Heritage impact assessment for the NEW BOXCUT, OPENCAST MINE AND MINING RELATED INFRASTRUCTURE FOR THE PEGASUS SOUTH MINE DEVELOPMENT AS PART OF THE KALBASFONTEIN EXPANSION PROJECT,

HERITAGE IMPACT ASSESSMENT FOR THE NEW BOXCUT, OPENCAST MINE AND MINING RELATED INFRASTRUCTURE FOR THE PEGASUS SOUTH MINE DEVELOPMENT AS PART OF THE KALBASFONTEIN EXPANSION PROJECT, EMALAHENI, 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 February 2013

EXECUTIVE SUMMARY

HERITAGE IMPACT ASSESSMENT FOR THE NEW BOXCUT, OPENCAST MINE AND MINING RELATED INFRASTRUCTURE FOR THE PEGASUS SOUTH MINE DEVELOPMENT AS PART OF THE KALBASFONTEIN EXPANSION PROJECT, EMALAHENI, MPUMALANGA PROVINCE

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area in which it is proposed to develop mining activities.

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 Stone Age as well as Iron Age occupation, as well as a much later colonial (farmer) component. In recent years an urban element developed, expanding at a phenomenal rate, largely as a result of mining development in the region.

• As no site, features or objects of cultural significance are known to exist in the study area, there would be no impact as a result of 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 measures. We request that if archaeological sites or graves are exposed during construction work, 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 February 2013

TECHNICAL SUMMARY

Property details						
Province	Мρι	Mpumalanga				
Magisterial district	Witk	Witbank				
Municipality	Ema	Emalahleni				
Topo-cadastral map	252	2529CC, 2529CD				
Closest town	Emalahleni (Witbank)					
Farm name	Kalbasfontein 284JS					
Coordinates	Centre Point					
	No	Latitude	Longitude	No	Latitude	Longitude
	1	S 25.78260	E 29.25680			

Development criteria in terms of Section 38(1) of the NHR Act	Yes/No
Construction of road, wall, power line, pipeline, canal or other linear	No
form of development or barrier exceeding 300m in length	
Construction of bridge or similar structure exceeding 50m in length	No
Development exceeding 5000 sq m	Yes
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	No
Any other development category, public open space, squares, parks,	No
recreation grounds	

Development	
Description	New box cut and opencast mine and infrastructure development
Project name	Inyanga Pegasus South Development

Land use	
Previous land use	Agriculture
Current land use	Vacant

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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 and 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. 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

HERITAGE IMPACT ASSESSMENT FOR THE NEW BOXCUT, OPENCAST MINE AND MINING RELATED INFRASTRUCTURE FOR THE PEGASUS SOUTH MINE DEVELOPMENT AS PART OF THE KALBASFONTEIN EXPANSION PROJECT, EMALAHENI, MPUMALANGA PROVINCE

1. INTRODUCTION

Inyanda Coal plan to expand their mining operation within the approved mining right area by means of a new box cut and opencast mining area north of the existing opencast mining operation on Portion 21 of the farm Kalbasfontein 284 JS. Mining related infrastructure associated with the new proposed box cut and opencast mining operation will consist of topsoil, subsoil and overburden stockpiles and the construction of haul roads.

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 LIDWALA Consulting Engineers 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 mining operations.

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

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 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 mixed use township.

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

2.2 Limitations

The investigation has been influenced by the following factors:

The unpredictability of buried archaeological remains.

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

Type of study	Aim	SAHRA involved	SAHRA response
Heritage Impact Assessment	The aim of a full HIA investigation is to provide an informed heritage-related opinion about the proposed development by an appropriate heritage specialist. The objectives are to identify heritage resources (involving site inspections, existing heritage data and additional heritage specialists if	Provincial Heritage Resources Authority	Comments on built environment and decision to approve or not
	necessary); assess their significances; assess alternatives in order to promote heritage conservation issues; and to assess the acceptability of the proposed development from a heritage perspective.	SAHRA Archaeology, Palaeontology and Meteorites Unit	Comments and decision to approve or not
	The result of this investigation is a heritage impact assessment report indicating the presence/absence of heritage resources and how to manage them in the context of the proposed development.		
	Depending on SAHRA's acceptance of this report, the developer will receive permission to proceed with the proposed development, on condition of successful implementation of proposed mitigation measures.		

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;
 - o graves of individuals designated by the Minister by notice in the Gazette;
 - o 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 Figures 3 and 4. For more information, please see the Technical Summary presented above (p. iii).

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. In this regard, various anthropological, archaeological, historical sources and heritage impact assessment reports were consulted (Nkangala District Municipality 2004; Van Schalkwyk 2002, 2008, 2011).

Information of a general nature was 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 adjacent areas.

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 LIDWALA Consulting Engineers by means of maps. The site was surveyed by walking across it (see Fig. 1for the track log that was kept of the site survey).

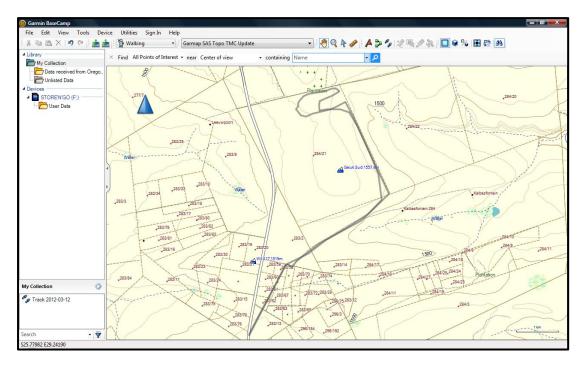


Fig. 1. Track log of the foot survey.

5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

5.1 Site location and description

The site is located approximately 12 km north of the town of Emalahleni (Witbank), Mpumalanga Province. The development site consists of Portion 21 of the Farm Kalbasfontein 284JS (Fig. 2). For more information, please see the Technical Summary presented above (p. iii).

The geology of the area is made up of arenite intrusion into surrounding tillite. The original vegetation is made up of Moist Sandy Highveld Grassland, but has been replaced due to farming activities (ploughing) in the development area.

Some buildings occur on the site (Fig. 3). These are of recent origin, are built with face brick and have corrugated iron roofs. It consists of a house and a barn structure.

• As these structures are of recent origin and show no unique architectural features, they are not viewed to have any heritage significance.

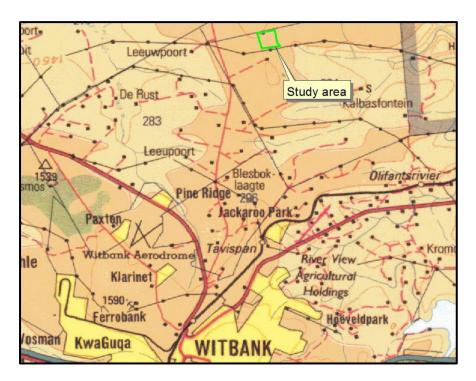


Fig. 2. Location of the study area (green dot) in regional context. (Map 2528: Chief Surveyor-General)



Fig. 3. Views over the study area.



Fig. 4. Aerial view of the proposed development. (Photo: Google Earth)

5.2 Development proposal

The proposed expansion of the mining operation on Portion 21 of the farm Kalbasfontein 284 JS where the new box cut and opencast pit will be constructed will utilise most of the existing infrastructure of the current operations of Inyanda Coal on Portion 21 of the farm Kalbasfontein 284 JS. Existing mining related infrastructure such as the existing access roads, haul roads, power lines, return water dam, crusher, coal washing plant, coal stockpile areas, water pipeline, co-disposal dump, site offices, workshop and diesel storage facilities within the mining authorization area of Inyanda Coal will be utilized and coal will be transported from the proposed new opencast pit to the existing mining related infrastructure on Portion 21 of the farm Kalbasfontein 284 JS via proposed new haul roads that will link with existing haul roads.

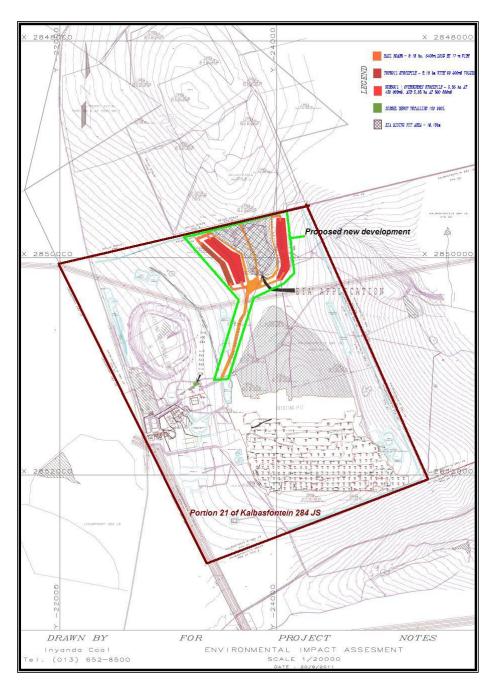


Fig. 5. Layout of the proposed development. (Map supplied by Lidwala)

5.3 Regional overview

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 Stone Age as well as Iron Age occupation, as well as a much later colonial (farmer) component. In recent years an urban element developed, expanding at a phenomenal rate, largely as a result of mining development in the region.

This section of the highveld area has been very sparsely populated during the Stone Age. Sites dating to the ESA and the MSA are know from the Loskop Dam area, with a few occurrences reported on the highveld region north of Bronkhorstspruit.

Iron Age people started to settle in southern Africa c. AD 300, with one of the oldest known sites at Broederstroom south of Hartebeespoort Dam dating to AD 470. Having only had cereals (sorghum, millet) that need summer rainfall, Early Iron Age (EIA) people did not move outside this rainfall zone, and neither did they occupy the central interior highveld area. Because of their specific technology and economy, Iron Age people preferred to settle on the alluvial soils near rivers for agricultural purposes, but also for firewood and water. River valleys such as that of the Steelpoort and Olifants Rivers were densely populated during this period.

The occupation of the larger geographical area (including the study area) did not start much before the 1500s. By the 16th century things changed, with the climate becoming warmer and wetter, creating condition that allowed Late Iron Age (LIA) farmers to occupy areas previously unsuitable, for example the Witwatersrand and the treeless plains of the Free State. This was also the period when Iron Age communities moved into the Middelburg region, as is evidenced by sites located on the northern section of the farm Elandspruit, some distance to the east of the study area (Fig. 6).

Archaeological sites

Some information regarding the Iron Age archaeology of the study region exists as a number of intensive surveys have been done in the region. Identified sites date to the Late Iron Age.

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



Fig. 6. Typical Late Iron Age stone walled site.

5.3.3 Historic period

White settlers moved into the area during the first half of the 19th century. They were largely self-sufficient, basing their survival on cattle/sheep farming and hunting. Few towns were

established and it remained an undeveloped area until the discovery of coal. During the Anglo-Boer War, a number of skirmishes occurred in the larger area, especially in the vicinity of the railway line to Mozambique.

Coal mining occurred only sporadically in the area. However, with the discovery of the Witwatersrand gold fields, the need for a source of cheap energy became important, and coal mining developed on a large scale in various regions. By 1899, at least four collieries were operating in the Middelburg-Witbank¹ district, supplying the gold mining industry (Praagh 1906).

Infrastructure and industrial heritage

In many cases this aspect of heritage is left out of surveys, largely due to the fact that it is taken for granted. However, the land and its resources could not be accessed and exploited without the development of features such as roads, bridges, railway lines, electricity lines and telephone lines, as well as industries that exploit locally available resources.

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



Fig. 7. Railway bridge, originally part of the NZASM.

5.4 Identified sites

The following cultural heritage resources were identified in the study area (Fig. 8):

¹ Witbank was established only after 1903.

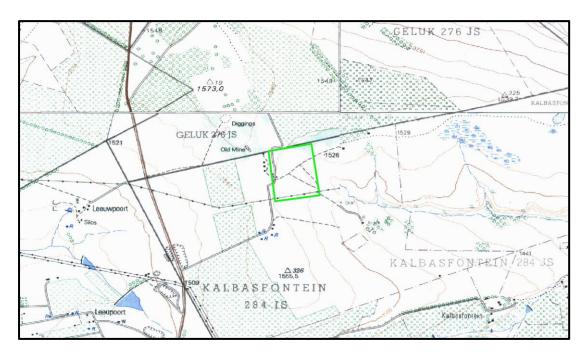


Fig. 8. Location of the study area. (Map 2529CC, 2529CD: Chief Surveyor-General)

5.4.1 Stone Age

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

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 area.

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 in the table 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)	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			

6.3 Impact assessment

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

• As no site, features or objects of cultural significance are known to exist in the study area, there would be no impact as a result of the proposed development.

7. CONCLUSIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the area in which it is proposed to develop mining activities.

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 Stone Age as well as Iron Age occupation, as well as a much later colonial (farmer) component. In recent years an urban element developed, expanding at a phenomenal rate, largely as a result of mining development in the region.

• As no site, features or objects of cultural significance are known to exist in the study area, there would be no impact as a result of 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 measures. We request that if archaeological sites or graves are exposed during construction work, it should immediately be reported to a heritage consultant 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

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.

Bergh, J.S. (red.). 1998. *Geskiedenisatlas van Suid-Afrika: die vier noordelike provinsies*. Pretoria: J.L. Schaik.

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

Mason, R.J. 1969. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Nkangala District Municipality 2004. *Formalization of Cultural and Historical sites*. Pretoria: BKS (Pty) Ltd and Cultmatrix cc.

Praagh, L.V. (ed.) 1906. The Transvaal and its mines. London: Praagh & Lloyd.

Richardson, D. 2001. Historic sites of South Africa. Cape Town: Struik Publishers.

Van Schalkwyk, J.A. 2002. A survey of cultural resources for the Arnot mining development, Middelburg District, Mpumalanga Province. Pretoria: Unpublished report 2002KH021.

Van Schalkwyk, J.A. 2008. Heritage impact survey report for the proposed mining development on the farm Elandspruit 291JS, Middelburg magisterial district, Mpumalanga Province. Pretoria: Unpublished report 2008/JvS/077.

Van Schalkwyk, J.A. 2011. *Cultural heritage inventory for the TRAC N4 toll road east, Pretoria to Maputo.* Pretoria: Unpublished report.

8.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2529CC, 2529CD Google Earth

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

4 Historia valua			
1. Historic value			1
Is it important in the community, or pattern of histor			
Does it have strong or special association with the	e life or work	of a person,	
group or organisation of importance in history			
Does it have significance relating to the history of s	lavery		
2. Aesthetic value			
It is important in exhibiting particular aesthetic c community or cultural group	haracteristics v	valued by a	
3. Scientific value			
	ot will contri	huta ta an	
Does it have potential to yield information the	iat will contri	bute to an	
understanding of natural or cultural heritage	of avanting	or tooks:ool	
Is it important in demonstrating a high degree	or creative	or technical	
achievement at a particular period			
4. Social value	C - 1		
Does it have strong or special association with		mmunity or	
cultural group for social, cultural or spiritual reasons	3		
5. Rarity			
Does it possess uncommon, rare or endangered as	spects of natura	al or cultural	
heritage			
6. Representivity			
Is it important in demonstrating the principal cha	racteristics of	a particular	
class of natural or cultural places or objects			
Importance in demonstrating the principal char			
landscapes or environments, the attributes of v	vhich identify	it as being	
characteristic of its class			
Importance in demonstrating the principal characteristics of human activities			
(including way of life, philosophy, custom, process,			
or technique) in the environment of the nation, prov	ince, 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.