

McGregor Museum Department of Archaeology



Report on a Phase 1 Archaeological Impact Assessment of proposed prospecting on Uitkyk 106, Locks Verdriet 105 and Brakpan 107, west of Kimberley, Northern Cape.

David Morris
August 2008

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Introduction

The archaeology of the Northern Cape is rich and varied, covering long spans of human history. Some areas are richer than others, and not all sites are equally significant. Heritage impact assessments are a means to facilitate development and mining while ensuring that what should be conserved is saved from destruction, or adequately mitigated and/or managed.

The present report concerns observations on archaeological and heritage traces on the properties Uitkyk 106, Locks Verdriet 105 and Brakpan 107, west of Kimberley, Northern Cape.

Mr Jaco J. du Toit (P.O. Box 110564 Hadison Park 8306, tel 0832573770) proposes obtaining a prospecting right. He provided access and showed us over the property on 13 August 2008.

Legislation

The National Heritage Resources Act (No 25 of 1999) (NHRA) provides protection for heritage resources including built fabric (including farm houses more than 60 years old), burials and archaeological traces.

Concerning archaeological remains, 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.

SAHRA at national level acts on an agency basis for the Provincial Heritage Resources Agency (PHRA) in the Northern Cape where archaeological sites and palaeontological material are concerned. In the event of any archaeological or fossil material being encountered during prospecting or development, SAHRA should be contacted immediately (021-4624502). Where other aspects of heritage are concerned, Boshwa (the Provincial Heritage Resources Authority) has jurisdiction.

Methods and limitations

A background literature/museum database search provides indications of what might be expected in the region.

During the site investigation, it was not clear where exactly prospecting (by way of drilling) was likely to take place. The survey focused on assessing the archaeological potential of different geomorphological zones on the farms, which could broadly be defined as: dolerite hills and their slopes (in the south west); pan-side settings with calcrete margins (in the north west); large areas over the remainder of the farms entirely mantled by Hutton (Aeolian) Sands, in places evidently up to several metres deep; and localised outcrops, peaking out through the Hutton Sands on the plains, of Ventersdorp basement basalt or andesite.

Given the thickness of sand, it is possible that substantial areas may have archaeological traces that are presently hidden from view.

It is recommended that should mining proceed following exploration and drilling, the specific locales of proposed higher impact should be examined in closer detail.

Background: archaeological resources in the region

Broadly speaking, the archaeological record of this region reflects the long span of human history from Earlier Stone Age times (more than one and a half million to about 270 000 years ago), through the Middle Stone Age (about 270 000 – 30 000 years ago), to the Later Stone Age (up to the protocolonial era). The last 2000 years was a period of increasing social complexity, with the appearance of farming (herding and agriculture) alongside foraging, and of ceramic and metallurgical (Iron Age) technologies alongside an older trajectory of stone tool making (Morris & Beaumont 2004). Rock art sites occur as rock engravings on rocky andesite outcrops such as at Wildebeest Kuil, not far to the north east, or on dolerite koppies such as at Vaalpan or Middel Plaats South, also nearby. Notable Middle Stone Age and Earlier Stone Age occurrences are known from Rooidam which lies just off the road between Uitkyk and Kimberley (Richardt 2007).

Observations

Amongst and below the dolerite hills

A rich spread of Stone Age artefacts, on hornfels, was previously observed on the eroded eastern footslope of the dolerite hills at the south western corner of the property being surveyed and on the adjoining farm Paardeberg 154. These however are in a derived surface context, lacking any organic traces, and probably mixed (largely Pleistocene in age) and hence are of limited archaeological value.

Similar material was observed in a valley (again exposed by erosion) in the vicinity of 28°48'50" S 24°09'04" E.

It is possible that rock engravings might be found in places amongst these Karoo age dolerite hills, although none were seen during our investigation and on a previous occasion on Paardeberg (the farmer, having grown up on the farm, had never seen any). A small site is known, however, on the extreme western edge of these same hills on the farm Middel Plaats South.

Pan margins

Pan margins may often be foci of surface archaeological material owing to their being natural magnets for past human activity (proximity to water and hence also animals being a consideration), as also their being places where overlying sediments are eroded to expose earlier strata.

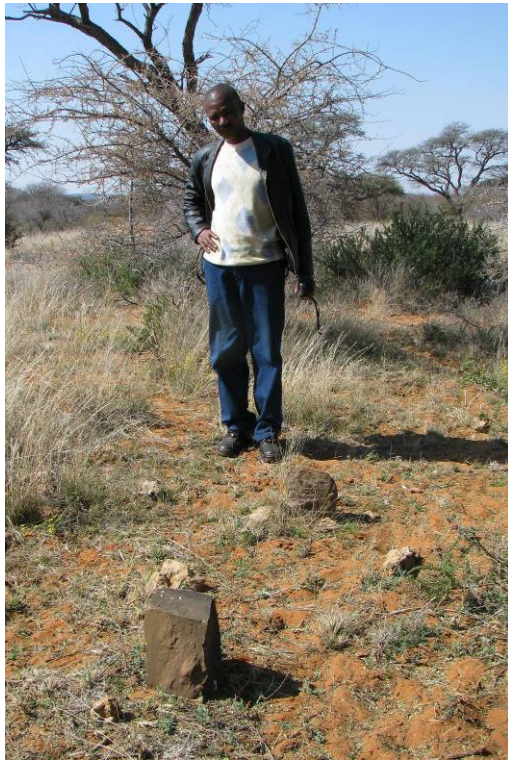
The margins of the Brakpan proved, however, to have extremely sparse traces of past human activity, with densities of probably mainly Middle Stone Age artefacts (on hornfels and quartzite) being less than 1 per 10X10 m in the vicinity of 28°45'48" S 24°09'12" E. This is an area which is less than 10 km from the Vaal and Riet Rivers, to the west and south, and it is possible that a *brak* (salty) pan would have provided only a marginal set of resources, with sparsely scattered stone tools representing ephemeral visits and opportunistic 'off-site' flaking in contexts of hunting or gathering.



Hutton Sands

A considerable depth of Hutton Sands covers the bulk of the property in question. No surface archaeological traces were noted at any of the places where we examined this geomorphological zone, although it is likely that small sites or dispersed artefact scatters would exist at or under the surface at many locales, and at the base of the Sands.

Heritage resources *on* the Sands comprise historical features such as the Locksverdriet homestead (unoccupied), a house that dates back at least half a century or more. In the vicinity of the homestead are graves of farm-workers (including the grave of one Evah Koopman, b 10-3-1923 d 6-11-1964), at 28°46'57" S 24°09'41" E, and of the Jansens family (who farmed here, inter alia breeding donkeys), at 28°46'54" S 24°09'34" E.



Graves of farm-workers near the Locksverdriet homestead.



One of the Jansens family graves near the Locksverdriet homestead.

Andesite outcrops

On the plains, possible foci of archaeological material could be a number of local outcrops of Pre-Cambrian Ventersdorp basalt (andesite). Such outcrops directly west of Kimberley include the site of Wildebeest Kuil where engravings occur on andesite blocks (a very similar situation pertains at one of the sites in the Mokala National Park south west of Uitskyk). However, on

two such outcrops investigated much of the rock was very rough, with a high incidence of amygdoids, or pock-marked where amygdoids had eroded out. No engravings were found.



Ventersdorp outcrop: rough surfaces unsuited to supporting engravings.



On one outcrop, at 28°47'03" S 24°12'42" E, a small scatter of Later Stone Age stone tools on fine-grained rocks was found, while on another, at 28°47'27" S 24°13'02" E, a single Middle Stone Age trimmed flake on quartzite was noted.

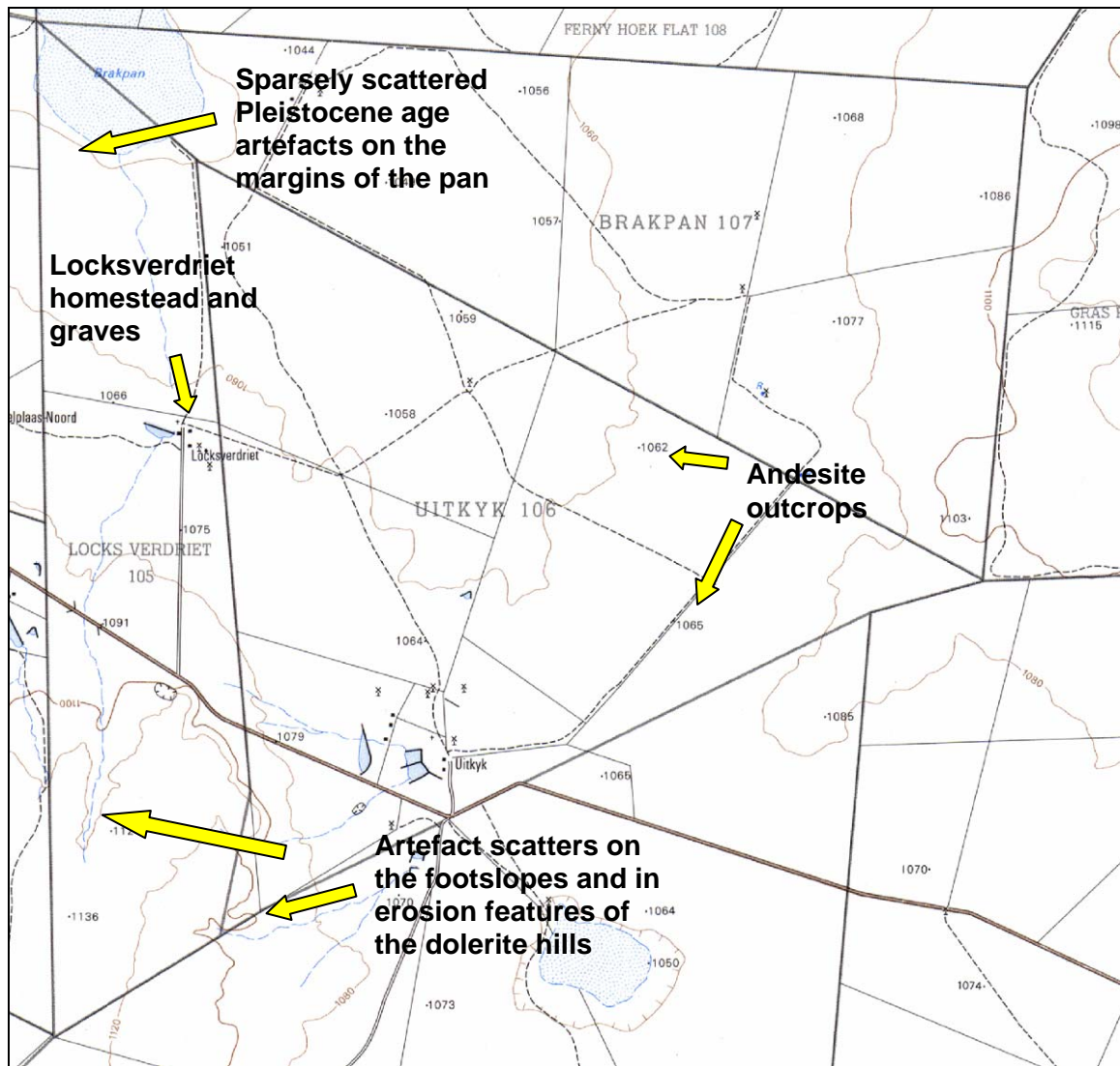


Later Stone Age flakes found on the top of an andesite outcrop. These small hills are a source of fine-grained nodules of stone, and are a vantage point for observing the surrounding plains.

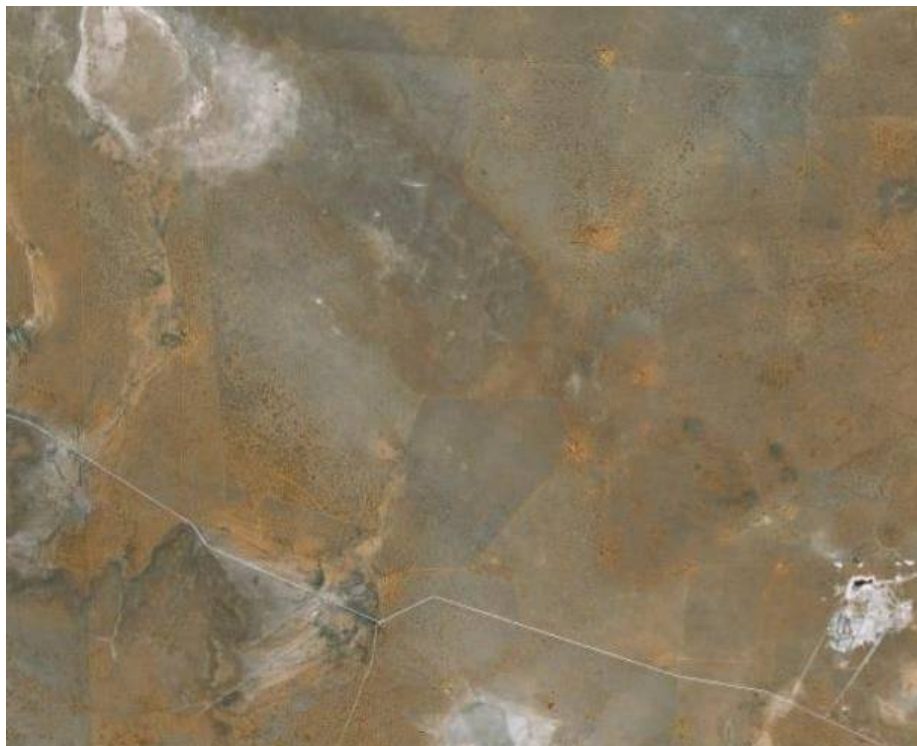


Middle Stone Age trimmed flake from an andesite outcrop.





Extract from the 1:50 000 map 2824CC



Recommendations

No major sites were located during the survey of Uitkyk, where different zones have been characterised in terms of observed and expected heritage traces.

While no features were found that would constrain prospecting (by way of drilling) at this stage, it is recommended that in the event that mining ensues a more detailed investigation should be focused on areas of expected primary and secondary impacts.

In the event that sites or features (eg high density of artefacts, a burial, or ostrich eggshell cache) are found during an aspect of prospecting, SAHRA (or the PHRA, depending on the status of any agency agreement) should be contacted immediately (021-4624502) and an archaeologist alerted to assess the find and make recommendations for mitigation, if necessary.

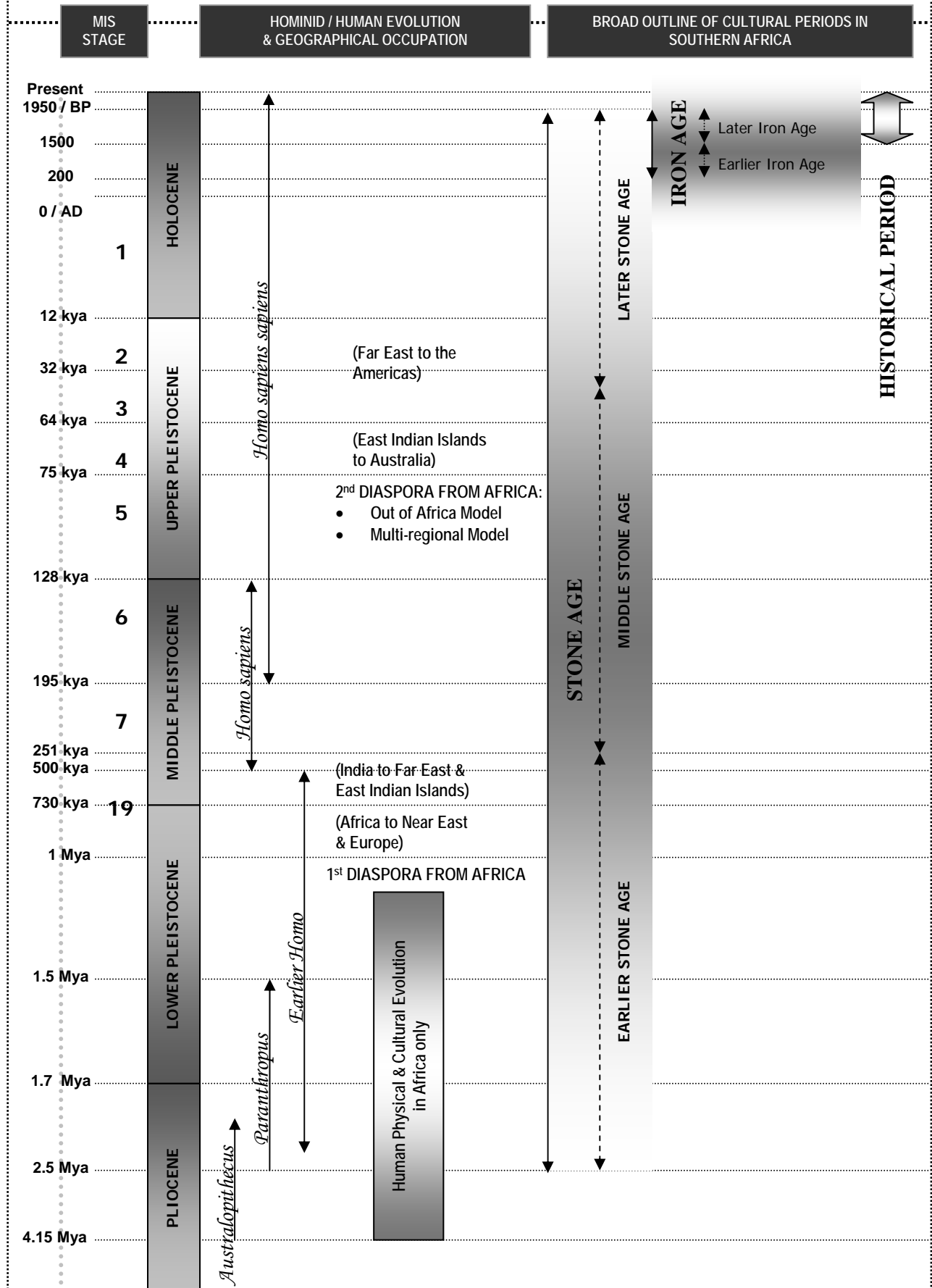
Acknowledgements

I thank Mr Jaco du Toit who provided access and guided us around the property, and Mr Vincent Dinku who assisted in the field.

References

- Morris, D. & Beaumont, P.B. 2004. *Archaeology in the Northern Cape: Some key sites*. Kimberley: McGregor Museum.
- Richardt, F. 2007. Rooidam revisited: on-going investigations into two 'Fauresmith' sites. Poster presented at SASQUA Conference, Howick, April 2007.

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.
- xxxi. “*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-interment 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.