

McGregor Museum Department of Archaeology



Archaeological Impact Assessment on Windsorton Erf 1, Northern Cape (Mahatalle)

DME NC 30/5/1/3/3/2/1/1888 EM
SAHRA 9/2/008/0001

David Morris
McGregor Museum, Kimberley
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Introduction

This report is commissioned by Mr Mosala Andries Mahatalle (P.O. Box 133, Boshof 8340, Tel 0761293062, email mamahatalle@hotmail.com). It provides a Phase 1 Archaeological Impact Assessment for a site of p[ro]posed alluvial diamond mining in the vicinity of Windsorton in the Northern Cape. The area in question lies south of the Windsorton-Barkly West road, in the area between the town and township west of Windsorton.

Specialist and legislative framework

The author of this report is an archaeologist accredited as a Principal Investigator by the Association of Southern African Professional Archaeologists. Previous experience includes research carried out in this area (Beaumont & Morris 1990; Morris 1988; Morris & Beaumont 1994).

The author works independently of the Mr Mahatalle or any organization with which he is connected, and provides this report within the framework of the National Heritage Resources Act (No 25 of 1999).

The National Heritage Resources Act No. 25 of 1999 (NHRA) protects heritage resources which include archaeological and palaeontological objects/sites older than 100 years, graves older than 60 years, structures older than 60 years, as well as intangible values attached to places. The Act requires that anyone intending to disturb, destroy or damage such sites, objects and/or structures may not do so without a permit from the relevant heritage resources authority. This means that a Heritage Impact Assessment should be performed, resulting in a specialist report as required by the relevant heritage resources authority/ies to assess whether authorisation may be granted for the disturbance or alteration, or destruction of heritage resources.

Environmental and heritage contexts

The environment in question consists of a flat, featureless upland away from the Vaal River (which is in the valley to the east), with basement Ventersdorp outcropping locally from a veneer of Rooikoppie "Older Gravels" which are of pre-Pleistocene age. The Rooikoppie gravel flats in this vicinity have been found in

other nearby settings to have very low incidence of flaked stone tools based on small quartzite and chalcedony nodules from the gravels (Morris 2008). It is possible that isolated engravings may occur on localized Ventersdorp (andesite) outcrops, but none was found in the area investigated.

Localized old diggings gave an opportunity to assess the presence of subsurface archaeological materials.

The landscape is sparsely vegetated (and recently burnt over about half the area examined), thereby making any surface archaeological traces highly visible.

The Northern Cape has a wealth of archaeological sites (Beaumont & Morris 1990; Morris & Beaumont 2004), with locales along and adjacent to the major river systems being of particular significance. This was particularly true of the Windsorton area, but much more so of the low-lying Younger Gravel sequences that have now largely been mined away on the east side of the river (Helgren 1979; Gibbon *et al.* 2009). River-side sites have been well-documented further down-stream along the Vaal in the Nooitgedacht-Pniel-Barkly West region (e.g. Beaumont & Morris 1990; Beaumont & McNabb 2000). Stone Age material found in this area spans the Earlier, Middle and Later Stone Ages through Pleistocene and Holocene times. Late Holocene material with pottery is known to occur on the river banks, while rock engravings are richly distributed in the region (Wilman 1933; Fock & Fock 1989; Morris 1988). Terraces along the rivers have also long been known for their association with archaeological and Plio-Pleistocene fossil material (e.g. Helgren 1979).

A cemetery is situated upslope from the proposed mining area, between it and the township.

Methods and limitations

The site was visited by the author and Mr Koot Msawula on 26 August 2010. The area was examined in detail on foot.

Vegetation cover is minimal making surface archaeological and heritage visibility relatively high. It is uncertain what depth of 'Rooikoppie' gravel overlies bedrock but the impression is that it is relatively shallow. The age of these gravels suggests that there would not be much of archaeological significance below the surface, unless deliberately buried there.

Anticipated impacts

The destructive impacts of the proposed mining that are possible in terms of heritage resources would tend to be a direct, once-off and permanent destruction event occurring during the initial mining. Rehabilitation cannot restore the contexts existing before mining takes place.

With respect to the magnitude and extent of potential impacts, mining is to take place in a ~1.5 ha area. There are existing access roads to the immediate vicinity.

Legislation

The National Heritage Resources Act (No 25 of 1999) (NHRA) provides protection for archaeological resources.

It is an offence to destroy, damage, excavate, alter, or remove from its original position, or collect, any archaeological material or object (defined in the Act), without a permit issued by the South African Heritage Resources Agency (SAHRA).

Section 35 of the Act protects all archaeological and palaeontological sites and requires that anyone wishing to disturb a site must have a permit from the relevant heritage resources authority. Section 36 protects human remains older than 60 years. In order for the authority to assess whether approval may be given for any form of disturbance, a specialist report is required. No mining, prospecting or development may take place without heritage assessment and approval.

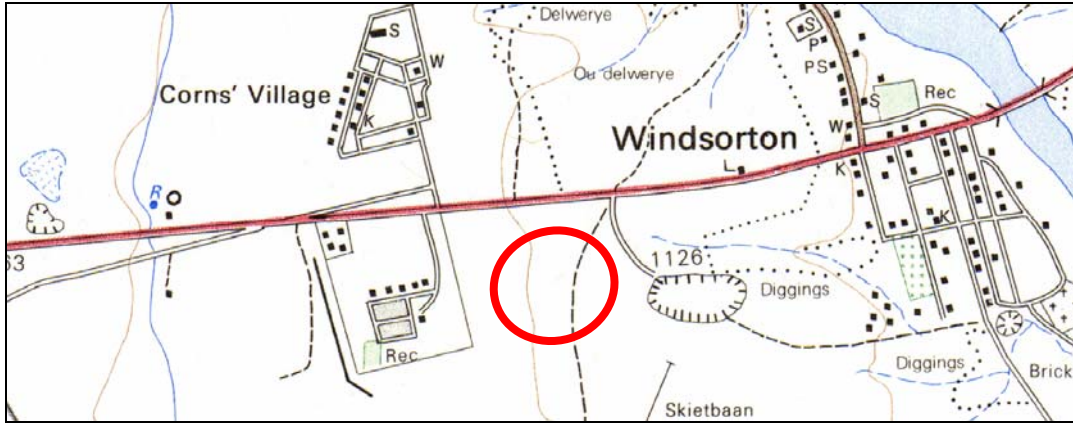
Where archaeological sites are concerned, SAHRA at national level acts on an agency basis for the Northern Cape Provincial Heritage Resources Agency (PHRA), Ngwao Bošwa ya Kapa Bokone. In the event of any archaeological material being encountered during prospecting or mining, SAHRA should be contacted immediately (021-4624502).

Observations

The site of proposed mining comprises a polygon defined by the corner peg points in the following table:

Point	South	East
A	-28.33594	24.69920
B	-28.33578	24.70049
C	-28.33680	24.70118
D	-28.33718	24.70026

The areas examined, as indicated above, form a relatively featureless and flat area well above the Vaal valley itself which is veneered by Older Gravels with Andesite outcropping occasionally from just below the surface. It is sparsely vegetated with a variety of mostly smaller *Acacia* spp. and grasses.



An extract from 1:50 000 sheet 2824BC showing the area investigated. A Google Earth image, below, showing the polygon for which a mining right is sought, reflects more recent developments in the area.



Geomorphologically, the area proved to be remarkably uniform with a thin sand cover over Rooikoppie gravels, with an extremely low incidence of Stone Age material – very much as found previously in two nearby areas (Morris 2008a, 2008b).

Isolated stone tools (occurring in surface densities of very much less than 1 per 10 x 10 m area) were found at 28.33638 S 24.69948 E; 28.33607 S 24.69940 E; 28.33653 S 24.70038 E; 28.33597 S 24.69977 E



Acheulean flakes at 28.33638 S 24.69948 E

Andesite outcrops were carefully inspected for engravings, but these all consisted of fairly small protrusions, and while some had ideal surfaces, none was found to bear any rock art.

Ruins of a twentieth century township were found in the western half of the intended mining area. Examples of house foundations were noted at 28.33604 S 24.70013 E; 28.33653 S 24.70038 E; 28.33589 S 24.70022 E. Artefacts including rusted metal, broken glass and porcelain are associated with these ruins. The ruins consist principally of lines of vertical stones marking the foundations/bases of walls which were probably built with mud or wood and iron. Most of these sites suggested approximately a mid-twentieth century date for the settlement. Forced removals from Windsorton to Pampierstad and thence to Diplankeng at Magogong are known to have taken place in 1965/6 (Kagisho Seleke pers comm., August 2010).



Ruin of dwelling (above) and associated artifacts (below)





The terrain showing shallow soil over Rooikoppie sediment, with localized traces of a mid-twentieth century township.

Recommendations

The most significant heritage trace found on the area examined was the ruins of a township cleared most probably in the mid 1960s. It is suggested that more oral history be collected in the area to document the history of this and other similar possible settlements – such as Fools Rush (Morris 2009) north west of Windsorton. Better examples of cleared townships exist in the Barkly West-Windsorton area. It is recommended to the heritage authorities that one or more good examples be set aside and conserved as the archaeological traces of twentieth century forced removals.

No other significant archaeological or heritage features were found on the area examined.

It is recommended that prospecting be allowed to proceed as proposed.

In the event that any archaeological site or feature is found in the course of work on the site – such as an area of substantially greater artefact density, a burial, or engraving occurrence – SAHRA should be contacted immediately (021-4624502: Ms N. Ndobochani or Ms M. Galimberti) so that the find can be investigated and mitigation measures recommended.

Records

Fieldnotes and photographs generated during the visit are lodged with the McGregor Museum, Kimberley.

Acknowledgements

I thank Mr K. Msawula who assisted me during the survey.

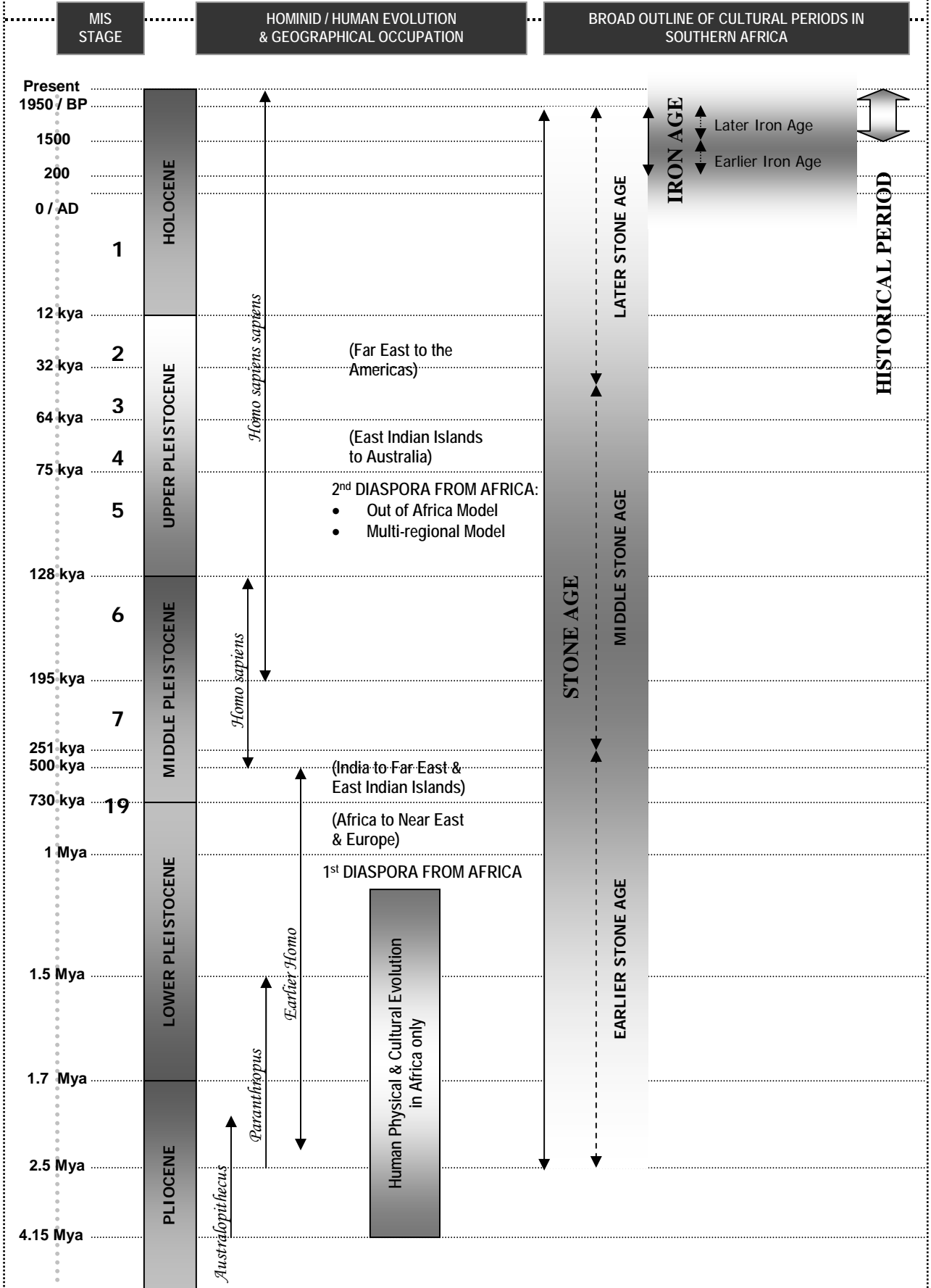
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Schematic Human Physical and Cultural Evolution in Africa



Extracts from the
National Heritage Resources Act (No 25 of 1999)

DEFINITIONS

Section 2

In this Act, unless the context requires otherwise:

- ii. “*Archaeological*” means –
 - a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
 - b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10 m of such representation;
 - c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic,... and any cargo, debris, or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation.
- viii. “*Development*” means any physical intervention, excavation or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including –
 - a) construction, alteration, demolition, removal or change of use of a place or structure at a place;
 - b) carrying out any works on or over or under a place;
 - c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
 - d) constructing or putting up for display signs or hoardings;
 - e) any change to the natural or existing condition or topography of land; and
 - f) any removal or destruction of trees, or removal of vegetation or topsoil;
- xiii. “*Grave*” means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;
- xxi. “*Living heritage*” means the intangible aspects of inherited culture, and may include –
 - a) cultural tradition;
 - b) oral history;

- c) performance;
 - d) ritual;
 - e) popular memory;
 - f) skills and techniques;
 - g) indigenous knowledge systems; and
 - h) the holistic approach to nature, society and social relationships.
- xxx. *“Palaeontological”* means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace;
- xli. *“Site”* means any area of land, including land covered by water, and including any structures or objects thereon;
- xliv. *“Structure”* means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

NATIONAL ESTATE

Section 3

- 1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- 2) Without limiting the generality of subsection 1), the national estate may include –
 - a) places, buildings, structures and equipment of cultural significance;
 - b) places to which oral traditions are attached or which are associated with living heritage;
 - c) historical settlements and townscapes;
 - d) landscapes and natural features of cultural significance;
 - e) geological sites of scientific or cultural importance
 - f) archaeological and palaeontological sites;
 - g) graves and burial grounds, including –
 - i. ancestral graves;
 - ii. royal graves and graves of traditional leaders;
 - iii. graves of victims of conflict
 - iv. graves of individuals designated by the Minister by notice in the Gazette;
 - v. historical graves and cemeteries; and
 - vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
 - h) sites of significance relating to the history of slavery in South Africa;
 - i) movable objects, including –

- i. objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
- ii. objects to which oral traditions are attached or which are associated with living heritage;
- iii. ethnographic art and objects;
- iv. military objects;
- v. objects of decorative or fine art;
- vi. objects of scientific or technological interest; and
- vii. 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).

STRUCTURES

Section 34

- 1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

ARCHAEOLOGY, PALAEOLOGY AND METEORITES

Section 35

- 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 assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

- 5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may –
 - a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
 - b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
 - c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph a) to apply for a permit as required in subsection 4); and
 - d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.
- 6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated, serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

BURIAL GROUNDS AND GRAVES

Section 36

- 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 of any burial ground or grave referred to in subsection 3a) 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.
- 5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection 3b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority –
 - a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
 - b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.
 - 6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority –
 - a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
 - b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-internment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

HERITAGE RESOURCES MANAGEMENT

Section 38

- 1) Subject to the provisions of subsections 7), 8) and 9), any person who intends to undertake a development categorised as –
 - a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
 - b) the construction of a bridge or similar structure exceeding 50 m in length;
 - c) any development or other activity which will change the character of a site –
 - i. exceeding 5 000 m² in extent; or
 - ii. involving three or more existing erven or subdivisions thereof; or
 - iii. involving three or more erven or subdivisions thereof which have been consolidated within the past five years; or

- iv. the costs which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - d) the rezoning of a site exceeding 10 000 m² in extent; or
 - e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,
- must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.
- 2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection 1) –
 - a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or
 - b) notify the person concerned that this section does not apply.
 - 3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection 2a) ...
 - 4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development decide –
 - a) whether or not the development may proceed;
 - b) any limitations or conditions to be applied to the development;
 - c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
 - d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
 - e) whether the appointment of specialists is required as a condition of approval of the proposal.

APPOINTMENT AND POWERS OF HERITAGE INSPECTORS

Section 50

- 7) Subject to the provision of any other law, a heritage inspector or any other person authorised by a heritage resources authority in writing, may at all reasonable times enter upon any land or premises for the purpose of inspecting any heritage resource protected in terms of the provisions of this Act, or any other property in respect of which the heritage resources authority is exercising its functions and powers in terms of this Act, and may take photographs, make measurements and sketches and use any

other means of recording information necessary for the purposes of this Act.

- 8) A heritage inspector may at any time inspect work being done under a permit issued in terms of this Act and may for that purpose at all reasonable times enter any place protected in terms of this Act.
- 9) Where a heritage inspector has reasonable grounds to suspect that an offence in terms of this Act has been, is being, or is about to be committed, the heritage inspector may with such assistance as he or she thinks necessary –
 - a) enter and search any place, premises, vehicle, vessel or craft, and for that purpose stop and detain any vehicle, vessel or craft, in or on which the heritage inspector believes, on reasonable grounds, there is evidence related to that offence;
 - b) confiscate and detain any heritage resource or evidence concerned with the commission of the offence pending any further order from the responsible heritage resources authority; and
 - c) take such action as is reasonably necessary to prevent the commission of an offence in terms of this Act.

A heritage inspector may, if there is reason to believe that any work is being done or any action is being taken in contravention of this Act or the conditions of a permit issued in terms of this Act, order the immediate cessation of such work or action pending any further order from the responsible heritage resources authority.