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**CULTURAL AND ARCHAEOLOGICAL HERITAGE ASSESSMENT SPECIALIST STUDY
FOR THE PROPOSED CONSTRUCTION OF 2,5KM OF 11KV KEMP-DICKIE POWER-LINE
IN THE MOPANI DISTRICT MUNICIPALITY, LIMPOPO PROVINCE**

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MANAGEMENT SUMMARY

BACKGROUND

Eskom Distribution proposes to construct a 2.5km Kemp-Dickie 11kV power-line in Modjadjieskloof area in the Greater Letaba Local Municipality, Mopani District of the Limpopo Province. This Archaeological and Heritage Impact Assessment (HIA) study was commissioned to assess the potential impact of this [proposed development on any archaeological and physical cultural properties that may be associated with the powerline servitude route.

SUMMARY RESULTS

The field survey was conducted on the 25th of July 2008. The survey covered the proposed powerline servitude route and its buffer zone. By nature, the proposed powerline development's potential impact footprint is limited to individual powerline pole positions. No archaeological sites were identified on the direct path of the powerline. A 2001 memorial landmark of local significance with a plaque commemorating the 100 years anniversary of the 1901 Duivelskloof battle was recorded about 100m from the powerline servitude. As such the landmark is not on the direct path of the proposed powerline.

SUMMARY RECOMMENDATIONS

- The identified local memorial monument is a 100m away from the proposed powerline route. As such it is not in any way on the direct path of the proposed development and will not be affected by the development both physically and in integrity.
- Furthermore, there are no archaeological or other cultural heritage resources that were identified on the affected project area. There are no archaeological or cultural heritage barriers to the proposed construction of a power-line.
- There being no known or potential archaeological material or heritage sites on the direct path of the powerline route, we recommend to the heritage authority to approve the development as planned.

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ABBREVIATIONS

| | |
|--------------|--|
| CHA | Cultural Heritage Assessment |
| EIA | Environmental Impact Assessment |
| HeSSA | Nzumbululo Heritage Solutions (South Africa) |
| SAHRA | South African Heritage Resources Agency |

ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT STUDY FOR THE PROPOSED CONSTRUCTION OF 2,5KM KEMP-DICKIE 11KV POWER-LINE IN THE GREATER LETABA LOCAL MUNICIPALITY, MOPANI DISTRICT

1 INTRODUCTION

Eskom Distribution, (Northern Region) proposes to develop a demand increase-related power-line to supplement the current energy supply for the commercial and domestic consumption in Greater Letaba Municipal area. In order to obtain Heritage clearance from the South African Heritage Resources Agency (SAHRA), Eskom appointed Nzumbululo Heritage Solutions to undertake the Cultural Heritage Assessment specialist study for the proposed development. This Heritage Impact Assessment (HIA) study was conducted to fulfil the requirements of the National Heritage Resources Act, Act 25 of 1999 Section 36 and 38. The HIA study focus on identifying and assessing archaeological, cultural, and historical heritage resources associated with the proposed power-line construction project's receiving environment.

This HIA study primarily seeks to:

- ❑ Identifying heritage resources affected by the proposed power-line and the associated infrastructural development.
- ❑ Assess the significance of the resources.
- ❑ Evaluate the impact thereon with respect to the socio-economic opportunities and benefits that would be derived from the proposed power-line.
- ❑ Consult with the affected and other interested parties in regard to the impact on the heritage resources in the project's receiving environment.
- ❑ Make recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the heritage resources.
- ❑ Identify and discuss with local communities (where applicable) on potential impacts of the proposed powerline construction on graves and burials sites within the affected area and make the necessary recommendations on how to handle the matter.
- ❑ Take responsibility for communicating with the Limpopo Heritage, SAHRA and other related authorities in order to obtain the heritage relevant permits and authorization.

In terms of Section 35 (4) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999)

...no person may, without a permit issued by the relevant heritage resources authority, destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; or bring onto, or use at an archaeological or palaeontological site any excavation equipment or any equipment

that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

Archaeological and palaeontological sites, materials, and meteorites are seen in the NHRA as “the source of our understanding of the evolution of the earth, life on earth and the history of people.” In this context, the law emphasize that the management of heritage resources is integrated with environmental resources and this means that heritage resources should be assessed and, if necessary, rescued before development is allowed to take place.

In areas where there has not yet been systematic survey to identify conservation-worthy places, a permit is required to alter or demolish any historic structure older than 60 years or military installation of over 75 years old. This will apply until a survey is done and identified heritage resources are formally protected.

2 BRIEF BACKGROUND

The proposed powerline will be developed in the Modjadjieskloof area of the Greater Letaba Local Municipality, Mopani District of Limpopo Province. The project area is situated east of Polokwane town along the R71 road from Polokwane to Modjadjieskloof. The line will connect an existing transformer to the Dickie Substation located 2km towards Modjadjieskloof town.

2.1 ROUTE DESCRIPTION

As per attached spanning sheet, the proposed power-line will traverse through commercial crop land on Spitsrand 422LT Farm. The Dickie substation is also located on this farm. Most of the affected power-line servitude is currently furrow of cultivation land characterised by secondary grass vegetation. The grassland is being used as grazing land. The proposed line will run parallel to the existing 33kV power line from the substation until it crosses the T-off to Kgapane towards Duiwelskloof 436 LT Farm.



Plate 1: The powerline will traverse through this typical secondary grassland currently being used for animal grazing. Most of the affected land was previously used for agricultural cultivation.

3 METHODS

The study consisted of standard field survey covering the proposed power-line route. In practice, most archaeological and historical sites are found through systematic survey of the target landscapes. On the 26th and 27th of August 2008, Hessa specialist conducted an impact assessment field survey by transecting the affected landscape on foot looking for indicators of archaeological and any other cultural materials in the affected areas. This was done by walking the 2.5km powerline route traversing the 100m wide servitude and its associated buffer zone. In part the field officer also inspected soil profiles for potential archaeological materials that may still be trapped *in situ* in an area already disturbed by previous earthmoving activities such as agricultural practices. Identification of archaeological or historical sites during surveying depends on visibility and accessibility. Most sections of the 2.5km route were accessible whereas some sections had high grass vegetation cover.



Plate 2: The powerline route is clearly marked by iron pegs with red tape indicating the position of proposed poles. Grass cover on some portions is dense limiting total ground surface inspection.

4. RESULTS

4.1: LOCATION DETAILS

Province: Limpopo

Magisterial District: Mopani

Name of Properties affected: Spitsrand 422 LT and Duiwelskloof 436 LT Farms

Proposed development: Linear development consisting of construction of 2.5km power-line. The construction will involve installation of a series of powerline poles over the 2.5km route.

Archaeological

No archaeological site was identified along the proposed powerline route. Over the 2.5 km route, the proposed power-line will run through grazing land, along the farm boundary fence, and through agricultural fields. The nature and extent of the ground surface disturbance in some sections made it unlikely for archaeological site to have survived *in situ*.

Historic Monuments

Historical and Recent sites - these sites are associated with white settlers, colonial wars, industrialization, African population settlements, contemporary ritual sites and settler farming

communities are the most common and visible. The more common functions of places of cultural historical significance include:

- Domestic
- Recreation & culture
- Commerce & trade
- Agriculture & subsistence
- Social
- Health care
- Religion
- Designed landscape
- Funeral (cemeteries, graves and burial grounds)
- Civil and Structural Engineering
- Education
- Defence /Military

A local memorial monument with a plaque commemorating the 100 years anniversary of the 1901 Duivelskloof battle was recorded along the powerline route (Plates 3 & 4). This memorial is dedicated to the battle between the Balobedu and the white settlers in 1901. The overall region was scene to colonial battles at the turn of the last century. This makes the region important in the history of region and South Africa at large.



Plates 3 & 4: A 2001 memorial landmark with a plaque commemorating the 100 years anniversary of the 1901 Duivelskloof battle. This landmark is situated about 100m from the proposed powerline servitude.

Burial grounds and graves

In terms of the Section 36 (3) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) no person may, without a permit issued by the relevant heritage resources authority:

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment, which assists in the detection or recovery of metals.

Grave yards

No graves were identified along the route of the powerline.

Previously unidentified burial sites/graves –

The possibilities of this occurring are very limited along the powerline route, during the proposed development. In the unlikely event that a burial site is accidentally found, they must be protected and not interfered with in any way during the powerline development.

5. STATEMENT OF OVERALL IMPACTS

The proposed powerline development will not have any significant impact on archaeological or cultural heritage resources. In the first place there are no archaeology sites that were recorded on the powerline route and the route is seriously degraded for any such sites to have survived on *surface in situ*. Furthermore, the nature of the proposed development will have limited impact footprint given the fact that the actual construction will involve installation of individual poles with about a square-metre spatial footprint.

6. OVERALL RECOMMENDATIONS

- No further predevelopment study or mitigation is necessary in relation to the proposed powerline development especially given the fact that archaeological resources will be affected by the proposed power-line development.
- Although a identified historical memorial monument was recorded in the vicinity of the project area, the site is located about 100m away from the powerline servitude. As such, the development may not interfere with the memorial site in any way during the proposed development.
- The foot print impact of each pole should be kept to minimal to limit the possibility of encountering chance finds.
- This study recommends that the heritage authorities approve the proposed powerline development subject to recommendations here in made.

7. CONCLUDING REMARKS

There being no archaeological sites within the powerline servitude, the proposed development, heritage authorities should approve the development to precede as planned.

Although a historic memorial site of local significance was identified in the project area, the site is far off the direct path of the proposed development.

8. BIBLIOGRAPHY

Bickford, A and Sullivan, S. 1977. "Assessing the research significance of historic sites" in S Sullivan and s. Bowdler (eds), *Site Surveys and Significance assessment in Australian Archaeology*. Canberra: ANU.

BURKE, H. And SMITH, C. 2004. *The archaeologist's field handbook*. Allen and Unwin. Australia.

Deacon H.J. and Deacon J. 1999. *Human beginnings in South Africa*. Cape Town: David Philips Publishers.

Huffman, T.N. 2007. *Handbook for the Iron Age*. Pietermaritzburg: UKZN Press.

National Heritage Resources Act (Act No 25 of 1999)