

Our Ref: O/3811/B/001

26TH October, 2017

HOUSING DEVELOPMENT AGENCY (HDA)

PROJECT NAME: HDA HARTBEESPORT LAND DEVELOPMENT

RE: EXISTING ELECTRICAL INFRASTRUCTURE - INCEPTION REPORT.

1. The businesses on site at the moment comprise mainly of low power consumers dealing in car breaking, car sales, scrap metal, small paint shop and one or 2 cafés using mostly gas. The business do not use much electricity as it comprises mainly of lights and plug points. These consumers are connected to either to mini-substations or overhead lines across the road and its mainly single phase.
2. The power utility for this area is City of Tshwane. The existing infrastructure on site, is not conducive for bigger electrical loads.
3. The reticulation in the nearby areas is mainly by underground 11kV Paper Insulated cables connected in a ring. The ring circuit connects mini-substations for consumers. Depending on the amount of power required at the time of application, City of Tshwane will employ one of the following methods:
 - (a) Connect the site by cutting into the existing ring and tapping off from there. The customer will have to provide an MV switch and cabling for the site. This will be treated as one stand. This will enable internal reticulation to be done.
 - (b) Connect the site to Silverton substation. This might entail using overhead lines to get to the site and terminate into the site substation to be built as part of the project.
 - (c) A new substation was built in Watloo area and will be commissioned soon, according to information supplied by one of the Planners. City of Tshwane might decide to connect the site to that substation.

The Medium Voltage reticulation for the site will be under ground cabling, in line with City of Tshwane requirements.

Below is domestic consumer meter-box on site.



Fig 1. City of Tshwane meter box on site boundary

Conclusion.

Once the type of development to be done on site is concluded, load calculations will be done. A more comprehensive study will then be done to assess how electrical network within the adjacent developments can be connected to DHA Hartbeespoort Development.

