2.2 Material and Equipment Specifications

A full technical approval process will be undertaken in accordance with the requirements of Eskom's standard developer project process. All the work undertaken and materials supplied will have to comply with Eskom's latest standards and specifications.

If public lighting is provided, it will be done in accordance with the standards and specifications of Rustenburg Local Municipality.

3. ESTIMATED SERVICE COSTS

A full cost estimate can only be done once the township layout has been finalised and Eskom engaged regarding the provision of services to the township. Eskom does not charge external engineering contributions. The up-front connection charge will be based on actual costs and include all network charges and shared services charges. The Eskom connection costs will only be obtained after a formal application has been submitted.

The costs for the provision of all the township services will be the responsibility of the township owners/developers.

Yours faithfully

EKSTEEN & LE ROUX

Per



J. J. STEVENSON