Cultural heritage impact assessment for the THE PROPOSED SPECIAL MAINTENANCE OF SECTIONS 6 AND 7 OF ROAD R56 BETWEEN MACLEAR AND INDWE, EASTERN CAPE PROVINCE

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED SPECIAL MAINTENANCE OF SECTIONS 6 AND 7 OF ROAD R56 BETWEEN MACLEAR AND INDWE, EASTERN CAPE 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.

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March 2015

EXECUTIVE SUMMARY

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED SPECIAL MAINTENANCE OF SECTIONS 6 AND 7 OF ROAD R56 BETWEEN MACLEAR AND INDWE, EASTERN CAPE PROVINCE

SANRAL proposes special maintenance of Sections 6 and 7 of road R56 between Maclear and Indwe in Eastern Cape Province. The distance of the two sections is 58.14km and 68.36km respectively.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by Chameleon Environmental Services 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 the special maintenance is planned for a section of the R56 road.

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 and limited Iron Age occupation, as well as a much later colonial (farmer) component. In recent years an urban element developed.

The following sites, features and objects of cultural heritage significance have been identified to occur in close proximity of the study area (see Appendix 3 for detailed information on the locality and mitigation measures propose for each identified feature):

- Large stone circle with an entrance marked by two standing stones. It has a diameter of approximately 24 x 27m. No other built features that could be related to this structure were noticed in the immediate vicinity.
 - Although this feature is clearly visible, its proximity to the road reserve might create a problem if road works is undertaken here.
 - The feature should be avoided and fenced off with danger tape during any road works that might take place in its vicinity.
- A very large town cemetery with probably more than 1000 graves. It runs parallel to the road for a distance of approximately 550m. Some of the graves are located next to the road reserve.
 - Although this cemetery is known and clearly visible, its proximity to the road reserve might create a problem if road works is undertaken here.
 - The cemetery should be avoided and fenced off with danger tape during any road works that might take place in its vicinity.
- On 7 August 1981 MK operatives, working out of Lesotho, were engaged by SAP forces at a roadblock near Elliot. Currently this feature forms part of a heritage route recounting the struggle for liberation and as a result is well signposted.
 - This feature is currently located within the boundary of the R56 road. Although this feature is clearly visible, its location in the road reserve might create a problem if road works is undertaken here.
 - It is recommended that the memorial is retained in its current position. If this is not possible, it should be relocated a few metres to the west, outside of the road reserve, on condition of negotiating its new location with the current landowner.
- Memorial commemorating three Maclear rugby players that died here on 17 May 1990.
 - This feature is currently located within the boundary of the R56 road. Although this feature is clearly visible, its location in the road reserve might create a problem if road works is undertaken here.

- It is recommended that the memorial is retained in its current position. If this is not possible, it should be relocated a few metres to the west, outside of the road reserve, on condition of negotiating its new location with the current landowner.
- A large number of culverts and small bridgelets along the railway line running from Indwe to Maclear. The railway line was constructed during the period 1904 to 1906.
 - For a number of sections the railway line runs very close to the existing R56, in some cases next to the road reserve fence. However, it is anticipated that the proposed development would not have an impact on these features
 - None required.

From a heritage point of view we therefore 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

March 2015

TECHNICAL SUMMARY

Property details	
Province	Eastern Cape
Magisterial districts	Maclear, Elliot, Indwe
Local municipalities	Elundini, Sakhisizwe, Emalahleni
Topo-cadastral maps	3127AD, 3127BC, 3127BD, 3128AA, 3128AB, 3128AC
Closest towns	Maclear, Ugie, Elliot, Indwe
Coordinates (approximate)	Endpoints: S 31.07601, E 28.35329; S 31.47380, E 27.34314

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	Yes
development or barrier exceeding 300m in length	
Construction of bridge or similar structure exceeding 50m in length	No
Development exceeding 5000 sq m	
Development involving three or more existing erven or subdivisions	
Development involving three or more erven or divisions that have been consolidated within past five years	
Rezoning of site exceeding 10 000 sq m	
Any other development category, public open space, squares, parks, recreation grounds	

Development	
Description	Special maintenance of two sections of the R56 in the Eastern Cape
	Province
Project name	R56 Special maintenance

Land use	
Previous land use	Road
Current land use	Road

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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

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED SPECIL MAINTENANCE OF SECTIONS 6 AND 7 OF ROAD R56 BETWEEN MACLEAR AND INDWE, EASTERN CAPE PROVINCE

1. INTRODUCTION

SANRAL proposes special maintenance of Sections 6 and 7 of road R56 between Maclear and Indwe in Eastern Cape Province (Fig. 2). The distance of the two sections is 58.14km and 68.36km respectively.

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 Chameleon Environmental Services 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 the special maintenance of the section of the road is to take place.

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 the special maintenance is planned for road R56.

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 and assumptions

The investigation has been influenced by the following factors:

- It is assumed that the description of the proposed project, provided by the client, 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.
- Large sections of the regions in which the study area is located have not yet been subjected to systematic archaeological surveys, creating huge gaps in available knowledge. Furthermore, most information that was generated in specific regions is based on impact assessments done for the purpose of development projects of some sort, with the result that it covers these regions only selectively.
- 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;
 - 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
 - o 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;
- o objects of decorative or fine art;
- 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 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. In this regard, various anthropological, archaeological, historical sources and heritage impact assessment reports were consulted.

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 maps supplied by Chameleon Environmental were converted into *kml* files and were then loaded onto a Nexus 7 tablet. This was used, in Google Earth, during the field survey to access the study areas.

The field survey was done on 20 and 21 March 2015. The site was surveyed by travelling the alignment of the R56 in both directions (see Fig. 1).

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).

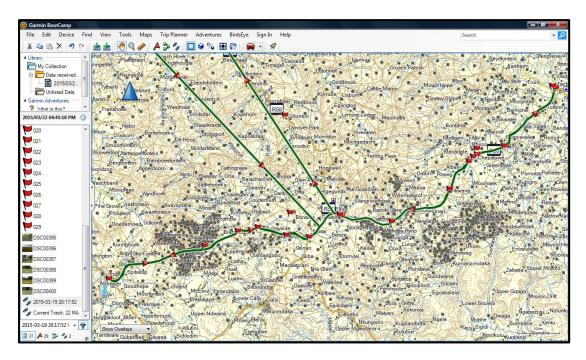


Fig. 1. Track log of the field survey.

5. PROJECT DESCRIPTION

5.1 Site location and description

SANRAL proposes special maintenance of Sections 6 and 7 of road R56 between Maclear and Elliot and Elliot and Indwe in Eastern Cape Province (Fig. 2). The distance of the two sections is 58.14km and 68.36km respectively. The main activity is to construct and improve a number of culverts located inside the current road reserve and no borrow pits, laydown areas or construction sites are planned for this project.

For more information, please see the Technical Summary presented above (p. iii).



Fig. 2. Map showing the sections of the road under consideration.

6. DESCRIPTION OF THE AFFECTED ENVIRONMENT

6.1 Site description

The following description was compiled from information contained in ENPAT as well as Mucina & Rutherford (2006). The geology of the study region is quite complex, consisting of basalt in the west and changing a number of times in alternating bands from mudstone to arenite as one travels eastwards. The original vegetation is made up of South-eastern Mountain Grassland in the west, changing to Moist Upland Grassland in the east. However, much of this has been replaced due to farming activities (cultivation) and plantations in the Maclear vicinity. Overall the topography is described as strongly undulating irregular land, changing to high mountains in the north and low mountains to the south.







Fig. 3. Views of the study area: Elliot to Indwe.



Fig. 4. Views of the study area: Elliot to Maclear.

The 1955 US Army Corps of Engineers 1:250 000 cadastral map (Fig. 5 below) shows that the road between Elliot and Indwe originally passed through Cala to the south, implying that the current R56 section of this road date post 1955.

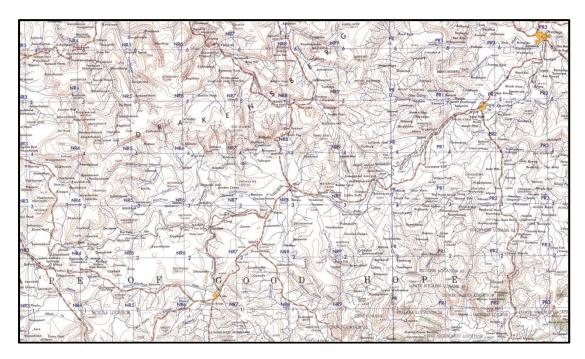


Fig. 5. 1955 US Army Corps of Engineers 1:250 000 map showing the old road alignment

6.2 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 and limited Iron Age occupation, as well as a much later colonial (farmer) component. This was soon followed by the development of a number of urban centres or towns. These mostly serve the surrounding farming communities.

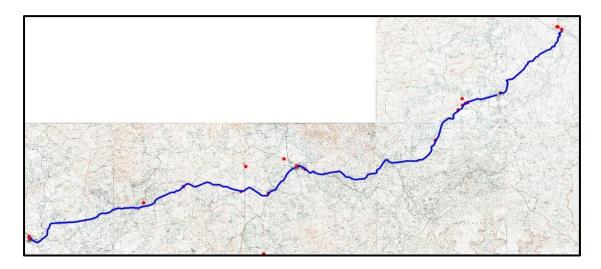


Fig. 6. Known heritage resources in relation to the study area. (Note: This information is deliberately limited to the six cadastral maps applicable in this study).

6.2.1 Stone Age

Human occupation of the larger geographical region took place since Early Stone Age (ESA) times. Tools dating to this period are mostly, although not exclusively, found in the vicinity of watercourses. The oldest of these tools are known as choppers, crudely produced from large pebbles found in the river. Later, *Homo erectus* and early *Homo sapiens* people made tools shaped on both sides, called bifaces. Biface technology is known as the Acheulean tradition, from St Acheul in France, where bifaces were first identified in the mid-19th century. Biface technology is found over a large area of Africa, some parts of India, Arabia and the Near East, as well as parts of western Europe. This is one of the longest-lasting technologies the world has known, spanning a period of more than 1,5 million years.

Although some important sites are known inland, e.g. Amanzi Springs (Deacon 1970), most sites seems to occur in the vicinity of the coast, where people utilised shellfish, producing huge shell middens.

During Middle Stone Age (MSA) times (c. 150 000 – 30 000 BP), people became more mobile, occupying areas formerly avoided. Open sites were still preferred near watercourses, but the people also became adept at exploiting the coastal resources, especially the shellfish. In the larger study region, they occupied the southern Drankensberg area (Opperman 1996) The MSA is a technological stage characterized by flakes and flake-blades with faceted platforms, produced from prepared cores, as distinct from the core tool-based ESA technology.

Occupation of the region seems to have increased during the Later Stone Age (LSA) (Opperman 1982, 1987, 1996). These people had even more advanced technology than the MSA people and therefore succeeded in occupying even more diverse habitats. A number of sites are known to occur in the region, located to the west and north of the study area. Also, for the first time (with a limited number of exceptions) we get evidence of people's activities derived from material other than stone tools. Ostrich eggshell beads, ground bone arrowheads, small bored stones and wood fragments with incised markings are traditionally linked with the LSA. The LSA people have also left us with a rich legacy of rock art, which is an expression of their complex social and spiritual believes, e.g. Grassridge Shelter (Opperman 1987:153).

6.2.2 Iron Age

Recently work on the Iron Age contributed to the establishing of a chronology and distribution pattern for Iron Age settlement in southern Africa (Huffman 2007). Iron Age people started to settle in southern Africa c. AD 300, with one of the oldest known sites at Silver Leaves south of Tzaneen dating to AD 270. 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.

The occupation of the Easter Cape region did not start much before the 1500s, although recent research (e.g. Binneman 1996; Nogwaza 1994; Prins & Granger 1993) indicates that it started during the 1st millennium. Derricourt (1977) investigated a number of sites in the Middeldrift area that he attributed to the Iron Age. Of course, the Late Iron Age also continues into modern times with the occupation of the area by the Nguni-speakers currently occupying the region.

Feely (1987), in his study of the settlement in the former Transkei region, indicate that areas larger than previously considered were probably inhabited by Iron Age farmers. However, he does not indicate any such occupation in the region of the study area.

6.2.3 Historic period

By the late 18th century some Dutch speaking settlers took up farms, but it was only with the arrival of the 1820 Settlers that population numbers started to take off. An investigation of the Title Deeds of most of the farms under consideration indicated that they were surveyed as early as the 1820s, implying that they would have been occupied by colonists since then.

The architecture of these farmsteads can be described as a modified English vernacular tradition that was brought by these settlers to the eastern Cape region after the 1820s. Farm buildings were generally single storied but town houses often reached two floors. Walls were thick and built in stone and the ridged roof, thatched or tiled, was terminated at either end by simple linear parapet gables (see image above).

In some cases outbuildings would be in the same style as the main house, if they date to the same period. However, they tend to vary considerably in style and materials used as they were erected later as and when they were required.

The town of Elliot was established in 1885 and became a municipality in 1911. It was named after Sir Henry George Elliot, Chief Magistrate of the Transkeian Territories from 1891 to 1902 (Raper 2004:86).

Indwe was founded in 1896 as a centre for low-grade coal-mining activities which started as early as 1867. It takes its name from the Indwe River (Raper 2004:150).

Maclear was started as a military base and developed to become a town, reaching municipality status in 1916. It is named after Sit Thomas Maclear (1794-1879), a famous Cape Town astronomer (Raper 2004:216).

The railway line, now out of service, was constructed in 1896 from the main line at Sterkstroom via Dordrecht to Indwe. It was extended in 1904 to Elliot and in 1905 and from there to Maclear in 1906 (Transnet Heritage).

6.3 Identified sites

The following cultural heritage resources were identified in the vicinity of the study area – i.e. less than 20 metres from either side of the R56 route (see Appendix 3 for detailed information on the locality and mitigation measures propose for each identified feature):

- Large stone circle with an entrance marked by two standing stones. It has a diameter of approximately 24 x 27m. No other built features that could be related to this structure were noticed in the immediate vicinity. Two other circles, somewhat smaller in size, occur 230m to the north and 220m to the west, respectively. These enclosures probably served as sheep pens.
- A very large town cemetery with probably more than 1000 graves. It runs parallel to the road for a distance of approximately 550m. Some of the graves are located next to the road reserve.
- On 7 August 1981 MK operatives, working out of Lesotho, were engaged by SAP forces
 at a roadblock near Elliot. Two MK operative were killed and to SAP members were
 injured. Six days later the remaining members of the groups were killed during a shootout
 with the police near Aliwal North. Currently this feature forms part of a heritage route
 recounting the struggle for liberation and as a result is well signposted.
- Memorial commemorating three Maclear rugby players that died here on 17 May 1990. Constructed of dressed stone with an inscription on a marble plaque.
- A large number of culverts and small bridgelets along the railway line running from Indwe
 to Maclear. These are all constructed with brocks of dressed sandstone. It can either be
 an arched structure or a metal decked structure. The railway line was constructed during
 the period 1904 to 1906.

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

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 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)	Yes		
archaeological site or material (Section 35)	None		
palaeontological site or material (Section 35)	None		
graves or burial grounds (Section 36)	Yes		
public monuments or memorials (Section 37)	Yes		
Other			
Any other heritage resources (describe)	Yes		

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 sites, features and objects of cultural heritage significance have been identified to occur in close proximity of the study area:

- Large stone circle with an entrance marked by two standing stones. It has a diameter of approximately 24 x 27m. No other built features that could be related to this structure were noticed in the immediate vicinity.
 - Although this feature clearly visible, its proximity to the road reserve might create a problem if road works in undertaken here.
- A very large town cemetery with probably more than 1000 graves. It runs parallel to the road for a distance of approximately 550m. Some of the graves are located next to the road reserve.
 - Although this cemetery is known and clearly visible, its proximity to the road reserve might create a problem if road works in undertaken here.
- On 7 August 1981 MK operatives, working out of Lesotho, were engaged by SAP forces at a roadblock near Elliot. Currently this feature forms part of a heritage route recounting the struggle for liberation and as a result is well signposted.
 - This feature is currently located within the boundary of the R56 road. Although this feature is clearly visible, its location in the road reserve might create a problem if road works is undertaken here.

- Memorial commemorating three Maclear rugby players that died here on 17 May 1990.
 - This feature is currently located within the boundary of the R56 road. Although this feature is clearly visible, its location in the road reserve might create a problem if road works is undertaken here.
- A large number of culverts and small bridgelets along the railway line running from Indwe to Maclear. The railway line was constructed during the period 1904 to 1906.
 - For a number of sections the railway line runs very close to the existing R56, in some cases next to the road reserve fence. However, it is anticipated that the proposed development would not have an impact on these features

8. 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 the special maintenance of section of the R56 road is planned.

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 and limited Iron Age occupation, as well as a much later colonial (farmer) component. In recent years an urban element developed.

The following sites, features and objects of cultural heritage significance have been identified to occur in close proximity of the study area (see Appendix 3 for detailed information on the locality and mitigation measures propose for each identified feature):

- Large stone circle with an entrance marked by two standing stones. It has a diameter of approximately 24 x 27m. No other built features that could be related to this structure were noticed in the immediate vicinity.
 - Although this feature clearly visible, its proximity to the road reserve might create a problem if road works isn undertaken here.
 - The feature should be avoided and fenced off with danger tape during any road works that might take place in its vicinity.
- A very large town cemetery with probably more than 1000 graves. It runs parallel to the road for a distance of approximately 550m. Some of the graves are located next to the road reserve.
 - Although this cemetery is known and clearly visible, its proximity to the road reserve might create a problem if road works is undertaken here.
 - The cemetery should be avoided and fenced off with danger tape during any road works that might take place in its vicinity.
- On 7 August 1981 MK operatives, working out of Lesotho, were engaged by SAP forces at a roadblock near Elliot. Currently this feature forms part of a heritage route recounting the struggle for liberation and as a result is well signposted.
 - This feature is currently located within the boundary of the R56 road. Although this feature is clearly visible, its location in the road reserve might create a problem if road works is undertaken here.
 - It is recommended that the memorial is retained in its current position. If this is not possible, it should be relocated a few metres to the west, outside of the road reserve, on condition of negotiating its new location with the current landowner.
- Memorial commemorating three Maclear rugby players that died here on 17 May 1990.

- This feature is currently located within the boundary of the R56 road. Although this feature is clearly visible, its location in the road reserve might create a problem if road works is undertaken here.
- It is recommended that the memorial is retained in its current position. If this is not possible, it should be relocated a few metres to the west, outside of the road reserve, on condition of negotiating its new location with the current landowner.
- A large number of culverts and small bridgelets along the railway line running from Indwe to Maclear. The railway line was constructed during the period 1904 to 1906.
 - For a number of sections the railway line runs very close to the existing R56, in some cases next to the road reserve fence. However, it is anticipated that the proposed development would not have an impact on these features
 - None required.

From a heritage point of view we therefore 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.

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.

Binneman, J. 1996. Preliminary results from investigations at Kulubele, an Early Iron Age farming settlement in the Great Kei River valley, Eastern Cape. Southern African Field Archaeology 5(1)28-35.

Booth, C. 2012. An Archaeological desktop study for the proposed Elliot Wind Energy Facility on a site west of Elliot, Sakhisizwe Local Municipality. Grahamstown: Unpublished report.

Deacon, H.J. 1970. The Auchelian occupation of Amanzi Springs Uitenhage district, Cape Province. *Annals of the Cape Provincial Museums (Nat.Hist.)* 8(11):89-189.

Derricourt, R.M. 1977. Prehistoric man in the Ciskei and Transkei. Cape Town: Struik.

Feely, J.M. 1987. *The Early Farmers of Transkei, Southern Africa before A.D. 1870*. Cambridge Monographs in African Archaeology 24. BAR International Series 378.

Huffman, T.N. 2007. Handbook to the Iron Age. Scottsville: University of KwaZulu-Natal Press.

Mucina, L & Rutherford, M.C. (eds.) 2006. *The Vegetation Atlas of South Africa, Lesotho and Swaziland*. Strelitzia 19. Pretoria. South African National Biodiversity Institute.

Nogwaza, T. 1994. Early Iron Age pottery from Canasta Place, East London District. *Southern African Field Archaeology* 3:103-106.

Opperman, H. 1982. Some research results of excavations in the Colwinton Rock Shelter, North-eastern Cape. *South African Archaeological Bulletin* 37:51-56

Opperman, H. 1987. *The Later Stone Age of the Drakensberg Range and its Foothills*. Cambridge Monographs in African Archaeology. BAR International Series 339.

Opperman, H. 1996. Excavation of a Later Stone Age deposit in Strathalan Cave A, Maclear District, Northeastern Cape, South Africa. In Pwiti, G & Soper, R. (eds.) *Aspects of African Archaeology*. Harare: University of Zimbabwe Publications. Pp. 335-342.

Prins, F.E. & Granger, J.E. 1993. Early farming communities in the northern Transkei: the evidence from Ntsitsana and adjacent areas. *Natal Museum Journal of Humanities* 5:153-174.

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

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

9.3 Maps and aerial photographs

1: 50 000 Topocadastral maps 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

1. Historic value			
Is it important in the community, or pattern of history			
Does it have strong or special association with the life or wo	ork of a perso	on, 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 chara community or cultural group	cteristics va	alued by a	
3. Scientific value			
Does it have potential to yield information that will contribute	e to an unde	rstanding of	
natural or cultural heritage			
Is it important in demonstrating a high degree of creative of at a particular period	r technical a	chievement	
4. Social value			
Does it have strong or special association with a particula	ar community	or cultural	
group for social, cultural or spiritual reasons	,	,	
5. Rarity			
Does it possess uncommon, rare or endangered aspect	s of natural	or cultural	
heritage			
6. Representivity			
Is it important in demonstrating the principal characteristics	of a particu	lar class of	
natural or cultural places or objects			
Importance in demonstrating the principal characteristics o	f a range of	landscapes	
or environments, the attributes of which identify it as being c			
Importance in demonstrating the principal characteristic			
(including way of life, philosophy, custom, process, land-			
technique) in the environment of the nation, province, region		,	
7. Sphere of Significance	High	Medium	Low
International	,		
National			
Provincial			
Regional			
Local			
Specific community			
8. Significance rating of feature		1	
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.

APPENDIX 3: INVENTORY OF IDENTIFIED CULTURAL HERITAGE SITES

3.1 Farmsteads and homesteads

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

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.

The architecture of these farmsteads can be described as an eclectic mix of styles modified to adapt to local circumstances. Farm buildings were generally single storied. Walls were thick and built in stone. The roof was either flat or ridged and thatched or tiled and was terminated at either end by simple linear parapet gables.

In some cases outbuildings would be in the same style as the main house, if they date to the same period. However, they tend to vary considerably in style and materials used as they were erected later as and when they were required.

Location	No. 3.1.1	Farm 495	S 31.37215, E 27.63316
Description			

Large stone circle with entrance marked by two standing stones on the southern side of the road. It has a diameter of approximately 24 x 27m. No other built features that could be related to this structure were noticed in the immediate vicinity. Two other circles, somewhat smaller in size, occur 230m to the north and 220m to the west, respectively. These enclosures probably served as sheep pens.

Significance of site/feature | Medium on a regional level – Grade III

Impact assessment

This feature is located right next to the fence delineating the road reserve. Although it clearly visible, its proximity to the road reserve might create a problem if road works is undertaken here.

Significance of impact					
Extent	Duration	Magnitude	Probability	Significance	Weight
2	5	6	4	52	Medium

Mitigation

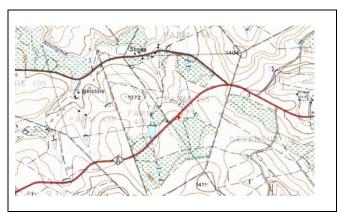
The feature should be avoided and fenced off with danger tape during any road works that might take place in its vicinity.

Requirements	
None	

References Map 3127BC







3.2 Graves and burial places

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

Apart from the formal cemeteries that occur in municipal areas (towns or villages), some quite informal, i.e. without fencing, can be expected to occur almost anywhere. Most of these cemeteries/burial places, irrespective of the fact that they are for land owner or farm labourers (with a few exceptions where they were integrated), are family orientated. They therefore serve as important 'documents' linking people directly by name to the land.

Location	No. 3.2.1	Elliot Townlands	S 31.33747, E 27.86339 to
			S 31.34062, E 27.86732

Description

A very large town (Elliot) cemetery with probably more than 1000 graves on the southern side of the road. It runs parallel to the road for a distance of approximately 550m. Some of the graves are located directly next to the road reserve.

Significance of site/feature High on a local level – Grade III

Impact assessment

This feature is located right next to the road reserve and possibly also encroaching in it. Although this cemetery is known and clearly visible, its proximity to the road reserve might create a problem if road works is undertaken here.

Mitigation

The cemetery should be avoided and fenced off with danger tape during any road works that might take place in its vicinity.

Requirements

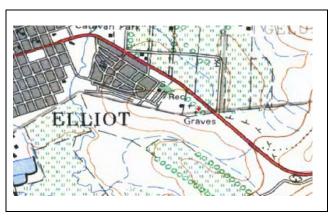
None

References

Map 3127BD







3.3 Public monuments and memorials

NHRA Category	Places, buildings, structures and equipment of cultural interest	
Protection status		
General Protection - Section 37: Public Monuments and Memorials		

Although most of these usually occur in urban areas, some also occur in rural areas where an event of significance took place.

As the sites (battlefields) are difficult to delineate the possibility of an impact on it is possible. Features such as monuments and commemorations are subject to damage. However, they are easy to identify and as a result are easier to avoid. Variety of interconnected elements makes up the whole. Impact on part therefore implies an impact on the whole.

Location	No. 3.3.1	Navar 478	S 31.38474, E 27.79469
Description			

On 7 August 1981 MK operatives, working out of Lesotho, were engaged by SAP forces at a roadblock near Elliot. Two MK operative were killed and two SAP members were injured. Six days later the remaining members of the group were killed during a shootout with the police near Aliwal North. Currently this feature forms part of a heritage route recounting the struggle for liberation and as a result is well signposted on the northern side of the road.

Significance of site/feature High on a provincial level – Grade III

Impact assessment

This feature is currently located within the boundary of the R56 road reserve. Although this feature is clearly visible, its location in the road reserve might create a problem if road works is undertaken here.

Mitigation

It is recommended that the memorial is retained in its current position. If this is not possible, it should be relocated a few metres to the west, outside of the road reserve, on condition of negotiating its new location with the current landowner.

Requirements

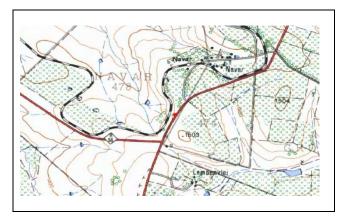
Although this feature is not protected under the NHRA, it is recommended that SAHRA should be informed of its existence and relocation.

References

Map 3127BD







Location	No. 3.3.2	Bustard Vale 326	S 31.28397, E 28.11357
Description			

Memorial commemorating three Maclear rugby players that died here on 17 May 1990. Constructed of dressed stone with an inscription on a marble plaque on the northern side of the road.

Significance of site/feature High on a local level – Grade III

Impact assessment

This feature is currently located within the boundary of the R56 road reserve. Although this feature clearly visible, its location in the road reserve might create a problem if road works is undertaken here.

Mitigation

It is recommended that the memorial is retained in its current position. If this is not possible, it should be relocated a few metres to the west, outside of the road reserve, on condition of negotiating its new location with the current landowner.

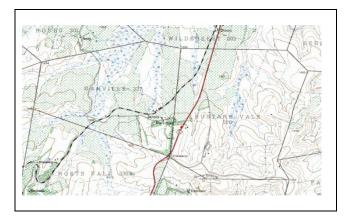
Requirements

Although this feature is not protected under the NHRA, it is recommended that SAHRA should be informed of its existence and relocation.

References

Map 3128AC





3.4 Infrastructure and industrial heritage

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

Variety of interconnected elements makes up the whole. Impact on part therefore implies an impact on the whole. The various features are subject to damage. Fortunately, these features are easy to identify and therefore easy to avoid.

Location	Various	Various	Various
Description			

A large number of culverts and small bridgelets along the railway line running from Indwe to Maclear on both the northern (Elliot to Maclear) and southern side (Elliot to Indwe) of the road. These are all constructed with blocks of dressed sandstone. It can either be an arched structure or a metal decked structure. The railway line was constructed during the period 1904 to 1906.

Significance of site/feature | High on a provincial level – Grade III

Impact assessment

For a number of sections the railway line runs very close to the existing R56, in some cases right next to the road reserve fence. However, it is anticipated that the proposed development would not have an impact on these features

Mitigation

None

Requirements

None

References

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