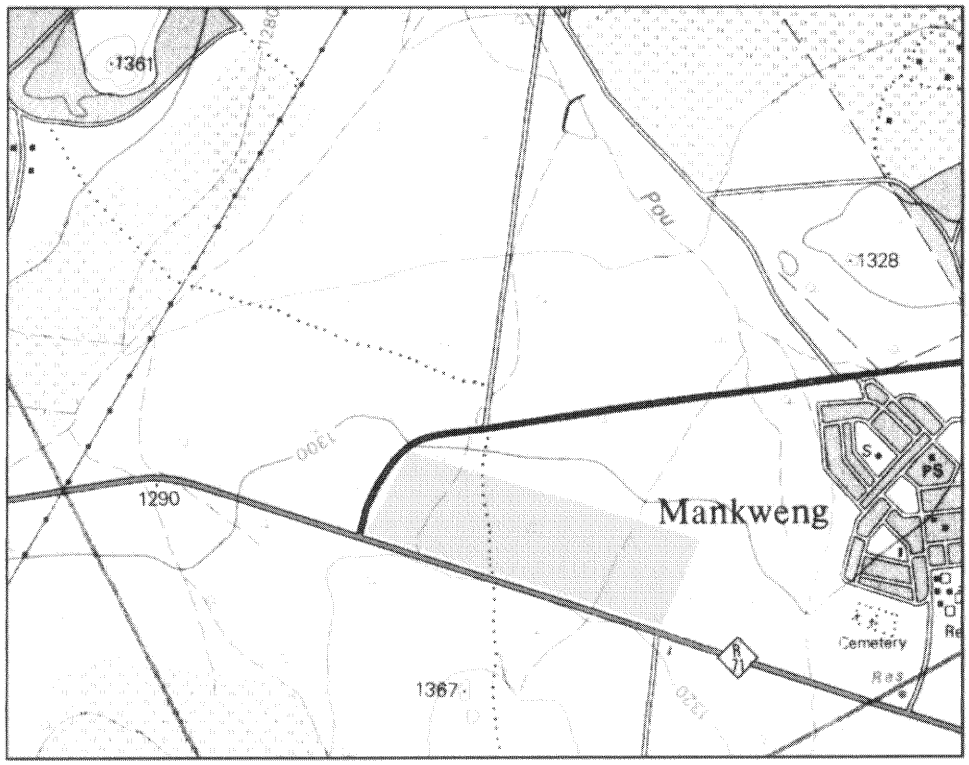
PHASE 1
ARCHAEOLOGICAL IMPACT ASSESSMENT

Mankweng (Unit F), Northern Province



Hester Roodt
February 1999

Tel: (015) 293 7075
E-Mail: hr19@pixie.co.za
CULTURAL RESOURCE CONSULTANTS
PO Box 1600
PIETERSBURG
0 7 0 0

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AIM

The aim was to undertake a **Phase 1** *Archaeological Impact Assessment* on approximately 60ha of Unit F at Mankweng where a low-cost 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 4, 1999.

METHOD

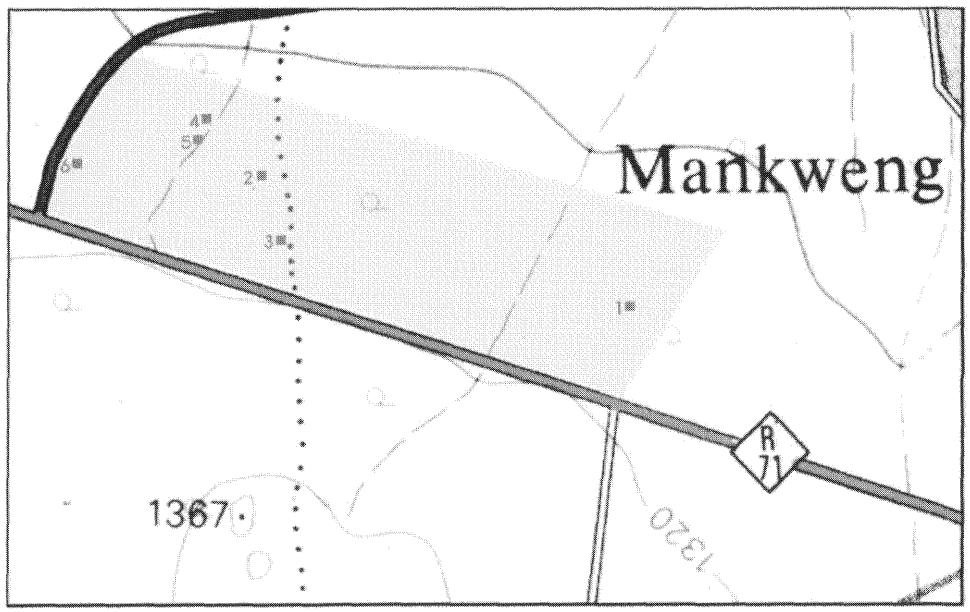
A survey of the whole area demarcated for development was done on foot and by vehicle by an archaeologist and one assistant. Locations were recorded by means of a GPS (Garmin, 45XL), and archaeological/historical features were photographed with a Kodak Digital DC120 camera. Two schematic maps were drawn:

- one of the area in general, indicating the various identified sites; and
- one of a particular feature, namely that of a homestead associated with a possible grave and midden.

DESCRIPTION

In general the greatest part of the area is archaeologically already highly disturbed by the informal settlement. It is characterized by the occupants' houses which are usually demarcated by either fences, cut acasia branches, aloe leaves or thatch. Most of the properties are kept well swept, in which case all traces of possible archaeological finds were removed. According to the disturbed plant growth, several stands has been previously (recently) occupied or tilled as fields. The greater majority of archaeological finds were located in eroded foot paths or where soil had been removed for either the digging of refuse pits, fencing posts, pit toilets or the planting of trees. All the pottery sherds are highly fragmented (with a mean size of 25mm), which is indicative of intense activities sometime in the past since depositioning of the artefacts.

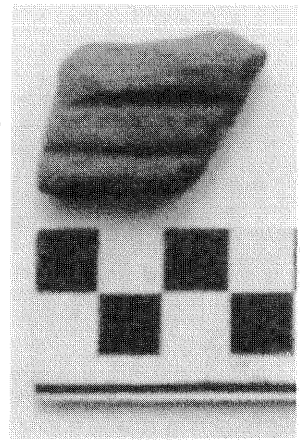
The most reliable water source lies outside the area demarcated for development. Vlei areas could be identified in a few places. A recent addition to the water sources is a storm water pipe draining excess water into this area from the opposite side of the R71. Investigation of the banks on the Pou river was unnecessary, as it lies outside the demarcated area. This would have been a possible source of pottery sherds and graves. The vlei areas would have been avoided as settlement alternatives, but cultural material could be re-covered from it: those have proved to contain nothing. It was hoped to find artefact remains in the new water course created by the storm water pipes, but nothing, not even stone age tools could be identified.



Six sites had been identified, some of which need to be investigated more intensively. They were numbered in chronological order as the assessment proceeded from the eastern most part of the area.

Site 1

S23°53'26.0" E29°42'49.0"



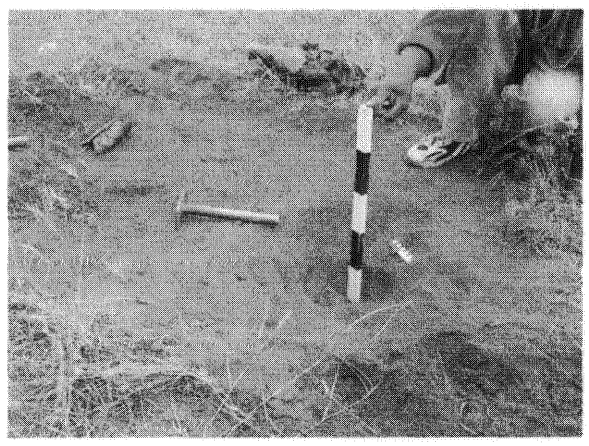
This marks the spot of one single pot sherd (Sherd 1), but its importance lies in the fact that it is decorated. Decorations are indicative of a specific culture group, and will also allow for estimating a general age of the site. It was located in a foot path passing the circumscribed boundary of a house. Approximately 100m from this find another, yet undecorated sherd was found. It was also located in a foot path. Both finds could have been washed down the slight slope from another primary site.

The pattern on Sherd 1 is characteristic of the Moloko tradition (early Sotho-Tswana). Moloko people inhabited the Pietersburg plateau since the 17th century.

Site 2

S 23°53'23.8" E29°42'33.1"

This site proved to be most rewarding in terms of pottery finds. A few potsherds were identified on the surface. This was the first find that seemingly was a surface deposition. In search of more substantial examples (the surface finds were undecorated and highly fragmented) a small area of approximately 700cm was cleared from plant growth, mainly grasses. In this process more sherds became visible. It was decided to excavate a test pit, which eventually proved the main deposition to be approximately 20cm deep. Some charcoal pieces were found in association with the sherds. If necessary, this can be used to date the deposit by means of the radio-carbon dating technique. I expect that more sherds will be encountered deeper.



The main objective of the test excavation was:

- to find better examples than those on the surface,
- to locate diagnostic samples (decorated and/or lipped sherds),
- to estimate the depth of the deposit.

Three different types of decoration were identified.

- Sherd 3. The decoration and technique is similar to that of Sherd 1, and thus also executed in the Moloko style. Horizontal bands running around the circumference of the pot.
- Sherds 4, 5 and 6. Impression in the clay made by means of a stylus.
- Sherd 6 from this site was recovered, amongst a few undecorated pieces, from just across the small two track road adjacent to the excava-

tion. It has only one faint, roughly incised line across its surface. This sherd could also be allocated to the Moloko tradition. Its identification however needs to be verified by a more substantial collection.

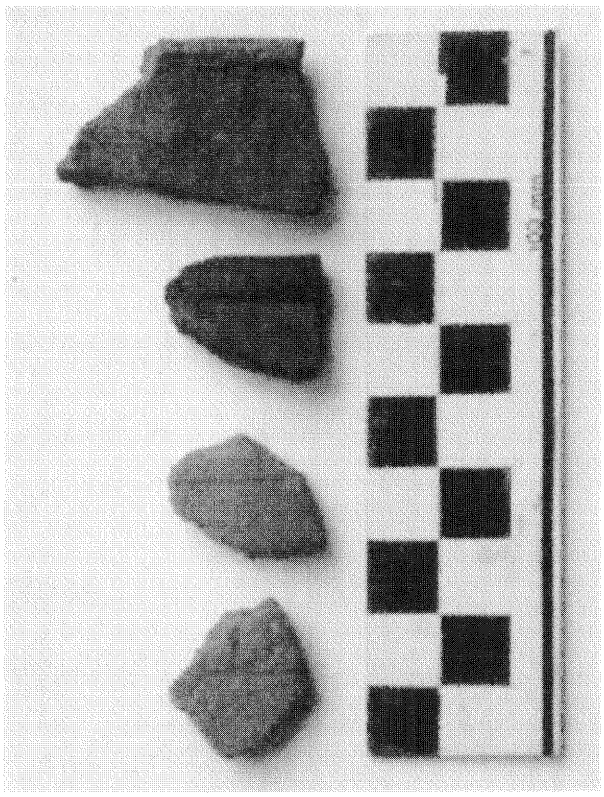
Site 3

S 23°53'27.9" E29°42'37.4"

a. A few undecorated sherds, the closest find to the R71.
b. Approximately 30m in a west-south-west direction another concentration of sherds were discovered, decorated in the same Moloko style as Sherd 1.
c. Almost 100m from 4a, in a west-north-west direction a small, undecorated sherd was found, pink in colour. This colour is of particular interest as it is characteristic of some of the oldest pottery encountered in Southern African context, allocated to the Early Iron Age (AD 500) .

Site 4

S 23°53'15.1" E29°42'24.2"



This site disclosed a concentration of grey (charcoal coloured) to grey-brown pottery sherds distributed over the entire area of approximately 65 x 20m that was investigated. It is small, with a mean size of 20mm, thin (7mm) and finely worked. Some of these sherds' surfaces are burnished. A few lipped pieces were also recovered. Only one decorated piece characterises this collection. These sherds are allocated to the Letaba tradition (Venda). As a result of its wide dispersal, one is unable to reconstruct even a small part of the pot. These were mainly recovered in a deeply eroded foot path between two rocky outcrops, while only one piece was found in between the foundation stones of Feature B.

House foundations were identified in at least two spots, each built on top of the rocky outcrop. For this purpose rocks and soil was used to level the surface.

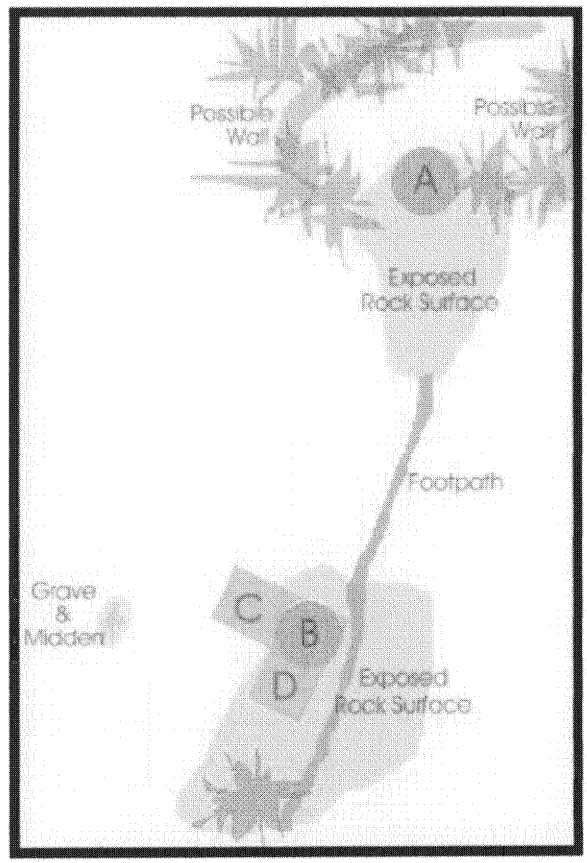
Feature A has a circular foundation and is approximately 4m in diameter, and is built on top of the western most outcrop of this site. A seemingly straight wall seems to border its western side in the form of a triangle. It was however difficult to properly access the characteristic of this wall, for it is almost completely covered in thick shrubbery. I was unable to access whether this structure was built of stone, in which case the foundations are totally covered by soil. Except for its height, approximately 0.5m, nothing else distinguishes it from the surrounding area.

Features B, C and D is located approximately 46m from Feature A. The house foundations were also built up and levelled by the same means as has been described before. It is not possible to access whether Feature B is also circular in form, or that it predates Features C and D, or that Feature B was rebuilt at a later date (contemporary with Features C and D), and that some of the faint impressions of a rectangular

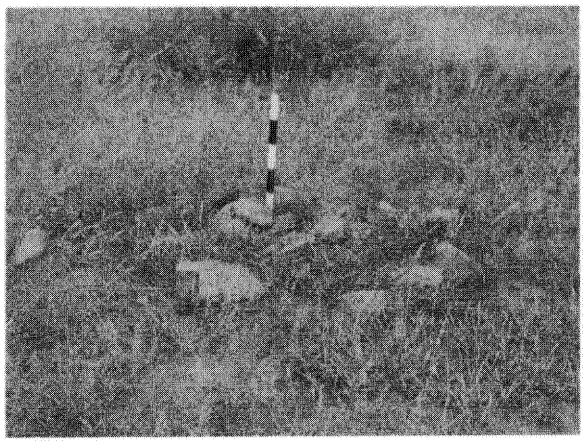
structure was superimposed on Feature B, in actual fact forming Feature E.

Feature B is approximately 6m in diameter and Fea tures C and D are both 4m in diameter. C and D are seemingly attached to B, being the main feature.

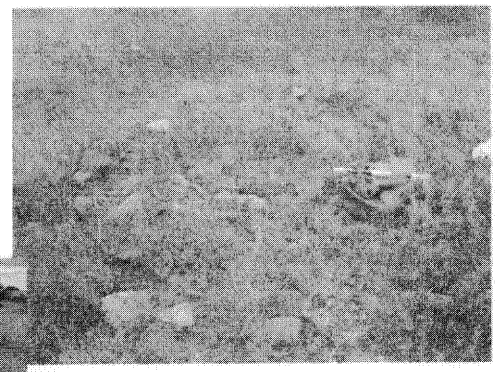
A midden is encountered approximately 6m to the south of B, C and D. The midden is however stacked with some rocks, which could be indicative of a grave.



The site map, not according to scale.

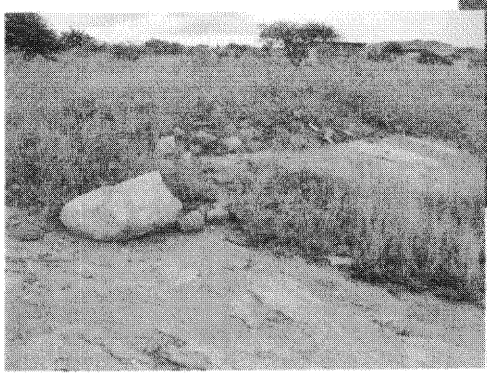


Grave and midden.

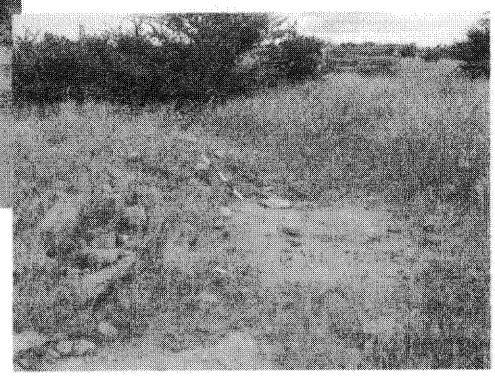


Structure A

The eroded footpath between the two rocky outcrops.



Structure B

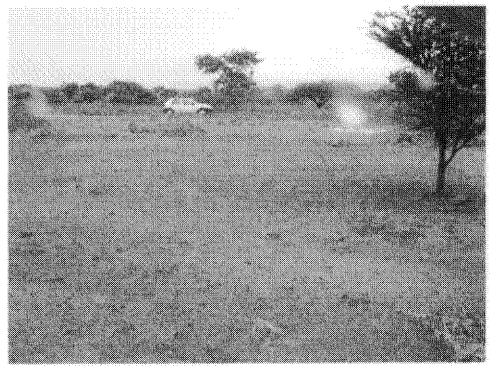


The scale is placed along the side of Structure A, with the one wall partly, covered in shrubbery and grass, on the right.

Site 5

S 23°53'15.4" E29°42'25.1"

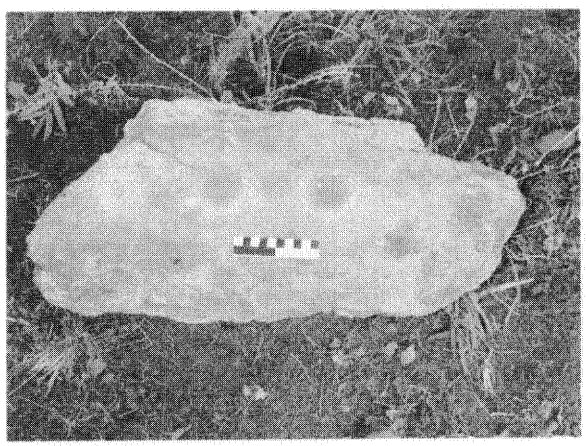
A few pottery sherds were identified on the surface. This again proved to be a disturbed area in the sense that soil had been dug and removed to accommodate the pipeline and man-hole, MAN A13A. No samples were retrieved.



Site 6

S 23°53'17.6" E29°42'01.5"

At this site a rock was found that could be identified as a game, namely *moruba*. These games are usually associated with cattle posts, where the herder boys kept themselves amused. Games were however also previously found at settlement sites.



EVALUATION

It is my opinion that the area was mainly used for agricultural purposes, as iron age people usually preferred to live mostly at the foot of koppies. The huge marula trees could also be indicative of field use of the area, as it was usually left to create welcome shade during farming activities. This practice is still in use in e.g Venda.

The Moloko style pottery is usually associated with stonewalled homesteads and cattle byres. As no such feature could be identified, it is my opinion that this area was mainly utilised for farming activities, in which case no stone walls would have been built.

The koppies closest to the site are located less than a kilometre away in a southern direction. It is possible that one would encounter stonewalled settlements there. This particular area has however been developed already, as has the immediate area north from the site.

Moloko tradition ceramics are commonly considered to have been made by people with Sotho-Tswana affinities because modern Pedi, South Sotho and Kgatla pottery can be derived from it. The earliest Letaba-style assemblages have been dated to the early 16th century at Harmony Village in the north-eastern Lowveld in the Northern Province.

Moloko ceramics appear at the same time as Letaba ceramics in Ndebele sites south of Pietersburg. The two styles exist together until the eclipse of the Ndebele in the Pietersburg/Potgietersrus area and date to the late 19th to early 20th century at the Ntabanhlophe Group III site and the later phase to 1920 at the Kekana and Ficus sites near Potgietersrus.

Since the 17th century, ceramics from the Pietersburg-Potgietersrus area seem to reflect the varied historical associations recorded from Transvaal Ndebele oral histories: whereas Moloko ceramics reflect their association with Koni/Sotho people, Letaba ceramics reflect their association with Venda in the north-eastern Lowveld in the Northern Province. This contention is supported by the frequency of styles within sites: whereas Moloko/Sotho-Tswana ceramics are best represented at sites of minor headmen with Koni and Tswana connections; Letaba/Venda ceramics predominate at sites associated with Ndebele chiefs and headmen with Lowveld connections.

Site 2
This seemed an important site in terms of the high concentration of potsherds. At least two different pots are represented here. It is important to acquire as large as possible an example of potsherds over the area. The test pit proved that, as a result of the low visibility of the archaeological sites, the majority of finds can be expected in the subsoil, at least 20cm deep. The potsherds has been identified as Moloko ceramics. This site would fall in the category of Iron Age / Agriculturist sites worthy of being mitigated:

- as it is a site in an area that is under-researched to build up the culture-historical sequence;
- special-purpose site i.e cattle post vs living site; and
- evidence for contemporary cultural interaction between Moloko and Letaba. *See Addendum 2.*

Site 3
The potsherds has been identified as Moloko ceramics. This seemed an important site in view of the high concentration of potsherds. It is important to acquire a better represented collection from this area.

Site 4
Middens and graves are prime archaeological sites. Middens are of great importance, as broken utensils and discarded artefactual material lend clues to the identity of the former occupants. If it is accompanied by a grave, the chances are good that the human skeletal remains will be well preserved and identifiable. From these one will be able to at least identify the sex, stature, age and race. Skeletal material also yield a record of health and nutrition (which could again be correlated with the contemporary environment) and other diseases. Associated artefactual material and the burial position also yield information relating to the person's cultural identity and social standing in the community. It is for these various reasons that graves are of great importance in the interpretation of an archaeological site. *See Addendum 1 for the*

law concerned with graves as well as Addendum 2.

The potsherds has been identified as Letaba ceramics. In this case it is suggested that contact was established with the contemporary Moloko people, and need to be investigated. *See Addendum 2 in this respect.*

Site 5
It is possible to view this as the fringes of the possible archaeological settlement.

Site 6
It would be an advantage to the general picture of the site to at least pinpoint the possible origin of this stone. This site would also fall in the category of sites that need to be mitigated in order to obtain contextual information.

RECOMMENDATIONS

In view of the above, 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 once the initial surface preparation (clearing of plant growth, etc.) has been done and again once the digging of house foundations, water trenches and other earth works are initiated.

- **If any graves and/or middens are encountered during initial clearing of the surface or during subsoil removal, the archaeologist should be notified immediately.**
- **If any stonewalled structures are identified.**

The presently identified sites should be treated as follow:

Sites 2 & 3
Proper test excavations should be executed. It is suggested that a test trench of approximately 1 x 25m should be dug (depth unknown) in order to evaluate these sites.

Site 4
It is recommended that at least the midden and suspected grave be excavated. Various test pits (1 x 1m) should be executed in and in close proximity around the house floors. Once this is completed and the site proved to be older than 50 years (*See Addendum 1*), it is suggested that the features identified as walls, bordering Structure A, should also be excavated as a means to establish its character. A test trench of at least 1 x 10m is suggested, at right angles to the wall.

Site 5
Once again some test pits, 1 x 1m are suggested.

Site 6
This area should be inspected again for possible cattle kraals and/or archaeological homesteads in the vicinity.

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.

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Hester Roodt

February 1, 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."]

ADDENDUM 2

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.