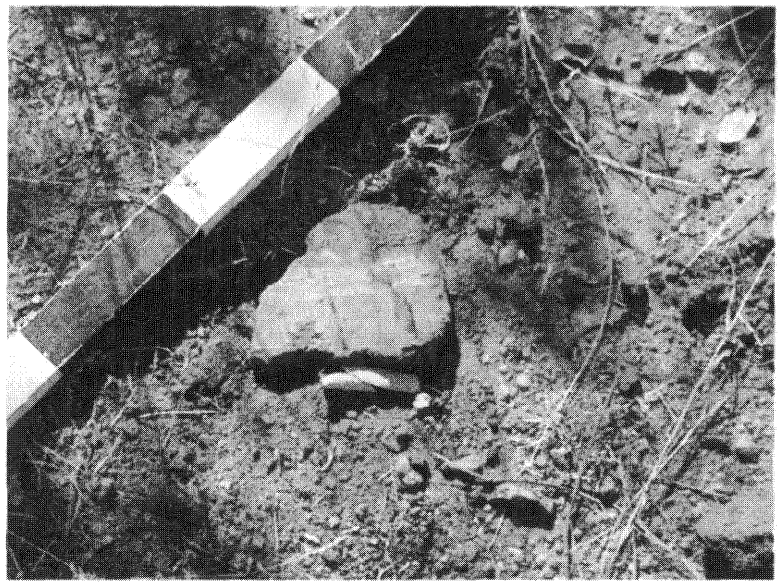
PHASE 1
ARCHAEOLOGICAL IMPACT ASSESSMENT

Warmbad Town Establishment
Het Bad 465 KR
NORTHERN PROVINCE



Hester Roodt
August 1999

Tel: (015) 293 7075
E-Mail: hr19@pixie.co.za

PO Box 1600
PIETERSBURG
0 7 0 0

CONTENTS

It is recommended that a Phase 2 Archaeological Impact Assessment be undertaken. The details could be finalised through mitigation on site.

Depending on the Phase 2 report and its recommendations, it would be of the utmost importance that the archaeologist be notified should

- any graves and/or middens are encountered during initial clearing of the surface or during subsoil removal. Please refer to the attached addenda.
- If any stonewalled structures are identified. Please refer to the attached addenda.

AIM

The aim was to undertake a **Phase 1** *Archaeological Impact Assessment* on approximately 150 ha on a portion of Het Bad 465 KR, Warmbad, where a housing project has been proposed, to assess the impact of the proposed project in terms of archaeological/historical sites and features and to make recommendations. The task was performed on May 26 and June 2, 1999.

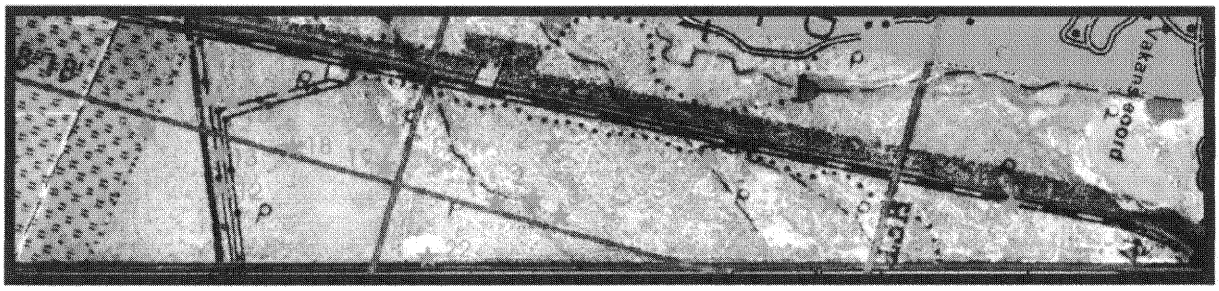
METHOD

A survey of the entire area demarcated for development was done on foot by an archaeologist and one assistant. Locations were recorded by means of a GPS (Garmin, 45XL), and archaeological/historical features were photographed with a Kodak Digital DC120 camera. Aerial photographs were supplied by Mr F van Heerden (Realty 1), which were scanned. As these were at my disposal during the reconnaissance, the sites are only numbered in sequence and indicated on the map.

DESCRIPTION

The entire area is flat and mainly covered in dense vegetation with the result that most of the area was several spot checks were done in the grass veld. The site covers at least 150 ha. A dam and several small streams were encountered. The southern most part is planted with sunflowers.

As can be seen on the map, the largest concentration of archaeological sites occur in the southern part. These are of mixed Stone Age (Middle as well as Late Stone Age) as well as Iron Age origin.

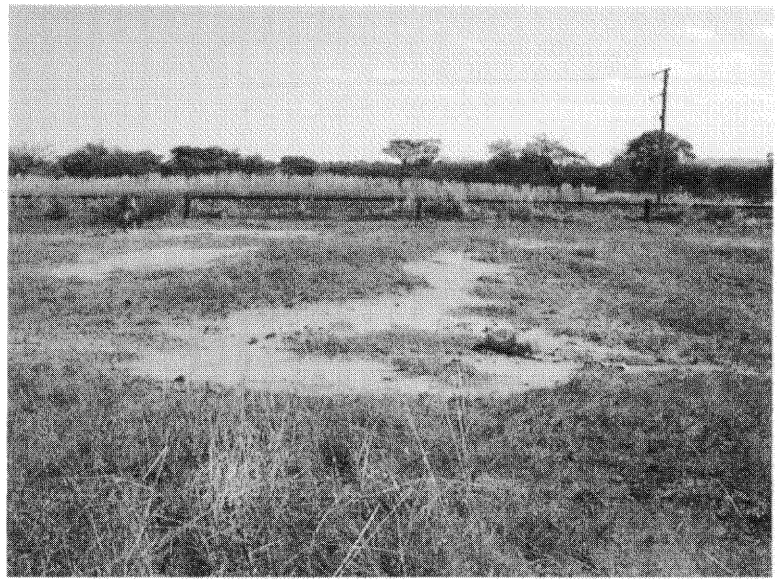


The mean size of numbered find places (sites) is a 50 m diameter. Sites 1 - 5 are however much smaller, in which only a few artefacts were recovered. Finds were mostly made on the surface characterised by previous disturbance, e.g the roads, as for example, Site 6, which is a large, sandy area devoid of vegetation, and it thus seems that more finds are still covered by topsoil.

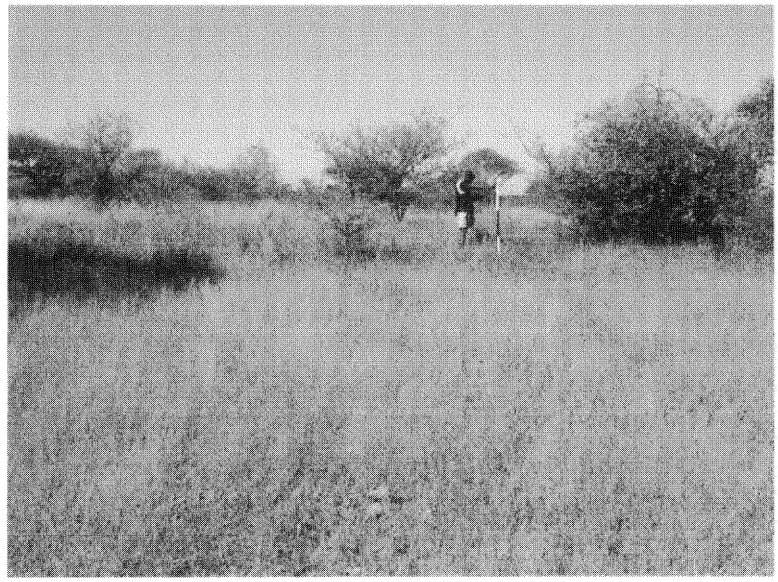
Most of the Stone Age finds were flakes and flaked pieces, with limited numbers of formal tools. This would characterize the area as one of tool preparation rather than a butcher site.

In those cases where Iron Age cultural material were found, the decorated or lipped pottery sherds were either too small and fragmented to be of any diagnostic value, or lacked any decorative attributes. At present it is thus impossible to state with any certainty to which cultural group these belonged.

Site 6 is of particular interest. It is the northern most find place presently identified and located in an open, sandy area almost next to the railway line. Many microlithic and other small stone artefacts were recovered from the surface.



Site 20 could possibly be a living site, as a slight rise in the landscape could be indicative of the remains of an enclosure . It is however thickly covered with grass and small aloes. Again large numbers of small, but undiagnostic pottery sherds were found.



EVALUATION

From the cultural material recovered, it is clear that the area was utilized at least since the Middle Stone Age times (+ 100 000 ya) up until the Iron Age period. The specific Iron Age cultural group who occupied or utilized this area cannot be established at present without further investigation. It does however seem that the cluster of archaeological sites, especially those containing signs of Iron Age occupation and/or utilization, on the southernmost part of the designated area, is possibly indicative of higher occupational densities outside the area that had to be reconnoitred.

It seems that at least Site 20 was occupied by Iron Age people. It was however at the time of reconnaissance impossible to establish the exact nature of the enclosure.

RECOMMENDATIONS

In view of the above, it is recommended that a Phase 2 Archaeological Impact Assessment be undertaken of site 20 and that the area south of the S24°54' latitude be investigated in more detail to collect a representative sample of pottery remains for the identification of the cultural group . The details should be finalised through mitigation on site..

Depending on the Phase 2 report and its recommendations, **it would be of the utmost importance that the archaeologist be notified should**

- **any graves and/or middens are encountered during initial clearing of the surface or during subsoil removal.** Please refer to the attached addenda.
- **If any stonewalled structures are identified.** Please refer to the attached addenda.

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.

Meyer, A. 1994. *Navorsingsmetodiek: Inligtingsformate vir Argeologiese Veldwerk*. Dept Antropologie en Argeologie, UP.

Hester Roodt

August 10, 1999

ADDENDUM 1

THE LAW

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.

ARCHAEOLOGICAL IMPACT ASSESSMENT

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 18th 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.

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."]

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:

Stone Age / Hunter Gatherer

- any open air site with bone or other organic material;
- any cave or rock shelter with deposit;
- rock paintings and rock engravings (record context as well as images);
- quarry sites with possibilities for core re-fitting;
- long sequence sites;
- coastal and inland shell middens;
- any sites with Howiesons Poort, Stillbay or Robberg artefacts;
- human remains or burials;
- fish traps;
- placement of Earlier Stone Age sites in the landscape - are they associated with river valleys, water sources or quarries?
- evidence for modernity in Middle Stone Age sites;
- sites with evidence for interaction between Stone Age and Iron Age or colonial people;
- Later Stone Age sites with Bambata pottery;
- pastoral sites, especially in the Eastern Cape;
- caches of ostrich eggshells or other items;
- hunting blinds;
- evidence for exploitation of raw material sources such as haematite or specularite.

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;
- 17th century or early 18th 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.