

CULTURAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED P443, D1886, AND L1380 ROAD UPGRADE NEAR INGWAVUMA, NORTHERN KWAZULU-NATAL



ACTIVE HERITAGE cc.

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LIST OF ABBREVIATIONS AND ACRONYMS

EIA	Early Iron Age
ESA	Early Stone Age
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1820 in this part of the country
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
IIA	Intermediate Iron Age
ISA	Intermediate Stone Age
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2006).
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

EXECUTIVE SUMMARY

A cultural heritage survey of a proposed upgrade of the P443, D1886 and L1380 roads at Ingwavuma located only one heritage site. However, this Middle Stone Age surface occurrence is situated more than 100m from Road P443. It is therefore not threatened by the proposed roads upgrade. There is no known archaeological reason why the development may not proceed as planned. However, it should be noted that the general area is rich in archaeological and contemporary grave sites. Construction work may expose material and attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and the KwaZulu-Natal Heritage Act (Act no 4 of 2008) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

1 BACKGROUND INFORMATION ON THE PROJECT

Table 1. Background information

Consultant:	Frans Prins (Active Heritage) for Jeffares & Green
Type of development:	<p>The upgrading of Provincial Road P443, District Road D1886 and Local Road L1380.</p> <p>The existing P443 road will be widened from approximately 6m to 8.5m. Sidewalks may be incorporated where appropriate, and will generally be located remotely from the road prism. The existing P443 road is surfaced with a S2 double seal. The surfaced sections of road are in poor condition and will be rehabilitated or reconstructed and widened in the upgrade project. The total length of the P443 upgrade is approximately 23.2km. It is anticipated that five existing pipe culverts will be replaced with concrete box culverts for increased hydraulic capacity, and to accommodate the wider road formation. One existing multi cell box culvert shall be demolished due to insufficient hydraulic capacity and road width. A new larger multi cell box culvert shall be constructed on this river course, on a new road alignment downstream of the existing culvert. Existing drainage pipe culverts and minor portal culverts will either be lengthened or, if sub-standard, replaced.</p> <p>District Road D1886 is an existing approximately 6m wide gravel road, which will be upgraded and widened to a surfaced 7m wide road.</p> <p>Existing drainage pipe culverts and minor portal culverts will either be lengthened or, if sub-standard, replaced.</p>

	Local Road L1380 is and existing approximately 5m wide gravel road, which will be upgraded and widened to a surfaced 6m wide road. Existing drainage pipe culverts and minor portal culverts will either be lengthened or, if sub-standard, replaced
Rezoning or subdivision:	Not applicable
Terms of reference	To carry out a Heritage Impact Assessment as subcontracted by Jeffares & Green.
Legislative requirements:	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008)

1.1. Details of the area surveyed:

The proposed development is situated near the small town of Ingwavuma in northern KwaZulu-Natal. The footprint includes Provincial Road P443, District Road D1886 and Local Road L1380. The proposed upgrade of P443 extends for approximately 23.2km, from Km 0.0 at the P522-1 intersection at Bambanana through to the end of P443 at the D1886 Intersection at Ingwavuma. The proposed upgrade of D1886 is approximately 3.2km in length, between the P443 Intersection and the start of L1380, which represents the entire length of D1886. The L1380 is 1.8 km long (Fig 1).

2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater Maputaland is endowed with heritage sites of various traditions and periods spanning the Stone Ages, Iron Ages and the historical period. However, the majority of these occur to the west of the Phongola river in the foothills of the Lebombo Mountains. A second large concentration occurs adjacent to and on the dune gordon along the coastline. The coastal plain, by contrast to the rest of Maputaland, is devoid of known archaeological sites. Oliver Davies, an archaeologist who conducted pioneer research and surveys in northern KwaZulu Natal in the 1960's and 1970's, commented that the coastal plain was unpromising for archaeological research due to its being covered by superficial sands and bush coverage which affect preservation and visibility (Avery 1980). By contrast, the foothills of the Lebombo in the vicinity of Ingwavuma is

well endowed with archaeological sites. The provincial heritage data base of the KwaZulu-Natal Museum lists twenty nine sites in the Ingwavuma magisterial district. These include Early Stone Age, Middle Stone Age, Later Stone Age and Later Iron Age sites.

Based on typological criteria it can be speculated that the known Early Stone Age sites in the greater Ingwavuma area most probably dates back to between 300 000 and 1.7 million years ago. Some of the stone tools have been identified as belonging to the Acheulian tradition and it is therefore possible that these sites were occupied by an early hominin such as *Homo erectus* or *Homo ergaster*. Middle Stone Age Sites dates back to ca. 40 000 - 200 000 BP. These sites relate to the first anatomically modern people in the world namely *Homo sapiens sapiens*. Most of the Middle Stone Age sites in the greater Maputaland are open air stone tool scatters with little archaeological context. However, some notable cave deposits do occur. The world renowned Border Cave Site, situated approximately 65km to the north of the town of Ingwavuma, is a good example. Humans lived at Border Cave over a period of 200 000 years. The human skeletal remains found in the cave are believed to be some of the oldest evidence of anatomically modern human beings. Various radiometric-dating techniques suggest that Middle Stone Age people were living at Border Cave more than 110 000 years ago. More than a million stone artefacts have been excavated in the cave and an enormous amount of animal material has been recovered from the site as well (Derwent 2006).

Only a handful of Later Stone Age sites have been recorded in the greater Maputaland. These relate to San hunter-gatherers or their immediate ancestors. The stone tool technology are smaller and more diverse and specialised than those made during the Middle Stone Age.

The Early Iron Age of the coastal zone in Maputaland contains ceramic fragments identified as belonging to the Matola phase. The Matola phase sites can be identified with the very first Bantu-speaking agriculturists that entered KwaZulu-Natal approximately 1 600 years ago from Eastern Africa (Maggs 1989). Although oral history indicate that the area was occupied in more recent centuries times by the Thembe-Thonga or their immediate ancestors archaeological sites belonging to this period have not yet been identified. Nevertheless the present African inhabitants of the area, the Thembe-Thonga and the Swazi, have a rich oral history and culture

relating to their intimate relationship with the environment spanning many centuries. Aspects of their cultural heritage identified by community representatives as being important include the following:

- Relationship of the local community with the physical environment
- Traditional fishing practises (fonya basket fishing)
- The indawo spirit possession cult
- Wild fruit utilisation
- The significance of the mothers brother in Thembe-Thonga social organisation
- Settlement rules and history
- Thonga language
- Issues relating to cross border identities
- Trade across the border
- History of various traditional authorities in the area
- Occupation of some areas by refugees of the Zulu wars
- Influence on local customs by refugees of the Mozambican War of 1975-1990

The conventional view is that that the historical occupants of Maputaland, the Tembe-Thonga, migrated from Karanga in the present day Zimbabwe in the middle of the seventeenth century Junod (1962:23). However, the theory that the African societies of south-east Africa migrated there in fixed ethnic units, as in the case of the Tembe-Thonga, has been questioned by archaeological research and recent research on oral traditions of Zululand and Natal (Maggs 1989). Instead of migrating there in fixed ethnic groups, it is now argued that the African societies of south-east Africa emerged locally from long established communities of diverse origins and diverse cultures and languages. Nevertheless, whether the Tembe came from Karanga to establish their authority over the people of south-east Africa, or whether they emerged locally, reports from Portuguese sailors indicate that a chief Tembe was in control of the ruling chiefdom in the Delagoa Bay hinterland in the mid-1600s (Wright & C. Hamilton 1989:46-64 and Kuper 1997:74). Tembe and his followers gradually established their authority over the people who lived in this hinterland including the area to the immediate east of the study area. Due to the abilities of their strong and charismatic leaders, the Tembe-Thonga remained a unified chiefdom and gradually extended their influence. This unity was upset in the middle of the eighteenth century when a split in the ruling lineage led to the fragmentation of the chiefdom. The division came after the death of Silamboya in 1746. The descendants of Silamboya's oldest son, Muhali, settled west of the Maputo River and north of the Usuthu River. This group, the senior

branch of the Tembe-Thonga, became known as the Mututwen-Tembe. The other part of the Tembe-Thonga followed a junior son of Silamboya, Mangobe, and settled east of the Maputo River. This branch would later become known as the Mabudu or Maputo (Bryant 1965:290). The imposed international border of 1875 bisected the area where the Mabudu branch settled. Being unable to control the vast area under his control, the chief of the junior branch, Mangobe, placed his sons in strategic positions so as to ensure his control. When Mangobe died, his first son, Nkupo, was named chief. However, his younger son, Mabudu, soon established himself as the stronger leader and took the chieftainship from his older brother (Hedges 1978:137). With the army now at his disposal Mabudu was able to dominate all trade between Europeans who landed at Delagoa Bay and local people living in the hinterland. Through this domination the Mabudu became, by the middle of the eighteenth century, the strongest political and economic unit in south-east Africa (Smith 1972:178-184). The people under his authority, which gradually increased, became known as the *abakwaMabudu* or the people of Mabudu's land (Webb and Wright 1979:157). By the early 1800s the Mabudu chiefdom stretched from the Maputo River in the west to the Indian Ocean in the east, and from Delagoa (Maputo) Bay in the north to as far south as Lake St. Lucia (Felgate 1982:1). This extensive area included the present-day Ingwavuma..

During the early 1800s similar processes of political centralisation were taking place amongst the Mthetwa, Ndwandwe and later the Zulu chiefdoms to the immediate south east of Ingwavuma. The Zulu eventually defeated the other groups and established themselves as the dominant power in south-east Africa (Wright & Hamilton 1989:67 and Laband 1995). The Mabudu were never attacked by, nor directly involved in any war with the Zulu. They were, however indirectly affected by wars of conquest the Zulu waged in the northern part of Zululand in the first half of the nineteenth century (Omer-Cooper 1975:57). Various groups of refugees passed through the Mabudu chiefdom during the reign of Shaka. Many of them settled among the Mabudu. The people who crossed the southern boundary of the Mabudu chiefdom brought with them languages and customs foreign to the Mabudu. Over time, Mabudu identity became less distinctive as people adopted many customs of those living south of them (Bryant 1964:292). As more and more people from the southern chiefdoms crossed into the Mabudu chiefdom, an increasing amount of prestige was attached to being Zulu and speaking isiZulu, since the Zulu were the dominant political force. The Zulu cultural influence in the greater Ingwavuma area was however not complete. People who fled the onslaught of the Zulu only stayed in the area for a short period before they moved

on (Felgate 1982:11). Furthermore, in exchange for tribute paid, the Zulu recognised the Mabudu as leaders of a vast territory. This, to an extent, secured their sovereignty (Bradley 1974). The relationship between the Mabudu and the Zulu differed markedly from that which the Zulu instituted with other chiefdoms. Ballard (1978) states that although the Mabudu 'paid tribute to the Zulu kings and cooperated on a military and economic level, they enjoyed much greater independence than the chiefdoms south of St. Lucia. Despite the Zulu influence, Maputaland, remained politically and culturally distinct from areas to the north, south and west. The people of the area spoke a unified language – xiRonga (Thonga). With some exceptions, notably the Ngubane and Khumalo, they accepted the rule of Mabudu chiefs (Felgate 1982:11). They practised customs that were unique to the area and differed from those of their Zulu, Swazi and Tsonga neighbours (Webster 1991:250). Nevertheless, many siSwati-speaking people crossed the nearby border and settled at Ingwavuma. Today a large percentage of the inhabitants in the immediate vicinity of Ingwavuma are Swazi people with social and political ties to Swaziland in the west.

During the colonial period the area was frequented by hunters, traders, and later missionaries (Bruton et al 1980). However, sites and structures associated with these activities need to be identified and placed in an inventory. Likewise during the more recent past many refugees of Mozambique crossed the international border and settled in the area (Klopper 2004). Sites belonging to this more recent "struggle era history" are also protected by national heritage legislation and needs to be surveyed and placed in an inventory.

Apart from human history the greater Maputaland also has extensive fossil deposits and geomorphology dating back to the Cretaceous, Tertiary and Quaternary periods. The Cretaceous fauna yielded by sequences includes ammonites, bivalves, gastropods, and nautiloids in abundance. Vertebrates are uncommon, only fish and reptiles being noted so far. Plant remains are relatively abundant in the form of logs and lignite chips. The Tertiary limestone deposits contain marine macro-fossils, calcareous nanno-fossils and planktic foraminifers (Avery 1980). Shell imprints have been found imprinted in concretions to the immediate south of Thembe Elephant Park and may therefore palaeontological significance (Anderson 2008).

3 BACKGROUND INFORMATION OF THE SURVEY

3.1 Methodology

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum. The SAHRIS website was consulted to obtain information on past heritage surveys in the area and on heritage site particulars. In addition, the available archaeological literature covering the greater Ingwavuma area was also consulted. A ground survey of the footprint, following standard and accepted archaeological procedures, was conducted. An area of 20m was surveyed on either side of roads P443, D1886, and L 1380.

3.2 Restrictions encountered during the survey

3.2.1 Visibility

Visibility was good although the vegetation was dense at places. It must also be mentioned that Anderson (2008) found various heritage sites buried below sand in the greater Maputaland area. He noted that these sites would have been archaeologically invisible had it not been that the developers excavated a long and deep trench that exposed some of these deposits. It is therefore entirely possible those archaeological sites may also be covered in sand in the study area and that they are invisible due to geomorphological factors.

3.2.2 Disturbance

No disturbance of any potential heritage features was noted.

3.3 Details of equipment used in the survey

GPS: Garmin Etrek

Digital cameras: Canon Powershot A460

All readings were taken using the GPS. Accuracy was to a level of 5 m.

4 DESCRIPTION OF SITES AND MATERIAL OBSERVED

4.1 Locational data

Province: KwaZulu-Natal

Town: Ingwavuma

4.2 Description of the general area surveyed

The existing P443 road is surfaced with a S2 double seal. The surfaced sections of the road are in poor condition. This road enters the village of Ingwavuma from the east. District Road D1886 is an existing approximately 6m wide gravel road whereas local road L1380 is also an existing, approximately 5m wide, gravel road. Both these gravel roads connect to P443 to the north of Ingwavuma. All these roads run through communal areas dotted with African homesteads and more peri-urban settlements in the immediate vicinity of Ingwavuma.

Although some African homesteads are situated directly adjacent to the existing roads no graves were observed within 60m from the proposed road development. Those graves that were observed by the consultant were all situated well beyond the road development zone. The proposed development will have no impact on these graves.

One Middle Stone Age site occurs within 100m from the P443 approximately 10km to the east of Ingwavuma (Figs 2 & 3) (see below). A second Middle Stone Age site was recorded by Oliver Davies in the 1970s and said to be situated adjacent to the Ingwavuma River (Figs 4). However, this second locality was visited by the consultant and no Middle Stone Age material is presently visible on the surface. It is possible that the original GPS coordinates provided by Dr Oliver Davies is incorrect but this point could not be verified.

The study area is not part of any known cultural landscape.

5 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

Only one heritage site of any significance was located during this survey. However, this site, a Middle Stone Age Site, is located more than 100m from the P433 (Figs 2 &

3). As such it is not threatened by the proposed development. The GPS coordinates for this site is: S 27° 6'24.25" E 32° 5'6.02 E" (Figs 2 & 3).

This site is not rated as significant as it is an open air site with a few stone tools visible on an eroded sandy surface. These included a few blades and flakes made from chert (Fig 5 & 6). There is no archaeological deposit associated with the site and the archaeological artefacts are all situated out of contexts.

5.1 Field Rating

The Middle Stone Age Site is rated as Generally Protected C with a low significance.

Table 2. Field rating and recommended grading of sites (SAHRA 2005)

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

6 RECOMMENDATIONS

The proposed upgrading of roads P443, D1886 and L1380 may proceed in terms of heritage values as no heritage sites are in any danger of being destroyed or altered. However, it should also be pointed out that the KwaZulu-Natal Heritage Act requires that operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities.

7 RISK PREVENTATIVE MEASURES ASSOCIATED WITH CONSTRUCTION

Maputaland has a rich archaeological history. Construction work and excavations may yield archaeological and/or cultural material. If any heritage features are exposed by construction work then all work should stop immediately and the provincial heritage agency, Amafa, should be contacted for further evaluation. Attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and the KwaZulu-Natal Heritage Act (Act no 4 of 2008) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.



Figure 2. Google aerial photograph showing the distribution of known heritage sites in the greater Ingwavuma area.

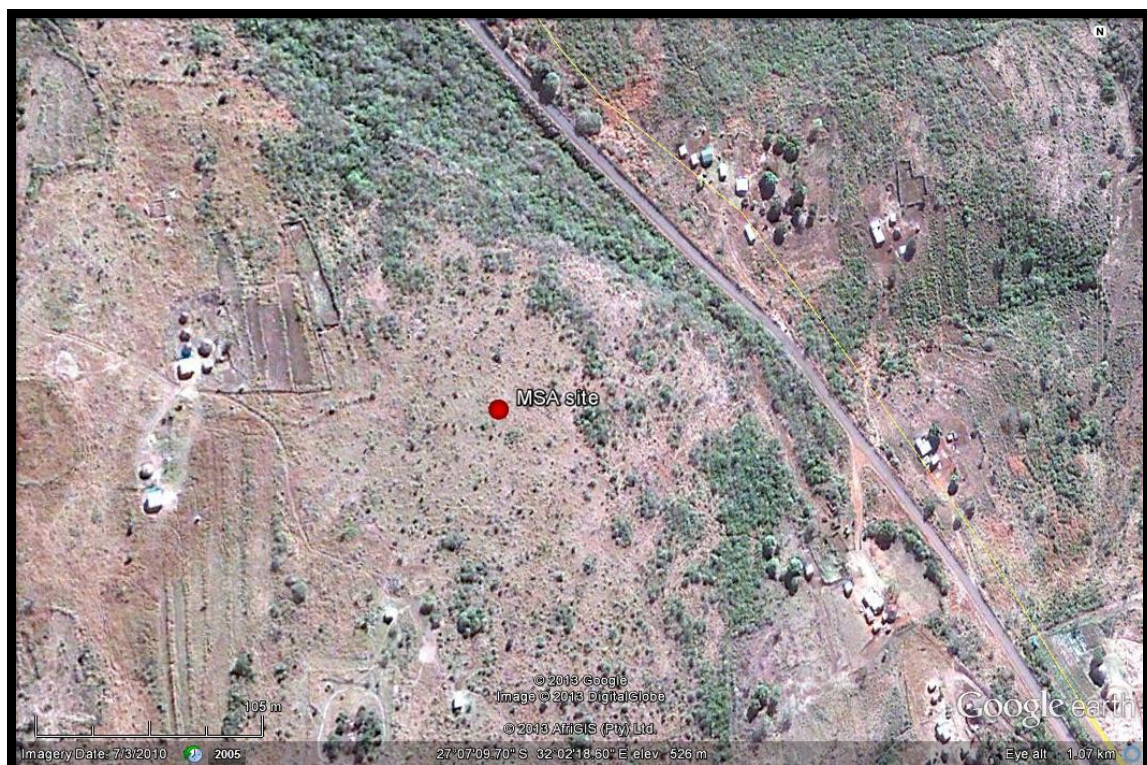


Figure 3. Google aerial photograph showing the location of a MSA site approximately 100m to the west of the P443.



Figure 4. Google aerial photograph showing the proposed location of a MSA site recorded by Oliver Davies in the 1970's. However, no site was observed by the consultant during a visit to this locality.



Figure 5. Middle Stone Age Site situated approximately 100m from proposed road upgrade.



Figure 6. Middle Stone Age flake situated on the surface in disturbed context.

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