Phase 1 Archaeological Impact Assessment for Enpact Environmental Consultants concerning the widening of the N4 National Road, Sections 9 and 10, Near Nelspruit, Mpumalanga compiled by



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Executive summary

An Archaeological Impact assessment was undertaken by Kudzala Antiquity CC for Enpact Environmetal Consultants concerning the widening of Sections 9 and 10 of the N4 National Road near Nelspruit in Mpumalanga Province. The section of road is approximately 12 km in extent and the largest stretch of road passes through the Crocodile River Gorge. The survey was conducted by making use of a motor vehicle and on foot in an effort to locate archaeological remains and historical features. A total of ten (10) site locations were documented. No archaeologically significant sites were located during the survey but a historically significant site was identified which may be impacted upon. Very little remains of this site as it was only used for about one year and most probably already destroyed by previous construction activity but historic accounts attest to the lively nature of this camp named Poort City, during its heyday.

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 conducted an Archaeological Impact Assessment (AIA) on certain servitude areas of the N4 National Road Sections 9 and 10, in extent approximately12 kilometres. The affected area is located in Mbombela and Nkomazi Municipal area, Ehlanzeni District, Mpumalanga Province.

The study forms part of an Environmental Impact Assessment as required by legislation, the National Heritage Resources Act (Act 25, 1999). This act requires of individuals (engineers, farmers, mines and industry) or institutions to have impact assessment studies undertaken whenever any development activities are planned. This is to ensure that heritage features or sites that qualify as part of the National Estate are not damaged or destroyed.

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:
 - 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) 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. Or in the case of historic buildings or structures, an architectural historian is consulted to assess the significance of a building or structure and make recommendations regarding its further preservation or advise whether such structures may be altered or demolished.

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 Nkomazi and Mbombela Local Municipalities near Nelspruit, roughly between Karino and Kaapmuiden within Mpumalanga Province. The survey was carried out on certain sections of the northern and southern servitude areas of the N4 National Road Sections 9 and 10 in extent some 12 kilometres.

The survey was conducted on foot and with a motor vehicle in an effort to locate cultural remains.

3. Methodology

There are certain areas on this route where proposed new climbing lanes will be built on the northern and southern sides of the N4 National road respectively (Appendix C). All these earmarked areas were visited with the aid of a GPS and surveyed with the aid of a motor vehicle and on foot. Some sites were documented purely for orientation purposes (Sites N4 9/1 and N4 9/2.

The methodological approach for this study should meet the requirements of relevant heritage legislation. A desktop study followed by a physical survey of the impacted areas was conducted. An archival desktop study was conducted in an effort to establish whether there are any significant structures or features of archaeological or historic value.

SAHRA recently (2005) issued the "Minimum standards for archaeological and palaentological components of impact assessment reports". This is a draft document which suggests that the following components be included in a 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. This study consisted of foot surveys, a desktop archival study as well as a study of the results of previous archaeological work in the area.

3.1. Desktop 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 or individuals were consulted:

- Lydenburg Museum Archives, Lydenburg
- Published and unpublished archaeological reports and articles

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.

Within 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 site's 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. This implies that construction activities at the particular grave site will be brought to a halt temporarily.

4. Archaeology and History

4.1. Archaeology

4.1.1. 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 fibres, 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 huntergatherer 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).

4.1.2. 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 600 AD.

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 ± 40 BP) this relates the pottery to the Mzonjani and Broederstroom phases. The early assemblage belongs to the Kwale branch of the Urewe tradition.

4.1.3. 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.

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.

4.2. Historic period

Various historians and ethnographers describe that the Mpumalanga Lowveld was frequented by Swazi and Sotho-Tswana groups in historic times i.e. Late Iron Age times during the period AD 1500-1800. (Myburgh, 1949; Herbst, 1985; Bornman, 2002; Pienaar, 1990; Barnard, 1975; Delius 2007).

Old trade routes was 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 centrums like Monomtapa 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 (Bergh, 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 Delagoabay 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 Delagoabay (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 Delagoabay 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 Delagoabay. Altough this attempt was also not successfull, it is seen as the first European intrusion into this northern area (Bergh, 1998:116).

In the Lowveld a sub-group of the Northen 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* around the 1820's (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 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.

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).

Mekemeke was one of several military outposts built by Mswati. These outposts stretched from west to east along the upper Komati River and the Kaap River to ensure that the borders of his domain remain free of invading groups, among them the Pedi. (Celliers, 2009; Bornman, 2002: 22; Myburgh, 1949: 47).

Historic events preceding the establishment of the settlement Mekemeke, are characterized by the influence of the famous king of the Swazi nation, Mswati II. Said to be the counterpart of the famous Shaka, influential king of the Zulu, Mswati was likewise known to be a conqueror and militant ruler (Matsebula, 1972: 44). Mswati the son of king Sobhuza's chief wife, Thandile, was the natural successor to the throne at a tender age of thirteen. At this stage he had a couple of regents namely Malambule and Malunge both elder brothers. Mswati's circumcision, around 1845, marked the start towards his full powers of kingship. He was officially installed as king in 1839 or 1840, but as he was still young a greater part of official affairs were still handled by his regents (Bonner,

1983: 51). Mswati II married the daughter of Nyandza Nkosi, a woman by the name of Lanyandza (also referred to as Mekemeke) in 1842 and conferred on her the status of right hand wife or *umfati wakunene* at his village in the Piggs Peak district (Myburgh, 1949:47).

In the year 1866 Lanyandza was sent as chieftainess to this village (Mekemeke) which was built for her by Mswati II, and the village became known as Mekemeke.

The surveyed area was probably not suitable for inhabitation by native Swazi or other Sotho groups as illustrated by van Warmelo:

"When the first Europeans settled on the high plateau of the interior, they had reason to avoid the much less elevated Barberton area. It was difficult of access, a large portion was malarious and lay within the tsetse fly belt and was useless to pastoralists and dangerous if not fatal to transport riders. The native population was small and poor." (Van Warmelo in Myburgh, 1949:7).

In 1884 gold was found on Moodie's concession near the present town of Barberton. The news of the discovery brought a great influx of diggers. New arrivals and prospectors swarmed over the hills in search of gold. Other reefs were found, including the famous Sheba by an Australian named Bray, the Kimberley Imperial, and others. Canteens, restaurants, shops, and a post-office sprang up like mushrooms on the quiet veld, and this collection went by the name of Barber's Camp" (Van Warmelo in Myburgh, 1949: 7).

In November 1874 a Commission investigated the possibility of constructing a railway which would connect Delagoa Bay with the interior of South Africa. The Republican Government authorized this initiative and a narrow gauge line was constructed leading up the foot of the Drakensberg.

In 1887 the Nederlandsche Zuid Afrikaansche Spoorweg Maatskappij (NZASM) was established with the sole purpose of constructing a railway line known as the Portuguese East Africa Railway via Nelspruit to Pretoria.

The railway bridge crossing the Komati River was completed at the end of May 1891 and the railhead reached Komatipoort Station on 1 July of that year. Hectorpruit followed on 1 October, Malelane on 28 December, three months later it reached Kaapmuiden and notwithstanding the the huge task through the Crocodile Gorge, Krokodilpoort Station

was reached in April 1892 followed by Nelspruit on 20 June 1892 (Barnard, 1975; Bornman, 1979, 2002; Bulpin, 1989).

The contract for the section through the Crocodile Gorge was given to George Pauling, a well-known and experienced railway contractor of the time. Pauling established his construction camp near the Krokodilpoort Railway station and it became known as "Poort City" (1891/2).

This camp was used by workers for a period of between 10 months and one year (Bornman, 2002: 91; Bulpin, 1989: 239, 240) and it is said to have been a rowdy and cheerful place with accompanying billiard saloons, bars, barmaids and even a small thatched roof hospital. A full-time doctor was employed by Pauling to care for his malaria-ridden workers.

"The hospital was a one-room wood and thatch affair with beds for twenty four patients. It was always full." (Bulpin, 1989: 239).

The mortality rate was quite high and a total of twenty-seven Europeans and around 100 Africans succumbed to fever. This was not the only problems which faced the contractor. The nature of the work required that Pauling had a large number of transport animals in the form of donkeys. The mortality rate of the donkeys were, however, even larger than that of the humans due to the tsetse fly and large numbers of lion in the area who frequently made a meal of one of the donkeys.

It is estimated that Pauling lost over 500 donkeys during his 12 month contract period (Bulpin, 1989:240).

5. Located sites, description and suggested mitigation

No significant archaeological sites and features could be located. However, the location

of the historic Poort City was documented although there are no visible remains. Nine

features of historic value and one which has social significance, were documented. Some

of these will be impacted upon by the proposed construction of climbing lanes and

intersections and they are sites N4 9/4 and N4 9/9.

5.1. Social consultation

A farm owner Mr Ernest van der Merwe raised concerns that the planned intersection and

climbing lanes will be close to or on the historic Poort City. He was consulted about the

whereabouts of the camp. His information was corroborated by written sources listed in

the bibliography.

With the assistance of Mr van der Merwe the location of the original Krokodilpoort

Railway station (site N4 9/8) and pump station (site N4 9/7) as well as the historic cutting

of the original railway (sites N4 9/5 and N4 9/6) and the possible location of a small hotel

(site N4 9/4) and some remains of the camp (site N4 9/9) were documented.

5.1.1 Site N4 9/1.

Location: See Appendix B and D.

Description:

An orientation point at the location of a proposed climbing lane

Impact of the proposed development/ activity:

N/A

Mitigation:

None recommended

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5.1.2. Site N4 9/2.

Location: See Appendix B and D.

Description:

An orientation point at the location of a proposed climbing lane

Impact of the proposed development/ activity:

N/A

Mitigation:

None recommended.

5.1.3. Site N4 9/3

Location: See Appendix B and D.

Description:

A single circular stone walled structure with rectangular loopholes for rifle fire. This is possibly a block house erected during the Anglo Boer War (1899-1902) and used by British Forces in an effort to minimize enemy (Boer) traffic along the railway to and from Delagoa Bay (Maputo).

Impact of the proposed development/ activity:

None, the structure is located too far away from the existing road.

Mitigation:

None recommended.

5.1.4. Site N4 9/4

Location: See Appendix B and D.

Description:

The supposed location of a small hotel which used to be part of Poort City, a contractors camp erected during the construction of the railway in 1891/2.

Impact of the proposed development/ activity:

The proposed development will probably impact on the site

Mitigation:

The site has already been negatively impacted upon during the construction of the N4 road during the early 1990's. It is recommended that an archaeologist monitor the road construction activities in this area during construction.

5.1.5. Site N4 9/5

Location: See Appendix B and D.

Description:

The location of the original railway cutting.

Impact of the proposed development/ activity:

The proposed development will not impact on the site as it is located outside the proposed development area.

Mitigation:

None recommended.

5.1.6. Site N4 9/6

Location: See Appendix B and D.

Description:

The location of the original railway cutting.

Impact of the proposed development/ activity:

The proposed development will not impact on the site as it is located outside the proposed development area.

Mitigation:

None recommended.

5.1.7. Site N4 9/7

Location: See Appendix B and D.

Description:

The location of the original pump station which serviced the Crocodile Gorge railway station.

Impact of the proposed development/ activity:

The proposed development will not impact on the site as it is located outside the proposed development area.

Mitigation:

None recommended.

5.1.8. Site N4 9/8

Location: See Appendix B and D.

Description:

The location of the original Crocodile Gorge railway station.

Impact of the proposed development/ activity:

The proposed development will not impact on the site as it is located outside the proposed development area.

Mitigation:

None recommended.

5.1.9. Site N4 9/9

Location: See Appendix B and D.

Description:

The remains of a stone-built wall associated with the temporary contractor's camp, Poort City.

Impact of the proposed development/ activity:

The proposed development will probably impact on the site.

Mitigation:

The site has already been negatively impacted upon during the construction of the N4 road during the early 1990's. It is recommended that an archaeologist monitor the road construction activities in this area during construction.

5.1.10. Site N4 10/1

Location: See Appendix B and D.

Description:

A memorial erected in remembrance of young people who passed away here after a car accident.

Impact of the proposed development/ activity:

It is envisaged that the site will probably not be impacted upon by the proposed construction of climbing lanes as it does not fall within the earmarked construction area.

Mitigation:

None recommended. Care should be taken to protect the memorial when construction activities are taking place nearby.

TABLE 5.1. General Significance of located sites.

Site	Description	Type of	Degree of	Sphere of
No.		significance	significance	significance
N4	Site of proposed climbing lane	N/A	N/A	National roads
9/1	documented for orientation			
	purposes			
N4	Site of proposed climbing lane	N/A	N/A	National roads
9/2	documented for orientation			
	purposes			
N4	Site of proposed climbing lane.	Historic	Archaeological: Not	Anglo Boer War
9/3	Historic block house visible from		known	(1899-1902)
	the N4 National road		Historic: High	
N4	Site where a small hotel	Historic	Archaeological:	Construction of the
9/4	presumably once stood		Limited Potential	NZASM railway
			Historic: Medium	1891/2
N4	The railway cutting of the	Historic	Archaeological:	Construction of the
9/5	original railway		Low potential	NZASM railway
			Historic: Medium	1891/2
N4	The railway cutting of the	Historic	Archaeological:	Construction of the
9/6	original railway		Low potential	NZASM railway
			Historic: Medium	1891/2
N4	The pump station/building for the	Historic	Archaeological:	Construction of the
9/7	Krokodilpoort station		Low potential	NZASM railway
			Historic: High	1891/2
N4	The location of the Krokodilpoort	Historic	Archaeological:	Construction of the
9/8	Railway Station		Low potential	NZASM railway
			Historic: High	1891/2
N4	A section of wall built of stone	Historic	Archaeological:	Construction of the
9/9			Low potential	NZASM railway
			Historic: Medium	1891/2
N4	Memorial	Social	Social significance	National roads.
10/1				Memorials

TABLE 5.2. Significance allocation of located sites.

Site	Unique nature	Integrity of	Wider	Relative	Depth of	Quality of	Quantity	Preservation
no.		archaeological	context	location	deposit	archaeological/	of site	condition of
		deposit				historic material	features	site
N4	N/A	N/A	National roads	N4	N/A	N/A	N/A	N/A
9/1				Section 9				
N4	N/A	N/A	National roads	N4	N/A	N/A	N/A	N/A
9/2				Section 9				
N4	Structure probably	Not known	National roads	N4	Not known	Archaeologically:	N/A	Good
9/3	dates from ABW			Section 9		medium potential.		
	(1899-1902)					Historically: Good		
						condition		
N4	Probable location	Not known	NZASM	N4	Not known/	Archaeologically:	Not known	Poor
9/4	of small hotel		railway 1891/2	Section 9	not	Limited potential.		
	(1891/2)				discernible	Historically: Very		
						poor condition		
N4	Historic railway	N/A	NZASM	Parallel to	Not known/	Archaeologically:	1	Fair
9/5	cutting		railway 1891/2	N4	not	Limited potential.		
				Section 9	discernible	Historically: Fair		
						condition		
N4	Historic railway	N/A	NZASM	Parallel to	Not known/	Archaeologically:	1	Fair
9/6	cutting		railway 1891/2	N4	not	Limited potential.		
				Section 9	discernible	Historically: Fair		
						condition		
N4	Pump station/	Not known	NZASM	North of	Not known/	Archaeologically:	1	Good
9/7	building		railway 1891/2	N4	not	Limited potential.		
				Section 9	discernible	Historically: Good		
						condition		
N4	Krokodilpoort	Not known	NZASM	North of	Not known/	Archaeologically:	1	Poor
9/8	Station		railway 1891/2	N4	not	Limited potential.		
				Section 9	discernible	Historically: Poor		
						condition		
N4	Wall section	Not known	NZASM	South of	Not known/	Archaeologically:	1	Poor
9/9			railway 1891/2	N4	not	Limited potential.		
			?	Section 9	discernible	Historically: Poor		
						condition		
N4	Memorial	N/A	Memorial of	N4	N/A	Socially significant	1	Good
10/1			victims of a	Section 10				
			fatal car					
			accident					

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.

6. Findings and recommendations

Mitigation measures were allocated to each site as discussed in section 5: **Located sites** and their description. This area revealed no archaeologically significant material, however, the location of a historically significant camp known as Poort City, was identified. The specific location and extent of this camp is hard to establish as it was only used for a year and no visible remains are left. It is highly likely that the current N4 national road passes through the location of this camp and therefore most of what remained of the camp were already destroyed. Sites N4 9/4 and N4 9/9 however, were pointed out by informant Mr Ernest van der Merwe who identified the former as the supposed location of a small hotel associated with Poort City (fig. 7-9 Appendix D) and the latter (fig. 14 Appendix D) as some type of walled structure which may also have been associated with the camp.

It is recommended that an archaeologist monitor construction activities while they take place at these two site locations. When archaeologically significant material is encountered, a rescue permit should be applied for immediately in order to excavate and preserve the deposit. This will then temporarily halt construction activity until the archaeological material has been removed.

The structure documented as site N4 9/3 probably served as a block house erected during the Anglo Boer War (1899-1902) as it has a commanding view over the railway line which was monitored by British Forces during the War. It will however not be impacted upon by the proposed climbing lanes as it is located well away from the N4 servitude area where new climbing lanes are to be constructed. No mitigation recommended.

A memorial on the southern side of the existing N4 numbered site N4 10/1 was

documented, the memorial does not fall within the area earmarked for the construction of new climbing lanes as indicated on the aerial photograph plan of the proposed climbing lanes but it is still regarded as being of high social significance. It is recommended that construction activities be kept as far as possible from this memorial.

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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 N4 9/1-3 and N4 10/1. The initials N4 9 and 10 refer to sections 9 and 10 of the N4 national road, followed by the number of the documented site. A spatial location with the aid of a GPS (Global Positioning System) was added to the site.

9.1. Site name: N4 9/1 (Site 1)

Date of compilation: 22/05/2010

GPS reading: 31.12694° E

25.48656° S

Altitude: 558m

Photo: Fig. 1, 2.

9.2. Site name: N4 9/2 (Site 2)

Date of compilation: 22/05/2010

GPS reading: 31.13926° E

25.48596° S

Altitude: 538 m

Photo: Fig. 3, 4.

9.3. Site name: N4 9/3 (Site 3)

Date of compilation: 22/05/2010

GPS reading: 31.15957° E

25.49257° S

Altitude: 524 m

Photo: Fig. 5, 6.

9.4. Site name: N4 9/4 (Site 4)

Date of compilation: 16/07/2010

GPS reading: 31.16393° E

25.49786° S

Altitude: 508 m

Photo: Fig. 7-9.

9.5. Site name: N4 9/5 (Site 5)

Date of compilation: 16/07/2010

GPS reading: 31.16578° E

25.49860° S

Altitude: 507 m

Photo: Fig. 10.

9.6. Site name: N4 9/6 (Site 6)

Date of compilation: 16/07/2010

GPS reading: 31.16668° E

25.49895° S

Altitude: 505 m

Photo: Fig. 11.

9.7. Site name: N4 9/7 (Site 7)

Date of compilation: 16/07/2010

GPS reading: 31.16476° E

25.49664° S

Altitude: 504 m

Photo: Fig. 12.

9.8. Site name: N4 9/8 (Site 8)

Date of compilation: 16/07/2010

GPS reading: 31.16449° E

25.49604° S

Altitude: 504 m

Photo: Fig. 13.

9.9. Site name: N4 9/9 (Site 9)

Date of compilation: 16/07/2010

GPS reading: 31.16409° E

25.49714° S

Altitude: 513 m

Photo: Fig. 14.

9.10. Site name: N4 10/1 (Site 10)

Date of compilation: 22/05/2010

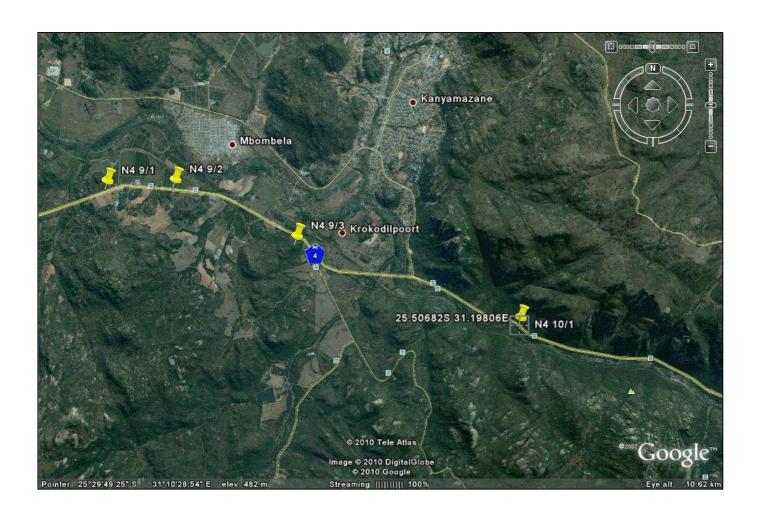
GPS reading: 31.19806° E

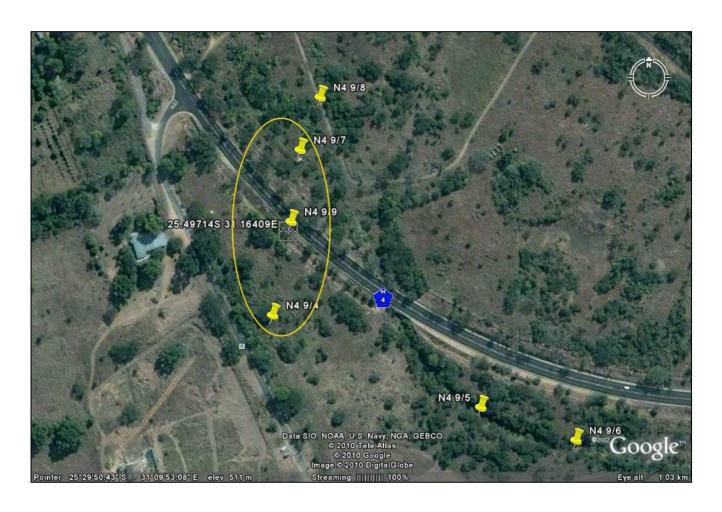
25.50682° S

Altitude: 482 m

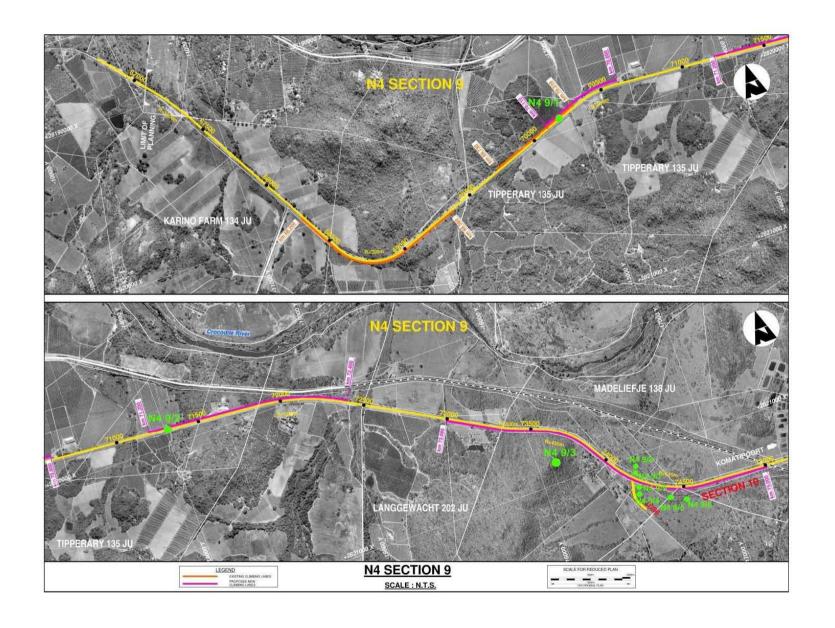
Photo: Fig. 15, 16.

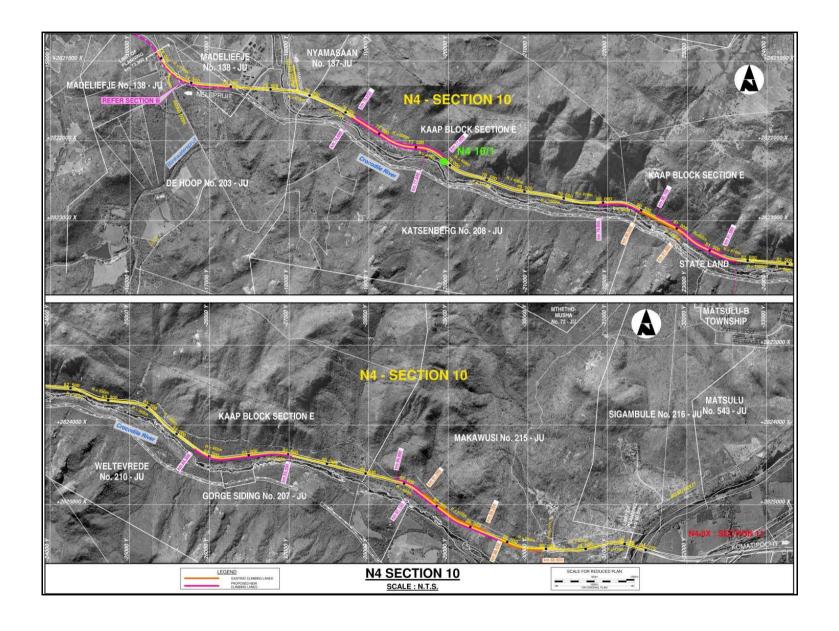
Appendix C – Maps and Aerial Photographs

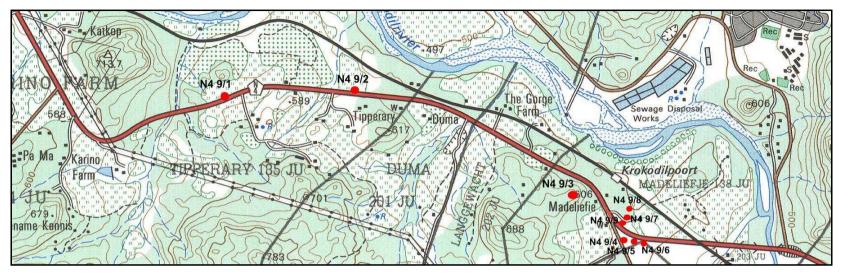




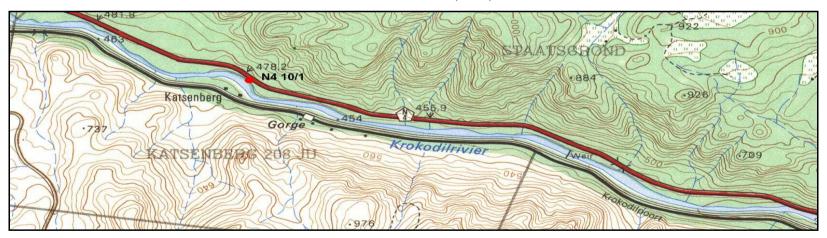
Yellow circle roughly indicates the area where Poort City may have been in 1891/2.







1:50 000 2531 AC (1984)



1:50 000 2531 CA (1984)

Appendix D



Fig. 1. Site N4 9/1. View to the west.



Fig. 2. Site N4 9/1. View to the east.

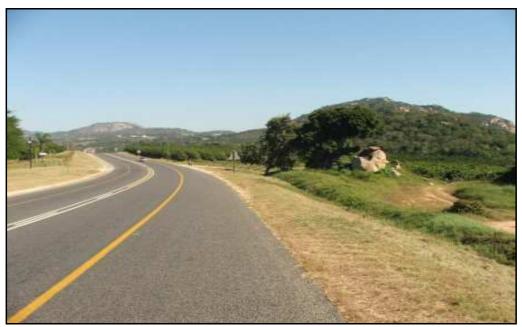


Fig 3. Site N4 9/2. View to the west.

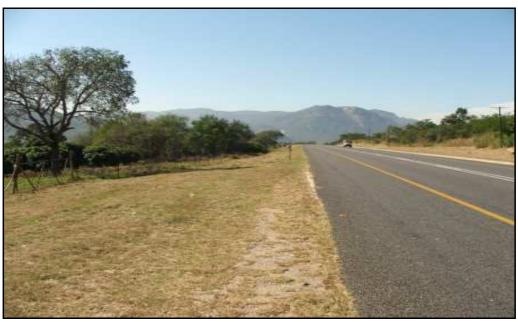


Fig 4. Site N4 9/2. View to the east.



Fig 5. Site N4 9/3. Red arrow indicates location of the block house.

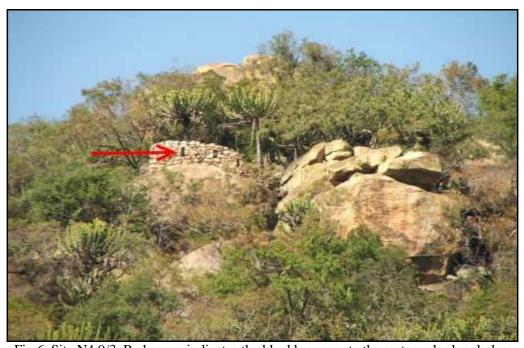


Fig 6. Site N4 9/3. Red arrow indicates the blockhouse, note the rectangular loopholes.



Fig. 7. Site N4 9/4. Arrows indicate where the small hotel possibly stood during the times of occupation at Poort City.



Fig. 8. Site N4 9/4. View north. Red arrow roughly indicates where the new intersection is planned and yellow where the old hotel possibly once stood.



Fig. 9. Site N4 9/4. View south. Red arrow roughly indicates where new intersection is planned and yellow arrow the location of the old hotel.



Fig. 10. Site N4 9/5. Red arrow shows where railway cutting starts.



Fig. 11. Site N4 9/6. A view to the west alongside and at the bottom of the old railway cutting.

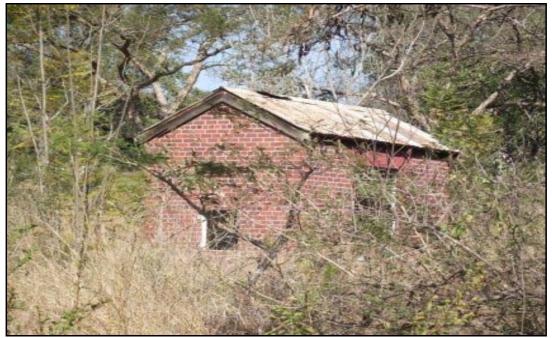


Fig. 12. Site N4 9/7. The old Pump Station or building at Krokodilpoort Station.



Fig. 13. Site N4 9/8. The location of the Railway Station at Krokodilpoort. Red arrows indicate where the platform once were.



Fig. 14. Site N4 9/9. The section of wall which may be associated with Poort City.



Fig 15. Site N4 10/1. The location of the memorial of seven scholars who passed away after a motor vehicle accident.



Fig 16. Site N4 10/1. Red arrow indicates the location of the memorial on the southern side of the N4 National Road.