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## PHASE 1

# ARCHAEOLOGICAL IMPACT ASSESSMENT

Witpoort 123 LR & Richards Laager 124 LR

Mokorong

Northern Province

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February 1999

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## AIM

The aim was to undertake a Phase 1 Archaeological Impact Assessment on approximately 99.6581 ha of Wilpoot 123 LR & Richards Lager 124 LR where a housing project has been proposed, to assess the impact of the proposed scheme in terms of archaeological/historical sites and features and to make recommendations. The task was performed on February 18, 1999.

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## METHOD

A survey of the whole area demarcated for development was done on foot by an archaeologist and two assistants. Mr Solomon Modube, employed at the Tele Centre, indicated the demarcated area to us. Locations were recorded by means of a GPS (Garmin, 45XL), and archaeological/historical features were photographed with a Kodak Digital DC120 camera. Unfortunately the GPS was dysfunctional, and we had to rely on measurements. As the project needed to be urgently completed it was not possible to return again to obtain GPS readings. A schematic map of the area in general, indicating the various identified sites was drawn to assist in locating the sites. The Wilpoot Sports Stadium was used as main reference point.

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## DESCRIPTION

Most of the identified area has been utilised for farming activities in the past, resulting in disturbed vegetation. In the south and south-eastern parts in particular, agricultural field contours are still clearly seen. An isolated, formal grave and the remains of a farmstead (outbuildings and concrete dam) are located in this area. No other surface finds were made. All archaeological material from this part came from below the surface, i.e the subsoil dug by an antbear and from a slightly eroded area.

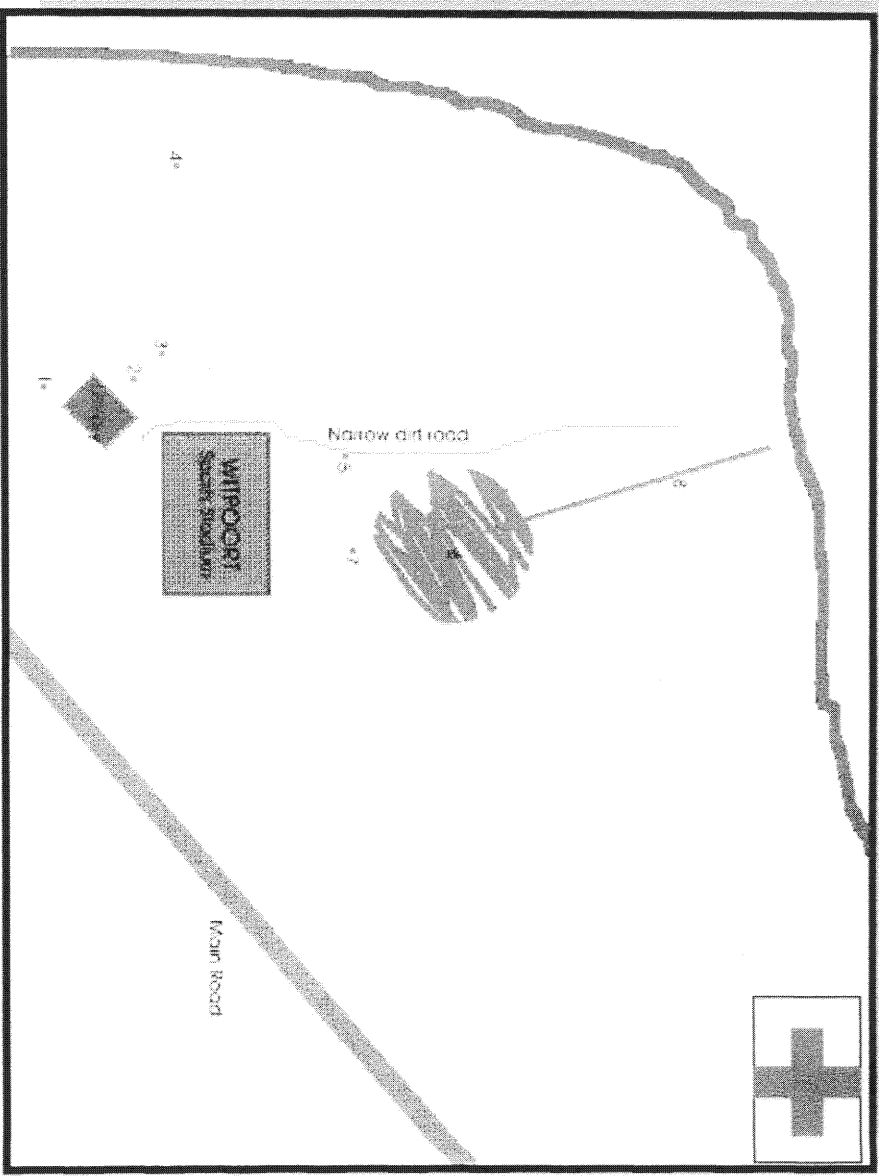
The rest of the area is characterised by several stone tool scatterings. However, the best sites were again identified where previous earthworks (e.g the water channel, a narrow, slightly eroded dirt road as well as a new water pipeline) had revealed several concentrations of stone tool flakes. Only a few formal tools were identified. As the majority of the finds are stone flakes, it can be inferred that the sites are production sites.

Both MSA (Middle Stone Age) and LSA (Late Stone Age) are present in the area. At this stage, as a result of the lack of formal artefactual remains, it is not possible to identify any particular culture. The MSA dates back to at least 250 000 years ago, followed by the LSA, which lasted from approximately 40 000 years ago into colonial times.

Some isolated potsherd finds were recorded, but as only one identifiable (decorated) piece was recovered, the finds don't lend itself to classification. No other features, e.g stone walls, house floor/foundations, middens or cattle byres were noticed. It is possible that this area could also have been utilised for agricultural or cattle grazing purposes, and that the homesteads would be encountered closer to the nearest hills.

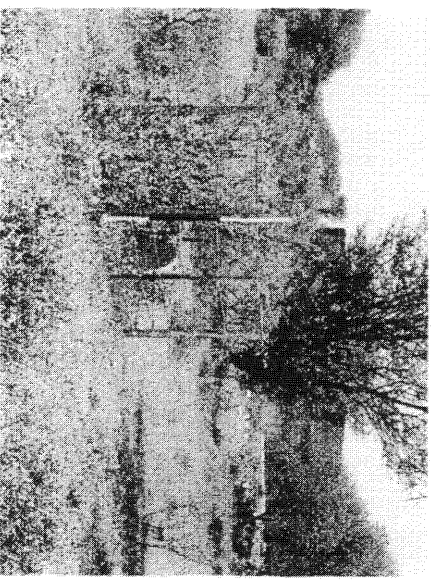
Eight sites had been identified. They were numbered in chronological order as the assessment proceeded from the eastern most part of the area.

MAP NOT ACCORDING TO SCALE



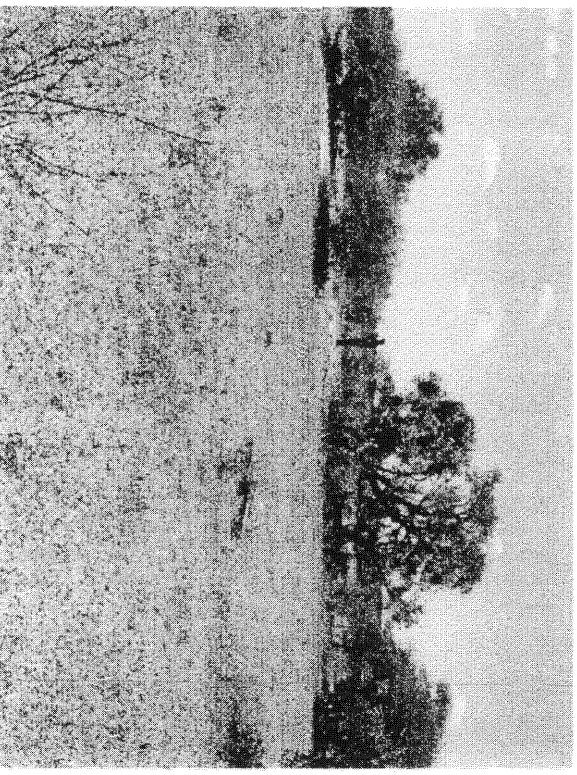
### Site 1

This first site is that of a single grave. The tombstone identifies it as the grave of *Johanna Hendrina Botha*, 21.12.1946 - 20.3.1947. It was located approximately 60m from the northern most corner post (furthest from the stadium) of the library/ boundary fence.



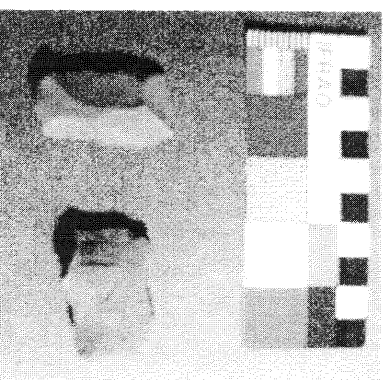
### Site 2

The ruins of an old farmhouse, associated outbuildings and concrete built dam. It is located approximately 50m from the Library in a south-south-east direction. The vegetation in the immediate area surrounding the farmstead has been disturbed as a result of sustained agricultural activities.



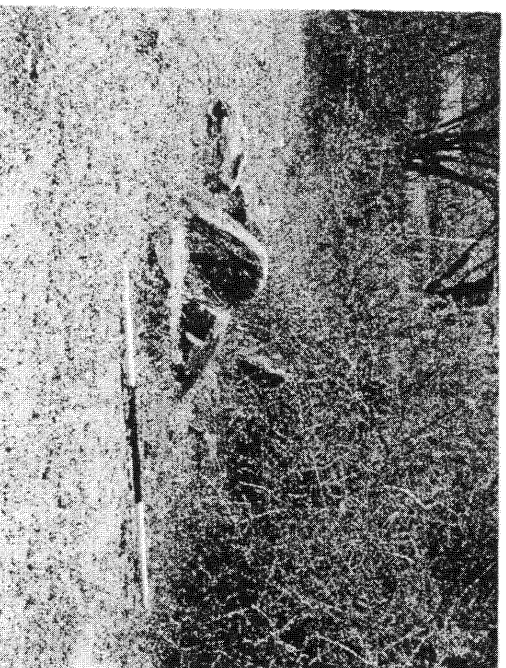
### Site 3

The find spot of these two stone tool flakes were marked as a site, as both were recovered from an antbear's hole, i.e approximately 25cm deep under the present surface. It is located approximately 30m from the farmstead in a straight line from the Library (south-south-east).



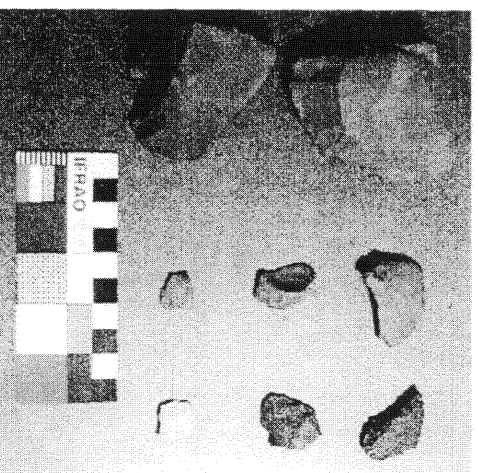
### Site 4

This site was initially identified as a grave, but after further reconnaissance of the immediate surrounding area, it was identified as part of agricultural fields. It is thus probable that these stones had been removed from the fields prior to ploughing. No other structures or features are associated with it, and the stacked rocks are larger than the characteristic size which is usually utilised for this purpose. It's position was marked at 137m from the river bank, south-south-east from the Library.



### Site 5

The first of the stone tool production sites. This site is located mainly in a narrow road, leading around the stadium in the direction of the river, down to the water channel. It lies approximately 113m from the western corner of the stadium in a south-western direction. This site was estimated to have at least a radius of 20m, but it could be more, as the majority of finds were located in the eroded road, its shoulders and the removed soil for the purpose of road building. This site can probably be connected to Site 6.

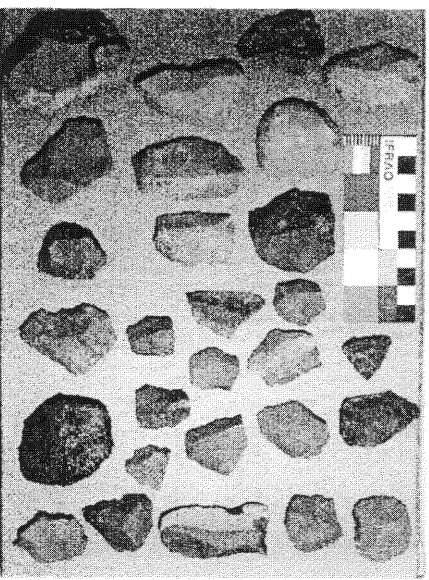
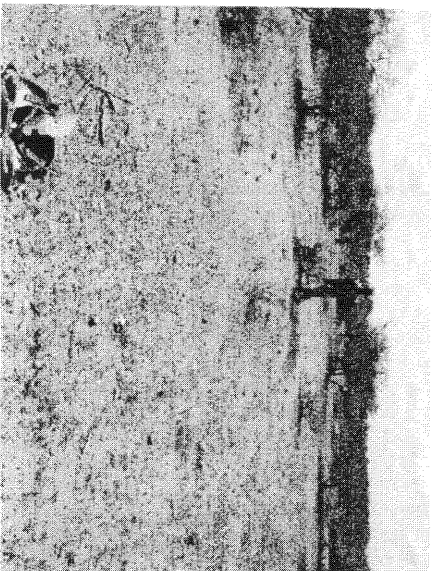




## Site 6

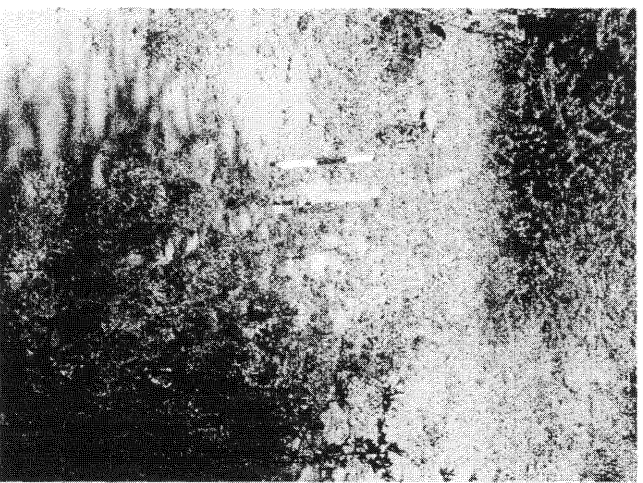
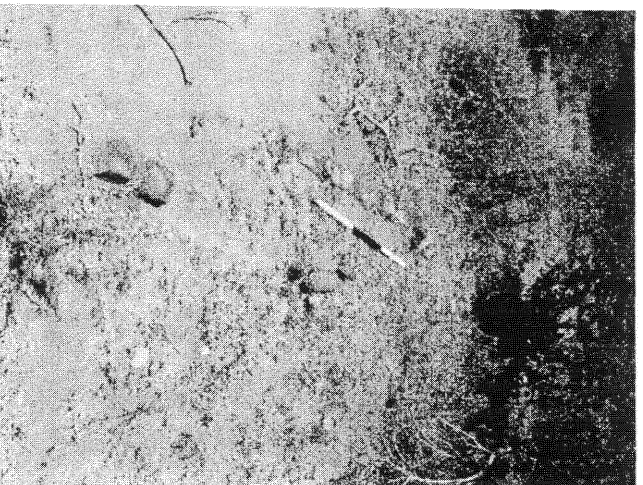
As a stone tool production site, it is characterised by stone flakes littering the surface. Concentrations are present where soil had been disturbed, i.e the water channel, agricultural field contours and, in close proximity to the river, the pipeline. Both MSA and LSA are represented in this site. It lies approximately 500m from the stadium and 50m south east from a pipeline, marked "HO 1571, DRY, 36m".

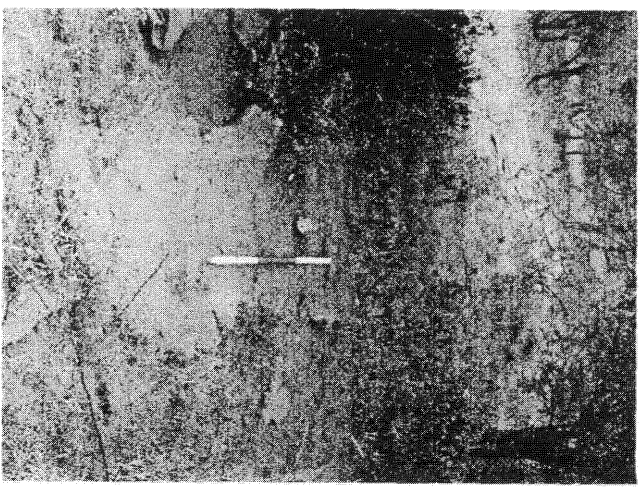
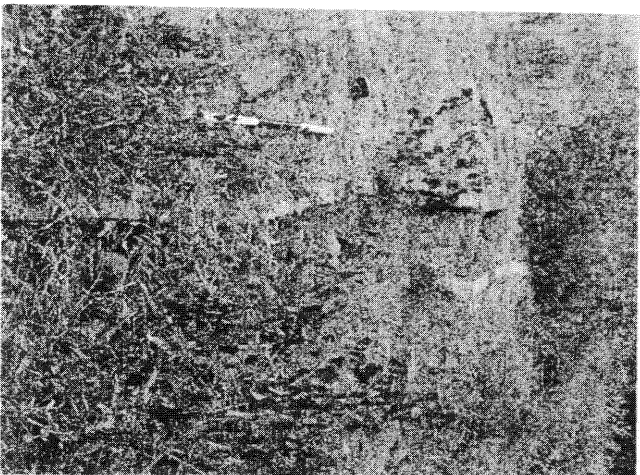
The extent of this site could not be fixed with certainty. It is an area that could extend from Site 5, stretching down to the river, and in actual fact covering an area of approximately 500m<sup>2</sup>.



## Site 7

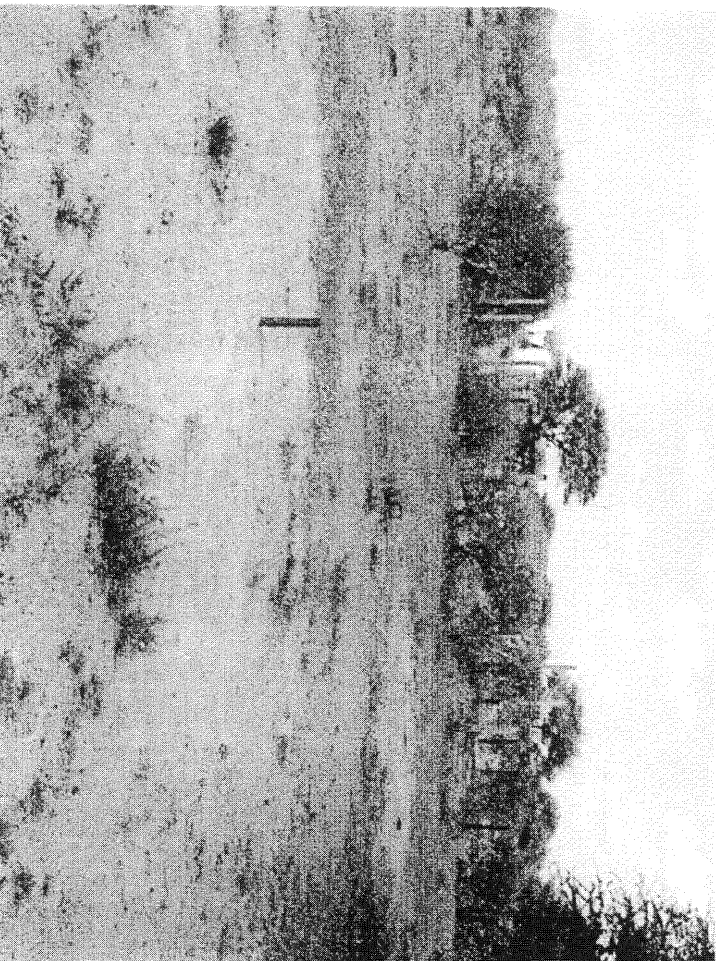
The water channel. This concrete structure is elevated from the surface approximately 500cm in some places (for the purpose of levelling out) by means of an earthen mound. It is also in disturbed soil regions like this where stone flake concentrations occur. The age of the channel is unknown.





## Site 8

Site 8 was identified with the auction-pen and pipeline marked "HO 1571, DRY, 36m". This site is characterised by gum-pole posts and post holes, forming a crush-pen and associated structures. Enclosed among these is the ruin of a small rondavel shaped building. The age of these structures are unknown.

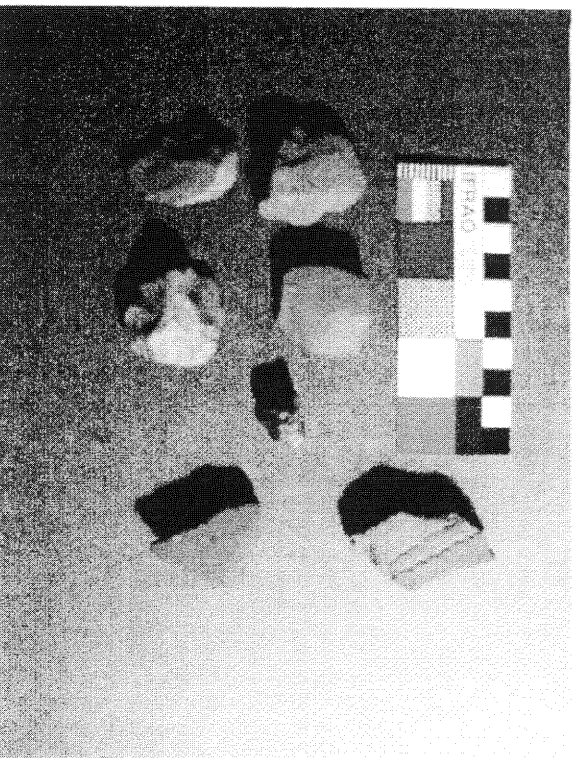




## EVALUATION

### General

The most important archaeological features in the whole area are the extensive stone tool production sites. As only stone flakes, versus stone tools, were identified, it wasn't possible to attribute it to a specific culture, e.g MSA, Pietersburg culture. For this reason the date can only be estimated at 250 000 years ago, i.e that of the MSA. This same site was also utilised by other and later tool producers, namely the LIA people since at least 40 000 years ago.



Only a few unidentifiable potsherds (one decorated sherd) were recovered from the area, and is of little value to an interpretative study. It is however certain that iron age peoples inhabited the area in the past. The main living area would be located elsewhere, but in close proximity - within at least a three kilometre radius - from the reconnoitred area, as these peoples relied heavily on permanent water sources and agricultural fields. It is clear however that the demarcated area was utilised by them, and it would not be improbable to find other cultural remains. Other activities related to settlement of an area would be features like middens,

graves and cattle byres. On the surface none of the aforementioned features were identified, but it could be revealed once the building process is initiated, e.g the digging of foundations and water pipelines.

The historical structures in the reconnoitred area is the grave, the farmstead and water channel. Lacking knowledge of the colonial and later settlement in this area, it is extremely difficult to establish a date for these structures. The grave however dates to 1947, which could postdate the farmstead.

The auction-pen seems modern and would therefore have no historical significance.

### Sites 1, 2 and 8

Under law (please see Addendum 1, in particular paragraph 12(2A) (f) in this regard) all structures older than 50 years are protected from destruction.

### Site 4

Addendum 1, paragraph 12(2A) (e) is applicable, should this structure prove to be a grave.

### Sites 5 & 6

Quarries, and therefore production sites are protected by law (please see both Addendum 1, paragraph 12(2A) (e) and Addendum 2, in particular under the heading "Stone Age/Hunter Gatherers") in this regard.

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## RECOMMENDATIONS

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It is recommended that a Phase 2 Archaeological Impact Assessment should be executed particularly on the stone tool production sites.

- It is suggested that the archaeologist be called upon to inspect the site once buildings operations, e.g the digging of foundations and/or pipelines, has been initiated. The details could be finalised through mitigation on site.
- If any graves, middens or other cultural remains are encountered during building operations, the archaeologist should be notified immediately.

**The presently identified sites should be treated as follows:**

### Site 1

This grave should be either properly fenced in and protected from possible harm or removed to the nearest municipality cemetery.

### Site 4

Should the site prove to be a grave or culturally related structure, the archaeologist should be called upon to excavate and/or document the finds.

### Sites 5 & 6

An archaeological inspection should be made of the site once building operations proceed. Should any significant finds be made, it might become necessary for the archaeologist to apply for an excavation permit from the NMC (National Monuments Council).

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## THE LAW

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The National Monuments Act (No. 28 of 1969) protects all palaeontological, archaeological and historical sites and material older than 50 years. It is an offence to destroy, damage, alter, remove from its original site, or excavate any such site or material without a permit from the National Monuments Council. A person convicted of an offence in terms of the Act, could be liable for a fine of up to R10000 or two years imprisonment, or both. See *Addendum 1 for extracts from this act*.

In terms of the Environmental Conservation Act (No. 73 of 1989) the Integrated Environmental Management Procedure, Guideline Document 1 identifies certain man-made areas and features that are listed as environments which must be included in an environmental impact assessment report. These include archaeological and palaeontological sites, graves and burial sites, buildings and sites of religious, social and cultural significance.

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## ARCHAEOLOGICAL IMPACT ASSESSMENT

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To minimise the impact of development on archaeological sites, and the impact of archaeological sites on development projects, and to avoid costly delays if a site is discovered during the course of construction work, it is important to hire an archaeologist well in advance to survey the area. It is important that developers realise that only qualified professional archaeologists should be employed to undertake survey work.

The developer is responsible for the costs involved in hiring an archaeologist to investigate the site.

### Phase 1

The archaeologist hired to do the work will submit a phase 1 report. On the basis of the recommendations and assessment of significance made in the report, a decision can be taken on how the development may proceed. In most cases development will be able to go ahead as planned after

the sites have been recorded.

## Phase 2

In some cases, mitigation in a Phase 2 programme will be necessary and may involve excavation or collection of archaeological material. The purpose behind mitigation is to sample the site so that the evidence can be stored permanently in a museum where it can be consulted at a later date for record and research purposes.

## Phase 3

More rarely, the site may be so important that it will warrant modification of the development in a Phase 3 programme. If this happens, the archaeologist, the National Monuments Council and the developer can confer on the action to be taken. It may be possible to incorporate an Iron Age village into a green belt in a housing scheme, or to modify a high rise building plan by covering rare 18<sup>th</sup> century foundations and associated rubbish dumps beneath a parking lot to avoid destroying them completely. Such solutions are possible if the archaeologist is consulted early enough in the planning process.

Permission for the development to proceed can be given only once the National Monuments Council is satisfied that steps have been taken to ensure that the archaeological sites will not be damaged, or that they have been adequately recorded and sampled.

If this chain of action is followed, we stand a chance of saving something of our archaeological heritage for future generations and of avoiding conflict between developers and cultural conservationists. The National Monuments Council must ensure that the historical and cultural heritage of all South Africans is protected. Careful planning can minimise the impact of archaeological surveys on development projects by selecting options that cause the least amount of inconvenience and delay.

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## BIBLIOGRAPHY

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Deacon, J. 1996. *Archaeology for Planners, Developers and Local Authorities*. National Monuments Council. Publication no. P021E.

Deacon, J. 1997. *Report: Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology*. In: Newsletter No 49, Sept 1998. Southern African Association of Archaeologists.



Hester Roodt

February 19, 1999

## ADDENDUM 1

### EXTRACTS FROM THE NATIONAL MONUMENTS ACT (NO 28 OF 1969, AS AMENDED IN 1986) THAT ARE RELEVANT TO ARCHAEOLOGICAL SITES

- 12(2A) No person shall destroy, damage, excavate, alter, remove from its original site or export from the Republic -
- (a) any meteorite or fossil; or
  - (b) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by Bushmen; or
  - (c) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by any other people who inhabited or visited the Republic before the settlement of the Europeans at the Cape; or
  - (d) any implement, ornament or structure known or commonly believed to have been made, used or erected by people referred to in paragraphs (b) and (c); or
  - (e) the anthropological or archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or
  - (f) any other historical site\*, archaeological or palaeontological finds, material or object,

except under the authority of and in accordance with a permit issued under this section.

[\* An "historical site" is defined as "any identifiable building or part thereof, marker, milestone, gravestone, landmark or tell older than 50 years."]

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## ADDENDUM 2

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### Report on Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology

SA3 (Southern African Association of Archaeologists) Biennial Conference  
University of Venda, 10 July 1998

*Janette Deacon  
National Monuments Council*

Opportunities for archaeological contract work will expand in southern Africa in the next few years. To make the best of the opportunities, medium-term (3-5 year) research and heritage conservation priorities need to be established as a matter of urgency in consultation with CRM practitioners, provincial and national heritage agencies and research archaeologists. The following factors are relevant.

1. In South Africa, the Department of Environmental Affairs and Tourism published on 5 September 1997 its long-awaited List of Activities which may have a substantial detrimental effect on the environment and the regulations regarding activities identified under Section 21(1) of the Environment Conservation Act (No. 73 of 1989). These effectively make environmental impact assessments compulsory for the listed activities.
2. The National Heritage Bill, designed to replace the National Monuments Act in South Africa, came before the Cabinet and Parliament in 1998. It could become law from 1 April 1999. Amongst other innovations, it makes impact assessments compulsory where historical, archaeological and palaeontological sites are affected by development but are not protected by other legislation.
3. In neighbouring African countries, the tempo of contract work is also rising as new legislation and requirements of the World Bank are implemented.

It seems widely accepted that CRM practitioners do mitigation to rescue the research potential of a site which would otherwise be lost. The following kinds of sites were identified as being worthy of mitigation:

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#### Stone Age / Hunter Gatherer

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| <ul style="list-style-type: none"><li>• any open air site with bone or other organic material;</li><li>• any cave or rock shelter with deposit;</li><li>• rock paintings and rock engravings (record context as well as images);</li><li>• quarry sites with possibilities for core re-fitting;</li><li>• long sequence sites;</li><li>• coastal and inland shell middens;</li><li>• any sites with Howiesons Poort, Stillbay or Robberg artefacts;</li><li>• human remains or burials;</li><li>• fish traps;</li><li>• placement of Earlier Stone Age sites in the</li></ul> | <ul style="list-style-type: none"><li>• landscape - are they associated with river valleys, water sources or quarries?</li><li>• evidence for modernity in Middle Stone Age sites;</li><li>• sites with evidence for interaction between Stone Age and Iron Age or colonial people;</li><li>• Later Stone Age sites with Bambata pottery;</li><li>• pastoral sites, especially in the Eastern Cape;</li><li>• caches of ostrich eggshells or other items;</li><li>• hunting blinds;</li><li>• evidence for exploitation of raw material sources such as haematite or specularite.</li></ul> |
|---|---|



## Iron Age / Agriculturist

- Sites that will help to clarify the ceramic sequence of the Early Iron Age in the northern and eastern regions of southern Africa;
  - any Bambata settlement;
- Early Iron Age sites with evidence for structures or long term occupation;
- sites with evidence for political or social hierarchies;
- evidence of the organization of metal production;
- burials with evidence for social differentiation, health and nutrition;
- evidence for trade within and outside of the Zimbabwe culture area;
- sites in areas that are under-researched to build up the culture-historical sequence;
- special-purpose sites such as rainmaking, circumcision, mining, furnaces, cattle posts vs living sites, salt making;
- Blackburn and Moor Park sites in KwaZulu-Natal;
- well preserved early Moloko sites with middens for evidence of diet and subsistence or stone walling;
- any Zimbabwe-style stone walling should be mapped in sufficient detail to estimate factors such as population size and grain-bin variability;
- evidence for contemporary cultural interaction, for example between Khami and Moloko;
- sites with architectural styles and information on materials used for housing, even in the recent past;
- evidence for the introduction of maize, either direct or in the style of grindstones used;
- sites with botanical remains of cultigens;
- information on the distribution, size and characteristics of dolly-holes for gold mining;
- evidence for textiles or weaving in addition to spindle whorls;
- evidence for games and contextual information relating to them;
- figurine caches and spatial relationships to settlements;
- check stone outcrops near stonewalled sites for engravings.

## Historical / Colonial

- sites connected with whaling and sealing;
- ships or ship/boat structures on land;
- shipwreck survivor camps;
- sites in the interior with nineteenth century ceramics (RESUNACT is preparing guidelines for identification);
- single occupation sites in urban environments with deposits such as wells, cisterns and depressions;
- 17<sup>th</sup> century or early 18<sup>th</sup> century sites in Cape Town;
- sites that are connected with national and international slave trade routes;
- LSA sites with metal items such as brass buttons;
- documentary and archival searches should be done before going into the field;
- sites that could inform on the effects of military forces on indigenous local populations;
- the symbolic significance of textiles, beads and other items imported by traders;
- sites with oral traditions of sacred significance - oral histories increase significance and are therefore relevant to archaeology;
- historical graves need sensitive removal during mitigation and this is often best done in collaboration between archaeologists and funeral specialists.

