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REPORT ON THE ARCHAEOLOGICAL INVESTIGATION AT ELANDSFONTEIN 440 JQ, ODI 1 DISTRICT, NORTH WEST PROVINCE

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INTRODUCTION

The archaeological excavations reported on in this document were conducted on two sites (named Sites A & B) located on the farm Elandsfontein 440 JQ, in the ODI 1 District of the North West Province. These stonewalled sites are part of a much larger Iron Age Settlement Complex, and probably represent two separate settlement units, or homesteads, contained in this complex. Seven excavations have been carried out, with four on Site A and three on Site B.

The main motivation for the excavations is the expansion of the Mining Operations of Keeley Granite into this area, threatening these sites with destruction.

AIMS OF THE EXCAVATIONS

The aims of the excavations were basically fourfold:

1. to recover as much cultural material as possible to help reconstruct the history of the various sites
2. to determine the domestic economy of the settlements
3. to contribute to the reconstruction and interpretation of settlement organization, and
4. to determine a chronology of Iron Age settlement in the area

METHODOLOGY

Standard archaeological methodology and practice was employed. Predetermined areas, such as middens and huts, were selected for excavating. Excavations were done according to natural and arbitrary stratigraphic layers, and all material was removed as a single component. Cultural material was sorted on site into the various categories, and bagged and labelled accordingly. Final sorting and analysis was done in the laboratory by the archaeologists and other experts.

DISCUSSION

Site A

The first settlement unit, or homestead, concentrated on was Site A, which consisted of a number of stone walled enclosures (hut bays and cattle), agricultural terraces, ash middens and other features. Four excavations were conducted here.

Excavation 1, Midden

This was a 2m x 2m square in an ash midden located at the back of a stone walled enclosure and on top of a cattle kraal. The aims of the excavation were to test (initially) the material cultural richness of the site and through it to recover as much cultural material as possible to help achieving the fourfold aims set out above. Obtaining enough C14 material (charcoal) to help date the settlement was very important.

A fairly large amount of material (more than what was expected) was recovered from the excavations, and included a wide range of artefacts. Besides the normal pottery and faunal remains, other interesting artefacts that came to light include ostrich egg-shell (OES) fragments and beads, a bone bead, a clay dagga pipe bowl, fragments of clay figurines (oxen), part of a copper bangle and a relatively large amount of marula seeds. The Iron Age pottery only contained a small percentage of decorated pieces, while a fair amount of undecorated shards with rims were found. The faunal sample did include some identifiable pieces, and through this a species list could possibly be drafted and a preliminary indication of dietary preferences be gathered. Some good charcoal samples were collected (from a depth of approximately 50 cm) to help with the radiocarbon dating of the settlement.

Five stratigraphic layers, representing at least two occupational levels, were identified (see profile photographs). The first layer consists of dark brown topsoil of approximately 18 cm thick, followed by an ashy layer of 10cm, then a reddish clay layer of 5 cm and a sterile, non-occupational layer of approximately 08 cm. The first, or earliest occupational level is below this, represented by 26 cm of ash and cattle dung. Below this another sterile layer is found. The total depth of the excavation is about 80 cm. An interesting occurrence in the excavation is three pits, of varying sizes, found roughly in the north eastern, north-western and south-eastern corners of the trench. The function and meaning of these pits are not known.

Excavation 2

This was an informal excavation in a cattle enclosure situated just south of Excavation 1. The excavation, measuring 1.50 m x 1.50 m, was conducted partially in a trench cut but earthmoving equipment on the site. The main aims of this excavation were to determine the depth of deposit in this area, as well as the stratigraphic layering. No cultural material was recovered.

Nine stratigraphic layers, representing at least two, and maybe even three, occupational layers, were recorded. They were as follows:

- (1) A 9 cm thick layer of dark brown top soil
- (2) A 21 cm ashy layer
- (3) A thin, reddish clay layer of 01 cm
- (4) Ash, 11 cm thick
- (5) A reddish clay layer of 06 cm
- (6) Ash, 10 cm thick
- (7) A layer of cow dung, 13 cm thick
- (8) A thin, reddish clay layer of 05 cm
- (9) A ash layer of 17 cm thick

The total depth of the deposit, before sterile soil was reached, is approximately 95 cm. The first 6 layers could be one occupational layer, with the area being used as an ash midden, while layer 7 could be representing the use of the area as a cattle enclosure. Layer 9 might be the first, and original layer of occupation. The thin red soil and clay lenses might represent episodes of deliberate capping, or stabilizing, of the ash midden deposits.

Excavation 3

This was another informal excavation conducted in a trench cut by earthmoving equipment. It measured 4 x 4 m. and was located on a stone walled terrace and cattle enclosure. No cultural artefacts were recovered, as the aims were to test the depth of deposit in this area, and determine the stratigraphic layering.

The total depth of deposit was 74 cm. from the top up to sterile soil. Four stratigraphic layers, representing at least two occupational levels, were identified. This is as follows:

- (1) Sterile top soil, 05 cm thick
- (2) A thick layer of cow dung deposit – 50 cm
- (3) An ashy layer of 06 cm, and
- (4) A brown coloured sterile soil layer of 13 cm

As with Excavation 2, the ash layer might be indication of the first occupational episode, when the area was used (possibly) for human use. This was followed by a second episode, when it was used solely as a cattle enclosure.

Excavation 4

This is a formal excavation, 4 m x 4 m in size, located in a stone walled hut enclosure. The excavation was measured out over a concentration of hut rubble that was busy eroding out from under a thin layer of topsoil.

The aims of the excavation is to recover as much in situ cultural material, hopefully on an intact hut floor preserved underneath the hut rubble. Although the excavation has not been completed yet, some material has been recovered. This includes mainly pottery and some fragmented pieces of bone.

Site B

Site B is located roughly west of Site A, and consists of a stone walled settlement that contains a number of circular hut enclosures surrounding a few cattle enclosures in its centre. The settlement plan is therefore typical of the so-called Central Cattle Pattern (CCP) model. This probably represents a single homestead, or settlement unit, that forms part of a larger Settlement Complex.

Excavation 1, Hut

The first excavation in this homestead was measured out on a small stone circle located within one of the stone walled hut enclosures. The excavation was 3,50 m x 3,50 m in size.

The small stone circle had a diameter of approximately 2,90 m, and had a double wall, 80 cm thick, constructed of large rocks with smaller ones as fill. Although some small pieces of hut clay, some with pole impressions, were recovered, surprisingly little hut rubble was found. Quite a big number of potsherds were recovered however, including a few decorated pieces. Nearly no faunal material came from this excavation, and the only other cultural material includes rubbing stones.

Besides the general lack of cultural artefacts, the excavation proved to be very interesting. Underneath a very hard, claylike layer of top soil (20 cm thick), a thin layer of red clay and

yellow dung (07 cm thick) smear was found on top of a stone paved floor. No artefacts or features of any significance were uncovered on this floor, and a sterile level is found once the stone paving is removed.

The stratigraphy in this excavation is as follows:

- (1) Dark brown top soil, 20 cm thick
- (2) A red claylike layer of 2 cm
- (3) A yellow dung layer of 5 cm, and
- (4) A stone paved floor

Excavation 2

This excavation, measuring 0,3 x 0,5 m, was located in a trench cut by earthmoving machinery on the site. The aim was to look at the stratigraphy, and test the depth of occupational deposit in the settlement. Part of a circular stone feature was noticed in the trench, and the excavation enclosed this as well.

After proper cleaning, the stone feature turned out to be the remains of a hut, with a similar paved floor as in Excavation 1. No stone wall on top of and enclosing this floor was however uncovered. This feature also had a small veranda. The stratigraphy in this excavation consisted of the following:

- (1) The stone paved floor
- (2) Clay and top soil (9 cm thick)
- (3) A second stone layer (8 cm)
- (4) A layer of ash (13 cm)
- (5) A red claylike layer (8 cm)
- (6) A second ashy layer (9 cm), and
- (7) A sterile, non-occupational layer of 26 cm thick

Excavation 3

This was the last excavation located on Site B, and was located in a circular stone walled hut enclosure. The aim was to clean out and document a stone paved hut floor that could clearly be seen underneath a thin layer of topsoil. The excavation measured 4 m x 4 m.

After careful cleaning a stone paved floor, 2,10 m in diameter, and without an enclosing stone wall, was exposed. A small veranda of 0,2 m x 0,1 m in size was also uncovered. The layout and construction is very similar to the feature found in Excavation 2.

THE FINDS

Site A – Excavation 1

Beads

- 1 x light blue glass seed bead
- 4 x OES beads
- 7 x broken OES beads

Shell

- 10 x pieces of marine/landsnail
- 12 x pieces of OES
- 2 x pieces of egg-shell (unidentified)

Metal

- 1 x copper bangle fragment \pm 12 mm long

Stone

- 1 x rubbing stone
- 3 x pieces of magnetite

Charcoal

- 1 x sample of charred marula seeds
- 1 x charcoal sample (ash pit)
- 1 x charcoal sample (\pm 50 cm depth)
- 1 x charcoal sample

Site A – Excavation 2, Layer 3

Charcoal

- 1 x charcoal sample (\pm 40 cm depth)

Small ceramic artefacts

- 1 x fragment of animal figurine (probably cattle)
- 1 x clay dagga pipe bowl, small (32 mm high, 28 mm diameter)
- 2 x shaped/rounded pieces of pottery (39 x 37 mm; 49 x 31 mm)
- 3 x pieces miscellaneous - 1 piece with red ochre, 1 part of a pedestal
- 1 x worked/shaped rim shard (48 x 58 mm)

Ceramics

- 5 x bowls (undecorated)
- 6 x bowls (decorated)
- 11 x pots with slightly everted necks and rounded rims (undecorated)
- 5 x pots with slightly everted necks and rounded rims (decorated)
- 14 x pots with slightly everted necks and flat rims (undecorated)
- 4 x pots with slightly everted necks and flat rims (decorated)
- 3 x pots with everted necks and rounded rims (undecorated)
- 1 x pot with upright neck and rounded rim (undecorated)
- 2 x spherical pots with rounded rims (undecorated)

Red ochre and graphite bands used in combination, as well as with incised and combed stamped decorations

Decorated ceramics

- Incisions
- Comb stamping
- Punctate
- Red ochre and graphite

Classes

Bowls with decoration below lip

Bowls with comb stamping decorated below lip and on body (comb stamping, triangles)

Pots, slightly everted neck, flat rims, with decoration below lip (punctuate)

Pots, slightly everted neck, flat rims, with decoration below lip and on body

Pots with everted neck and rounded rim, with rim nicking

Pots with everted neck and rounded rim with decoration below lip

Comb stamping – 10 vessels (50%)

Incisions – 1 vessel (10%)

Notching/nicking (40%)

Site A, excavation 4

Ceramics

1. 3 x pots with slightly everted neck and rounded rim (undecorated)

2. 2 x bowls with rounded rims (combstamping below the rim)

Combstamping on 100% of all vessels. Red ochre visible on some shards.

Site B, excavation 1

Ceramics

1. 1 x pot with everted neck and flat rim (rimnicking)

2. 1 x pot with upright neck and rounded rim (decoration on neck)

3. 3 x bowls with flat rim (decoration below rim and on body)

DISCUSSION

The two sites that were excavated are both very typical of Late Iron Age Tswana settlements.

Entry of Tswana people into the larger region is characterised by three successive migrations: first the Kgalagadi, Fokeng and Hoja; followed by the Thlaping and Rolong; and finally the Hurutshe, Kgatla and Kwena groups (Lye & Murray 1980). They mostly occupied the region to the west of Pretoria, in the vicinity of Rustenburg and Brits, although indications on a few sites to the north of Pretoria seem to indicate that they penetrated at least this far to the east. The settlement of these different groups in the larger region is a complex process of division, aggregation, migration and conquest, for which we do not have space in this presentation. However, it is generally accepted that their influx into the area is as a result of similar climatic events that forced the Stone Age people to abandon the area a few millennia earlier. Colder, drier weather on the central highveld forced people to move northwards where it is warmer and where more surface water could be found.

A similar process that gave rise to the spread amongst the Sotho/Tswana, also took place, about the same time, amongst the Nguni-speakers in KwaZulu-Natal. Venturing inland under a chief called Mafana, they eventually settled, c. 1600, under chief Mhlanga at a place called Emnyameni (place of the black hills – the norite hills north of the Magaliesberg and adjacent to the Apies River). At this place, now known as Pyramid, the Ndebele came into existence under their great leader Musi. Different oral histories exist in this regard. Some claim that Musi was also known as Tshwane, whereas others would have it that he was succeeded by his son, named Tshwane. According to this latter tradition, Tshwane built himself a capital just north of Wonderboompoort, on the banks of the Mbibana (Apies River). After his death, the

Ndebele divided, living off at least six different groups, each under the leadership of one of Musi/Tshwane's sons. Some of these groups, such as the Ndzundza and Manala moved out of the area. Other, smaller groups, such as the Maletle, Tlhako and Tloung were assimilated by the Tswana-speakers (Van Vuuren 1983).

For a short period of time, peace came to the area. Populations expanded, settlements grew and new ones were established. But this population growth eventually gave rise to inter-tribal stress, leading to the fact that people abandoned the flat, open areas, moving into the various mountains and hills. The quartzite of the Magaliesberg did not provide quite the same quality building material as is found in the norite intrusions just to the north. The end result, however, is that huge stone walled settlements developed as people aggregated into fortified villages for defensive purposes).

As a result of this process, settlements associated with this period can be found all over the larger Pretoria region. There is hardly a hill or an outcrop that does not have remains of settlement dating to this period, e.g. Tswana in or near the Magaliesberg, Swartkoppies, Onderstepoort and Hoekfontein (Van Schalkwyk, Pelser & Teichert 2000); and Ndebele for example the Bronberge, Pyramid, Silver Lakes and Hartherley (Van Schalkwyk, Pelser & Van Vuuren 1996). As was the case with preceding Stone Age communities, Iron Age people exploited the region and its resources to the maximum. Cattle and small stock were grazed on the slopes of the mountains, whereas the rich turf soils of the low-lying areas were tilled, producing a variety of cereals. Other resources were eagerly sought out. Iron smelting furnaces were found in large numbers in the Bronberg and the location of the modern ISCOR plant.

REFERENCES

- Lye, W.F. & Murray, C. 1980. *Transformations on the highveld: the Tswana and southern Sotho*. Cape Town: David Phillip.
- Van Schalkwyk, J.A. 1998. *A survey of cultural resources in the proposed mining area on the farm Hoekfontein 432JQ, Odi I District*. Unpublished report 98KH17. Pretoria: National Cultural History Museum.
- Van Schalkwyk, J.A., Pelser, A., & Van Vuuren, C.J. 1996. Investigation of Late Iron Age sites on the farm Hatherley 331JR, Pretoria district. *Research by the National Cultural History Museum* 5:45-56.
- Van Schalkwyk, J.A., Pelser, A.J. & Teichert, F. 2000. Archaeological investigation of a Late Iron Age Tswana settlement on the farm Hoekfontein 432JQ, Odi I District, North West Province. *Research by the National Cultural History Museum* 9:58-64.
- Van Vuuren, C.J. 1983. *Die vestigingspatroon van die Suid-Ndebele*. Unpublished MA thesis. Pretoria: University of Pretoria.

Faunal Report on Elandsfontein

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INTRODUCTION

Elandsfontein is a Late Iron Age site. The terrain will be discussed in detail in Dr Küsel's report.

EXCAVATION METHODS AND METHODS USED IN FAUNAL ANALYSIS

Two excavations 440 JQ Site A - midden and 440 JQ Site B – Stone circle (hut) were undertaken to a depth of 90 cm. A mesh size of 1mm was used at the excavations.

The faunal material was sorted into identifiable and not identifiable fragments; the identifiable analysis was done with the help of the Transvaal Museums' Archaeozoology Department's collection. The analysis was done at international standards as promoted by ICAZ (International Council of Archaeozoology)

Age class determination where applicable was done according to Voigt (1983) and Plug (1988). The quantification methods MNI, NISP and QSP used were done in accordance to the methods set out by Plug, I (1988).

Complete bones and worked bones were measured using a calliper with an accuracy of 0.1mm as part of the standard archaeological analytical methodology; these measurements are not included here but are kept on file. The measurements were taken using the standard points of measurements described by Von den Driesch (1976) and Peters (1986)

Weathering was estimated by comparison to the rest of the sample analysed.

FAUNAL SAMPLE

Unidentifiable

The total sample bones that could not be identified were 3741 with a mass of 2850.3g.

Identifiable

The total sample bones that could be identified were 111 with a mass of 1085.8g. All species identified occur and did occur in the region.

A variety of nine species were identified. Most commonly found was *Bos taurus* followed by *Ovis aries* and small rodent. The largest variety of species, nine in all, was found in 440 JQ Excavation I this excavation also produced the largest identifiable sample (104 specimens).

Aging and sexing

Four pieces of ossified cartilage coupled with the extremely worn *Bos taurus* M1 in 440 JQ excavation 1 indicates an aged individual. A juvenile and sub adult *Bos taurus* were identified in the same layer. No other ages were identified.

One female *Bos taurus* left pubis was identified in 440 JQ layer 1, this bone also exhibited chop marks.

Taphonomy, and worked bone

Out of the total of 3852 fragments 447 were burnt. An additional 3 bones were weathered 72 bone showed cut marks a further 5 exhibited chop marks. There was rodent gnaw marks on 17 fragments and two fragments had carnivore gnaw marks.

Five pieces of bone all from 440 JQ layer 1 showed human modification. One bone bead, a polished long bone and 3 polished rib bones.

DISCUSSIONS AND CONCLUSIONS

The fauna identified fits with that of a Late Iron Age terrain. Domestic animals in this case *Bos taurus* and *Ovis aries* were the main source of food. The three of *Sylvicapra grimmia* teeth and the tortoise that was identified could possibly indicate that the diet was supplemented by hunting there is however not enough evidence to support this conclusion.

There is evidence of carnivore gnaw marks which could have been made by the dogs kept by late iron age people. This evidence can however not be supported as no canid bones were found.

The amount of fresh breaks in the material is worrying as some of the breaks to the material were such that they could not be reassembled. The number of identifiable material could have been higher if more care was taken with the material.

Certain of the conclusions are tentative because of the small sample size and the amount of breaks that could not be reassembled. To stimulate further discussion and test the conclusions reached, more research needs to be done in the area and further excavations undertaken at Elandsfontein.

ACKNOWLEDGEMENTS

I wish to thank Dr U Küsel for allowing me the opportunity to do the analysis for this terrain. Dr I Plug for her guidance with the project. The Department of archaeozoology at the Transvaal Museum for the use of the collection.

REFERENCES

- Meester, W., Rautenbach, I. L., & Dippenaar, N. S. 1986. *Classification of southern African mammals*. Transvaal Museum monograph No 5 Pretoria
- Peters, J., 1986. *Bijdrage tot de archeozoölogie van Soedan en Egypte*. PhD thesis. Gent: Rijksuniversiteit.
- Plug, I., 1988. *Hunters and Herders: An Archaeozoological study of someprehistoric communities in the Kruger National Park*. Dphil thesis University of Pretoria
- Smithers, R. H. N. 1983. *The mammals of the Sub-Saharan Africa*. University of Pretoria
- Von den Driesch, A., 1976. *A guide to the measurements of animal bones from archaeological sites*. Peabody Museum Bulletin 1. Massachusetts: Harvard University.

TABLE

| Square | Level | Skeletal Part | Damage | Amount | Total | Mass (g) | |
|---------------|--------------------|---------------|--------------------|-------------|-------|----------|-----|
| 440 JQ | Excavation 1 | Enamel | Burnt | 5 | 89 | 37.3 | |
| | | | Vertebrae | Cutmarks | 1 | 37 | 207 |
| | | | | Rodent gnaw | 1 | | |
| | | Rib | Chopmarks | 2 | | | |
| | | | Burnt | 4 | 63 | 212 | |
| | | | Cutmarks | 5 | | | |
| | | | Rodent gnaw | 1 | | | |
| | | Skull | Burnt | 3 | 76 | 220 | |
| | | | Carnivore gnaw | 1 | | | |
| | | | Rodent gnaw | 4 | | | |
| | | Bone flake | Weathered | 1 | 3438 | 2091 | |
| | | | Trampled | 3 | | | |
| | | | Rodent gnaw | 9 | | | |
| | | | Carnivore gnaw | 1 | | | |
| | | | Cutmarks | 64 | | | |
| | | | Burnt | 428 | | | |
| | | | Ossified cartilage | | 4 | 0.7 | |
| | | Wood | | 2 | 0.3 | | |
| | | Stone | | 2 | 0.8 | | |
| | | Metal | | 1 | 1.2 | | |
| Pottery | Decoration | 1 | 8 | 30.1 | | | |
| Seed | | | 5 | 0.7 | | | |
| 440 JQ Site A | Midden | Enamel | | | 1 | 0.2 | |
| | | Rib | Rodent gnaw | 1 | 2 | 23 | |
| | | Bone flake | | | 2 | 25 | |
| 440 JQ Site B | Stone circle (hut) | Enamel | | | 2 | 0.5 | |
| | | Bone flake | | | 9 | 0.5 | |

ILLUSTRATIONS

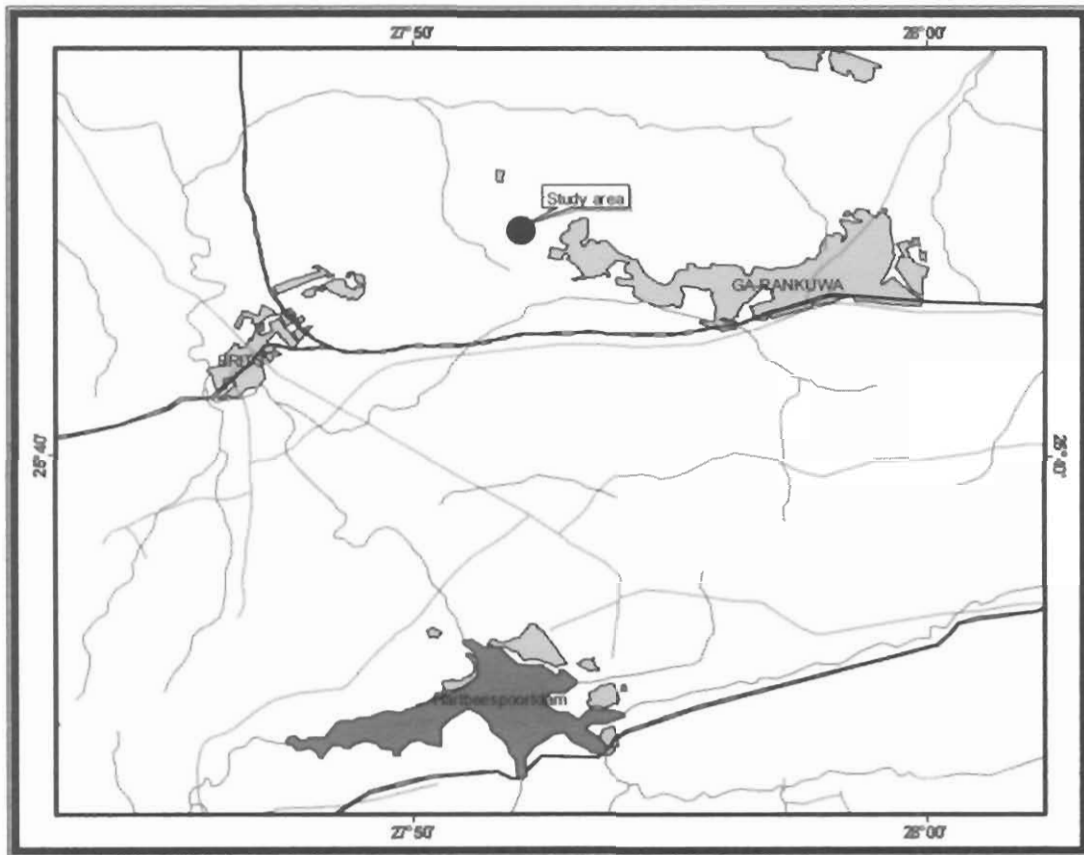


Figure 1. Location of the sites in regional context.

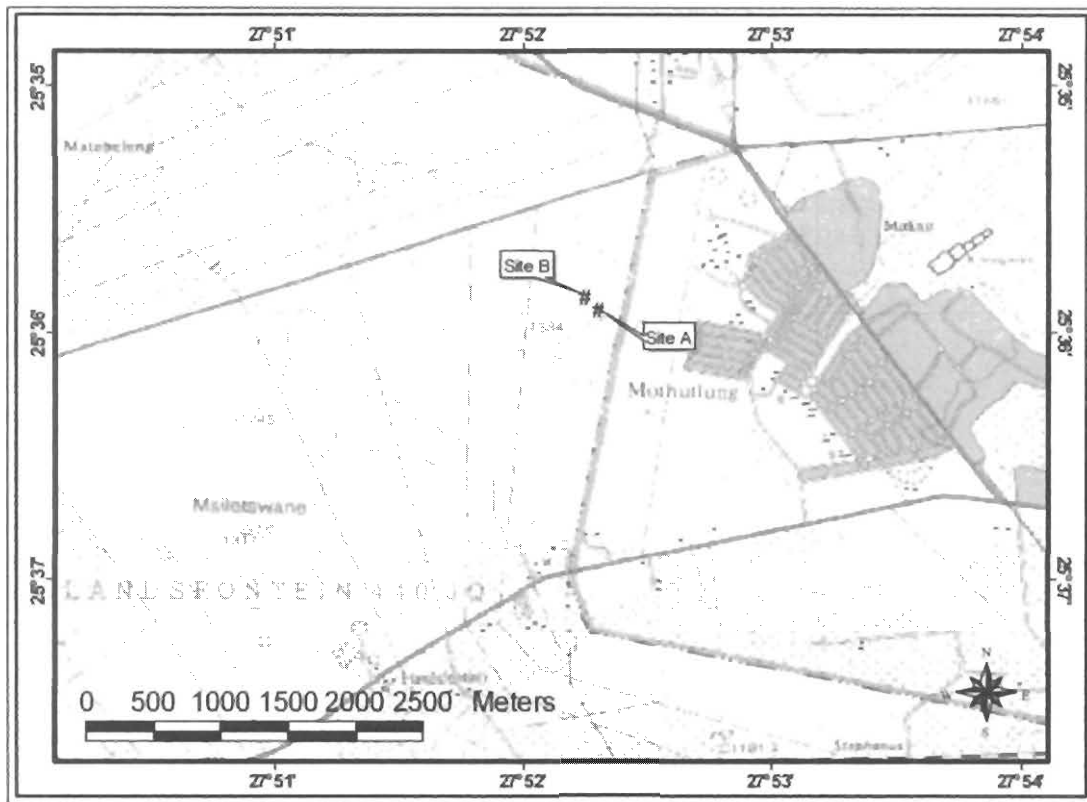


Figure 2. Location of the two sites.



Figure 3. Layout of site A

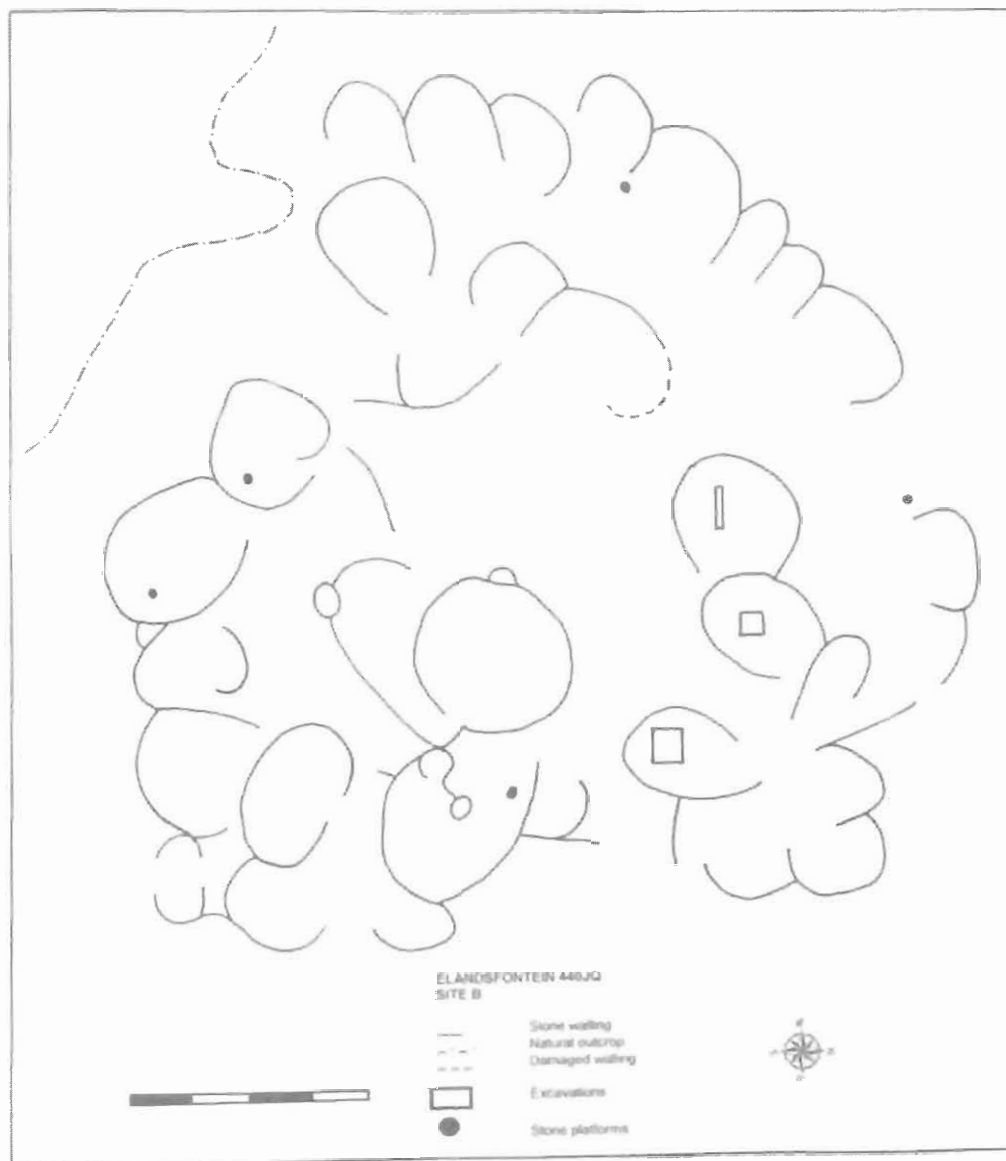


Figure 4. Layout of site B.



Figure 5. Stratigraphy in Excavation 1, Site A







Figure 6. Stone walled structure prior to excavation, Site B.



Figure 7. Hut floor with veranda on site B.

ELANDSFONTEIN 440JQ

SITE B

| | |
|---|-----------------|
|  | Stone walling |
|  | Natural outcrop |
|  | Damaged walling |
|  | Excavations |
| # | Stone platforms |
| 0 | Huts |

4



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**RECORDING AND EXCAVATIONS ON THE FARM
ELANDSFONTEIN 440 JQ
(Permit No, 80/04/05/012/51**

Attached please find the report on the excavations on the farm Elandsfontein 440 JQ. As stated in my application for the permit, granite mining will destroy the site. What is the next step to legalize the destruction of the site?

Yours truly,



Udo Küsel