Heritage impact assessment report for the PROPOSED ESTABLISHMENT OF THE VANGUARD SOLAR KLEINBEGIN PV POWER PLANT, !KHEIS LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE

# HERITAGE IMPACT ASSESSMENT REPORT FOR THE PROPOSED ESTABLISHMENT OF THE VANGUARD SOLAR KLEINBEGIN PV POWER PLANT, !KHEIS LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE

**Report No:** 2011/JvS/075

Status: Final Revision No: 0

Date: September 2011

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# Declaration:

I, J.A. van Schalkwyk, declare that I do not have any financial or personal interest in the proposed development, nor its developers or any of their subsidiaries, apart from the provision of heritage assessment and management services.

J A van Schalkwyk (D Litt et Phil)

Heritage Consultant September 2011

# **EXECUTIVE SUMMARY**

HERITAGE IMPACT ASSESSMENT REPORT FOR THE PROPOSED ESTABLISHMENT OF THE VANGUARD SOLAR KLEINBEGIN PV POWER PLANT, !KHEIS LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE

Vanguard Solar (Pty) Ltd proposes to develop a renewable energy facility consisting of a photovoltaic (PV) solar energy component, as well as well as the associated infrastructure on the Farm Kleinbegin 115, approximately 45km south-east of Upington in the Northern Cape Province.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **Savannah Environmental (Pty) Ltd** to conduct a Heritage Impact Assessment (HIA) to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the photovoltaic plant and associated infrastructure.

Only three stone tools were recovered during the survey. This represents a very low density of objects, probably 1 in 500 m<sup>2.</sup> As the stone tools have a low density and as they are surface finds, i.e. outside their original context, they are viewed as having a low significance.

 As no sites, features or objects of cultural heritage significance were identified in the study area there would be no impact from the proposed development. No mitigation is therefore required.

Therefore, from a heritage point of view it is recommended that the proposed development be allowed to continue. However, it is requested that should archaeological sites or graves be exposed during construction work, it must immediately be reported to a heritage practitioner so that an investigation and evaluation of the finds can be made.

J A van Schalkwyk Heritage Consultant September 2011

ii

TABLE OF CONTENTS	
<del></del>	Page
EXECUTIVE SUMMARY	II
TABLE OF CONTENTS	III
LIST OF FIGURES	III
GLOSSARY OF TERMS AND ABBREVIATIONS	IV
1. INTRODUCTION	1
2. TERMS OF REFERENCE	1
3. HERITAGE RESOURCES	2
4. STUDY APPROACH AND METHODOLOGY	4
5. DESCRIPTION OF THE AFFECTED ENVIRONMENT	4
6. SITE SIGNIFICANCE AND ASSESSMENT	10
7. CONCLUSIONS	11
8. REFERENCES	13
APPENDIX 1: CONVENTIONS USED TO ASSESS THE SIGNIFICANCE OF HEI	
APPENDIX 2. RELEVANT LEGISLATION	15
LIST OF FIGURES	
<u> </u>	Page
Fig. 1. Location of the study area in regional context	•
Fig. 2. Views over the study area	
Fig. 3. Detail of the study area and layout of the project	
Fig. 4. Examples of farmsteads and farming related features in the region	
Fig. 5. Example of a cemetery identified in the region	
Fig. 6. The stone tools that were identified	
rig. o. The stone tools that were identified	9

# **GLOSSARY OF TERMS AND ABBREVIATIONS**

#### **TERMS**

**Study area:** Refers to the entire study area as indicated by the client in the accompanying Fig. 1 & 2.

**Stone Age:** The first and longest part of human history is the Stone Age, which began with the appearance of early humans between 3-2 million years ago. Stone Age people were hunters, gatherers and scavengers who did not live in permanently settled communities. Their stone tools preserve well and are found in most places in South Africa and elsewhere.

Early Stone Age 2 000 000 - 150 000 Before Present

Middle Stone Age 150 000 - 30 000 BP Late Stone Age 30 000 - until c. AD 200

**Iron Age:** Period covering the last 1800 years, when new people brought a new way of life to southern Africa. They established settled villages, cultivated domestic crops such as sorghum, millet and beans, and they herded cattle as well as sheep and goats. These people, according to archaeological evidence, spoke early variations of the Bantu Language. Because they produced their own iron tools, archaeologists call this the Iron Age.

Early Iron Age AD 200 - AD 900
Middle Iron Age AD 900 - AD 1300
Late Iron Age AD 1300 - AD 1830

**Historical Period**: Since the arrival of the white settlers - c. AD 1840 - in this part of the country

### **ABBREVIATIONS**

ADRC Archaeological Data Recording Centre

ASAPA Association of Southern African Professional Archaeologists

BP Before Present

CS-G Chief Surveyor-General

EIA Early Iron Age
ESA Early Stone Age
LIA Late Iron Age
LSA Later Stone Age

HIA Heritage Impact Assessment

MSA Middle Stone Age

NASA National Archives of South Africa
NHRA National Heritage Resources Act

PHRA Provincial Heritage Resources Agency
SAHRA South African Heritage Resources Agency

HERITAGE IMPACT ASSESSMENT REPORT FOR THE PROPOSED ESTABLISHMENT OF THE VANGUARD SOLAR KLEINBEGIN PV POWER PLANT, //KHARA HAIS LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE

# 1. INTRODUCTION

Vanguard Solar (Pty) Ltd proposes to develop a renewable energy facility consisting of a photovoltaic (PV) solar energy component, as well as well as the associated infrastructure on the Farm Kleinbegin 115, approximately 45km south-east of Upington in the Northern Cape Province.

South Africa's heritage resources, also described as the 'national estate', comprise a wide range of sites, features, objects and beliefs. According to Section 27(18) of the National Heritage Resources Act (NHRA), Act 25 of 1999, no person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **Savannah Environmental (Pty) Ltd** to conduct a Heritage Impact Assessment (HIA) to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the photovoltaic plant and associated infrastructure.

This HIA report forms part of the Environmental Impact Assessment (EIA) as required by the EIA Regulations in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and is intended for submission to the South African Heritage Resources Agency (SAHRA).

# 2. TERMS OF REFERENCE

# 2.1 Scope of work

The aim of this HIA, broadly speaking, is to determine if any sites, features or objects of cultural heritage significance occur within the boundaries of the area where it is planned to develop the transmission line.

The scope of work for this study consisted of:

- Conducting of a desk-top investigation of the area, in which all available literature, reports, databases and maps were studied.
- A visit to the proposed development area.

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development area;
- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources;

• Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

# 2.2 Limitations

• It must be kept in mind that by its very nature, archaeological sites occur below ground surface, making its detection is some cases difficult.

Table 1: Applicable category of heritage impact assessment study and report.

study Heritage The			
Heritage The		involved	response
Impact about approble (involution of the impact approble of the impa	e aim of a full HIA investigation is to vide an informed heritage-related opinion but the proposed development by an propriate heritage specialist. The ectives are to identify heritage resources rolving site inspections, existing heritage a and additional heritage specialists if sessary); assess their significances; ess alternatives in order to promote itage conservation issues; and to assess acceptability of the proposed relopment from a heritage perspective.  The result of this investigation is a heritage sence/ absence of heritage resources and we to manage them in the context of the posed development.  The pending on SAHRA's acceptance of this port, the developer will receive permission proceed with the proposed development, condition of successful implementation of	Provincial Heritage Resources Authority  SAHRA Archaeology, Palaeontolog y and Meteorites Unit	response  Comments on built environment and decision to approve or not  Comments and decision to approve or not

# 3. HERITAGE RESOURCES

# 3.1 The National Estate

The NHRA (No. 25 of 1999) defines the heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations that must be considered part of the national estate to include:

- places, buildings, structures and equipment of cultural significance;
- places to which oral traditions are attached or which are associated with living heritage;
- historical settlements and townscapes;

- landscapes and natural features of cultural significance;
- geological sites of scientific or cultural importance;
- archaeological and palaeontological sites;
- · graves and burial grounds, including
  - o ancestral graves;
  - o royal graves and graves of traditional leaders;
  - o graves of victims of conflict;
  - graves of individuals designated by the Minister by notice in the Gazette;
  - historical graves and cemeteries; and
  - other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- sites of significance relating to the history of slavery in South Africa;
- · movable objects, including
  - objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens:
  - objects to which oral traditions are attached or which are associated with living heritage;
  - o ethnographic art and objects;
  - military objects;
  - objects of decorative or fine art;
  - o objects of scientific or technological interest; and
  - 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).

# 3.2 Cultural significance

In the NHRA, Section 2 (vi), it is stated that "cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. This is determined in relation to a site or feature's uniqueness, condition of preservation and research potential.

According to Section 3(3) of the NHRA, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of

- its importance in the community, or pattern of South Africa's history;
- its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- 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
- sites of significance relating to the history of slavery in South Africa.

A matrix was developed whereby the above criteria were applied for the determination of the significance of each identified site (see Appendix 1). This allowed some form of control over the application of similar values for similar sites.

#### 4. STUDY APPROACH AND METHODOLOGY

# 4.1 Extent of the Study

This survey and impact assessment covers the area as presented in Section 5 and as illustrated in Figures 1 - 2.

# 4.2 Methodology

# 4.2.1 Preliminary investigation

# 4.2.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. The following sources were consulted – Hocking n.d.; Humphreys 1976; Raper 2004; Rudner 1953; Rudner & Rudner 1968; Wilson & Anhaeusser 1998.

 Information on events, sites and features in the larger region were obtained from these sources.

#### 4.2.1.2 Data bases

The Heritage Atlas Database, the Environmental Potential Atlas, the Chief Surveyor General (CS-G) and the National Archives of South Africa (NASA) were consulted.

 Database surveys produced a number of sites located in the larger region of the proposed development.

# 4.2.1.3 Other sources

Aerial photographs and topocadastral and other maps were also studied - see the list of references below.

Information of a very general nature was obtained from these sources.

# 4.2.2 Field survey

The area that had to be investigated was identified by **Savannah Environmental (Pty) Ltd** by means of maps. During the site visit the heritage consultant was accompanied by Mr K. Kotze, brother of the farm owner, who explained the site layout and recent changes in the development that were decided on.

The PV site was surveyed by walking four transects across it, whereas the access road and power line route were walked as a linear survey.

# 5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

#### 5.1 Site location and description

The study area is an irregular shaped section of land located approximately 60 km to the southeast of the town of Upington in the Northern Cape Province (Fig. 1 & 2). It consists of Portions of the Farm Kleinbegin 115.

The geology is made up of schist, with some dolerite intrusions to the west of the study area. The original vegetation is classified as Karroid Kalahari Bushveld in the north, changing to Orange River Nama Karoo in the south of the study area. The topography is classified as gently rolling plains.

As a result of the above environmental factors the following aspects can be seen to dominate in the environment:

- Plains which make up the largest section of the study area. Water sources and potential shelter is limited.
- A number of small streambeds cross through the area, all carrying water only during the rainy season.
- This landscape has always been sparsely populated, largely due to the lack of open water. The Orange River is approximately 25 km to the east of the study area.

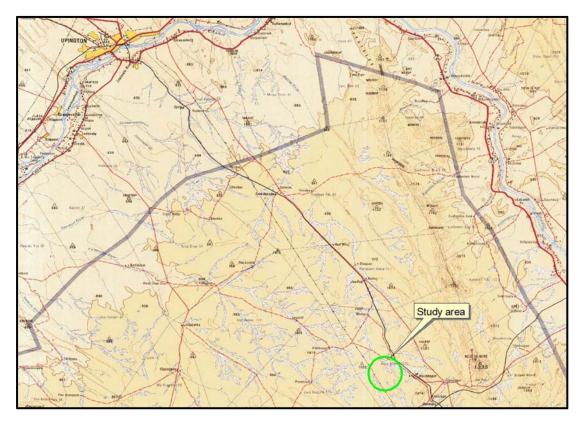


Fig. 1. Location of the study area in regional context. (Map 2820: Chief Surveyor-General)



Fig. 2. Views over the study area.

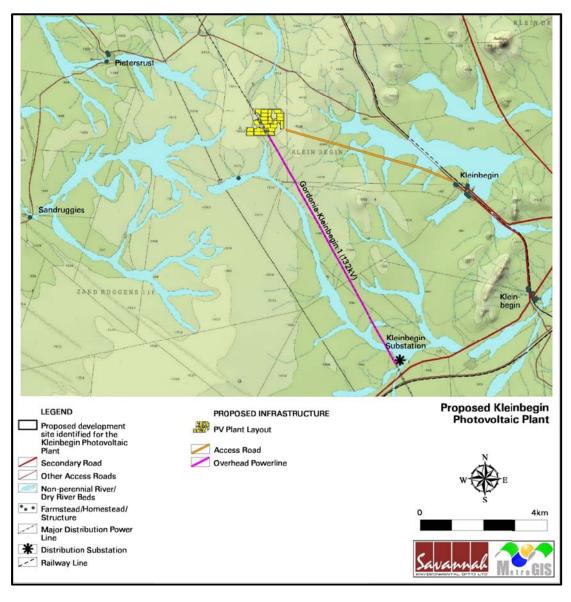


Fig. 3. Detail of the study area and layout of the project.

# 5.2 Development overview

It is proposed to develop a renewable energy facility that would consist of the following elements:

- The photovoltaic plant;
- The power line from the PV plant to the substation;
- An access route, which is to go from the old Kleinbegin station towards the site.
   According to Mr Kotze it was decided to shift the route slightly to the west in order to follow the existing line fence rather than go through the veld.

# 5.3 Overview of the region

The cultural landscape qualities of the larger region essentially consist of a single component, which is a rural area in which the human occupation is made up of a pre-colonial (Stone Age) occupation and a much later colonial (farmer) component.

#### Stone Age

Surveys done for example by Sampson (1985) to the south-east of the study area indicated a rich legacy in Stone Age sites in the Karoo. However, the region of the study area seems to have been a bit more marginal as no major sites or traditions have been identified here as yet.

Occupation by early humans would probably date to the Middle Stone Age and would consist of open sites in the vicinity of stream beds or at hills and outcrops. Population density might have increased during the Later Stone Age and people would have occupied rock shelters where available as well as open sites. During this later period they also produced rock art and Rudner and Rudner (1968) indicates that engravings occur to the south and west of the study area, and paintings to the south.

Rudner & Rudner (1968) describe the area as one that was mainly visited by bands of hunters during the good rain years, until it became an area of retreat for Korana people with their cattle and flocks of sheep. These people were then later replaced by white farmer that entered into the region.

# Historic period

Not many farmsteads occur in the region as most of the original farms were very large, requiring few of these to be developed. In the vicinity of the river, with the development of intensive irrigation farming, many farmsteads and other features were developed. These were usually adapted to accommodate the specific farming requirements of the specialised agricultural activities.

The Title Deed of the farm Kleinbegin 115 dates to November 1892, but unfortunately it does not state in whose favour it was. However, according to Mr Kotze senior, the Kotze family was the first registered owners of the farm and some of the farming related structures date to this period. The current farmhouse on this section of the farm Kleinbegin was built in 1925.

Some early asbestos and uranium mining activities took place on different sections of the farm (Wilson & Anhaeusser 1998). Unfortunately it is not clear exactly when and where these activities occurred, but it seems to be on the eastern section of the farm outside the proposed development area.

# Farmsteads

Farmsteads are complex features in the landscape, being made up of different yet interconnected elements. Typically these consist of a main house, gardens, outbuildings, sheds and barns, with some distance from that labourer housing and various cemeteries. In addition roads and tracks, stock pens and wind mills complete the setup. An impact on one element therefore impacts on the whole.

NHRA Category	Buildings, structures, places and equipment of cultural significance
Protection status	
General Protection	- Section 34: Structures older than 60 years





Fig. 4. Examples of farmsteads and farming related features in the region.

# Cemeteries

A number of informal, i.e. without fencing, is expected to occur sporadically all over, but probably in the vicinity of the various farmsteads. Many might also have been forgotten, making it very difficult to trace the descendants in a case where the graves are to be relocated.

Most of these cemeteries, irrespective of the fact that they are for land owners or farm labourers (with a few exceptions where they were integrated), are family orientated. They are therefore serve as important 'documents' linking people directly by name to the land.

NHRA Category	Graves, cemeteries and burial grounds
Protection status	
General Protection	- Section 36: Graves or burial grounds



Fig. 5. Example of a cemetery identified in the region.

# 5.4 Identified sites

The following sites, features and objects of cultural significance have been identified in the study area.

# 5.4.1 Stone Age

Archaeological sites

NHRA Category	Archaeological and palaeontological sites
Protection status	
General Protection	- Section 35: Archaeology, palaeontology and meteorites

		•	
Location			
Description			
Only three stone tools were recovered during the survey. One is a side-struck flake tool of quartzite, probably dating to the Early or Middle Stone Age. The other is a core of quartz and the last is a quartzite flake tool. Both of the latter date to the Middle Stone Age. This represents a very low density of objects, probably 1 in 500 m <sup>2</sup> .			
Significance	Low on a regional level – Gr	ade III	
Mitigation			
No further action necessary			



Fig. 6. The stone tools that were identified.

# 5.4 2 Iron Age

• No sites, features or objects dating to the Iron Age were identified in the study area.

# 5.4.3 Historic period

 No sites, features or objects dating to the historic period were identified in the study areas.

#### 6. SITE SIGNIFICANCE AND ASSESSMENT

# 6.1 Heritage assessment criteria and grading

The NHRA stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act:

- **Grade I**: Heritage resources with qualities so exceptional that they are of special national significance;
- Grade II: Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; and
- Grade III: Other heritage resources worthy of conservation on a local authority level.

The occurrence of sites with a Grade I significance will demand that the development activities be drastically altered in order to retain these sites in their original state. For Grade II and Grade III sites, the applicable of mitigation measures would allow the development activities to continue.

# 6.2 Statement of significance

A matrix was developed whereby the above criteria, as set out in Sections 3(3) and 7 of the NHRA, No. 25 of 1999, were applied for each identified site (see Appendix 1). This allowed some form of control over the application of similar values for similar sites. Three categories of significance are recognized: low, medium and high. In terms of Section 7 of the NHRA, all the sites currently known or which are expected to occur in the study area are evaluated to have a grading as identified below.

Table 2. Summary of identified heritage resources in the study area.

Identified heritage resources	
Category, according to NHRA	Identification/Description
Formal protections (NHRA)	
National heritage site (Section 27)	None
Provincial heritage site (Section 27)	None
Provisional protection (Section 29)	None
Place listed in heritage register (Section 30)	None
General protections (NHRA)	
structures older than 60 years (Section 34)	None
archaeological site or material (Section 35)	Yes
palaeontological site or material (Section 35)	None
graves or burial grounds (Section 36)	None
public monuments or memorials (Section 37)	None
Other	
Any other heritage resources (describe)	None

• As the stone tools have a low density and as they are surface finds, i.e. outside their original context, they are viewed as having a low significance.

# 6.3 Impact assessment

Based on current information regarding sites in the surrounding area, all sites expected to occur in the study region are judged to have Grade III significance.

 As the identified tools are viewed as having a low significance, there would be no impact from the proposed development. No mitigation is therefore required.

Nature: The potential impact of the construction of the PV panels on above and below				
ground archaeology.				
	Without Mitigation	With Mitigation		
Extent	Local (1)	Local (1)		
Duration	Permanent (5)	Permanent (5)		
Magnitude	Minor (2)	Minor (2)		
Probability	Unlikely (2)	Unlikely (2)		
Significance	Low < 30	Low < 30		
Status (positive or negative)	Negative	Neutral		
Reversibility	No	No		
Irreplaceable loss of resources?	No, but in some cases, yes	No		
Can impacts be mitigated?	Yes			

# Mitigation

No mitigation is proposed before construction starts because the archaeological remains (if any) are of low significance (excluding human remains). However, if concentrations of archaeological materials are exposed then all work must stop for an archaeologist to investigate (see below).

If any human remains (or any other concentrations of archaeological heritage material) are exposed during construction, all work must cease and it must be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources Agency, so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to investigate and to remove/collect such material. Recommendations will follow from the investigation.

Cumulative impacts: N/A Residual impacts: N/A

# 7. CONCLUSIONS

The aim of this survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area of the proposed development, to assess the significance thereof and to consider alternatives and plans for the mitigation of any adverse impacts.

Only three stone tools were recovered during the survey. This represents a very low density of objects, probably 1 in 500 m<sup>2.</sup> As the stone tools have a low density and as they are surface finds, i.e. outside their original context, they are viewed as having a low significance.

 As no sites, features or objects of cultural heritage significance were identified in the study area there would be no impact from the proposed development. No mitigation is therefore required.

Therefore, from a heritage point of view it is recommended that the proposed development be allowed to continue. However, it is requested that should archaeological sites or graves be exposed during construction work, it must immediately be reported to a heritage practitioner so that an investigation and evaluation of the finds can be made.

#### 8. REFERENCES

# 8.1 Data bases

Chief Surveyor General
Environmental Potential Atlas, Department of Environmental Affairs and Tourism.
Heritage Atlas Database, Pretoria.
National Archives of South Africa
SAHRA Archaeology and Palaeontology Report Mapping Project (2009)

# 8.2 Literature

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

Hocking, A. n.d. Kaias and Cocopans: the story of mining in South Africa's Northern Cape. Johannesburg: Hollards.

Humphreys, A.J.B. 1976. Note on the southern limits of Iron Age settlement in the Northern Cape. *South African Archaeological Bulletin* 31(121/122): 54-57

Raper, P.E. 2004. South African place names. Johannesburg: Jonathan Ball Publishers.

Rudner, I. 1953. Decorated ostrich egg-shell and stone implements from the Upington area. *South African Archaeological Bulletin*. 8(31): 82-84.

Rudner, J. & Rudner, I. 1968. Rock-art in the Thirstland areas. South African Archaeological Bulletin 23:75-89.

Wilson, M.G.C. & Anhaeusser, C.R. 1998. *The Mineral Resources of South Africa*. Sixth Edition. Handbook 16. Pretoria: Council for Geosciences.

# 8.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2821DC Google Earth

#### 8.4 Interviews

Mr B. Kotze, father of the owner of the farm Mr K. Kotze, brother to the owner of the farm

# APPENDIX 1: CONVENTIONS USED TO ASSESS THE SIGNIFICANCE OF HERITAGE RESOURCES

# **Significance**

According to the NHRA, Section 2(vi) the **significance** of heritage sites and artefacts is determined by it aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technical value in relation to the uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

Matrix used for assessing the significance of each identified site/feature

1. Historic value			
Is it important in the community, or pattern of history			
Does it have strong or special association with the life of	r work of	a person.	
group or organisation of importance in history		а ролоси,	
Does it have significance relating to the history of slavery			
2. Aesthetic value			
It is important in exhibiting particular aesthetic character	eristics va	lued by a	
community or cultural group			
3. Scientific value			
Does it have potential to yield information that will	Contribu	ite to an	
understanding of natural or cultural heritage			
Is it important in demonstrating a high degree of cr	eative or	technical	
achievement at a particular period			
4. Social value			
Does it have strong or special association with a parti-	cular com	nmunity or	
cultural group for social, cultural or spiritual reasons		•	
5. Rarity			
Does it possess uncommon, rare or endangered aspects	of natural	or cultural	
heritage			
6. Representivity			
Is it important in demonstrating the principal characteristics of a particular			
class of natural or cultural places or objects			
Importance in demonstrating the principal characterist			
landscapes or environments, the attributes of which i	dentify it	as being	
characteristic of its class			
Importance in demonstrating the principal characteristics of human activities			
(including way of life, philosophy, custom, process, land-u			
or technique) in the environment of the nation, province, region or locality.			
7. Sphere of Significance	High	Medium	Low
International			
National			
Provincial			
Regional			
Local			
Specific community			
8. Significance rating of feature			
1. Low			
2. Medium			
3. High			

#### **APPENDIX 2. RELEVANT LEGISLATION**

All archaeological and palaeontological sites, and meteorites are protected by the National Heritage Resources Act (Act no 25 of 1999) as stated in Section 35:

- (1) Subject to the provisions of section 8, the protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources authority: Provided that the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.
- (2) Subject to the provisions of subsection (8)(a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.
- (3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.
- (4) No person may, without a permit issued by the responsible heritage resources authority-
  - (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
  - (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
  - (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
  - (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

In terms of cemeteries and graves the following (Section 36):

- (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.
- (2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.
- (3) No person may, without a permit issued by SAHRA or a provincial 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, 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.
- (4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and reinterment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.