

**ESKOM**

**CULTURAL AND ARCHAEOLOGICAL HERITAGE ASSESSMENT SPECIALIST STUDY  
FOR THE PROPOSED CONSTRUCTION OF 2133.37KM OF 16kVA AT TSHINO/NDIITWANI  
VILLAGE IN MAKHADO LOCAL MUNICIPALITY OF VHEMBE DISTRICT,LIMPOPO  
PROVINCE**

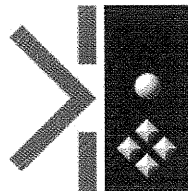
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**PREPARED FOR**

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**PROJECT NO.THT17008086**

## REPORT DETAILS

**PROJECT NAME:** PROPOSED CONSTRUCTION OF 2133.37KM LINE AT TSHINO/NDIITWANI VILLAGE.

**REPORT TITLE:** ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT SPECIALIST STUDY

**AUTHOR:** Dr. McEdward Murimbika

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**PROFESSIONAL SERVICE PROVIDER (PSP)** Nzumbululo Heritage Solutions (South Africa) cc.

## MANAGEMENT SUMMARY

### BACKGROUND

Nzumbululo Heritage Solutions (South Africa) (HeSSA) has been appointed by Eskom Northern Region Distribution to conduct an Archaeological and Cultural Heritage Impact Assessment study for the proposed construction of the 2133.37km at Tshino Ndiitwani area in the Makhado Local Municipality, Vhembe District, Limpopo Province. This Heritage Impact Assessment (HIA) study focus on potential impacts on archaeological, cultural, and historical heritage resources associated with the proposed construction of the power-line.

### SUMMARY RESULTS

The field survey was conducted on the 05<sup>th</sup> of September 2008. The survey covered the proposed powerline servitude route. By nature, the proposed powerline development's potential impact footprint is limited to individual power-line pole positions. No significant archaeological sites or material remains were identified on the direct path of the powerline. There were no other physical cultural properties of any significance threshold that were identified along the powerline route.

### SUMMARY RECOMMENDATIONS

There are no archaeological or cultural heritage resources barriers to the proposed construction of a power-line. We recommend that a heritage-monitoring program be designed to deal with potential chance finds should archaeological or historical finds be found accidentally during digging of a pole foundations. We concluded that the proposed development may proceed subject to the following recommendations:

- There being no significant archaeological material of significance on powerline route, the development may proceed as planned.
- A monitoring programme is essential during the excavation of pole foundations as we can not rule out the possibilities of encountering subsurface chance archaeological remains. Should archaeological materials be identified during powerline development, particular in association with pole footprints, heritage authorities should be informed.

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## ABBREVIATIONS

<b>CHA</b>	Cultural Heritage Assessment
<b>EIA</b>	Environmental Impact Assessment
<b>HeSSA</b>	Nzumbululo Heritage Solutions (South Africa)
<b>SAHRA</b>	South African Heritage Resources Agency

## DEFINITIONS

**Archaeological** material remains resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures.

**Chance Finds** archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

**Cultural Heritage Resources** same as Heritage Resources as defined and used in the South African Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and palaeontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or *graves* and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

**Cultural Significance** the complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

**Excavation** principal method of extracting data in archaeology, involving systematic recovery of archaeological remains and their context by removing soil and any other material covering them.

**Grave** a place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery.

**Historic** material remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

**In Situ material, material** culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

**Material culture** buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

**Site** a distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

## ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT STUDY FOR THE PROPOSED CONSTRUCTION OF POWER-LINE AT TSHINO/NDIITWANI VILLAGE OF THE VHEMBE DISTRICT IN THE LIMPOPO PROVINCE

### 1 INTRODUCTION

Eskom Distribution, (Nothern Region) proposes to develop a power-line to supply its costomer Mbulaheni Mushiana. In order to obtain Heritage clearance from the South African Heritage Resources Agency for the proposed power-line, 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 and substation construction project’s receiving environment. Aims and terms of reference of the HIA study are summarised in Table 1 below.

**Table 1:** Terms of Reference for the HIA Study associated with the construction of a power-line.

PURPOSE	ACTIVITIES
<ul style="list-style-type: none"> <li><input type="checkbox"/> Fulfil the statutory requirements of the National Heritage Resources Act, Act 25 of 1999, Section 38.</li> <li><input type="checkbox"/> To identify and describe (in terms of their conservation and / or preservation importance) sites of cultural and archaeological importance that may be affected by the proposed power-line construction. This study should include the identification of gravesites.</li> <li><input type="checkbox"/> Identify and describe impacts to archaeological and cultural resources.</li> <li><input type="checkbox"/> Make recommendations on mitigation measures.</li> <li><input type="checkbox"/> Identify and describe management measures.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Identify, describe and map sites of archaeological, historical or cultural interest affected by the proposed development.</li> <li><input type="checkbox"/> Identify, where possible, the gravesites affected by the development.</li> <li><input type="checkbox"/> Liaise with the local communities (if applicable) with regards to the impact of the development on the heritage resources.</li> <li><input type="checkbox"/> Describe the importance or significance of these sites and whether these sites need to be conserved, protected or relocated.</li> <li><input type="checkbox"/> Describe the procedures for mitigation or relocation of sites and provide an indication of time required for these management measures to be implemented.</li> <li><input type="checkbox"/> Document findings and recommendations.</li> </ul>

This HIA study primarily seeks to:

- Identifying heritage resources affected by the proposed power-line.
- 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.
- Make recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the heritage resources.

- 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.

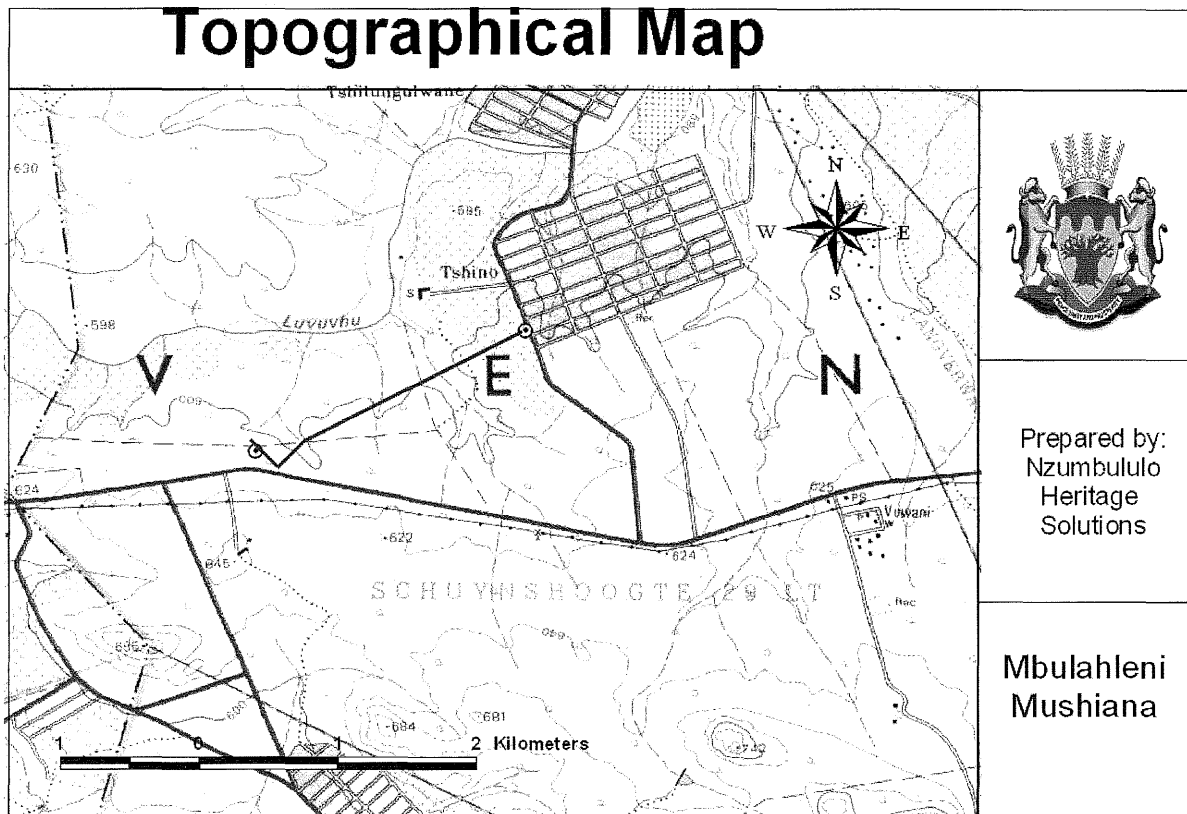
Clearly, archaeological and palaeontological sites, materials, and meteorites are seen in the NHRA as “the source of our understanding of the evolution of the earth, life on earth and the history of people.” In this context, the law emphasize that the management of heritage resources is integrated with 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 Tshino/Ndiitwani area in the Makhado Local Municipality, Vhembe District, Limpopo Province. The project area is situated South of Maunavhathu Military base (GPS S 23° 07' 05" E30° 23' 55")





## 2.1 ROUTE DESCRIPTION

The proposed line will start next to Madandila restaurant and run along the gravel road until it connects at 2133.37km.

## 3 METHODS

The study consisted of standard field survey covering the proposed power-line route, and their respective servitudes. In practice, most archaeological and historical sites are found through systematic survey of the target landscapes. The survey therefore, sought to identify cultural heritage sites including graves, burial grounds and contemporary religious or sacred ceremonial sites associated with power line route.

On the 05<sup>th</sup> of September, HeSSA heritage specialists conducted the reconnaissance survey and impact assessment by transecting the affected landscape on foot looking for indicators of archaeological and any other cultural materials in the affected areas. In part the field officer also inspected soil profiles for potential archaeological materials that may still be trapped *in situ* in an area disturbed by borrowing animals and earth moving machines.

Identification of archaeological or historical sites during surveying depends on visibility and accessibility. The surrounding areas of the proposed power-line route are accessible. By looking at the nature of the proposed site, there is no existence or availability of archaeological or historical resources that can be classified as of high or medium in terms of significance.

## **4. RESULTS**

### **LOCATION DETAILS**

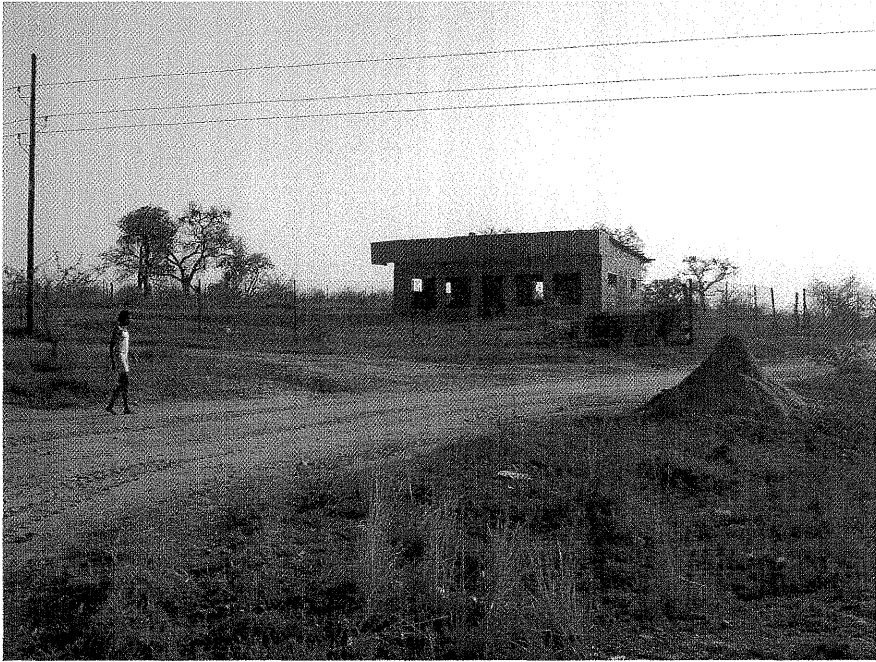
**Province:** Limpopo


**Magisterial District:** Vhembe District

**Name of Properties affected:** Weltevreden 23 LT

**Proposed development:** Construction of power-line.

The location details and the field survey findings are presented in Table 2 below.

Location and Description	Cultural Heritage Site Type Found	Cultural Heritage Significance	Recommendations
<p>The proposed power line will start next to Madandila restaurant.</p>	<p>No Cultural Heritage sites were identified in the affected area</p>  <p><b>Plate 2:</b> View of the structures next to the project starting point.</p>	<p>None</p>	<p>Place site under heritage monitoring program covering the period of use.</p>

Location and Description	Cultural Heritage Site Type Found	Cultural Heritage Significance	Recommendations
<p>The proposed power-line will run along the gravel road until it reaches the connection point.</p>	<p>No Cultural Heritage sites were identified in the affected area</p>  <p><b>Plate 4:</b> The proposed power line will run at the southern side of the road.</p>	<p>None</p>	<p>Place site under heritage monitoring program covering the period of use.</p>

## Archaeological and Cultural Sites

No archaeological sites or materials were identified in association with the powerline route. The proposed power-line runs through the already disturbed area. The chance of finding the archaeological material along the route is very limited.

## 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

There is no listed monument in the area affected by the proposed power-line route. No historical sites of significance were identified on route of power-line development. However, it should be noted that the general area has a long history of human occupation, making the entire landscape a cultural landscape.

## 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.

Therefore, in addition to the formal protection of culturally significance graves, all graves which are older than 60 years and which are not already located in a cemetery (such as ancestral graves in rural areas), are protected. Communities, which have an interest in the graves, must be consulted before any disturbance can take place. The graves of victims of conflict and those associated with the liberation struggle will have to be included, cared for,

protected and memorials erected in their honour where practical. Regarding graves and burial grounds, the NHRA distinguishes between the following:

- Ancestral graves
- Royal graves and graves of traditional leaders
- Graves of victims of conflict
- Graves of individuals designated by the Minister by notice in the Gazette
- Historical graves and cemeteries
- Other human remains, which are not covered in terms of the Human Tissue Act, 1983 (Act No.65 of 1983).

### **Significance valuation Burial Ground, Historic Cemeteries and Graves**

The significance of burial grounds and gravesites is closely tied to their age and historical, cultural and social context. Nonetheless, every burial should be considered as of high significance. Should any grave previously unknown be identified during construction, every effort should be made not disturb them. Pole position should be shifted to ensure the grave or burial ground is not disturbed.

### ***Grave yards***

Formal grave yard was identified was identified along the route 3 of the powerline.

### ***Previously unidentified burial sites/graves –***

Although the possibilities of this occurring are very limited along the powerline routes and the for the substation, during the proposed development, should burial sites outside the NHRA be accidentally found, they must be reported to the nearest police station to ascertain whether or not a crime has been committed. If there is no evidence for a crime having been committed, and if the person cannot be identified so that their relatives can be contacted, the remains may be kept in an institution where certain conditions are fulfilled. These conditions are laid down in the Human Tissue Act (Act No. 65 of 1983). In contexts where the local traditional authorities give their consent to the unknown remains to be re-buried in their area, such re-interment may be conducted under the same regulations as would apply for known human remains.

## **5. STATEMENT OF OVERALL IMPACTS**

From a cultural heritage point of view, any development that alters the ground surface status quo will potentially destroy any archaeological resources in its direct path, and the impact will be permanent in nature, extent and duration. Archaeological resources are fixed in space. Any activities that threatens to alter the status quo is, therefore an immediate and direct

threat to the heritage resources (Bickford and Sullivan, 1977) However, since there were no archaeological or cultural heritage sites that was identified on the direct path of power-line route or the substation alternate sites, the overall impact of the proposed power-line is considered to be low.

Generally speaking, the proposed power-line construction project will have minimal impact upon any cultural heritage resources given the fact that the survey did not encounter any such sites with any significance threshold.

## **6. OVERALL RECOMMENDATIONS**

- No further predevelopment study or mitigation is necessary for the archaeological and cultural heritage resources with regards to the proposed construction of a power-line development project. However, there is always a probability of discovering archaeological sites during sub-surface earth moving activities such as digging the pole foundations or any other trenches. The preferred powerline route site is acceptable.
- The foot print impact of each pole should be kept to minimal to limit the possibility of encountering chance finds.
- This study recommends that a heritage monitoring plan (as part of the EMP) be put in place during construction period to ensure that no chance finds are encountered.
- Furthermore, the construction team should be informed about the value of the cultural heritage resources in general so as to ensure that they do not destroy the chance archaeological sites they may encounter during working on the power-line route.

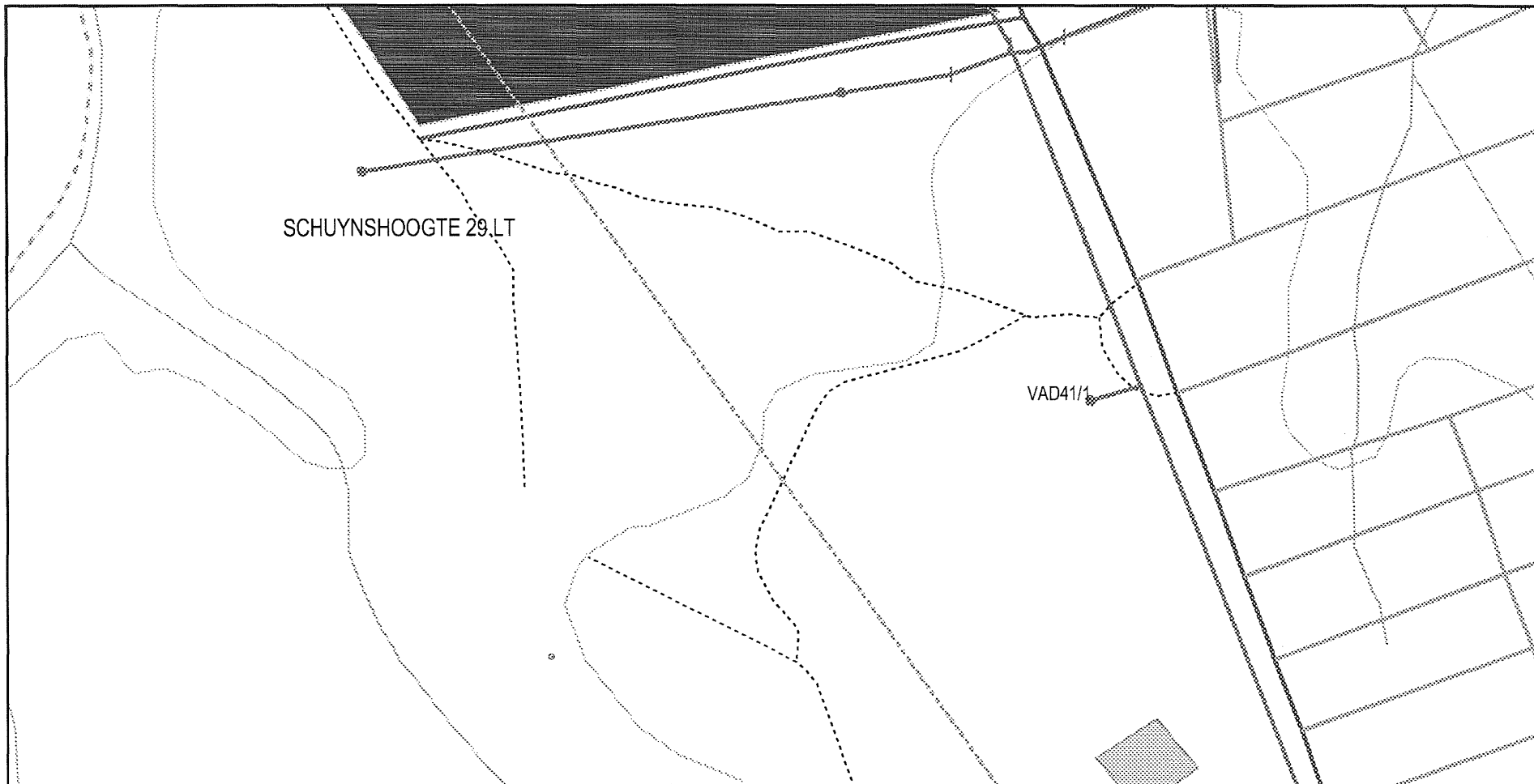
## **7. CONCLUDING REMARKS**

From a heritage perspective, in the absence of any known heritage resources and taking into consideration the socio-economic and other values of the proposed distribution powerline development, there are no barriers to the proposed development. The cultural landscape affected by the powerline does not have significance threshold to call for total protection of the landscape. Nonetheless, detailed monitoring procedures should be scheduled into the project EMP in order to adequately respond to chance finds that may be found accidentally during the power-line development. The proposed project may proceed as planned subject to a heritage monitoring programme. With the constraints herein discussed and appropriate monitoring measures adopted, there are no objections to the proposed development project and we recommend to the heritage authorities to approve the project accordingly.

## 8. REFERENCES

- 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)





Scale: 1:5000

THT17008086

MUSHIANA MT

Owner: \_\_\_\_\_

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

Date: \_\_ 20 \_\_ / \_\_ / \_\_

Eskom: \_\_\_\_\_

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

Date: \_\_ 20 \_\_ / \_\_ / \_\_

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Eskom  
Distribution

Datum/ System	LO ProjectNo	Customer	FdrCod e	Surveyor	PoleNo	Description	Structure Type	Equipment	Y	X	Z	Survey Date	Lat	Long	SW ID
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD40	Existing pole Existing line	None	-143268.053	2558298.2		29/07/2008	23° 07' 05"	30° 23' 55"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41	Existing pole Existing line	None	-143257.037	2558266.862		29/07/2008	23° 07' 04"	30° 23' 54"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/1	New pole T-off	None	-143213.544	2558278.468		29/07/2008	23° 07' 04"	30° 23' 53"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD42	Existing pole Existing line	None	-143238.83	2558215.095		29/07/2008	23° 07' 02"	30° 23' 54"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/20	New pole Bend	None	-142129.7	2559060.955		29/07/2008	23° 07' 30"	30° 23' 15"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/23	New pole Bend	None	-141837.91	2559095.953		29/07/2008	23° 07' 31"	30° 23' 05"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/25	New pole Bend	None	-141667.354	2559110.879		29/07/2008	23° 07' 32"	30° 22' 59"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/10	New pole Bend	None	-142818.453	2558885.344		29/07/2008	23° 07' 24"	30° 23' 39"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/14	New pole Bend	None	-142556.198	2558975.331		29/07/2008	23° 07' 27"	30° 23' 30"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/11	New pole New line	None	-142750.248	2558917.429		29/07/2008	23° 07' 25"	30° 23' 37"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/18	New pole Bend	None	-142257.228	2559053.363		29/07/2008	23° 07' 30"	30° 23' 20"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/2	New pole New line	None	-143179.743	2558287.481		29/07/2008	23° 07' 05"	30° 23' 52"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/6	New pole Bend	None	-143076.75	2558618.003		29/07/2008	23° 07' 15"	30° 23' 48"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/26	New pole Bend	None	-141577.358	2559122.855		29/07/2008	23° 07' 32"	30° 22' 56"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/7	New pole Bend	None	-143027.937	2558692.242		29/07/2008	23° 07' 18"	30° 23' 46"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/16	New pole Bend	None	-142391.008	2559014.652		29/07/2008	23° 07' 29"	30° 23' 24"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/3	New pole New line	None	-143155.214	2558366.189		29/07/2008	23° 07' 07"	30° 23' 51"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/17	New pole New line	None	-142324.616	2559033.875		29/07/2008	23° 07' 29"	30° 23' 22"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/19	New pole New line	None	-142193.64	2559057.173		29/07/2008	23° 07' 30"	30° 23' 17"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/21	New pole New line	None	-142036.532	2559072.112		29/07/2008	23° 07' 31"	30° 23' 12"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/22	New pole New line	None	-141937.327	2559083.969		29/07/2008	23° 07' 31"	30° 23' 08"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/24	New pole New line	None	-141748.797	2559103.806		29/07/2008	23° 07' 32"	30° 23' 02"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/27	New pole New line	None	-141522.829	2559127.142		29/07/2008	23° 07' 32"	30° 22' 54"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/4	New pole New line	None	-143129.19	2558449.709		29/07/2008	23° 07' 10"	30° 23' 50"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/5	New pole New line	None	-143102.502	2558535.374		29/07/2008	23° 07' 13"	30° 23' 49"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/8	New pole Bend	None	-142960.005	2558754.843		29/07/2008	23° 07' 20"	30° 23' 44"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/9	New pole Bend	None	-142886.333	2558822.764		29/07/2008	23° 07' 22"	30° 23' 42"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/12	New pole New line	None	-142685.747	2558936.695		29/07/2008	23° 07' 26"	30° 23' 35"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/13	New pole New line	None	-142623.923	2558955.129		29/07/2008	23° 07' 27"	30° 23' 32"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/15	New pole New line	None	-142472.165	2558995.314		29/07/2008	23° 07' 28"	30° 23' 27"	
WGS84	29	THT17008086	Mbulaheni Theophilus Mushiana	VAD	MATIBE	VAD41/28	New pole Terminal	Transformer (16KVA)	-141469.806	2559130.746		29/07/2008	23° 07' 33"	30° 22' 52"	318977335

