Cultural heritage impact assessment for the PROPOSED DEVELOPMENT OF THE MZINTI FEEDLOT, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT OF THE MZINTI FEEDLOT, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE

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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

July 2015

EXECUTIVE SUMMARY

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT OF THE MZINTI FEEDLOT, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE

It is proposed to develop a cattle feedlot for sustainable livestock production and fattening to market at the Nkomazi Red Meat Abattoir, as well as to create employment amongst the local youth whilst sustaining their livelihood.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by Royal HaskoningDHV to conduct a cultural heritage assessment to determine if the proposed development would have an impact on any sites, features or objects of cultural heritage significance.

The cultural landscape qualities of the region is made up of a pre-colonial element consisting of Stone Age and Iron Age occupation, as well as a much later colonial (farmer) component, which also gave rise to an urban environment.

Impact analysis of cultural heritage resources under threat of the proposed development, are based on the present understanding of the development.

 As no heritage sites occur in the study area, there would be no impact resulting from the proposed development.

Therefore, from a heritage point of view we recommend that the proposed development can continue on condition of acceptance of the above mitigation measure. We also recommend that if archaeological sites or graves are exposed during development activities, it should immediately be reported to a heritage consultant so that an investigation and evaluation of the finds can be made.

J A van Schalkwyk Heritage Consultant

July 2015

TECHNICAL SUMMARY

Property details						
Province	Мρι	ımalanga				
Magisterial district	Kan	hlushwa				
District municipality	Ehla	anzeni South				
Topo-cadastral map	253	1DA				
Closest town	Mzir	nti				
Farm name & no.	Gov	ernment land				
Portions/Holdings						
Coordinates	Cen	tre points (app	roximate)			
	No	Latitude	Longitude	No	Latitude	Longitude
	1	S 25.68495	E 31.72038	2	E 25.68469	E 31.72311

Development criteria in terms of Section 38(1) of the NHR Act		
Construction of road, wall, power line, pipeline, canal or other linear form of		
development or barrier exceeding 300m in length		
Construction of bridge or similar structure exceeding 50m in length		
Development exceeding 5000 sq m		
Development involving three or more existing erven or subdivisions	No	
Development involving three or more erven or divisions that have been	No	
consolidated within past five years		
Rezoning of site exceeding 10 000 sq m	Yes	
Any other development category, public open space, squares, parks, recreation	No	
grounds		

Development	
Description	Development of a cattle feedlot
Project name	Mzinti Feedlot

Land use	
Previous land use	Farmland
Current land use	Farmland (Grazing)

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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

Later 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. As 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

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

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT OF THE MZINTI FEEDLOT, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE

1. INTRODUCTION

It is proposed to develop a cattle feedlot for sustainable livestock production and fattening to market at the Nkomazi Red Meat Abattoir, as well as to create employment amongst the local youth whilst sustaining their livelihood.

South Africa's heritage resources, also described as the 'national estate', comprise a wide range of sites, features, objects and beliefs. However, according to Section 27(18) of the National Heritage Resources Act (NHRA), No. 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 Royal HaskoningDHV to conduct a cultural heritage assessment to determine if the proposed development would have an impact on any sites, features or objects of cultural heritage significance.

This 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

This report does not deal with development projects outside of or even adjacent to the study area as is presented in Section 5 of this report. The same holds true for heritage sites, except in a generalised sense where it is used to create an overview of the heritage potential in the larger region.

2.1 Scope of work

The aim of this study 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 feedlot.

This includes:

- Conducting a desk-top investigation of the area;
- A visit to the proposed development site,

The objectives were to

 Identify possible archaeological, cultural and historic sites within the proposed development areas;

- 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 Assumptions and Limitations

The investigation has been influenced by the following factors:

- It is assumed that the description of the proposed project, as provided by the client (Royal HaskoningDHV 2015), is accurate.
- No subsurface investigation (i.e. excavations or sampling) were undertaken, since a permit from SAHRA is required for such activities.
- It is assumed that the public consultation process undertaken as part of the Environmental Impact Assessment (EIA) is sufficient and that is does not have to be repeated as part of the heritage impact assessment.
- The unpredictability of buried archaeological remains.
- This report does not consider the palaeontological potential of the site.

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;
 - royal graves and graves of traditional leaders;
 - graves of victims of conflict;
 - oraves 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;
 - 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 identified 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 Figure 3.

4.2 Methodology

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. In this regard, various anthropological, archaeological and historical sources were consulted.

 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 and the National Archives of South Africa 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 site was visited on 24 July 2015. The *kml* file indicating the development area was loaded onto a Nexus 7 tablet. This was used in Google Earth during the field survey to access the area.

The site was surveyed by walking transects across it, stopping to investigate features such as outcrops - see Fig. 1 below. As this is winter, the grass cover is down, making archaeological visibility good. In addition, Mr Mahlalela (082 522 3165), one of the beneficiaries and coowners of the property accompanied the consultant to explain the site and the proposed development.

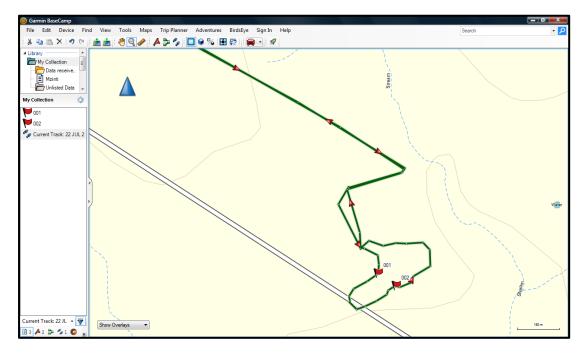


Fig. 1. Map indicating the track log of the field survey.

4.2.3 Documentation

All sites, objects and structures that are identified are documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities are determined by means of the *Global Positioning System* (GPS) and plotted on a map. This information is added to the description in order to facilitate the identification of each locality.

The track log and identified sites were recorded by means of a Garmin Oregon 550 handheld GPS device. Photographic recording was done by means of a Canon EOS 550D digital camera.

Map datum used: Hartebeeshoek 94 (WGS84).

5. PROJECT LOCATION AND DESCRIPTION

5.1 Site location

The proposed development is to take place approximately 30 km southeast of the town of Malelane in Mpumalanga Province (Fig. 2). For more information please see the Technical Summary presented above (p. iii).

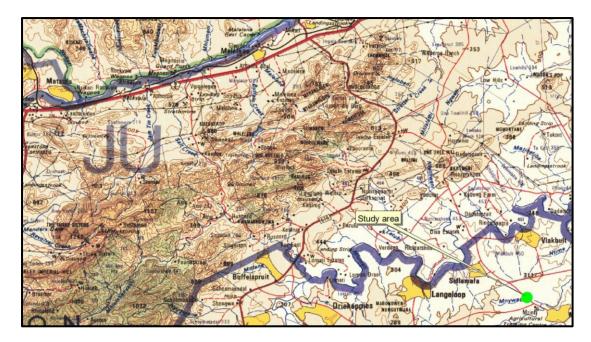


Fig. 2. Location of the study area in regional context. (Map 2530: Chief Surveyor-General)

5.2 Project description

The beneficiaries of the proposed development require assistance from the Department of Agriculture, Rural Development, Land and Environmental Affairs to develop their farm and develop sustainable Livestock Production and Fattening to market the Nkomazi Red Meat

Abattoir, constructed to create employment amongst the local youth whilst sustaining their livelihood. The scope of the project includes the following:

- Feedlot Pens to accommodate 500 Cattle @ 9-15m² per animal
- Hospital and Acclimatization Pens 100 Cattle @ 9-15m² per animal
- Handling Facility with offload, on load, handle, receive, sort 2m²/animal
- Manure Lagoons
- Carcass Disposal Trench
- Diversion banks, earthworks, road networks etc.
- Spray Race
- Silage Bunkers
- Water Networks, Elevated tanks, 75000l Total
- Feed troughs and Aprons, Water Troughs, Shades etc.
- · Feed Storage and Processing Unit

In order to facilitate this development two sections of land were identified, both of which are to be investigated for the purpose of the proposed development. The most suitable site would then be selected for the development of the facility (Fig. 3).



Fig. 3. Layout of the proposed development – indicated on the alternative sites

6. DESCRIPTION OF THE AFFECTED ENVIRONMENT

6.1 The environment

The geology of the region is made up of quartz monzonite and the topography is described as moderately undulating plains. The Mzinti River is located approximately 1,5 km south of the study area. The original vegetation is classified as Mixed Lowveld Bushveld.

The original road leading from Malelane to Mzinti passed through the study area, in fact cutting it in two. However, this has been relocated to the east a few years ago when it was tarred, making the road shorter and straighter.

The current land use is grazing for cattle – see Fig. 4 below.

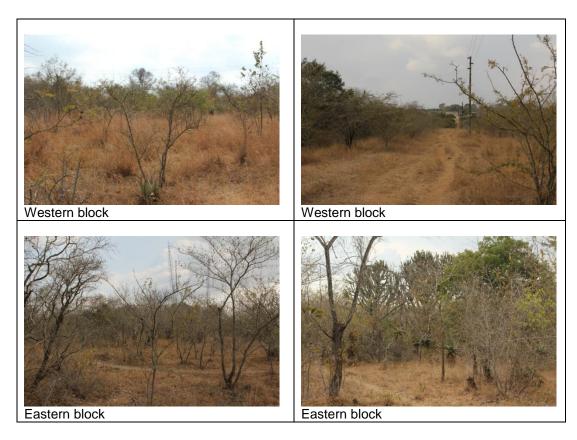


Fig. 4. Views over the study area.

Some disused farming related structures occur on the site, e.g. concrete dams, water troughs, loading platforms and pump houses. According to Mr Mahlalela, these were built during the last 20 years, but were soon after abandoned.



Fig. 5. Old farming structures.

6.2 Overview of the region

The aim of this section is to present an overview of the history of the larger region in order to eventually determine the significance of heritage sites identified in the study area, within the context of their historic, aesthetic, scientific and social value, rarity and representivity – see Section 3.2 and Appendix 1 for more information.

The cultural landscape qualities of the region essentially consist of a rural setup. In this the human occupation is made up of a pre-colonial element consisting of limited Stone Age as well as Iron Age occupation, as well as a much later colonial (farmer) component. A much smaller component is an urban one.

6.2.1 Stone Age

Human occupation started at least during the Early Stone Age, with reports of Acheulian type tools found in a number of places in the larger region. This occupation continued through to the Middle to the Later Stone Age. Because of the high impact of agricultural development, as well as the dense vegetation cover in the undeveloped areas, very few indications of Stone Age occupation were identified during the survey.

A number of very important sites dating to the Later Stone Age occur more to the north in the vicinity of the in the Crocodile River. Some of these also contain rock art.

6.2.2 Iron Age

Iron Age people moved into southern Africa by c. AD 300, entering the area either by moving down the coastal plains, or by using a more central route. It seems more likely that the first option was what brought people into the study area. From the coast they followed the various rivers inland. One of the earliest dated sites is located near Tzaneen (Silver Leaves). Some sites dating to this and a slightly later period, were identified at Plaston (Evers 1977) and still closer at Stentor and Kudu (Van Schalkwyk 2007)

6.2.3 Historic period

In 1725 Jan van de Capelle, in charge of the Dutch fortification and trading post *Fort Lijdzaamheid* at Delagoa Bay (Maputo), sent an expedition to explore an inland route to the fabled land of Monomotapa. It was a military expedition of 31 men, commanded by Francois de Kuiper. On 5 July 1725 Sergeant Johannes Monna and 6 men reconnoitred a route through the Komatipoort to reach Iron Age communities to the west. They were the first Europeans to enter the present-day Mpumalanga Province.

The tropical climate, as well as malaria, bilharzia, nagana, sleeping-sickness and other human and animal diseases, prevented widespread colonial occupation. The rinderpest outbreak of the 1890s (which decimated large numbers of wild animals and cut down the distribution of tsetse flies), the advent of the railways, planned land settlement of white farmers, the development of agriculture and the establishment of nature conservation areas changed this situation and resulted in increasing numbers of colonists settling in the lowveld region.

During the 1840s until the 1880s, the area was visited sporadically by prospectors, scientists, hunters and other explorers, most notably St Vincent Whitshed Erskine (1868 and 1871) and

Karl Mauch (1870). Gold was discovered in the Barberton region in 1884 and was quickly followed by other discoveries (Praagh 1906, Barnard 1975).

The people occupying the area are of Swazi-speaking origin and, under the previous government, were "citizens" of the Kangwane Homeland. The 1949 version of the settlement map by Myburgh (1949) show the distribution and location of the various Swazi headmen located in the larger region.

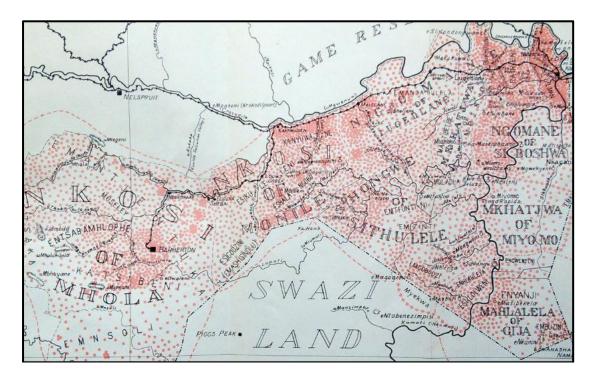


Fig. 6. Swazi-speaking settlements in the region c. 1949 (after Myburgh 1949).

6.3 Identified sites

The following sites, features and objects of cultural significance were identified in the study area:

6.3.1 Stone Age

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

6.3 2 Iron Age

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

6.3 2 Historic period

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

7. SITE SIGNIFICANCE AND ASSESSMENT

7.1 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.

7.2 Statement of significance

Based on current information regarding the identified sites as well as in the surrounding area

 As no heritage sites occur in the study area, there would be no impact resulting from the proposed development.

Table 1. 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)	None
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

7.3 Impact assessment

Impact analysis of cultural heritage resources under threat of the proposed development, are based on the present understanding of the development. The following heritage features were identified:

 As no heritage sites occur in the study area, there would be no impact resulting from the proposed development.

8. RECOMMENDATIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area where it is proposed to develop the cattle feedlot.

The cultural landscape qualities of the region is made up of a pre-colonial element consisting of Stone Age and Iron Age occupation, as well as a much later colonial (farmer) component, which also gave rise to an urban environment.

Impact analysis of cultural heritage resources under threat of the proposed development, are based on the present understanding of the development.

 As no heritage sites occur in the study area, there would be no impact resulting from the proposed development.

Therefore, from a heritage point of view we recommend that the proposed development can continue on condition of acceptance of the above mitigation measure. We also recommend that if archaeological sites or graves are exposed during development activities, it should immediately be reported to a heritage consultant so that an investigation and evaluation of the finds can be made.

9. REFERENCES

9.1 Data bases

Chief Surveyor General Environmental Potential Atlas, Department of Environmental Affairs and Tourism. Heritage Atlas Database, Pretoria. National Archives of South Africa

9.2 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.

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Van Schalkwyk, J.A. 2007b. Heritage survey report for the proposed development on portions of various farms in the Malelane area of Mpumalanga Province. Unpublished report 2007/JvS/067Mauricedale.

Van Schalkwyk, J.A. 2013. Heritage impact assessment for the proposed Dundonald Shopping Centre, Dundonald-A, Albert Luthuli Local Municipality, Mpumalanga Province. Unpublished report 2013/JvS/004. Pretoria

9.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2531DA Google Earth

APPENDIX 1: CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON HERITAGE RESOURCES

Significance

According to the NHRA, Section 2(vi) the **significance** of a 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 or work or	f a persor	n, group or	
organisation of importance in history	•		
Does it have significance relating to the history of slavery			
2. Aesthetic value			
It is important in exhibiting particular aesthetic characterist	stics valu	ued by a	
community or cultural group		Ž	
3. Scientific value			
Does it have potential to yield information that will contribute to	an unders	tanding of	
natural or cultural heritage		_	
Is it important in demonstrating a high degree of creative or ted	hnical ac	hievement	
at a particular period			
4. Social value			
Does it have strong or special association with a particular co	mmunity	or cultural	
group for social, cultural or spiritual reasons			
5. Rarity			
Does it possess uncommon, rare or endangered aspects of	natural o	or cultural	
heritage			
6. Representivity			
Is it important in demonstrating the principal characteristics of	a narticula	ar class of	
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Significance of impact:

- low where the impact will not have an influence on or require to be significantly

accommodated in the project design

- medium where the impact could have an influence which will require modification of

the project design or alternative mitigation

- high where it would have a "no-go" implication on the project regardless of any

mitigation

Certainty of prediction:

 Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment

- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

- 1 = no further investigation/action necessary
- 2 = controlled sampling and/or mapping of the site necessary
- 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- 4 = preserve site at all costs

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

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.

The National Heritage Resources Act (Act no 25 of 1999) 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, and which prescribes heritage resources assessment criteria, consistent with the criteria set out in section 3(3), which must be used by a heritage resources authority or a local authority to assess the intrinsic, comparative and contextual significance of a heritage resource and the relative benefits and costs of its protection, so that the appropriate level of grading of the resource and the consequent responsibility for its management may be allocated in terms of section 8.

Presenting archaeological sites as part of tourism attraction requires, in terms 44 of the Act, a Conservation Management Plan as well as a permit from SAHRA.

- (1) Heritage resources authorities and local authorities must, wherever appropriate, coordinate and promote the presentation and use of places of cultural significance and heritage resources which form part of the national estate and for which they are responsible in terms of section 5 for public enjoyment, education, research and tourism, including-
 - (a) the erection of explanatory plaques and interpretive facilities, including interpretive centres and visitor facilities;
 - (b) the training and provision of guides;
 - (c) the mounting of exhibitions;
 - (d) the erection of memorials; and
 - (e) any other means necessary for the effective presentation of the national estate.
- (2) Where a heritage resource which is formally protected in terms of Part I of this Chapter is to be presented, the person wishing to undertake such presentation must, at least 60 days prior to the institution of interpretive measures or manufacture of associated material, consult with the heritage resources authority which is responsible for the protection of such heritage resource regarding the contents of interpretive material or programmes.
- (3) A person may only erect a plaque or other permanent display or structure associated with such presentation in the vicinity of a place protected in terms of this Act in consultation with the heritage resources authority responsible for the protection of the place.

APPENDIX 3. SPECIALIST COMPETENCY

Johan (Johnny) van Schalkwyk

J A van Schalkwyk, D Litt et Phil, heritage consultant, has been working in the field of heritage management for more than 30 years. Based at the National Museum of Cultural History, Pretoria, he has actively done research in the fields of anthropology, archaeology, museology, tourism and impact assessment. This work was done in Limpopo Province, Gauteng, Mpumalanga, North West Province, Eastern Cape, Northern Cape, Botswana, Zimbabwe, Malawi, Lesotho and Swaziland. Based on this work, he has curated various exhibitions at different museums and has published more than 60 papers, many in scientifically accredited journals. During this period he has done more than 2000 impact assessments (archaeological, anthropological, historical and social) for various government departments and developers. Projects include environmental management frameworks, road-, pipeline-, and power line developments, dams, mining, water purification works, historical landscapes, refuse dumps and urban developments.