

# McGregor Museum Department of Archaeology



## Archaeological Impact Assessment on a certain surveyed portion of Erf 1, Windsorton, Northern Cape.

DME File references: NC 30/5/1/2/3/2/1/215 EM  
SAHRA File reference: 9/2/008/0001

David Morris  
July 2009

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## **Introduction**

The author was contacted by Mrs Amos Davids to carry out a phase 1 archaeological impact assessment with respect to proposed mining on a certain surveyed portion of Erf 1, Windsorton, on and alongside the island and within the Vaal River channel, downstream from the town of Windsorton.

Contact details: Mr A.J. Davids, P.O. Box 82, Windsorton 8510 Tel 053-5510089/5510355

The site was visited on 16 July 2009 in the company of Mr Davids who guided me to the vicinity to be mined.

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

## **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.

SAHRA at national level acts on an agency basis for the Provincial Heritage Resources Agency (PHRA) in the Northern Cape, where archaeological sites are concerned. Permit applications should be made to the SAHRA office in Cape Town. In the event of any archaeological material being encountered during prospecting, SAHRA should be contacted immediately (021-4624502).

## **Methods and limitations**

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

During the site investigation, the area of proposed mining was inspected. It consists of the island downstream from Windsorton already almost completely disturbed by previous mining, and the adjacent river channel including a section immediately downstream from the island, which has been pumped dry (the river diverted) and excavated to bedrock in places. Remnants of gravel profiles remain in places.

Old diggings gave an opportunity to assess the presence of subsurface archaeological materials, although in most instances the sediments have already been completely disturbed (as is plainly to be seen in the Google Earth image).

## **Background: archaeological resources in the region**

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). 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).

## **Observations**

The prospecting site comprises a polygon defined by the corner peg points A to MM in the attached table, and taking in all of the island, the adjacent river channels and a portion of the river channel as it begins to flow westwards just downstream from the island.

The entire present surface of the island together with the approaches to it is artificial, probably subjected to generations of searches for diamonds. There was almost nothing likely to approximate any kind of in situ archaeological deposit, although flakes and handaxes were occasionally to be seen on the heaps and surfaces in question. It was impossible to estimate any meaningful context for these.

Downstream from the island we walked down into the dried bed of the river where gravels are being mined down to a glacially striated Dwyka conglomerate and outcrops of Ventersdorp. Only locally are there remnants of in situ gravel. No artefacts were noted in these particular sections. They are potentially of interest in terms of a current cosmogenic dating project (Ryan Gibbon and colleagues) and hence details were passed along to Gibbon who was conducting fieldwork in the

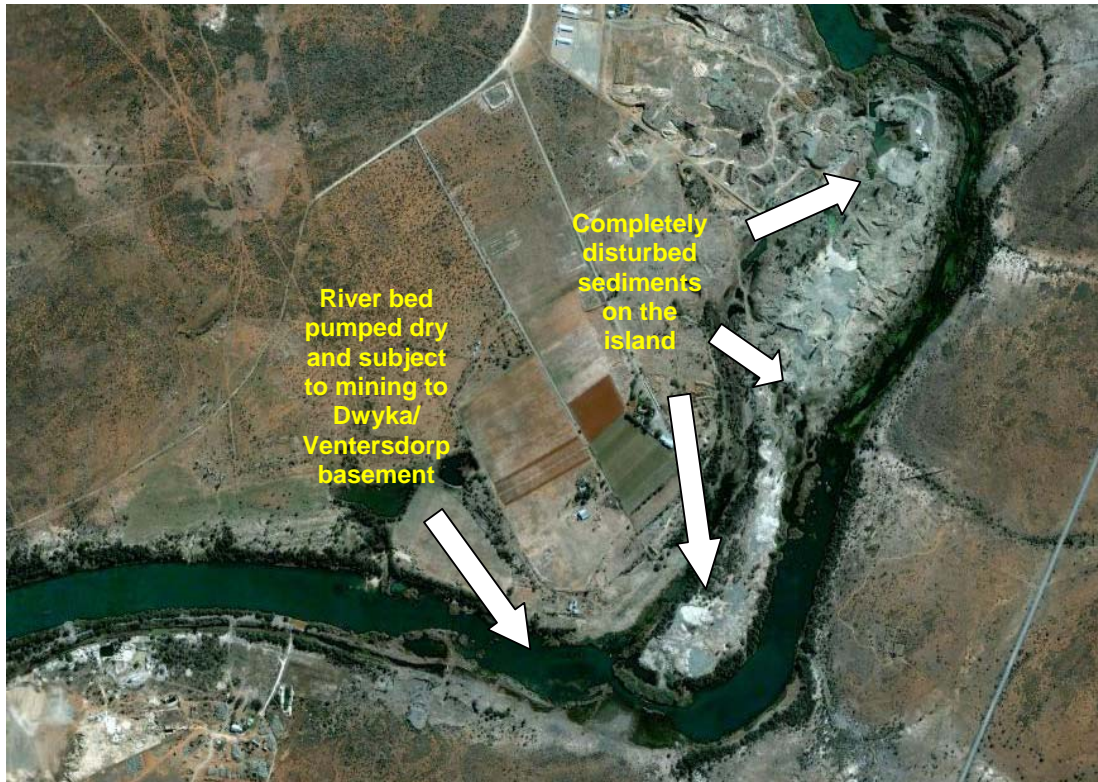
area in July.

THE FIGURE A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, BB, CC, DD, EE, FF, GG, HH, II, JJ, KK, LL, MM AND A REPRESENTS 112.3158ha. SITUATED ON A PORTION OF WINDSORTON ERF 1, THE STATE LAND.

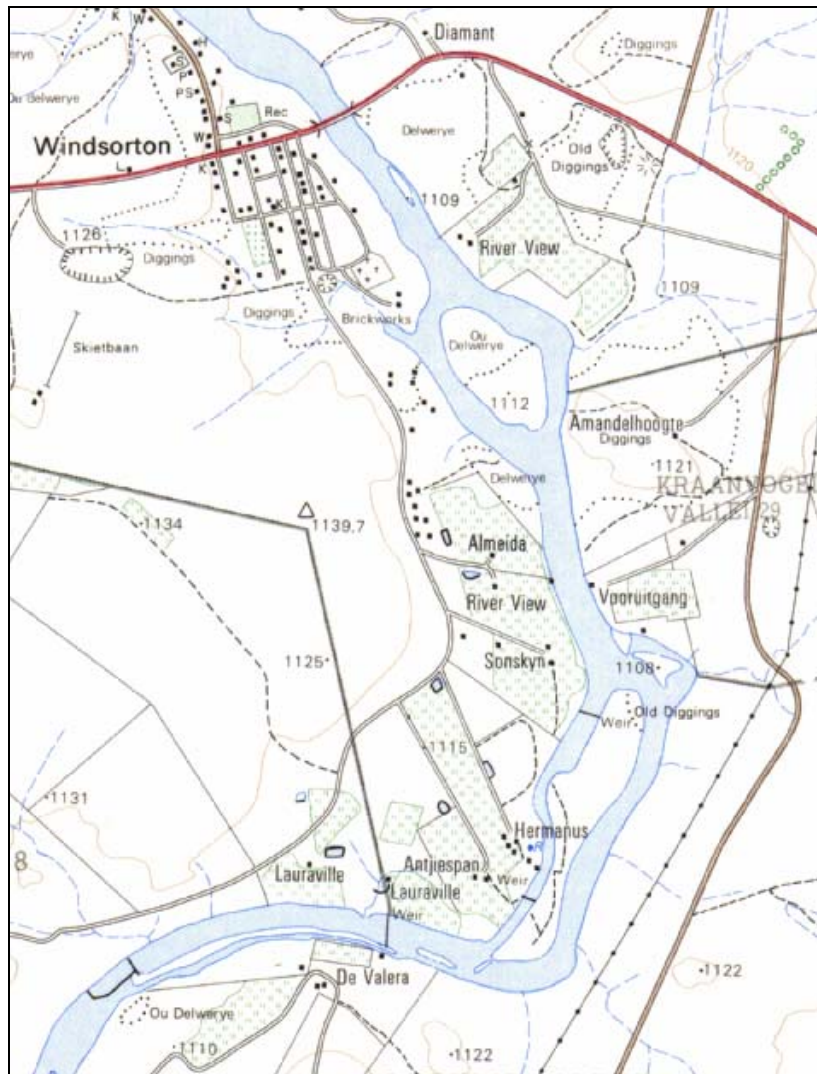
**WGS 84 DATUM SURVEY SYSTEM WG 25**

CO-ORDINATES :

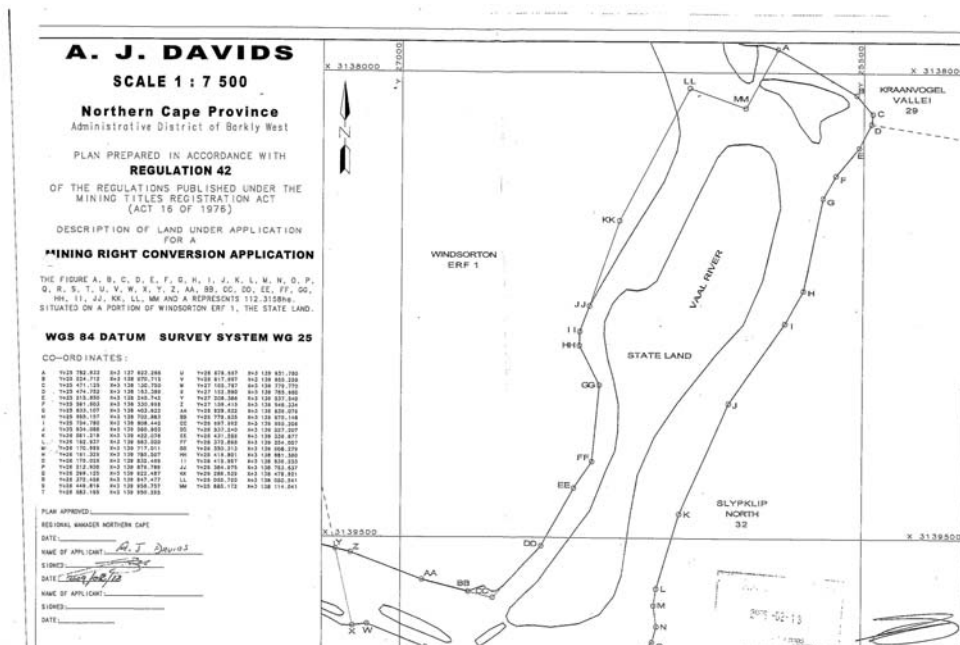
A	Y+25 782.933	X+3 137 922.268	U	Y+26 676.657	X+3 139 931.760
B	Y+25 524.712	X+3 138 070.715	V	Y+26 917.697	X+3 139 855.258
C	Y+25 471.125	X+3 138 130.750	W	Y+27 105.767	X+3 139 779.770
D	Y+25 474.752	X+3 138 163.388	X	Y+27 152.890	X+3 139 785.660
E	Y+25 515.850	X+3 138 240.745	Y	Y+27 208.386	X+3 139 537.540
F	Y+25 591.603	X+3 138 330.996	Z	Y+27 159.415	X+3 139 549.334
G	Y+25 633.107	X+3 138 403.922	AA	Y+26 929.622	X+3 139 636.079
H	Y+25 695.157	X+3 138 702.883	BB	Y+26 778.635	X+3 139 675.148
I	Y+25 754.790	X+3 138 808.445	CC	Y+26 697.992	X+3 139 695.206
J	Y+25 934.088	X+3 139 065.903	DD	Y+26 537.240	X+3 139 527.207
K	Y+26 091.219	X+3 139 422.076	EE	Y+26 431.286	X+3 139 339.877
L	Y+26 162.937	X+3 139 663.020	FF	Y+26 372.866	X+3 139 254.057
M	Y+26 170.996	X+3 139 717.011	GG	Y+26 350.313	X+3 139 008.279
N	Y+26 161.326	X+3 139 785.507	HH	Y+26 416.801	X+3 138 881.360
O	Y+26 175.026	X+3 139 835.469	II	Y+26 415.997	X+3 138 836.233
P	Y+26 212.900	X+3 139 879.789	JJ	Y+26 384.975	X+3 138 755.637
Q	Y+26 299.125	X+3 139 922.497	KK	Y+26 289.529	X+3 138 478.921
R	Y+26 372.456	X+3 139 947.477	LL	Y+26 065.720	X+3 138 050.541
S	Y+26 449.816	X+3 139 958.757	MM	Y+25 885.172	X+3 138 114.041
T	Y+26 583.165	X+3 139 950.295			



Google Earth image of the Vaal River just south (downstream) from Windsorton



Extract from 1:50 000 sheet 2824BC





Handaxe without context from the Island  
Horizontal measurement of book: 205 mm.



Mining the bed of the river downstream from the island.

Reference made in the EMP to a report by Peter Beaumont is irrelevant. It refers to a locale further upstream, between the island and the town of Windsorton, where Fauresmith artefacts have been noted in gravel and calcified silts higher up in the sequence than those exposed in the banks of the Vaal adjacent to the island.

## **Recommendations**

No significant archaeological or heritage features were found on the areas examined, though it is clear that archaeological contexts of note probably did once exist here. Virtually no part of the area investigated had not been disturbed by previous mining.

Sections in the banks of the river downstream from the island were referred to Gibbon and colleagues for possible cosmogenic dating and stratigraphic characterization.

It is recommended that prospecting be allowed to proceed as proposed. Archaeologists should be allowed to inspect any sections at the site at any time.

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 – SAHRA should be contacted immediately (021-4624502: Mrs Mary Leslie or Dr A. Jerardino) so that the find can be investigated and mitigation measures recommended.

## **Acknowledgements**

I thank Mr Davids who guided me to the site of proposed mining.

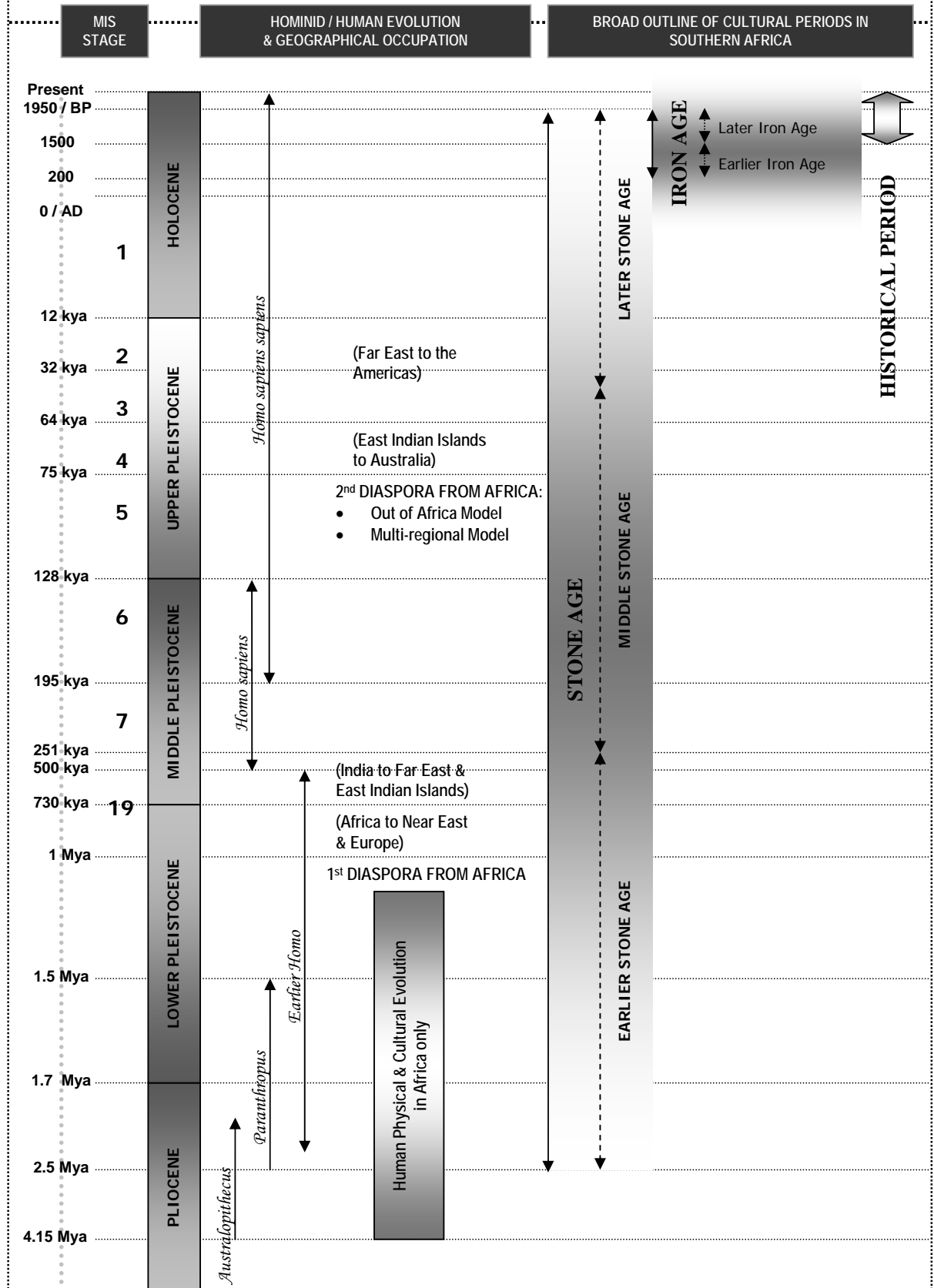
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### Schematic Human Physical and Cultural Evolution in Africa



# 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.
- 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 traces;
- 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 m<sup>2</sup> 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 m<sup>2</sup> 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.