

Heritage Impact Assessment Report

For the proposed 1600m of 22 kV powerline on farm Bosplaat Boshof area, Free State Province, South Africa

**Desktop Heritage Impact Assessment Report
for the proposed 1600m of 22 kV powerline on
farm Bosplaat Boshof area, Free State Province,
South Africa**

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17 June 2021

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ABBREVIATIONS

ASAPA	Association of Southern African Professional Archaeologist
EIA	Environmental Impact Assessment
HIA	Heritage Impact Assessment
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act
NHRA	National Heritage Resource Act
SAHRA	South African Heritage Resource Agency

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DEFINITIONS

Archaeological resources

These include:

- 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;
- Rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- Wrecks, being any vessel or aircraft, or any part thereof which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the republic as defined in the Maritimes Zones Act, and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;
- Features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

Cultural significance

This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

Development

This means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in the change to the nature, appearance or physical nature of a place or influence its stability and future well-being, including:

- Construction, alteration, demolition, removal or change in use of a place or a structure at a place;
- Carrying out any works on or over or under a place;
- Subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- Constructing or putting up for display signs or boards;
- any change to the natural or existing condition or topography of land;
- and any removal or destruction of trees, or removal of vegetation or topsoil.

Environment

The surroundings within which humans exist and that is made up of:

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- a) The land, water and atmosphere of the earth;
- b) Micro-organisms, plant and animal life;
- c) Any part or combination of a) and b) and the interrelationships among and between them; and
- d) The physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being (*i.e.* the social environment)

Natural vegetation

The existing vegetation species, indigenous or otherwise, of trees, shrubs, groundcover, grasses and all other plants found growing on the site.

Site

The piece of land and any other place on, under, over, in or through which the development activity is to be executed or carried out. The site shall include the activity area, internal roads and access route

Heritage resources: This means any place or object of cultural significance.

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1 INTRODUCTION

The author is an in-house qualified archaeologist with a BA Honours in Archaeology from (UNISA). She is appointed as an Environmental Officer by Eskom Distribution Central East Cluster and was requested by Nondwe Khanye from Eskom Distribution Gemma Cluster (email:khanyen@eskom.co.za) to conduct a Desktop Heritage Impact Assessment for the proposed 1600m of 22 kV powerline on farm Bosplaat Boshof area, in the Tolokogo Local Municipality, Lejweleputswa District, Free State Province, South Africa as requested by SAHRA.

2 AIMS WITH THIS REPORT

The following is the aim of the report:-

- To detail a desktop analysis of the status of heritage resources, as outlined in the National Heritage Resources Act, Act No. 25 of 1999, in the area earmarked for the proposed development;
- To establish whether any of the types of heritage resources as outlined in Section 3 of the National Heritage Resources Act, Act No. 25 of 1999 is likely to occur within the project area;
- If the above applies, to determine the significance of these heritage resources and the extent to which they are affected by the proposed development;
- To propose suitable mitigation measures for heritage resources that may be affected or impacted by the proposed development.

3 LEGAL REQUIREMENTS

The Heritage Impact Assessment (HIA) is governed by national legislation as outlined below:

- National Heritage Resources Act, Act No. 25 of 1999 (NHRA) and associated guidelines

Section 3 of the National Heritage Resources Act, Act No 25 of 1999, lists the following as National Estates:-

- (a) places, buildings, structures and equipment of cultural significance; 2
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;

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- (g) graves and burial grounds, including—
- (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including—
- (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).
- (3) Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of—
- (a) its importance in the community, or pattern of South Africa's history;
 - (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
 - (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
 - (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects; 3
 - (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
 - (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;

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(g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;

(h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and

(i) sites of significance relating to the history of slavery in South Africa.

4 METHODOLOGY

The methodology followed in the compilation of the report was as follows:

- A desktop study was done of the development footprint and environmental area.
- A search was done on the SAHRIS database to determine what Archaeological and Heritage Impact studies had been done in the area
- The site was inspected on foot on 14 June 2021 and relevant observations are indicated in this report.
- Consultation was done during the site visit and the two farmers where the development is going to take place were interviewed.

5 PROPOSED ACTIVITY

5.1 Location

The project area is situated west of the town of Boshof in the western Free State and on the border of the Northern Cape Province in the Tokologo Local Municipality within Lejweleputswa District, South Africa. The proposed line will transverse between three farms namely Arauna Farm erf 1050, Willanna Farm erf 1150 and Uitsig Farm 1524.

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Table 1 – Site Location and Property Information

Receiving Environment	Bosplaat Boshof farm 22 kV powerline
Town	Boshof
Responsible Local Authority	Tokologo Local Municipality
Magisterial District	Lejweleputswa
Region	Western Free State on the border of Northern Cape
Country	South Africa
Site centre GPS Coordinates	Start Point “28.45'44.72411” S and “25.20'37.90378”E Pole Number:BPBW275-54-50 End point: “28.45'16.30000” S and “25.21'30.50000”E Pole Number: BPBW275-54-50-16

5.2 Description of the Affected Environment

The receiving environment is generally flat with some dolerite outcrops in the east towards the powerline end point (Figure 3). The line transverse between three farms, the other two farmers (Arauna erf 1050 and Willanna erf 1150) towards the west of the line use it as grazing land for their livestock (Figure 2). The new customer (Uitsig erf 1524) uses the land as a game farm (Figure 3).

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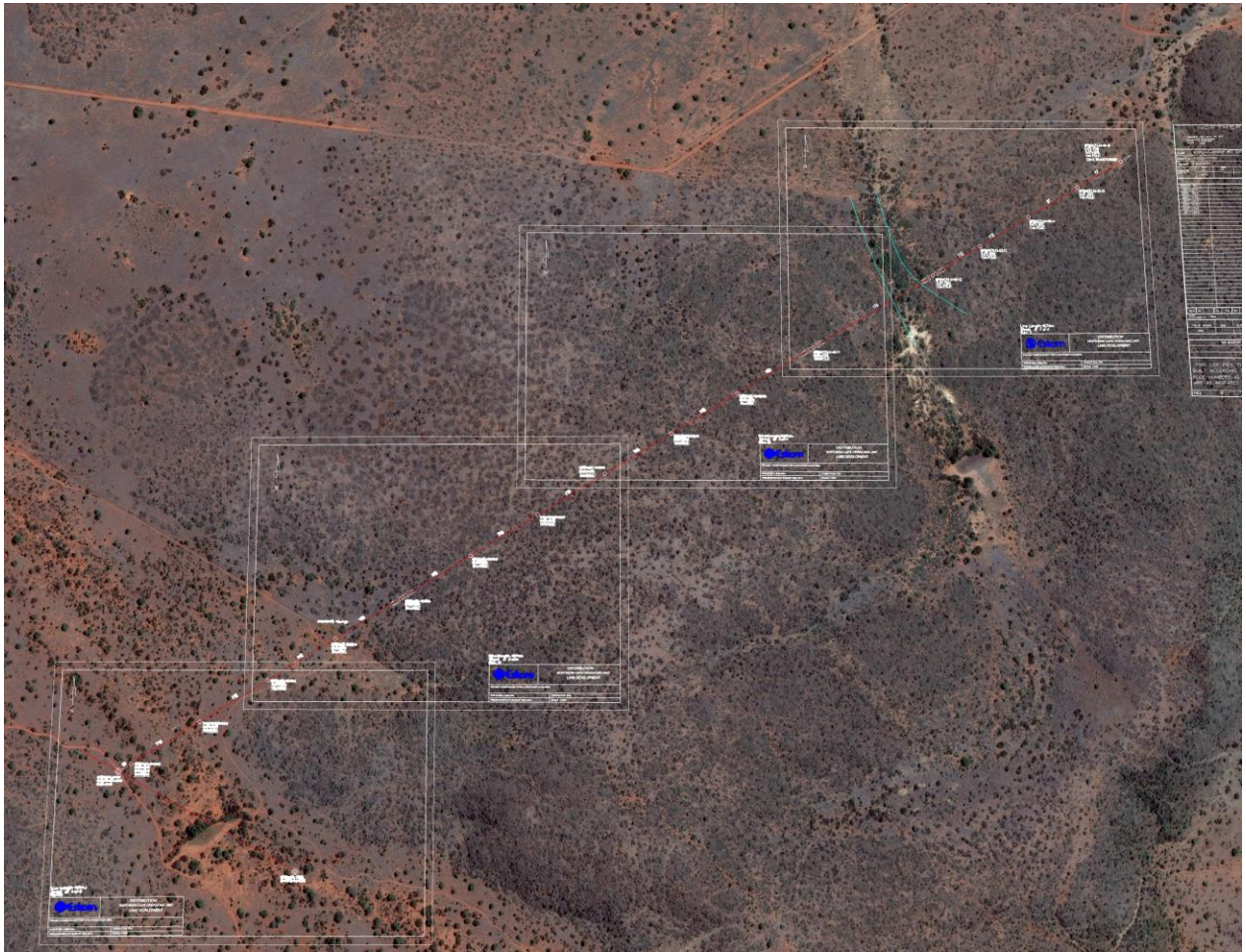


Figure 1: Google Earth map showing the location of the proposed 1600m 22kV Bosplaat Boshof Powerline

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Figure 2: West view route of the proposed line

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Figure 3: The East view of the proposed line

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6 SITE SIGNIFICANCE

Table 2-Site significance classification standards as prescribed by SAHRA

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATIONS
National Significance	Grade 1	High Significance	Conservation; National Site nomination
Provincial Significance	Grade 2	High Significance	Conservation; Provincial Site nomination
Local Significance	Grade 3 A	High Significance	Conservation; Mitigation not advised
Local Significance	Grade 3 B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A	-	High / Medium Significance	Mitigation before destruction
Generally Protected B	-	Medium Significance	Recording before destruction
Generally Protected C	-	Low Significance	Destruction

7 FINDING AND DISCUSSIONS

7.1 Stone Age Period

The Stone Age period is the first and longest part of human history, and gets its name from the use of simple stone tools. The stone Age people were hunters, gatherers and scavengers who were nomadic who used stone. The Stone Age period has been further divided:

Early Stone Age 2 500 000 - 150 000 Before Present

Middle Stone Age 150 000 - 30 000 BP

Late Stone Age 30 000 - until c. AD 200

Middle Age Stone materials have been documented in the study town (Boshof) there were no Stone Age tools that were noted during the survey.

- No material dating to this period was noted on the proposed route.

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7.2 Iron Age Period

Iron Age period is about the Bantu speaking people who brought a new life to Southern Africa. For the first time, people lived in settled communities, cultivated crops such as sorghum, millets, ground beans and cowpeas and they herded cattle as well as sheep and goats. These early farming people also made their own iron tools ,archaeologist called them Iron Age Early Iron Age AD 200 - AD 900

Middle Iron Age AD 900 - AD 1300

Late Iron Age AD 1300 - AD 1830

- No Iron Age artefacts or settlement were noted on the proposed route.

7.3 Historical Period

The arrival of European settlers in the interior is accompanied by significant events. These settlers were largely self-sufficient, relying on cattle/sheep farming and also hunting. Few towns were established and farming remains the most dominant economy. Boshof was established in March 1856 on the farm Van Wyksvlei by Dr Andrew Murray. The farm was purchased from a Griqua, Dawid Danster by a farmer, D S Fourie in 1839 and sold to the DR Church in 1855. The Town was named in honour of Jacobus Nicolas Boshof (1808-18881) who was the second president of the Free State from 1855 -1859.

Boshof is a farming community and the main activity is sheep, cattle and game farming.

- No historical structure or settlement was noted on the proposed line

7.4 Graveyard/ Burial ground

Although no burial sites or graves were identified in the area of the proposed line, there is always the possibility of encountering previously unidentified burial sites in any landscape in South Africa.

- There was no place of burial or graveyard noted in the area proposed line.

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8 RECOMMENDATIONS

It is recommended that the responsible authorities, the South Africa Heritage Resources Agency (SAHRA) grant the project a Positive Review Comment.

The project will not impact on any archaeological or general heritage resources sites.

9 ACKNOWLEDGEMENT

I thank Boitumelo Magau (Surveyor) who accompanied and showed me the various areas the powerline will be running through.

10 CONCLUSIONS

In conclusion, no significant heritage traces were found that are considered to require further mitigation.

The loss of heritage resources is therefore assessed to be of **Low** significance with and without the implementation of mitigations

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REFERENCES

- Beaumont, P.B. and J.C. Vogel. [On a timescale for the past million years of human history in central South Africa](#). South African Journal of Science. 102:217 – 227
- Huffman, T.N. 2007. Handbook to the Iron Age. The Archaeology of Pre-Colonial Farming Societies in Southern Africa. Durban University of Kwazulu-Natal Press.
- Magoma E. 2013. Phase 1 Archaeological Impact Assessment of the Proposed Development of the Boshof Combined School in the Tokologo Municipality, Lejweleputswa District Municipality, Free State Province.
- Matenga, E. 2019. Phase 1 Heritage Impact Assessment (Including Paleontological Assessment) Requested in Terms of Section 39 of the National Heritage Resources Act No 25/1999 for a Mining Right on Portion 4 of the Farm Blaauwboschfontein 229, Boshof District, Free State Province.
- Mitchell, P. 2002. The Archaeology of Southern Africa. Cambridge: Cambridge University Press.
- Morris, D. 2013. Proposed Blackwood Solar Energy Facility on Portion of Pandamsfontein 1593, South west of Kimberley, in the Free State: Scoping phase Heritage Input.
- Tomase, N. 2018. Proposed Construction of 15.5km single-circuit BPBH and KDLO interconnector 22kV powerline near Boshof
- Rossouw, L. 2017. Phase 1 Archaeological Impact Assessment for mining permit application on the Remainder of the farm Speculatie 217 (now Rooifontein 1722), Boshof District, Free State Province.
- van Schalkwyk, L. 2018. Environmental Impact Assessment second draft EIA for the proposed Construction, Operation and Decommissioning of a Seawater Reverse Osmosis Plant and Associated infrastructure in Tongaat, Kwazulu-Natal
- Vollenhoven, AC. 2014. A Report on a Heritage Impact Assessment for the Proposed Eskom Kimberley Strengthening Phase 4 Project between the Beta and Boundary Substation in the Northern Cape and Free State Province

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Website

https://www.hwc.org.za/sites/default/files/2_3_6%20Grading_Implications%20and%20Management_Approved.pdf

Accessed June 2021

https://en.wikipedia.org/wiki/Battle_of_Boshof

Accessed June 2021

www.boshof.co.za/History.htm

Accessed June 2021

Evans, M.F.M. 1999. **Encyclopedia of the Boer War**. British Library Cataloguing in Publication Data. <http://www.sahistory.org.za/archive/encyclopedia-boer-war-martin-f-marix-evans>.

Accessed June 2021.

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