

Phase 1 Archaeological Impact Assessment for Eco 8
Environmental Planners in respect of section 24 G of the
Environmental Management Act (Act No. 107 of 1998) at
Nkambeni Tented Lodge, Nkambeni Trust Land, Numbi,
Mpumalanga Province
compiled by

Kudzala Antiquity



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Contents

Executive summary	p. 3.
1. Introduction	p. 4.
2. Description of surveyed area	p. 6.
3. Methodology	p. 7.
4. History and Archaeology	p.11.
4.1. Historic Period	p. 11.
4.2. Archaeology	p. 16.
5. Located sites, their description and suggested mitigation	p. 22.
6. Findings and recommendations	p. 27.
7. Bibliography	p. 28.
8. Appendix A – Terminology	p. 30.
9. Appendix B – List of located sites	p. 36.
11. Appendix C – Maps	p. 38.
Aerial photo location	p. 39.
1:50 000 location map	p. 41.
12. Appendix D – Photos of located sites	p. 42.
13. Appendix E – Declaration of Interest	p. 49.
14. Appendix F – Statement of Experience	p. 52.

Executive summary

An Archaeological Impact assessment was undertaken by Kudzala Antiquity CC for Eco 8 Environmental Planners at Nkambeni Tented Lodge close to the Numbi Gate of the Kruger National Park. The Study was commissioned as part of an application in terms of section 24 G (Amended) of the NEMA or Environmental Management Act (Act No. 107 of 1998). This provides for the rectification of unlawful commencement or continuation of a listed activity as listed by the NEMA. The survey was conducted on foot in an effort to locate archaeological remains and historical features. A total of 5 site locations were documented. Some finds of archaeological significance were encountered during the survey with varying degrees of significance. A site (NCK 4) where a larger concentration of pottery sherds and lower grinding stone is located in a pathway between existing tents warrants further investigation and a second phase is recommended. This implies that a shovel test excavation (after a permit from SAHRA has been obtained) is carried out here in order to determine the extent of the archaeological deposit and also the impact which the development has had on the deposit in this area. Thereafter a management programme should be compiled in order to properly manage archaeological remains in the area.

Disclaimer: *Although all possible care is taken to identify all sites of cultural importance during the investigation of study areas, it is always possible that hidden or sub-surface sites could be overlooked during the study. Kudzala Antiquity CC will not be held liable for such oversights or for costs incurred as a result of such oversights.*

1. Introduction

Kudzala Antiquity CC conducted an Archaeological Impact Assessment (AIA) on some 2 hectares of the Nkambeni Tented Lodge located on Trust Land just east of the Numbi Gate of the Kruger National Park. The study forms part of an Environmental Impact Assessment as required by legislation, the National Heritage Resources Act (Act 25, 1999) and the NEMA (National Environmental Management Act, 107 of 1998). In this case the tented lodge was constructed before Environmental approval had been acquired and this assessment is part of an application in terms of the NEMA amended Act (section 24G). This report was compiled in an effort to assess whether heritage features or sites which qualify as part of the National Estate were damaged or destroyed and includes recommendations and suggested mitigation measures.

Heritage resources considered to be part of the national estate include those that are of cultural significance or have other special value to the present community or future generations. The national estate may include:

- places, buildings, structures and equipment of cultural significance;
 - places to which oral traditions are attached or which are associated with living heritage;
 - historical settlements and townscapes;
 - landscapes and natural features of cultural significance;
 - geological sites of scientific or cultural importance;
 - archaeological and palaeontological sites;
 - graves and burial grounds including:
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the *Gazette*;
 - (v) historical graves and cemeteries; and
- other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

- sites of significance relating to slavery in South Africa;
- movable objects including:
 - (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and

books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

Van Vollenhoven (1995:3) describes cultural resources as all unique and non-renewable physical phenomena (of natural occurrence or made by humans) that can be associated with human (cultural) activities. These would be any man-made structure, tool, object of art or waste that was left behind on or beneath the soil surface by historic or pre-historic communities. These remains, when studied in their original context by archaeologists, are interpreted in an attempt to understand, identify and reconstruct the activities and lifestyles of past communities. When these items are disturbed from their original context, any meaningful information they possess is lost, therefore it is important to locate and identify such remains before construction or development activities commence.

An AIA (Archaeological Impact Assessment) or HIA (Heritage Impact Assessment) consists of three phases, this document deals with the first phase. This (phase 1) investigation is aimed at getting an overview of cultural resources in a given area, thereby assessing the possible impact a proposed development may have on these resources. When the archaeologist encounters a situation where the planned project will lead to the destruction or alteration of an archaeological site, a second phase in the survey is

normally recommended. During a phase two investigation, the impact assessment of development activities on identified cultural resources is intensified and detailed investigation into the nature and origin of the cultural material is undertaken. Normally at this stage, archaeological excavation is carried out in order to document and preserve the cultural heritage.

Phase three consists of the compiling of a management plan for the safeguarding, conservation, interpretation and utilization of cultural resources (Van Vollenhoven, 2002).

Continuous communication between the developer and surveyor after the initial report has been compiled may result in the modification of a planned route or development to incorporate or protect existing archaeological sites.

2. Description of surveyed area

The study area falls within the Mbombela (Nelspruit) Municipality within Mpumalanga Province. The survey was carried out on approximately 2 hectares of Trust Land.....

The development comprises an eco-tourism resort known as Nkambeni Tented Lodge and was constructed in two phases. The first phase started in July 2007 and consisted of 75 accommodation units, reception office and restaurant with associated infrastructure as well as management accommodation. Phase 1 covered a physical footprint area of $\pm 4600 \text{ m}^2$ with a total transformed area of less than 1 hectare. Phase 2 consisted of an additional 75 accommodation units, staff accommodation and associated infrastructure, additional parking areas and landscaping that covers a physical footprint of $\pm 4050 \text{ m}^2$ (total transformed area of more than 1 hectare). Construction was completed in April 2008 and the resort became operational in May 2008. Access to the resort was initially obtained from an existing service road along the railway line that bounds the property along its western boundary.

The surveyed area is characterized by typical Lowveld vegetation probably Sour Lowveld Bushveld. The affected area has a natural boundary on the eastern side in the form of a rivulet known as the Mbabala Spruit.

The survey was conducted on foot in an effort to locate cultural remains.

3. Methodology

The methodological approach for this study meets the requirements of relevant heritage legislation. The investigation of the identified area where the proposed activity is to take place, consisted of foot (physical) survey, a desktop archival study as well as a study of the results of previous archaeological work in the area. The archaeological surveying was concentrated within the developed area boundaries.

SAHRA (South African Heritage Resources Agency) in their “*Minimum standards for archaeological and palaeontological components of impact assessment reports*”. requires that the following components be included in a archaeological or heritage impact assessment:

- Archaeology
- Shipwrecks
- Battlefields
- Graves
- Structures older than 60 years
- Living heritage
- Historical settlements
- Landscapes
- Geological sites

- Palaeontological sites and objects

All the above-mentioned heritage components are addressed in this report, except shipwrecks, geological sites and palaeontological sites and objects.

The purpose of the archaeological study is to establish the whereabouts and nature of cultural heritage sites should they occur on the surveyed area. This includes settlements, structures and artifacts which have value for an individual or group of people in terms of historical, archaeological, architectural and human (cultural) development.

It is the aim of this study to locate and identify such objects or places in order to assess whether they are of significance and warrant further investigation or protection.

3.1. Desktop archival study

The purpose of the desktop study is to compile as much information as possible on the heritage resources of the area. This helps to provide an historical context for located sites. Sources used for this study included published and unpublished documents, archival material and maps. Material obtained from the following institutions were consulted:

- Lydenburg Museum Archives, Lydenburg
- Published and unpublished archaeological reports and articles
- Published historic accounts of the area

3.2. Significance of sites

The South African Heritage Resources Agency (SAHRA) formulated guidelines for the conservation of all cultural resources and therefore also divided such sites into three main categories. These categories might be seen as guidelines that suggest the extent of protection a given site might receive. They include sites or features of local (Grade 3) provincial (Grade 2) and national (Grade 1) significance.

For practical purposes the surveyor uses his own classification for sites or features and divides them into three groups, those of low or no significance, those of medium significance, those of high significance.

Regarding the establishment of the significance of a site or feature there are certain values or dimensions connected to significance which may be allocated to a site. These include:

- **Types of significance**

The sites' scientific, aesthetic and historic significance or a combination of these is established.

- **Degrees of significance**

The archaeological or historic site's rarity and representative value is considered. The condition of the site is also an important consideration.

- **Spheres of significance**

Sites are categorized as being significant in the international, national, provincial, regional or local context. Significance of a site for a specific community is also taken into consideration.

It should be noted that to arrive at the specific allocation of significance of a site or feature, the specialist considers the following:

- Historic context
- Archaeological context or scientific value
- Social value
- Aesthetic value

More specific criteria used by the specialist in order to allocate value or significance to a site include:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features

- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Quality of the archaeological or historic material of the site
- Quantity of sites and site features

In short, archaeological and historic sites that contain data which may significantly enhance the knowledge that archaeologists currently have about our cultural heritage should be considered highly valuable. In all instances these sites should be preserved and not damaged during construction activities. When development activities do however jeopardize the future of such a site, a second and third phase in the Cultural Resource Management (CRM) process is normally advised which entails the excavation or rescue excavation of cultural material along with a management plan to be drafted for the preservation of the site or sites.

Graves are considered very sensitive sites and should never under any circumstances be jeopardized by development activities. Graves are incorporated in the National Heritage Resources Act under section 36 and in all instances where graves are found by the surveyor, the recommendation would be to steer clear of these areas. If this is not possible or if construction activities have for some reason damaged graves, specialized consultants are normally contacted to aid in the process of exhumation and reinterment of the human remains.

4. History and Archaeology

4.1. Historic period

4.1.1. Early History

The first inhabitants of the eastern Lowveld were probably the San or Bushmen. They were a nomadic people who lived together in small family groups and relied on hunting and gathering of food for survival. Evidence of their existence is to be found in numerous rock shelters throughout the Lowveld where some of their rock paintings are still visible. A number of these shelters have been documented in the Nelspruit and Krokodilpoort mountains area (Bornman, 1995; Hampson, 2001; Schoonraad in Barnard, 1975). It has been argued that the red ochre source for these paintings is to be found at Dumaneni, near Malelane (Bornman, 1995) in fact some 100 San rock art sites have been documented in and around the Bongani Mountain Reserve area (Hampson, 2001). This area is located immediately south-west of the Kruger National Park and within the larger Mthetomusha Game Reserve. What is interesting about these paintings are that they contain images which were previously thought to occur in specific restricted areas of southern Africa only.

The area is currently mostly occupied by SiSwati and xiTsonga speaking people, most of whom originally lived in what is now the southern Kruger National Park (Van Riet et al. 1997).

Two Late-Holocene (Later Stone Age) sites near Hazyview in the Kruger National Park date to the last 2500 years and are associated with pottery and microlith stone tools (Bergh, 1998: 95). This is contemporary to typical hunter-gatherer lifestyle and may also have been sites frequented by San.

It was only later that Bantu-speaking tribes moved into this area from the northern parts of Southern Africa and settled here. This period is referred to as the Early Iron Age (AD 200-1500 approx.). These were presumably Sotho-Tswana herder groups.

Various historians and ethnographers describe that the Lowveld was frequented by Swazi and Sotho-Tswana groups during historic times i.e. Late Iron Age times during the period AD 1500-1800. (Barnard, 1975; Bergh, 1998; Bornman, 2002; Herbst, 1985; Myburgh,

1949).

Old trade routes were well established before the period of Colonial expansion and these routes mainly existed as a direct consequence of metallurgy and mining for iron, tin, copper and some gold to make weapons, agricultural equipment and ornaments (Bergh, 1998:103). The earliest signs of iron mining and working in the old Transvaal dates to approximately 300 AD and copper mining and working in Southern Africa may have been practiced as early as 620 AD (Bergh, 1998:103).

These people were responsible for the establishment of large centres like Monomotapa the Zimbabwe Complex and also the famed Mapungubwe in the Limpopo valley. At around 900 AD Arab merchants established a trade post at Sofala (Beira). Since the start of the 11th century, these Arabs had trade relations with the people of Zimbabwe. Textiles, porcelain and glass beads were traded for gold, ivory and other minerals.

An ancient trade route passed close-by the current Nelspruit and started from Delagoabay in a westward direction through the Lowveld towards the gold fields of Lydenburg, by passing through Malalapoort, the Nkhomati and Crocodile Rivers to Skipberg in the current Kruger National Park close-by the place where Pretoriuskop Rest Camp is located. From here onwards there were two possible routes up the mountains to reach the goldfields. The first one passed by Spitskop (Sabie) and from there on to Lydenburg. The second passed south of the “Devils Knuckles” to Lydenburg. The Voortrekkers used this route in 1845 when making the wagon route between Ohrigstad and Delagoabay (Berg, 1998: 104). There were also several linking routes to existing main routes, one of which started from Sabie or Lydenburg to the route which linked Delagoabay to the Soutpansberg via Pilgrim’s Rest. It is also believed that a footpath existed at the foothills of the (Transvaal) Drakensberg which led around the mountain to link again with a major route alongside the Olifants River (Bergh, 1998:104).

In 1721 Dutch sailors reached Delagoa Bay and settled there for nine years, during this time they launched a number of expeditions inland. During August 1723 lieutenant Jan Steffler and 17 men launched the first of these expeditions but they were ambushed by natives shortly after crossing the Lebombo Mountains. Exactly where they crossed the

mountains is uncertain but it is possible that they were actually in northern Swaziland when they were attacked. Steffler succumbed as a result of this ambush and his followers returned to Delagoa Bay (Bergh, 1998:116).

A second attempt to create an inland route took place two years later in June 1725 when Francois de Cuiper and 34 men departed from Delagoa Bay and travelled in a north-western direction. They reached Gomondwano in the current Kruger National Park where they were also attacked by a local tribe. This resulted in them also having to return to Delagoa Bay. Although this attempt was also not successful, it is seen as the first European intrusion into this northern area (Bergh, 1998:116).

In the (Eastern Transvaal) Lowveld a sub-group of the Northern Sotho, known as the eastern Sotho, were present nearby the eastern escarpment. They are known as the Pulana, Pai and Kutswe, these people moved from northern Swaziland further northwards when Swazi expanded into this area during the *mfecane* (Bergh, 1998:107-108). One of the recorded events relates to the attack of the Ndwande under Zwide on the Pedi in 1825 (Bergh, 1998:114-115). This seems to have started from the Lowveld in the region of the Pretoriuskop area towards Steelpoort.

Before the *mfecane* period (1820's) small farmer groups including the Pai and Pulana resided in the mountainous area surrounding Barberton and Nelspruit. The conflict during the *mfecane*, when the Swazi under Mswati II raided these smaller groups, resulted in scattered settlement of those who managed to escape the Swazi onslaught. Evidence of these scattered settlements are sometimes found in the form of small stone walled enclosures in and around Barberton, Nelspruit and onwards to the Schoemanskloof.

4.1.2. The Voortrekkers

The Groot Trek of the Voortrekkers started with the Tregardt- van Rensburg trek in 1835. The two men met where Tregardt and his followers crossed the Orange River at Buffelsvlei (Aliwal North). Here van Rensburg joined the trek northwards. On August 23, 1837 the Tregardt trek left for Delagoabay from the Soutpansberg. They travelled eastwards alongside the Olifants River to the eastern foothills of the Drakensberg. From here they travelled through the Lowveld and the current Kruger National Park where they

eventually crossed the Lebombo mountains in March 1838. They reached the Fortification at Lourenço Marques on 13 April 1838 (Bergh, 1998:124-125).

The Republic of Lydenburg was established on 17 December 1856. This was a vast area and stretched from the northern Strydpoort mountains to Wakkerstroom in the south and Bronkhortsspruit in the west to the Swazi border and the Lebombo mountains east.

4.1.3. History of the Anglo Boer War (1899-1902) in the area.

Although the Lowveld region has a rich history regarding events and occurrences that transpired during the Anglo-Boer War very little information could be gathered of any historical data that directly affected the area under investigation. Nevertheless, there does seem to have been some guerilla warfare activity in the region of the Kaapmuiden station during the war. On 17 June 1900 Sergeant L. Von Steinaecker¹ and Colonial Scouts from the British Army blew up a bridge between Kaapmuiden and the Portuguese frontier. Traffic to Delagoa Bay on the line was stopped for about a fortnight, but the Boer forces did not suffer any major inconvenience from the explosion (Amery, 1909). Ongoing archaeological research (since 2000) involving the Steinaecker's Horse Unit who operated in the current Kruger National Park during the Anglo Boer War (1899-1902) has resulted in the excavation of several outposts of this unit including sites in and around Skukuza, Letaba and the Lower Sabie area.

However, "the large iron bridge which spanned the Crocodile River" at Kaapmuiden was destroyed by the Boers during a guerrilla attack at a later stage in the war. This was major inconvenience for the British as "supplies were conveyed by fatigue parties of the Yorkshire regiment from the train to the bridge-head 150 yards away, whence they were rolled down to the river bed, carried across by natives, and loaded into wagons. In spite of the intense, steaming heat of the low veld, the fatigue parties labored strenuously night and day at a task as trying as any which [the British] had to deal with during the war".

¹ Known as Steinaecker's Horse, this British Unit was under command of an ex-Prussian army officer Baron Ludwig von Steinaecker, who fought on the side of the British during the Anglo-Boer War. The unit first operated from Swaziland, but later had its headquarters at Komatipoort and at the Sabie Bridge (Skukuza) as well as several outposts in the southern and central area of the present day Kruger Park. Source: S. Joubert, *The Kruger National Park a history*, Vol 1, p. 15.

After engineers completed a deviation across the Crocodile River, a supply depot was established at the Kaapmuiden station and the branch line between Kaapmuiden and Barberton was used to send supplies to other British troops in the surrounding territories (Amery, 1909).

One of several Concentration camps for Black people was located near the Nelspruit Railway Station (Bergh, 1998). In December of 1900 Lord Kitchener ordered the establishment of numerous concentration camps where the Boers and Black people on their farms would be housed. Separate camps existed for Boer wives and children and for Black People. In May 1902 there were a total of 37 camps for Black people in the Transvaal with a total population of 115 000 people (Bergh, 1998).

4.2. Archaeology

4.2.1. Stone Age

The Later phases of the Stone Age began at around 20 000 years BP (Before Present). This period was marked by numerous technological innovations and social transformations within these early hunter-gatherer societies. Hunting tools now included the bow and arrow. More particularly, the link-shaft arrow which comprises a poisoned bone tip loosely linked to a shaft which fell away when an animal was shot and left the arrow tip embedded in the prey animal. Other innovations included bored stones used as digging –stick weights to help with uprooting of tubers and roots, small stone tools, normally less than 25mm long, which was used for cutting meat and scraping hides. There were also polished bone needles, twine made from plant fibers, tortoiseshell bowls, fishing equipment including bone hooks and stone sinkers, ostrich eggshell beads and other decorative artwork (Delius, 2007).

These people may be regarded as the first modern inhabitants of Mpumalanga, known as the San or Bushmen. They were a nomadic people who lived together in small family groups and relied on hunting and gathering of food for survival. Evidence of their existence is to be found in numerous rock shelters throughout the Eastern Mpumalanga where some of their rock paintings are still visible. A number of these shelters have been documented throughout the Province (Bornman, 1995; Schoonraad in Barnard, 1975; Delius, 2007). These include areas such as Witbank, Ermelo, Barberton, Nelspruit, White River, Lydenburg and Ohrigstad.

Two Late-Holocene (Later Stone Age) sites near Hazyview in the Kruger National Park date to the last 2500 years and are associated with pottery and microlith stone tools (Bergh, 1998: 95). This is contemporary to typical hunter-gatherer lifestyle and may also have been sites frequented by San.

San paintings in Mpumalanga are characterized by representations of animals and human figures and are normally fine-lined paintings which are produced by using brushes made of plant material, sticks and quills. The colours are usually red and black or sometimes white. It has been argued that the red ochre source for some of these paintings is to be found at Dumaneni, near Malelane (Bornman, 1995).

At Honingklip near Badplaas in the Carolina District, two LSA rock shelters with four panels of rock art was discovered and archaeologically investigated. The site was used between 4870 BP and as recently as 200 BP. Stone walls at both sites date to the last 250 years of hunter-gatherer occupation and they may have served as protection against intruders and predators. Pieces of clay ceramic and iron beads found at the site indicates that there was early social interaction between the hunter-gatherer (San) communities and the first farmers who moved into this area at around 500 AD. Evidence from Welgelegen Shelter on the banks of the Vaal River near Ermelo suggests that the early farming (Bantu) and hunter-gatherer (San) communities coexisted (Delius, 2007; Bergh, 1998). The farmers who used metal tools, occupied the shelter while an independent hunter-gatherer group who made typical LSA (Late Stone Age) stone tools and used pottery, occupied the overhang area of the shelter. Similar “symbiotic” relationships existed between the Batwa San from the Lake Chrissie area and the Swazi well into the 20th century (Delius, 2007).

4.2.2. Early Iron Age

The period referred to as the Early Iron Age (AD 200-1500 approx.) started when presumably Karanga (north-east African) herder groups moved into the north eastern parts of South Africa. It is believed that these people may have been responsible for making of the famous Lydenburg Heads, ceramic masks dating to approximately 600AD. Ludwig von Bezing was a boy of more or less 10 years of age when he first saw pieces of the now famous Lydenburg heads in 1957 while playing in the veld on his father's farm near Lydenburg. Five years later von Bezing developed an interest in archaeology and went back to where he first saw the shards. Between 1962 and 1966 he frequently visited the Sterkspruit valley to collect pieces of the seven clay heads. Von Bezing joined the archaeological club of the University of Cape Town when he studied medicine at this institution. He took his finds to the university at the insistence of the club. He had not only found the heads, but potsherds, iron beads, copper beads, ostrich eggshell beads, pieces of bones and millstones. Archaeologists of the University of Cape Town and WITS Prof. Ray Innskeep and Dr Mike Evers excavated the site where von Bezing found the remains. This site and in particular its unique finds (heads, clay masks) instantly

became internationally famous and was henceforth known as the Lydenburg Heads site. Two of the clay masks are large enough to probably fit over the head of a child, the other five are approximately half that size. The masks have both human and animal features, a characteristic that may explain that they had symbolic use during initiation- and other religious ceremonies. Carbon dating proved that the heads date to approximately 600 AD and were made by Early Iron Age people. These people were Bantu herders and agriculturists and probably populated Southern Africa from areas north-east of the Limpopo river. Similar ceramics were later found in the Gustav Klingbiel Nature Reserve and researchers believe that they are related to the ceramic wares (pottery) of the Lydenburg Heads site in form, function and decorative motive. This sequence of pottery is formally known as the Klingbiel type pottery. No clay masks were found in similar context to this pottery sequence.

Two larger heads and five smaller ones make up the Lydenburg find. The heads are made of the same clay used in making household pottery. It is also made with the same technique used in the manufacture of household pottery. The smaller heads display the modeling of a curved forehead and the back neck as it curves into the skull. Around the neck of each of the heads, two or three rings are engraved horizontally and are filled in with hatching marks to form a pattern. A ridge of clay over the forehead and above the ears indicates the hairline. On the two larger heads a few rows of small clay balls indicate hair decorations. The mouth consists of lips – the smaller heads also have teeth. The seventh head has the snout of an animal and is the only head that represents an animal.

Some archaeological research was done during the 1970's at sites belonging to the EIA (Early Iron Age), location Plaston, a settlement close to White River (Evers, 1977). This site is located on a spur between the White River and a small tributary. It is situated on holding 119 at Plaston.

The site was discovered during house building operations when a collection of pottery shards was excavated. The finds consisted of pottery shards both on the surface and excavated.

Some of the pottery vessels were decorated with a red ochre wash. Two major decoration

motifs occurred on the pots:

- Punctuation, using a single stylus and
- Broadline incision, the more common motif

A number of Early Iron Age pottery collections from Mpumalanga and Limpopo may be compared to the Plaston sample. They include Silver Leaves, Eiland, Matola, Klingbiel and the Lydenburg Heads site. The Plaston sample is distinguished from samples of these sites in terms of rim morphology, the majority of rims from Plaston are rounded and very few beveled. Rims from the other sites show more beveled rims (Evers, 1977:176).

Early Iron Age pottery was also excavated by archaeologist, Prof. Tom Huffman during 1997 on location where the Riverside Government complex is currently situated (Huffman, 1998). This site known as the Riverside site is situated a few kilometers north of Nelspruit next to the confluence of the Nelspruit and Crocodile River. It was discovered during the course of an environmental impact assessment for the new Mpumalanga Government complex/ offices. A bulldozer cutting exposed storage pits, cattle byres, a burial and midden on the crest of a gentle slope. Salvage excavations conducted during December 1997 and March 1998 recovered the burial and contents of several pits.

One of the pits contained among other items, pottery dating to the eleventh century (AD 1070 \pm 40 BP) this relates the pottery to the Mzonjani and Broederstroom phases. The early assemblage belongs to the Kwale branch of the Urewe tradition.

During the early 1970's Dr Mike Evers of the University of the Witwatersrand conducted fieldwork and excavations in the Eastern Transvaal. Two areas were studied, the Letaba area south of the Groot Letaba River, west of the Lebombo Mountains, east of the great escarpment and north of the Olifants River. The second area was the Eastern Transvaal escarpment area between Lydenburg and Machadodorp.

These two areas are referred to as the Lowveld and escarpment respectively. The earliest work on Iron Age archaeology was conducted by Trevor and Hall in 1912. This revealed prehistoric copper-, gold- and iron mines. Schwelinus (1937) reported smelting furnaces, a salt factory and terraces near Phalaborwa. In the same year D.S. van der Merwe located ruins, graves, furnaces, terraces and soapstone objects in the Letaba area.

Mason (1964, 1965, 1967, 1968) started the first scientific excavation in the Lowveld

which was followed by N.J. van der Merwe and Scully. M. Klapwijk (1973, 1974) also excavated an Early Iron Age (EIA) site at Silverleaves and Evers and van den Berg (1974) excavated at Harmony and Eiland, both EIA sites.

Recent research by the National Cultural History Museum resulted in the excavation of an Early Iron Age site in Sekhukuneland, known as Mototolong (Van Schalkwyk, 2007). The site is characterized by four large cattle kraals containing ceramics which may be attributed to the Mzonjani and Doornkop occupational phases.

4.2.3. Late Iron Age

The later phases of the Iron Age (AD 1600-1800's) is represented by various tribes including Ndebele, Swazi, BaKoni, Pedi and smaller tribes such as the Pai, Pulana and marked by extensive stonewalled settlements. These are found throughout the Highveld and particularly around Lydenburg, Badfontein, Sekhukuneland, Roossenekal and Steelpoort. The Swazi were particularly active in the Lowveld during the difaqane period (1820's) and it is well-known that they frequently attacked and ousted smaller herder groups like the Pai and Pulana, especially in the area today known as Low's Creek. They were however prevented from settling in the low-lying areas due to the presence of the tsetse fly and malaria. Consequently there is little evidence of large scale settlement in the Crocodile River valley until the time of colonial settlement (1890's) and later. In Meyers Doctoral Thesis which concentrated on the archaeology of the Kruger National Park (Meyer, 1986) he observed pottery which he named the Shirimantanga industry, this is grouped under his Group 10 (of 20) which he classified for the KNP. He describes this pottery as having characteristic incised decoration on the neck and shoulder portions of the pots and being associated with rocky outcrops and some stone terracing with some evidence of iron smelting. Some pots have weak neck pieces and the decoration motif varies coarse to fine incisions which are triangular in shape. The decoration motifs are often untidy and bowls are carinate in shape.

Birkholtz (1997, unpublished Honnours Dissertation) discovered sites with this type of pottery in the vicinity of Pretoriuskop Rest Camp and the Numbi Gate. This pottery type is classified by Huffman (2007) as belonging to the Kalundu Tradition and he names it

Maguga with a probable date of around AD 1200 to 1450.

5. Located sites, description and suggested mitigation

Five sites were documented. Site NCK 1 is located far south-east of the tented camp and will probably not be impacted by future development activity. Sites NCK 2, 3 and 5 had small scatters of undecorated pottery which was probably deposited by rainwater run-off. Site NCK 4 is characterized by a large concentration of undecorated pottery sherds and a piece of a lower- as well as upper grinding stone. Sites NCK 2-4 are all located close-by or in-between tent platforms. The tents are permanent fixtures on top of platforms (Fig. 12, App. D) which are erected on stilts. This has to some extent minimized impact on archaeological deposit. Footpaths between tent platforms have probably had an impact on the documented deposit.

Table 5.1. Summary of site location and significance

<i>Site No.</i>	<i>IN developed area</i>	<i>OUTSIDE developed area</i>	<i>Significant</i>	<i>Not significant</i>
NCK1		•	•	
NCK2	•			•
NCK3	•			•
NCK4	•		•	
NCK5	•			•

5.2. Description of located sites

5.2.1. Site NCK 1.

Location: See Appendix B and D.

Description:

This is an area characterized by a rocky outcrop (granite) where a some pottery sherds were found at the south-eastern perimeter of the rock face.

Impact of the development/ activity:

It is envisaged that the site will probably be impacted upon by future development activity.

Mitigation:

None recommended.

5.2.2. Site NCK 2.

Location: See Appendix B and D.

Description:

The location of a tiny scatter of undecorated pottery sherds which were probably laid bare due to water run-off (Fig. 3, 4 App. D). The site is located North of the current Restaurant and on the southern perimeter of the Restaurant Parking area, close to some of the tents. A lot of the top soil was removed in order to establish footpaths in-between the tents so this may have removed some of the archaeological deposit.

Impact of the development/ activity:

It is envisaged that the site will probably not be further impacted upon by future development activity.

Mitigation:

None recommended.

5.2.3. Site NCK 3.

Location: See Appendix B and D.

Description:

A few scattered pottery sherds, undecorated. Located close to footpath between tent platforms (Fig. 5 App. D).

Impact of the development/ activity:

It is envisaged that the site will probably not be further impacted upon by future development activity.

Mitigation:

None recommended.

5.2.4. Site NCK 4.

Location: See Appendix B and D.

Description:

A larger concentration of undecorated pottery located in the footpath between tent platforms. The exposed artefacts are spread over an area roughly 5m x 15m. The artefacts were clearly further exposed by water run-off. There is also a broken lower grinder and an upper grinder (Fig. 6-9. App. D). The site is located next to tent no. 88.

Impact of the development/ activity:

Construction of the footpath has probably led to some disturbance of the archaeological deposit, though some deposit evidently remains.

Mitigation:

Despite the impact that the construction of the footpath has had, a relatively larger archaeological deposit remained. It is recommended that a shovel test be conducted here in order to determine the extent of the remaining deposit and possibly identify the pottery type i.e. ethnic identity.

5.2.5. Site NCK 5.

Location: See Appendix B and D.

Description:

A tiny scatter of pottery sherds located in the parking area close to the Reception and offices.

Impact of the development/ activity:

Construction of the parking area has probably led to the exposure of the sherds. Further impact by future development activity is not envisaged.

Mitigation:

None recommended.

TABLE 5.2. General Significance of located sites.

Site No.	Description	Type of significance	Degree of significance	Sphere of significance
NCK 1	Scatter of pottery sherds	Archaeological	Archaeological: Medium potential Historic: Medium	16 th to early 19 th Century Lowveld
NCK 2	Tiny scatter of pottery sherds	Archaeological	Archaeological: Low potential, no other evidence Historic: Medium	16 th to early 19 th Century Lowveld
NCK 3	Tiny scatter of pottery sherds	Archaeological	Archaeological: Low potential, no other evidence Historic: Medium	16 th to early 19 th Century Lowveld
NCK 4	Large scatter of pottery sherds and other archaeological deposit	Archaeological	Archaeological: Good potential Historic: Medium	16 th to early 19 th Century Lowveld
NCK 5	Tiny scatter of pottery sherds	Archaeological	Archaeological: Low potential, no other evidence Historic: Medium	16 th to early 19 th Century Lowveld

TABLE 5.3. Significance allocation of located sites

Site no.	Unique nature	Integrity of archaeological deposit	Wider context	Relative location	Depth of deposit	Quality of archaeological/historic material	Quantity of site features	Preservation condition of site
NCK1	None/ generic sherds with no decoration	Poor	16 th to early 19 th Century Lowveld	Near Nkambeni Tented Lodge	Not known	Archaeologically: Fair Historically: Fair	10	Fair
NCK2	None	Poor	16 th to early 19 th Century Lowveld	Nkambeni Tented Lodge	Surface	Archaeologically: Poor Historically: Poor	3	Poor
NCK3	None	Poor	16 th to early 19 th Century Lowveld	Nkambeni Tented Lodge	Surface	Archaeologically: Poor Historically: Poor	2	Poor
NCK4	None/ generic sherds with no decoration	Fair to poor	16 th to early 19 th Century Lowveld	Nkambeni Tented Lodge	Surface and just sub-surface	Archaeologically: Fair Historically: Fair to good	Many	Fair
NCK5	None	Poor	16 th to early 19 th Century Lowveld	Nkambeni Tented Lodge	Surface	Archaeologically: Poor Historically: Poor	3	Poor

6. Findings and recommendations

The bulk of archaeological remains are normally located beneath the soil surface. It is therefore possible that some significant cultural material or remains, were not located during this survey and will only be revealed when the soil is disturbed.

Should excavation or large scale earth moving activities reveal any human skeletal remains, broken pieces of ceramic pottery, large quantities of sub-surface charcoal or any material that can be associated with previous occupation, a qualified archaeologist should be notified immediately. This will also temporarily halt such activities until an archaeologist have assessed the situation. It should be noted that if such a situation occurs it may have further financial implications.

Mitigation measures were allocated to each site as discussed in section 5: **Located sites and their description**. Sites NCK 1-3 and NCK 5 are not considered to be of high significance. Site NCK 4, has a larger artifact deposit and this warrants further investigation considering that the area have been impacted upon before a any archaeological impact have been assessed.

It (the site) probably represents an area where settlement may have occurred, though it is difficult to ascertain to which ethnic group it may be ascribed to as a result of the absence of decorated pottery. Further investigation by means of a shovel test of the area is recommended and this may reveal more decorated sherds and also the extent of the deposit. This activity will also reveal the extent of impact which the development has had on the site or possibly the lack of impact. Currently the Nkambeni Tented Lodge has a small exhibition open to guests which highlight the history of the immediate area and KNP. It is recommended that archaeological material recovered by the suggested mitigation be included in this exhibition in order to compliment the current information displayed there and also to preserve these artefacts. It should be noted that the recommended mitigation will require application for a permit from SAHRA and will have further cost implications for the developer.

Thereafter a management programme should be compiled in order to properly manage archaeological remains in the area.

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Appendix A

Terminology

“Alter” means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

“Archaeological” means –

- Material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artifacts, human and hominid remains and artificial features or structures;
- Rock Art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- Wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artifacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation; and
- Features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found;

“Conservation”, in relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance;

“Cultural significance” means aesthetic, architectural, historical, scientific, social,

spiritual, linguistic or technological value or significance;

“Development” means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including –

- construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- carrying out any works on or over or under a place;
- subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
- constructing or putting up for display signs or hoardings;
- any change to the natural or existing condition or topography of land; and
- any removal or destruction of trees, or removal of vegetation or topsoil;

“Expropriate” means the process as determined by the terms of and according to procedures described in the Expropriation Act, 1975 (Act No. 63 of 1975);

“Foreign cultural property”, in relation to a reciprocating state, means any object that is specifically designated by that state as being of importance for archaeology, history, literature, art or science;

“Grave” means a place of internment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;

“Heritage resource” means any place or object of cultural significance;

“Heritage register” means a list of heritage resources in a province;

“Heritage resources authority” means the South African Heritage Resources Agency, established in terms of section 11, or, insofar as this Act (25 of 1999) is applicable in or in respect of a province, a provincial heritage resources authority (PHRA);

“Heritage site” means a place declared to be a national heritage site by SAHRA or a place declared to be a provincial heritage site by a provincial heritage resources authority;

“Improvement” in relation to heritage resources, includes the repair, restoration and rehabilitation of a place protected in terms of this Act (25 of 1999);

“Land” includes land covered by water and the air space above the land;

“Living heritage” means the intangible aspects of inherited culture, and may include –

- cultural tradition;
- oral history;
- performance;
- ritual;
- popular memory;
- skills and techniques;
- indigenous knowledge systems; and
- the holistic approach to nature, society and social relationships;

“Management” in relation to heritage resources, includes the conservation, presentation and improvement of a place protected in terms of the Act;

“Object” means any moveable property of cultural significance which may be protected in terms of any provisions of the Act, including –

- any archaeological artifact;
- palaeontological and rare geological specimens;
- meteorites;
- other objects referred to in section 3 of the Act;

“Owner” includes the owner’s authorized agent and any person with a real interest in the property and –

- in the case of a place owned by the State or State-aided institutions, the Minister or any other person or body of persons responsible for the care, management or control of that place;
- in the case of tribal trust land, the recognized traditional authority;

“Place” includes –

- a site, area or region;
- a building or other structure which may include equipment, furniture, fittings and articles associated with or connected with such building or other structure;
- a group of buildings or other structures which may include equipment, furniture, fittings and articles associated with or connected with such group of buildings or other structures;
- an open space, including a public square, street or park; and
- in relation to the management of a place, includes the immediate surroundings of a place;

“Site” means any area of land, including land covered by water, and including any structures or objects thereon;

“Structure” means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith

Appendix B

9. List of located sites

Sites located on the surveyed area were numbered NCK 1-5. The initials “NCK” represents “Nkambeni Camp” and “Kruger” because of its close proximity to Kruger National Park, followed by the number of the site. A spatial location with the aid of a GPS (Global Positioning System) was added to the site.

9.1. Site name: NCK 1 (Site 1)

Date of compilation: 08/01/2011

GPS reading: 31.19918° E

25.14774° S

Photo: Fig. 1-2.

9.2. Site name: NCK 2 (Site 2)

Date of compilation: 08/01/2011

GPS reading: 31.19568° E

25.13619° S

Photo: Fig. 3, 4.

9.3. Site name: NCK 3 (Site 3)

Date of compilation: 08/01/2011

GPS reading: 31.19523° E

25.13438° S

Photo: Fig. 5.

9.4. Site name: NCK 4 (Site 4)

Date of compilation: 08/01/2011

GPS reading: 31.19391° E

25.13348° S

Photo: Fig. 6-9.

9.5. Site name: NCK 5 (Site 5)

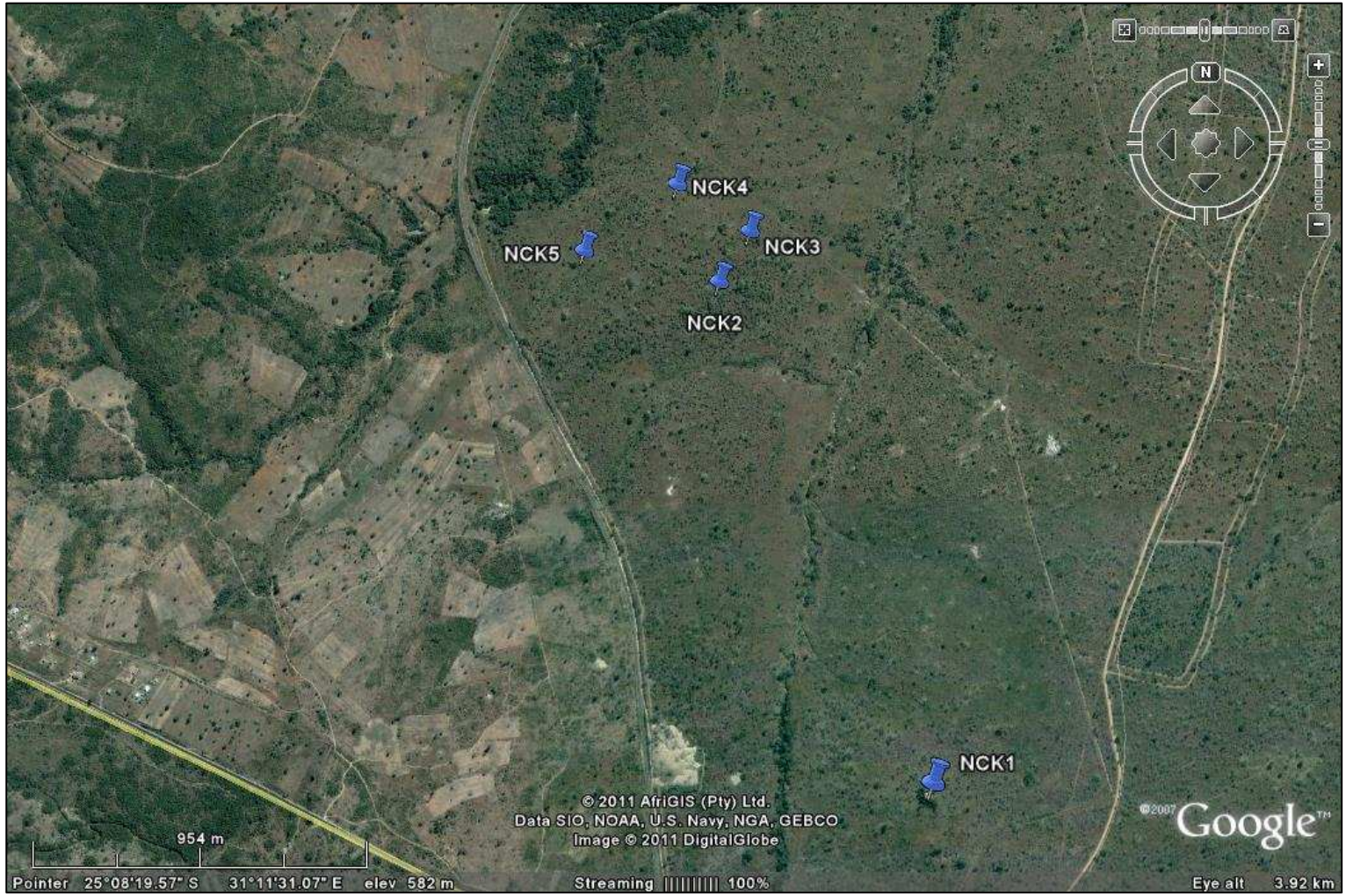
Date of compilation: 08/01/2011

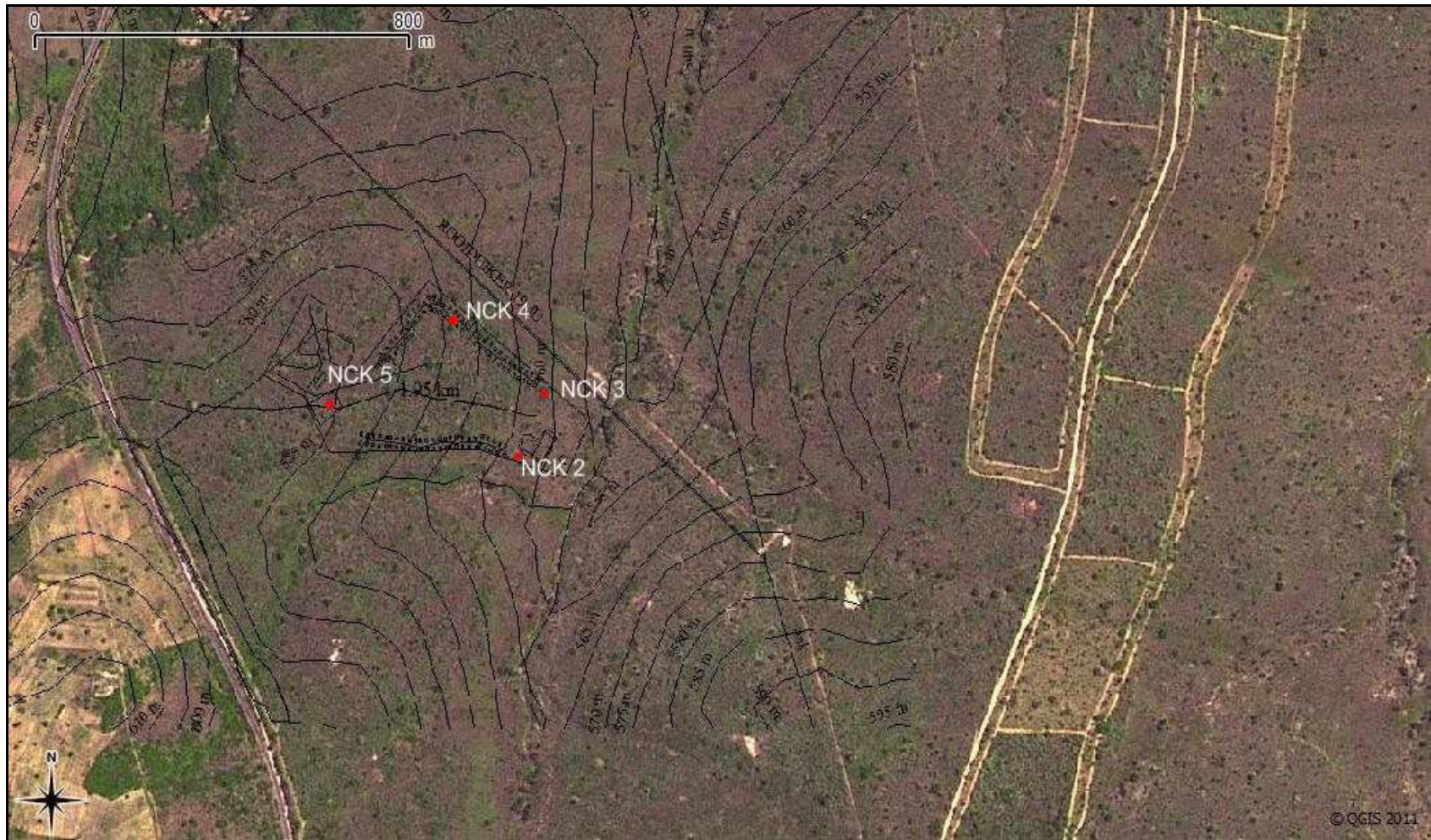
GPS reading: 31.19152° E

25.13530° S

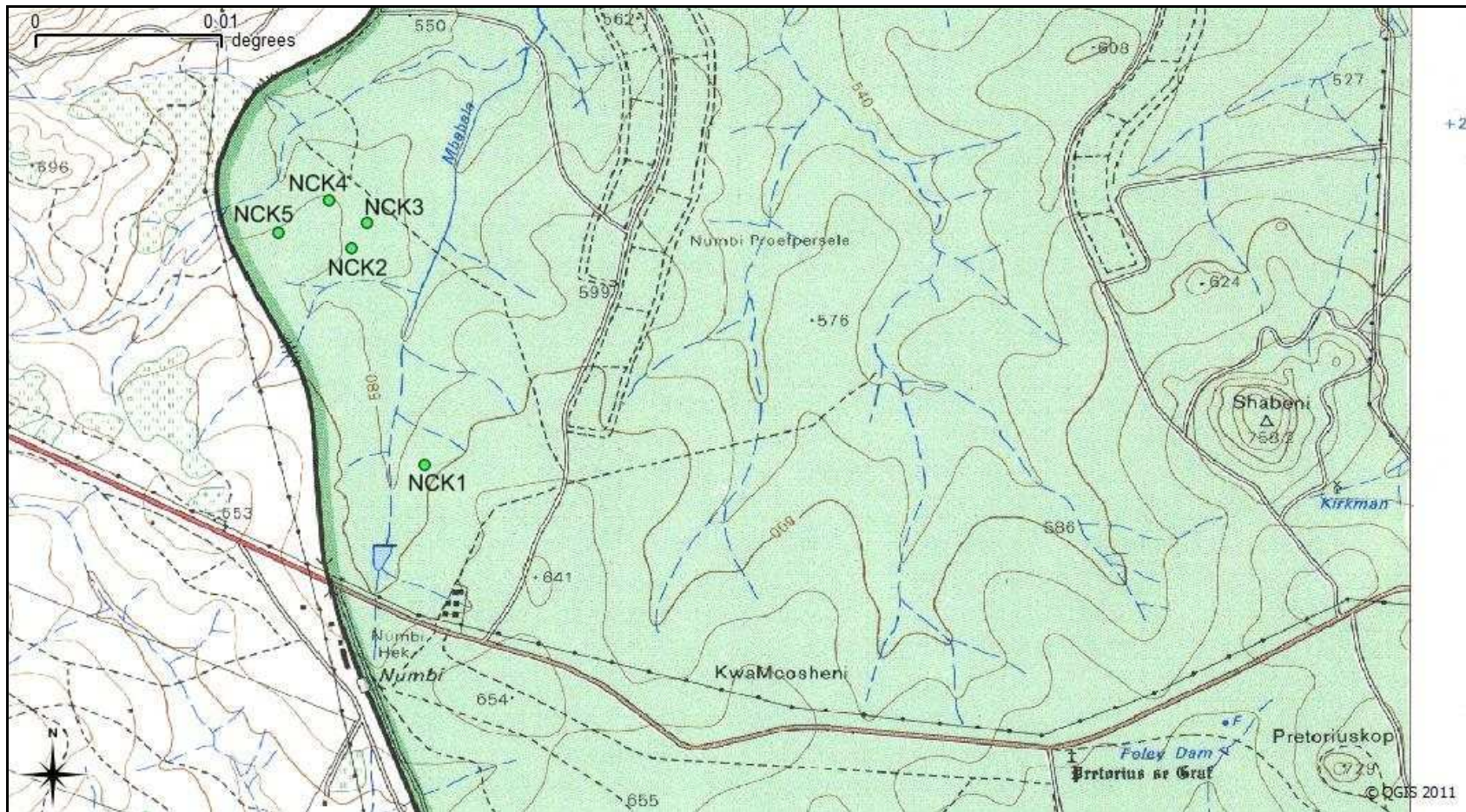
Photo: Fig. 10, 11.

Appendix C – Maps





Black border boundary and restaurant, offices and tent layout



Map 1:50 000 2531 AB Pretoriuskop (1984).

Appendix D – Photos of located sites



Fig. 1. Site NCK 1. Some scattered pottery sherds close-by an lone granite oucrop.



Fig. 2. Site NCK 1. View of the outcrop at Site 1. Photo taken in a southern direction.



Fig. 3. Site NCK 2. Small pottery sherd scatter exposed by rainwater drainage.



Fig. 4. Site NCK 2. Pottery scatter found in foreground. The Restaurant visible in the background. Direction of photo is East.



Fig. 5. Site NCK 3. Surface scatter of pottery exposed by rainwater drainage located in the pathway between the existing tents.



Fig. 6. Site NCK 4. A large concentration of pottery exposed by rainwater drainage in the pathway between tents.



Fig. 7. Site NCK 4. Some of the pottery sherds and a piece of a lower grinding stone with matching upper grinder.



Fig. 8. Site NCK 4. Detail of lower – (left) and upper grinders.



Fig. 9. Another concentration of pottery at site NCK 4.



Fig. 10. Site NCK 5. A small scatter of pottery found at the current reception and parking area.



Fig. 11. Site NCK 5. The reception and parking area. A small scatter of pottery was found here. Direction of photo, West.

Appendix E – Declaration of interest



the **dedet**

Department:
Economic Development, Environment and Tourism
MPUMALANGA PROVINCIAL GOVERNMENT

**Details of specialist and declaration of interest in respect of an
application for authorisation in terms of the National Environmental
Management Act, 1998 (Act No. 107 of 1998), as amended and the
Environmental Impact Assessment Regulations, 2010**

PROJECT TITLE

INKAMBEZI TENTED LODGE, TRIBAL TRUST LANDS, NUMBIGATE ROAD
WHITE RIVER MAGISTERIAL DISTRICT, HAZYVIEW.

Specialist:
Nature of specialist
study compiled:
Contact person:
Postal address:
Postal code:
Telephone:
E-mail:
Qualifications &
relevant experience:
Professional
affiliation(s) (if any)

ARCHAEOLOGIST / HERITAGE SPECIALIST	
ARCHAEOLOGICAL / HERITAGE STUDY	
JP CELLIERS	
5209, LYDENBURG	
1120	Cell: 082 779 3748
013 235 2213	Fax:
kudza@lambi.net	
MA DEGREE IN ARCHAEOLOGY (UP) 8 YEARS EXPERIENCE	
ASAPA (ASSOC. OF SOUTH AFRICAN PROFESSIONAL ARCHAEOLOGISTS)	

The specialist appointed in terms of the Regulations

I, JEAN-PIERRE CELLIERS declare that -

General declaration:

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in Regulation 8;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of section 24F of the Act.

JP Celliers
Signature of specialist:

KIDZALA ANTIQUITY CC
Name of company:

15/03/2011
Date:

[Signature]
Signature of Commissioner of Oaths

Strode M.S
Date:

2011/03/16
Designation:

Official stamp (below)



Appendix F – Statement of Experience

Statement of relevant experience

JP Celliers is a trained Archaeologist and Museum Professional. He holds a Masters Degree from the University of Pretoria with specialisation in Archaeology.

He has been conducting Archaeological Impact Studies and Mitigation in a professional capacity since 2003 and is the Director of Kudzala Antiquity CC , a consulting business specialising in Archaeological and related Heritage work.

He is also a member in good standing of ASAPA (Association of South African Professional Archaeologists) where he is graded as a Field Supervisor in the following disciplines: Iron Age Archaeology, Stone Age Archaeology and Colonial Period Archaeology.



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JP CELLIERS, DIRECTOR