



Figure 7: Protected Tree Species at Site C (*C. imberbe* and *S. birrea*)

Potential Impact

- Construction**
- Clearance of the vegetation for the footprint of the station;
 - Fires and the introduction of invasive species;
 - Damage to vegetated areas; and
 - Removal of vegetation outside of the construction footprint.
- Operation**
- Removal of vegetation during routine maintenance.

6.8 Socio Economic Aspects

Status Quo

Although the sites are located within Ward 5 of the Moses Kotane Local Municipality, the closest area that the Demarcation Board has data for is the small town of Nonceba in Ward 1. For this reason, the data from Nonceba will be used. Since all three sites are located within the same Farm, the data from Nonceba will be considered applicable to all sites.

The community of Nonceba has a low level of education, five people have a certificate that is less than the equivalent of grade 12. There were no other degrees or diplomas within the community (Stats SA, 2001).

A low level of education is usually coupled with a low skills base. Out of 65 employed individuals aged 15 to 65, only three were in a managerial position. The majority of people were in elementary positions such as plant and machine operators (Stats SA, 2001).

There were four hundred and ninety people, between the ages of 15 and 65, who were not working. The majority of these people (184) could not find work and 158 were scholars or students (Stats SA, 2001).

None of the households within the Nonceba community had an annual household income greater than R153 600.00. The monthly income per individual does not exceed R6 400.00, in fact the majority of people earn R1 600.00 per month and below (Stats SA, 2001).

Transport within Nonceba is predominantly by foot (Stats SA, 2001).

Potential Impact

- Construction**
- Temporary, limited job opportunities - preference to local labour; and
 - Skills development.
- Operation**
- Maintaining the long-term economic sustainability of Dwaalboom PPC.

The construction of the switching station and associated structures such as the terminal pylons and turn-in lines do not pose a safety risk. There will be a security fence around the switching station itself, to prevent injury to people and animals.

6.9 Air quality

Status Quo

No studies were undertaken to determine the level of air pollution in the study area.

Potential Impact

- Construction**
- Dust from construction vehicles and machinery; and
 - Emissions from construction vehicles, machinery and generators.
- Operation**
- No foreseen adverse or beneficial effects.

The switching station and associated structures will not produce emissions, therefore there are no foreseen cumulative impacts with regards to emissions.

6.10 Land use

Status Quo

According to the AGIS website (2007) the landuse type of all three sites is “cultivated, permanent, commercial, irrigated”. The sites are surrounded by “planted grassland”, which was previously known as “improved grassland (AGIS, 2007). According to ENPAT (DEAT, 2001) the land is classified as vacant/unspecified. From personal observation all three sites are used for grazing.

The sites do not fall within any proclaimed conservation, mining or forestry areas (DEAT, 2001).

Potential Impact

No foreseen adverse or beneficial effects.

6.11 Aesthetics

Status Quo

All three sites would be built near an existing Eskom servitude. There are transmission lines within this servitude that are not aesthetically appealing; the visual appeal of the area has therefore already been impacted.

Site C is located away from the dirt road and behind a stand of natural vegetation. It is therefore less visible than Sites A and B which are closer to the road and would not be screened by vegetation.

No people live within sight of Sites A and B, but at Site C a tenant would be exposed to the visual effect of the switching station.

Potential Impact

- Construction**
- No foreseen adverse or beneficial effect as the construction camp is a temporary feature.
- Operation**
- Site C will be negatively impacted as switching stations are visually unappealing.

6.12 Noise

Status Quo

A noise study has not been conducted in the vicinity of any of the proposed sites. All three site alternatives would have few contributors to noise as they are far from any residences or industry, the nearby roads are dirt and vehicular traffic on them is minimal.

Potential Impact

- Construction**
- Noise from construction vehicles, machinery and generators; and
 - Blasting is required for constructing on Site B and Site C.
- Operation**
- No foreseen adverse or beneficial effects.

There is no foreseen cumulative impact on noise in any of the three locality alternatives.

6.13 Sites of archaeological and cultural interest

Status Quo

The South African Heritage Resources Agency (SAHRA) was informed of the proposed development. SAHRA did not inform Nemaï Consulting that a Heritage Impact Assessment (HIA) was required and therefore an HIA was not conducted.

There are no known sites of archaeological or cultural significance at any of the locality alternatives.

Potential Impact

No foreseen adverse or beneficial effects.

6.14 Agriculture

Status Quo

No crops are cultivated on any of the three sites and due to the high clay content of the soil (DEAT, 2000) the land is not suitable for agriculture (Mangold, 2002). AGIS (2007) shows the land of the three sites as having a low agricultural potential.

All three sites are used for grazing.

The soil is black and red and the soils are strongly structured and have a high base content. The soil at the study area is at least 750mm deep. The soils themselves are calcareous in nature (DEAT, 2000).

Potential Impact

- Construction** • Disturbance to livestock from construction activities.
- Operation** • Loss of grazing land for the tenant's livestock.

6.15 Infrastructure - Roads

Status Quo

The roads to the alternative sites are low-traffic dirt roads. Construction vehicles would increase the traffic along these roads, this is however a short-term impact. The only increase in traffic that may be expected is that of maintenance crews, which would not result in a significant increase in traffic.

Potential Impact

- Construction** • Transportation of equipment; and
- Use of road network by construction vehicles.
- Operation** • Use of the road network by maintenance vehicles.

There is no foreseen cumulative impact on the traffic patterns of the area.