

**Cultural heritage impact assessment for the
PROPOSED HOTEL DEVELOPMENT ON A SECTION OF THE FARM KAKAMAS
SUID 28, MARCHAND, KAI !GARIB MUNICIPALITY,
NORTHERN CAPE PROVINCE**

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED HOTEL DEVELOPMENT ON A SECTION OF THE FARM KAKAMAS SUID 28, MARCHAND, KAI !GARIB MUNICIPALITY, NORTHERN CAPE PROVINCE

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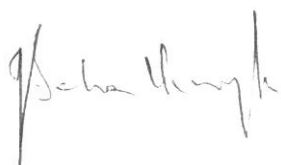
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Declaration:

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 2014

EXECUTIVE SUMMARY

CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED HOTEL DEVELOPMENT ON A SECTION OF THE FARM KAKAMAS SUID 28, MARCHAND, KAI !GARIB MUNICIPALITY, NORTHERN CAPE PROVINCE

It is proposed to develop a hotel on a section of land located southeast of the hamlet of Marchand in the Northern Cape Province.

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **MEG Omgewingsimpakstudies** 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 hotel.

The cultural landscape qualities of the larger region essentially consist of two components. The first is a rural area in which the human occupation is made up of a pre-colonial element (Stone Age) as well as a much later colonial (farmer) component. The second component is an urban landscape dating to the colonial period and is linked to the rural colonial landscape.

- A number of stone tools, all dating to the Middle Stone Age were identified. The material used is mostly banded iron stone, but a few made from a hardened shale also occurs. Cores, flakes and unspecific tools (probably all scrapers) were identified. The area has a density of approximately 1 object per 20m².

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 also 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
July 2014

TECHNICAL SUMMARY

| Property details | | | | | | |
|-------------------------|-----------------|------------|------------|----|----------|-----------|
| Province | Northern Cape | | | | | |
| Magisterial district | Gordonia | | | | | |
| Municipality | Kai !Garib | | | | | |
| Topo-cadastral map | 2820CB | | | | | |
| Closest town | Marchand | | | | | |
| Farm name | Kakamas Suid 28 | | | | | |
| Coordinates | Centre point | | | | | |
| | No | Latitude | Longitude | No | Latitude | Longitude |
| | | S 28.73848 | E 20.51711 | | | |

| 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 form of development or barrier exceeding 300m in length | No |
| 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 consolidated within past five years | No |
| Rezoning of site exceeding 10 000 sq m | No |
| Any other development category, public open space, squares, parks, recreation grounds | No |

| Development | |
|--------------------|-------------------|
| Description | Hotel development |
| Project name | - |

| Land use | |
|-------------------|--------|
| Previous land use | Vacant |
| 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 |

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1. INTRODUCTION

It is proposed to develop a hotel on a section of land located southeast of the hamlet of Marchand in the Northern Cape Province.

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

In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by **MEG Omgewingsimpakstudies** 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 hotel.

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 a hotel.

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.

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-
 - ancestral graves;
 - royal graves and graves of traditional leaders;
 - graves of victims of conflict;
 - graves of individuals designated by the Minister by notice in the Gazette;
 - historical graves and cemeteries; and
 - other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- sites of significance relating to the history of slavery in South Africa;
- movable objects, including-
 - objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - objects to which oral traditions are attached or which are associated with living heritage;
 - ethnographic art and objects;
 - military objects;
 - 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 Figures 3 and 4. For more information, please see the Technical Summary presented above (p. iv).

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 (Couzens 2004; De Beer 1992; Lange 2006; Morris 1995; Morris & Beaumont 1991; Parsons 2007; Richardson 2001; Rudner 1953; Rudner & Rudner 1968; Van der Waal-Braaksma & Ferreira 1986).

- 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 MEG Omgewingsimpakstudies by means of maps and during a site visit. The site was visited on 17 June 2104 and several transects were walked across it (see Fig. 1 for the track log that was kept of the site survey).

During the site visit the current owner of the farm, Mr Jaco Craford was interviewed. Mr Craford grew up on the farm and he confirmed that there are no known grave or structures on the development site.

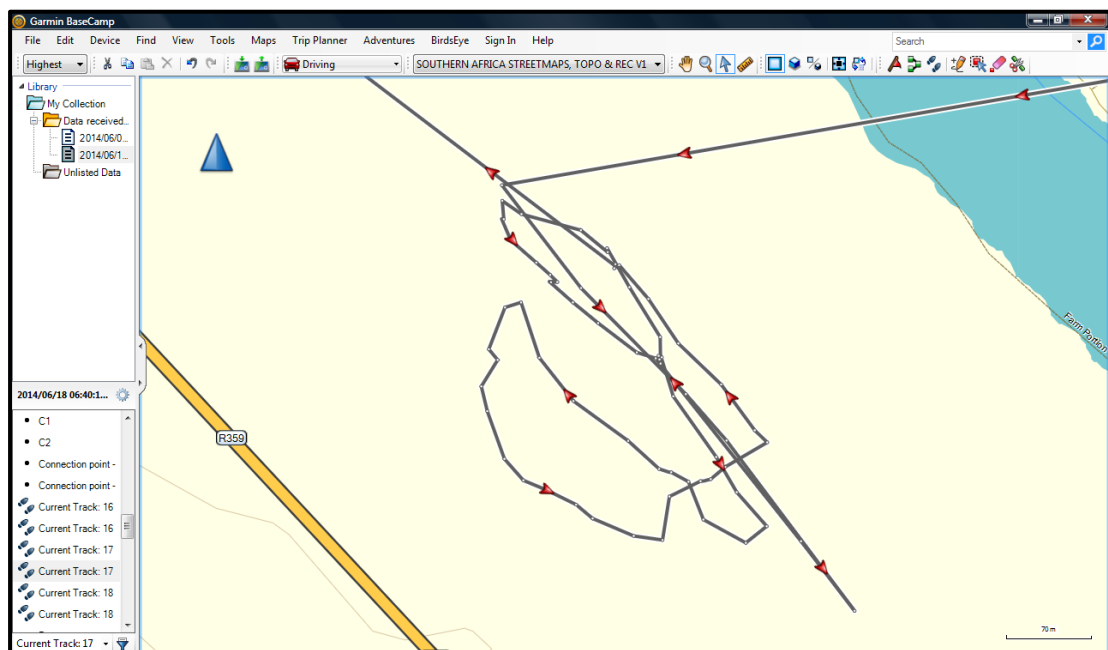


Fig. 1. Track log of the foot survey.

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. DESCRIPTION OF THE AFFECTED ENVIRONMENT

5.1 Site location and description

The proposed development site is located southeast of the hamlet of Marchand on the road (R359) between Kakamas and Augrabies Falls. For more detail, please see the Technical Summary presented on page iv.

The geology is made up of granite, changing to tillite to the east of the study area. Tillite is a sedimentary rock, usually formed by the burial and subsequent hardening of glacial till. Neither granite nor tillite is material that is suitable for the making of stone tools. The morphology of the region is described irregular plains. The vegetation is classified as Namaqualand Broken Veld (ENPAT).

During the site visit it was found that sections of the study area have been cleared of topsoil by means of earthmoving machines. In another section large amounts of rubble have been dumped. All of this would have had a negative impact on any heritage sites or objects that might have occurred here in the past.

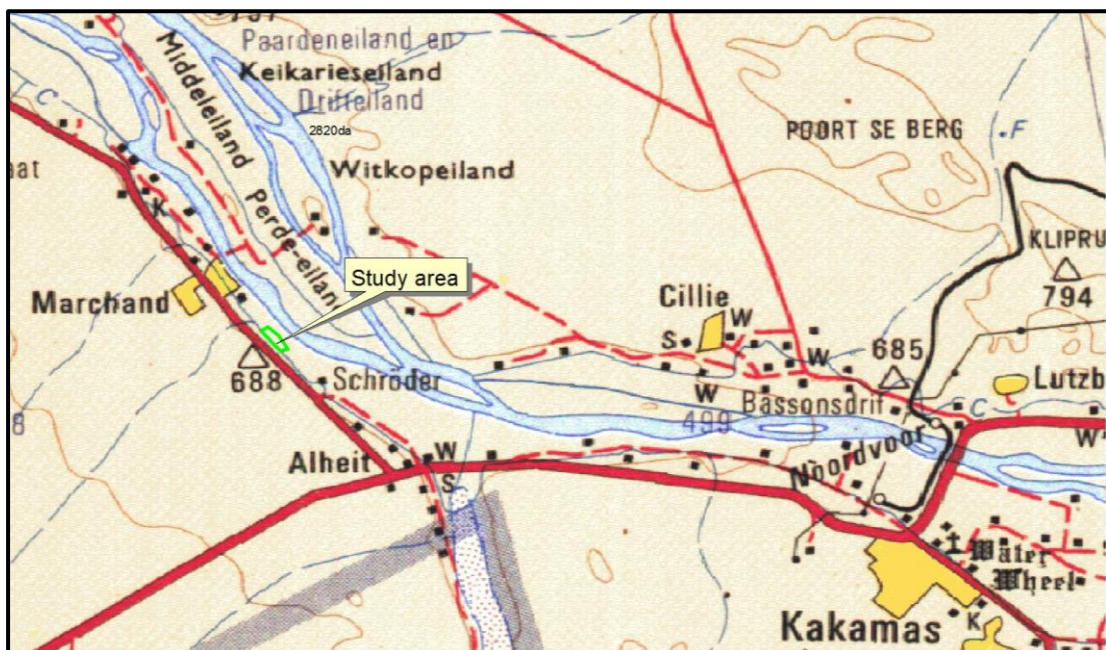


Fig. 2. Location of the study area (green polygon) in regional context.
(Map 2820: Chief Surveyor-General)



Fig. 3. Views over the study area.



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

5.2 Development proposal

The proposed development covers an area 3,5ha and would include the administration section, accommodation, services and parking area.



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

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 larger region essentially consist of two components. The first is a rural area in which the human occupation is made up of a pre-colonial element (Stone Age) as well as a much later colonial (farmer) component. The second component is an urban landscape dating to the colonial period and is linked to the rural colonial landscape.

5.3.1 **Rural landscape**

The rural landscape has always been sparsely populated and it was only in a few areas such as in the vicinity of sustainable water sources or through the application of specific economic strategies such as the development of irrigation systems, that people succeeded to occupy a section of the region for any length of time.

- Archaeological sites

Archaeological sites in this area predominantly date to the Stone Age as early farmer communities, also referred to as Iron Age communities, did not settle this far west (Humphreys 1976).

Occupation of the larger region took place since the Early Stone Age, with occurrences of Middle Stone Age more frequent than the Early Stone Age. However, it is mostly during the Later Stone Age when population density increased. Later, with the arrival of stock herders this increased even more, resulting in competition for resources such as access to water and shelter. Settlement mostly took place at small hills where rock shelters might occur or in the vicinity of the Orange River.

The type of heritage sites encountered in the region are settlement sites, e.g. !Nawabdanas or Renosterkop (Morris & Beaumont 1991) or those studied by Parsons (2008), burial sites on the banks of the Orange River (Morris 1995), rock engraving sites (Rudner & Rudner 1968; Lange 2006) and stone quarries (van Schalkwyk 2010).

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

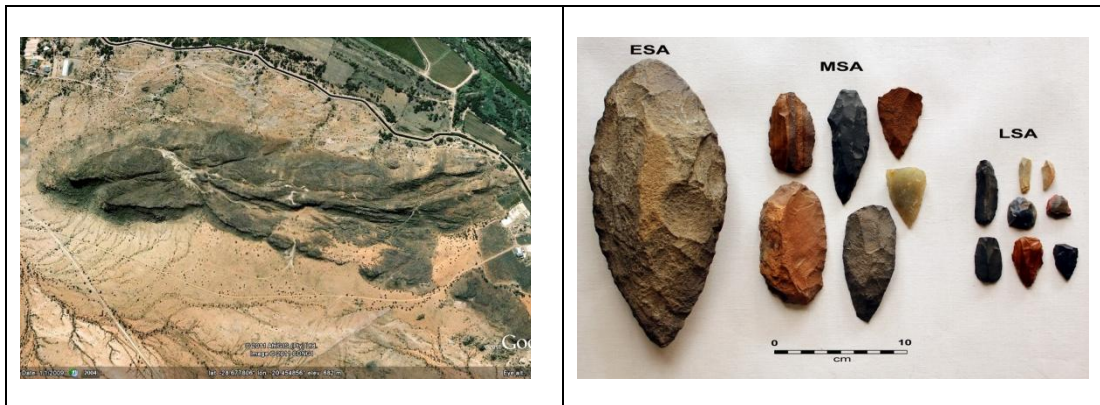


Fig. 6. Renosterkop where Morris & Beaumont (1991) excavated (left). (Photo: Google Earth)
The stone tools (right) are not from the region and are only used to illustrate the difference between Early (left), Middle (middle) and Later Stone Age (right) technology.

- Farmsteads

In the vicinity of the river, with the development of intensive irrigation farming, many farmsteads and other features were developed. These were usually adapted to accommodate the specific farming requirements of the specialised agricultural activities.

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.

As this is a complex of interrelated features, an impact on one element therefore implies an impact on the whole.

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



Fig. 7. Farmstead and a sheep pen.

- Cemeteries

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 anywhere.

Most of these cemeteries, irrespective of the fact that they are for land owner or farm labourers (and 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.

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



Fig. 8. An informal cemetery.

- 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, irrigation canals, railway lines, electricity lines and telephone lines.

Most features that can be included in this category are located on the outer fringes of towns. In the region under consideration the systems of canals developed to irrigate the extensive vineyards and orchards are a prime example of this type of heritage.

In addition, a large number of old mines dot the landscape. Most of these were very small in scale and can be classified as quarries rather than mines proper. Minerals such as beryl, feldspar, mica, amazonite and topaz were mined. Most of these mines are now abandoned, leaving behind a legacy of mining heritage in the region.

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



Fig. 9. Old bridge across the Orange River.

5.3.2 Urban landscape

- Kakamas:

The town of Kakamas grew out of an irrigation scheme that was established in 1898 for farmers that was left destitute by the severe drought of 1895-1897. It was laid out in 1931 and attained full municipal status in 1964. The name of the town is of Khoikhoi origin and translates as “place of drinking water by stock”.

According to the various databases that were consulted it has approximately 10 buildings and features that are listed as provincial heritage sites or are viewed to be of conservation worthy status. In addition a number of cemeteries are also located in various places around the town.

A few smaller villages or hamlets occur in the region, e.g. Augrabies, Lutzburg and Alheit. They provide some basic services such as a few shops, a church, garage, etc. to the surrounding community.

| | |
|--------------------------|--|
| NHRA Category | Buildings, structures, places and equipment of cultural significance |
| Protection status | General Protection - Section 34: Structures older than 60 years |
| NHRA Category | Graves, cemeteries and burial grounds |
| Protection status | General Protection - Section 36: Graves or burial grounds |
| NHRA Category | Buildings, structures, places and equipment of cultural significance |
| Protection status | General Protection - Section 37: Public Monuments and Memorials |

5.4 Identified sites

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

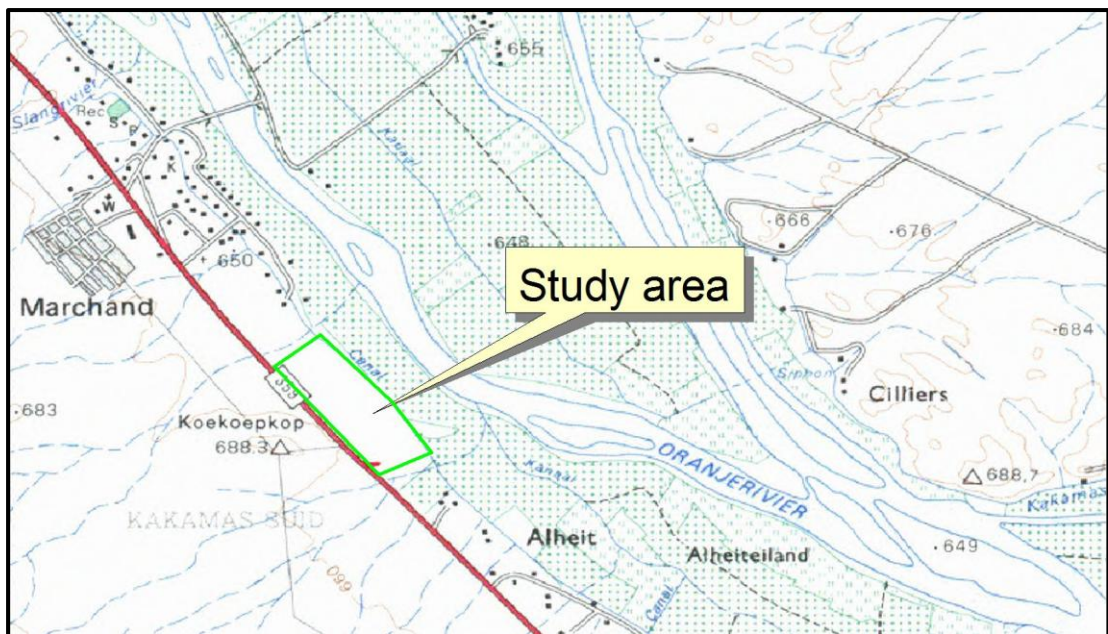


Fig. 10. Location of the study area.
(Map 2820CB: Chief Surveyor-General)

5.4.1 Stone Age

| | | | |
|--------------------------|---|------------|------------|
| NHRA Category | Archaeological and palaeontological sites | | |
| Protection status | General Protection - Section 35: Archaeology, palaeontology and meteorites | | |
| Location | 1 | S 28.73848 | E 20.51711 |
| Description | A number of stone tools, all dating to the Middle Stone Age were identified. The material used is mostly banded iron stone, but a few made from a hardened shale also occurs. Cores, flakes and unspecific tools (probably all scrapers) were identified. The area has a density of approximately 1 object per 20m ² . | | |

| | |
|---------------------|-------------------------------------|
| Significance | Low on a regional level – Grade III |
| Mitigation | No further action necessary |



Fig. 11. A selection of the identified artefacts.

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

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 the hotel.

The cultural landscape qualities of the larger region essentially consist of two components. The first is a rural area in which the human occupation is made up of a pre-colonial element (Stone Age) as well as a much later colonial (farmer) component. The second component is an urban landscape dating to the colonial period and is linked to the rural colonial landscape.

- A number of stone tools, all dating to the Middle Stone Age were identified. The material used is mostly banded iron stone, but a few made from a hardened shale also occurs. Cores, flakes and unspecific tools (probably all scrapers) were identified. The area has a density of approximately 1 object per 20m².

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 also 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.

De Beer, M. 1992. *Keimoes en omgewing: 'n kultuurhistoriese verkenning*. Keimoes: Munisipaliteit Keimoes.

De Jong, R.C. 2010. *Draft heritage impact assessment report: proposed land use change to provide for irrigated agricultural activities on the remainder of Holding 189, Kakamas North Settlement, Kai! Garib municipality, Northern Cape Province*. Unpublished report 2010/37. Pretoria.

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

Lange, M.E. 2006. *Women reading the Gariep River, Upington: structured inclusion*. Unpublished MA thesis. Durban: University of KwaZulu-Natal.

Morris, A.G. 1995. The Einiqua: an analysis of the Kakamas skeletons. In Smith, A.B. (ed) 1995, *Einiqualand: studies of the Orange River frontier*. Cape Town: University of Cape Town Press.

Morris, D. & Beaumont, P. 1991. !Nawabdanas: Archaeological sites at Renosterkop Kakamas District, Northern Cape. *South African Archaeological Bulletin* 46: 115-124.

Norman, N. & Whitfield, G. 2006. *Geological Journeys*. Cape Town: Struik Publishers.

Parsons, I. 2007. Hunter-gathers or herders? Reconsidering the Swartkop and Doornfontein Industries, Northern Cape Province, South Africa. *Before Farming* 4.

Parsons, I. 2008. Five Later Stone Age artefact assemblages from the interior Northern Cape province. *South African Archaeological Bulletin* 63(187):51-60.

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

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

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

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

Van der Waal-Braaksma, G & Ferreira, O.J.O. 1986. *Die Noordweste. Die stoflike kultuuruiting van die streek se bewoners*. Johannesburg: Genootskap vir Afrikaanse Volkskunde.

Van Schalkwyk, J.A. 2010a. *Archaeological impact survey report for the land use change on sections of the farm Vaalkoppies 40, Gordonia district, Northern Cape Province*. Unpublished report 2010/JvS/069.

Van Schalkwyk, J.A. 2010b. *Heritage impact assessment for the proposed agricultural development on a section of the property Kakamas South, Gordonia magisterial district, Northern Cape Province*. Unpublished report 2010/JvS/093. Pretoria.

Van Schalkwyk, J.A. 2011. *Heritage impact assessment report for the proposed establishment of the Inca Solar PV Power Plant, Kakamas region, Northern Cape Province*. Unpublished report 2011/JvS/030.

Van Schalkwyk, J.A. 2011b. *Heritage impact assessment for the proposed citrus orchard development on Portions of the farm Kakamas South, Augrabies, Gordonia magisterial district, Northern Cape Province*. Unpublished report 2011/JvS/061.

Van Schalkwyk, J.A. 2013a. *Cultural heritage impact assessment for the proposed township development on a section of the farm Kakamas Suid 28, Marchand, Kai !garib municipality, Northern Cape Province*. Unpublished report 2013/JvS/054.

Van Schalkwyk, J.A. 2013b. *Cultural heritage impact assessment for the proposed township development on a section of the farm Kakamas Suid 28, Alheit, Kai !garib municipality, Northern Cape Province*. Unpublished report 2013/JvS/055.

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

8.3 Maps and aerial photographs

1: 50 000 Topocadastral maps: 2820cd
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 its 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 of a person, 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 characteristics valued by a community or cultural group | | | | |
| 3. Scientific value | | | | |
| Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage | | | | |
| Is it important in demonstrating a high degree of creative or technical achievement at a particular period | | | | |
| 4. Social value | | | | |
| Does it have strong or special association with a particular community or cultural group for social, cultural or spiritual reasons | | | | |
| 5. Rarity | | | | |
| Does it possess uncommon, rare or endangered aspects of natural or cultural heritage | | | | |
| 6. Representivity | | | | |
| Is it important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects | | | | |
| Importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class | | | | |
| Importance in demonstrating the principal characteristics of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province, region or locality. | | | | |
| 7. Sphere of Significance | | High | Medium | Low |
| International | | | | |
| National | | | | |
| Provincial | | | | |
| Regional | | | | |
| Local | | | | |
| Specific community | | | | |
| 8. Significance rating of feature | | | | |
| 1. | Low | | | |
| 2. | Medium | | | |
| 3. | High | | | |

APPENDIX 2. RELEVANT LEGISLATION

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

(1) Subject to the provisions of section 8, the protection of archaeological and palaeontological sites and material and meteorites is the responsibility of a provincial heritage resources authority: Provided that the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.

(2) Subject to the provisions of subsection (8)(a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.

(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

(4) No person may, without a permit issued by the responsible heritage resources authority-

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

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

(1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.

(2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.

(3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-

- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

(4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment 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.