
HERITAGE IMPACT ASSESSMENT FOR THE PLANNED SPENCER- TABOR POWERLINE, LIMPOPO PROVINCE

Prepared by:

J A VAN SCHALKWYK

NATIONAL CULTURAL HISTORY MUSEUM

P.O. Box 28088

Sunnyside

0132

Prepared for:

Mr A WOGHIREN

STRATEGIC ENVIRONMENTAL FOCUS

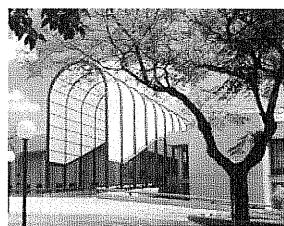
P O Box 74785

LYNNWOOD RIDGE

Gauteng

0040

28 February 2007



NATIONAL CULTURAL HISTORY MUSEUM
NASIONALE KULTUURHISTORIESE MUSEUM

EXECUTIVE SUMMARY

HERITAGE IMPACT ASSESSMENT FOR THE PLANNED SPENCER-TABOR POWERLINE, LIMPOPO PROVINCE

The aim of the survey was to evaluate the heritage potential of an area through which it is proposed to construct a new electricity powerline. For this purpose, four alternative routes were identified. On closer scrutiny, the alternatives are basically variants of two main routes.

The problem is that, speaking from a heritage point of view, little previous work has been done in the area. Furthermore, accessibility also proved to be a problem. The end result is that this is largely terra incognita, so to speak.

From a heritage point of view, it is anticipated that all four of the identified corridors would, at least for shorter sections, have an impact on heritage sites. Selection of the preferred corridor is then based on the criteria of the least number of sites that would be impacted on. Based on current knowledge, this would be alternative 4.

Based on the above, it is anticipated that if the development takes place, it would be on condition of acceptance of the management measures as set out in Section 7 of this report. The most important of this would be the conducting of a full Phase 1 archaeological survey of the selected corridor in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

In the case where resources do occur, assessment of the potential impact of the development can only be done once a final corridor has been selected and tower positions determined. Mitigation of heritage sites implies first of all total avoidance, or, secondly, the recovery of sufficient data from the site in order that it can be studied and understood at a later stage. This latter scenario is not necessarily negative as science stands to benefit from such actions.

TABLE OF CONTENTS

	Page
TABLE OF CONTENTS.....	2
GLOSSARY OF TERMS.....	2
LIST OF ABBREVIATIONS	2
1. INTRODUCTION	2
2. BACKGROUND AND BRIEF	2
3. STUDY APPROACH	2
4. STUDY AREA.....	2
5. SITE SIGNIFICANCE AND ASSESSMENT.....	2
6. IDENTIFICATION OF RISK RESOURCES.....	2
7. RECOMMENDED MANAGEMENT MEASURES.....	2
8. CONCLUSION.....	2
9. REFERENCES	2
10. PROJECT TEAM.....	2

GLOSSARY OF TERMS

Study area: Refers to the entire study area as indicated by the client in the accompanying Fig. 1.

Stone Age: The first and longest part of human history is the Stone Age, which began with the appearance of early humans between 3-2 million years ago. Stone Age people were hunters, gatherers and scavengers who did not live in permanently settled communities. Their stone tools preserve well and are found in most places in South Africa and elsewhere.

Early Stone Age	2 000 000 - 150 000 Before Present
Middle Stone Age	150 000 - 30 000 BP
Late Stone Age	30 000 - until c. AD 200

Iron Age: Period covering the last 1800 years, when new people brought a new way of life to southern Africa. They established settled villages, cultivated domestic crops such as sorghum, millet and beans, and they herded cattle as well as sheep and goats. These people, according to archaeological evidence, spoke early variations of the Bantu Language. Because they produced their own iron tools, archaeologists call this the Iron Age.

Early Iron Age	AD 200 - AD 1000
Late Iron Age	AD 1000 - AD 1830

Historical Period: Since the arrival of the white settlers - c. AD 1840 - in this part of the country

LIST OF ABBREVIATIONS

ADRC	Archaeological Data Recording Centre
EIA	Early Iron Age
ESA	Early Stone Age
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NHRA	National Heritage Resources Act
PHRA	Provincial Heritage Resources Agency
SAHRA	South African Heritage Resources Agency

HERITAGE IMPACT ASSESSMENT FOR THE PLANNED SPENCER-TABOR POWERLINE, LIMPOPO PROVINCE

1. INTRODUCTION

The National Cultural History Museum¹ was contracted by **Strategic Environmental Focus** to review an area in which it is proposed to develop a new 400 kV powerline. For this purpose, four alternative routes were identified by ESKOM. The aim of the survey was to determine the nature and potential of cultural heritage resources found within the boundaries of the area that is to be impacted by the developed. Based on this, a selection is to be made on the most viable route to be develop.

Cultural heritage resources are broadly defined as all non-physical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.

2. BACKGROUND AND BRIEF

The scope of work consisted of reviewing an area, in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999), to determine the potential of heritage resources that might occur in the area.

This include:

- Conducting a desk-top investigation of the area;
- A visit to the proposed development site.

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development areas;
- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources;
- Indicated which would be the preferred site for the proposed development;
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

¹ The National Cultural History Museum is affiliated to the Northern Flagship Institution, which act as parent body for a number of museums, all of which resorts under the Department of Arts and Culture.

3. STUDY APPROACH

3.1 Information base (sources)

Only a few sources are known to exist about the area specifically, and most of these deal with the larger region on a very generalised basis.

3.2 Methodology

3.2.1 Preliminary investigation

3.2.2 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various reports, anthropological, archaeological and historical sources were consulted - see the list of references below. With reference to the study area specifically, only two surveys are known. A few general sources, dealing with topics and events on a regional basis, are available. See list of references below.

3.2.3 Data bases

The *Heritage Sites Database* and the *Environmental Potential Atlas* was consulted.

3.2.4 Other sources

Topocadastral and other maps were also studied - see the list of references below.

3.3 Field survey

The area was divided into blocks by using natural (e.g. streams) as well as manmade (e.g. roads, fences) boundaries, and each block was surveyed driving across it through it in a number of transects. Fences and rivers obviously necessitated a deviation from this strategy.

3.4 Documentation

Sites, objects and structures that are identified are documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities are

determined by means of the *Global Positioning System (GPS)*² and plotted on a map. This information is added to the description in order to facilitate the identification of each locality.

Map datum used: Hartebeeshoek 94 (WGS84).

3.5 Limitations

The following played an important role in determining the potential in the area:

- Almost nothing is known of the area as very little previous research has been done here.
- Dense vegetation encountered during the survey period, made it difficult to identify sites, as well as to establish their extent (size).
- Not all areas are accessible, for example game ranches and some farms.

² According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then to correlate it with reference to the physical environment before plotting it on the map.

4. STUDY AREA

4.1 Location of the study area

The location and extent of the study area can be determined from the map in Figure 1. It is located approximately 60 km northeast of Polokwane, on the eastern side of the N1. From here it stretches eastwards for approximately 60 km just to the west of Bolobedu.

4.2 Description of region

The area under discussion has never been subjected to a detailed heritage survey. It is only smaller sections that have been surveyed, usually for specific purposes (e.g. Loubser 1991, Van Schalkwyk, 2001a, 2001b).

Sections of the area have been in white ownership for some decades. These are largely farms or game reserves. The rest of the area can be classified as tribal area. As such a large number of small villages dot the landscape.

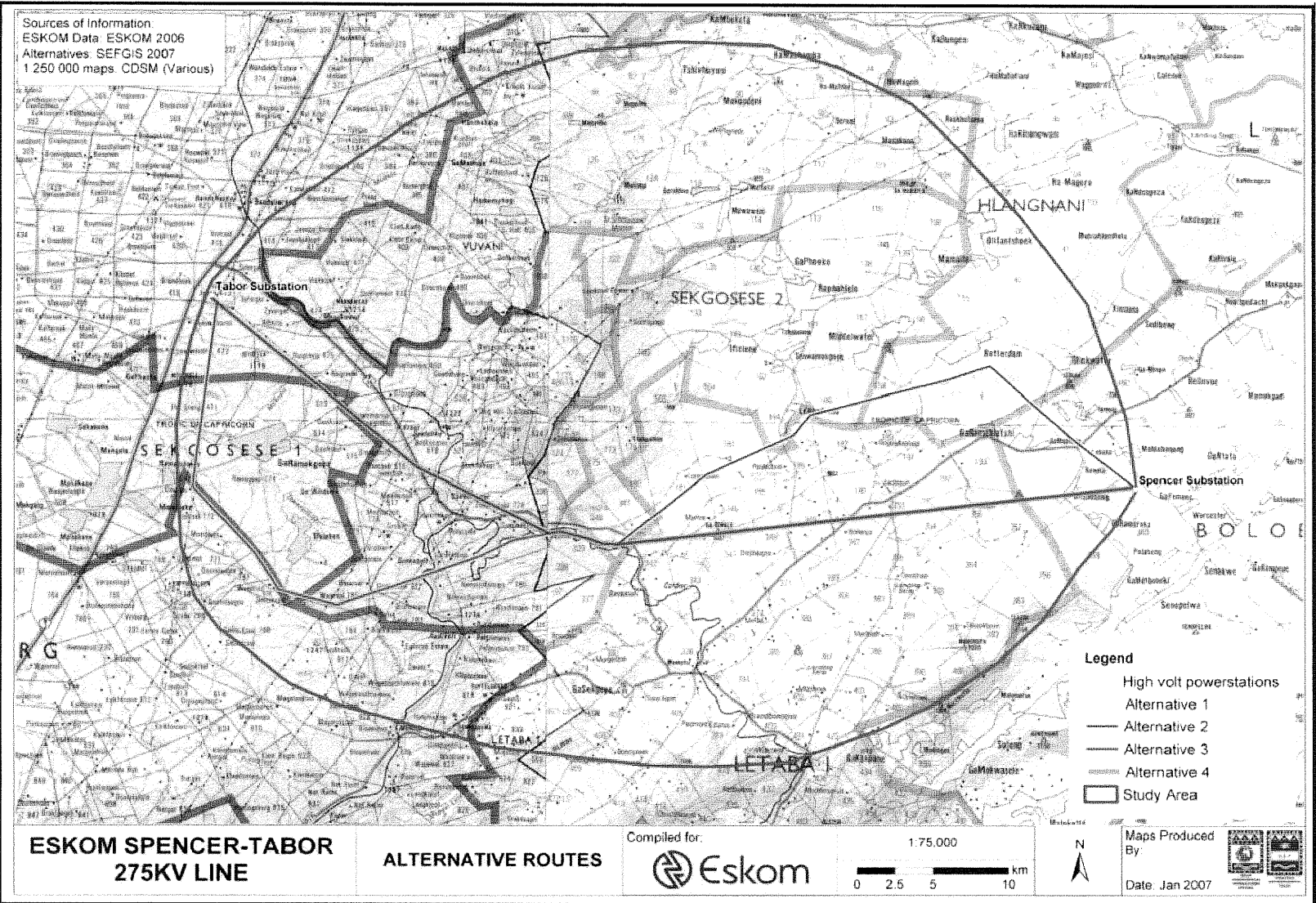


Figure 1. Location of the study area in regional context, showing the different alternative routes.

4.2.1 Stone Age

Occupation of the larger geographical region took place since at least Middle Stone Age times. Tools dating to this period, identified by archaeologists as the Pietersburg Industrial Complex are commonly found in the proximity of most rivers, outcrops and such. However, as these are surface finds, they are generally viewed to have a low significance.

It was only during the Late Stone Age, that people started to occupy sites on a recurring basis. These are rock shelters and caves, occurring in suitable geological environments, e.g. in the Soutpansberg self and the broken environment of the Limpopo river. Very few such sites are known to occur in the study area, although no detailed survey has ever been done here. For the first time we now get evidence of people's activities derived from material other than stone tools. Ostrich eggshell beads, ground bone arrowheads, small bored stones and wood fragments with incised markings are traditionally linked with the LSA. They were also well known for giving expression to their complex religious beliefs in rock art, which can be found in any number of sites in the area.

4.2.2 Iron Age

Iron Age people started to settle in southern Africa c. AD 300, with one of the oldest known sites at just to the west of the tunnels at Wylies Poort, dating to c. AD 400. By AD 800 people were occupying a number of village in the Limpopo River valley and, with the East Coast trade, populations rapidly expanded. This resulted in the development of kingdoms that ruled over large tracts of land. However, drought and changes in the trade patterns, forced these people by AD 1250 to abandon these areas, some moving north, other south.

The occupation of the larger geographical area (including the study area) started at least during the first millennium AD, for example in the Sekgosesese district. However, it was only after the beginning of the 16th century that large-scale occupation of the area started to take place. By the 16th century things changed, with the climate becoming warmer and wetter, creating condition that allowed Late Iron Age (LIA) farmers to occupy areas previously unsuitable. Population movements, competition for resources, etc. created tensions amongst different groups and people were forced to congregate into large towns for defensive purposes. These stone-walled villages were almost always located on hilltops, though near cultivatable soil and a source of water.

4.2.3 Historic period

Whites moved into the area during the first half of the 19th century, first as hunters, traders and missionaries, with settlers following closely on their heels. One of the first white settlements, Schoemansdal, was located to the west of Makhado (Louis Trichardt). Over time, farms were surveyed

and new towns were laid out. The gold mining industry in South Africa took off with the discovery of gold at Eersteling, south of Polokwane. During the Anglo Boer War, a number of skirmishes were fought in the region, e.g. at Rhenosterpoort south of the study area.

4.2.4 Ethno-historical sequence

The western section of the study area is almost exclusively inhabited by people of Tlokwa origin. It is said that the origin of all Tlokwa people can be traced to Tlokweg on the Mooi River near Potchefstroom, where they had the *thakadu* (ant-bear) as their totem. From here can be traced the Tlokwa tribes of North West Province, Free State, Lesotho, KwaZulu-Natal, Botswana and Northern Province. Exactly when this segregation took place, can no longer be determined with any clarity. It is however justifiable to estimate that the northward movement of the Tlokwa took place before the year 1700.³ According to tradition, they first settled at Moletane in the Potgietersrus district, but early in the eighteenth century they moved further northward (Botha 1983:163; Krige 1937:350; Van Warmelo 1953; Transvaal Native Affairs Department 1905).

In this period they extended their boundaries, from their main settlement near Munnik, up to Venda in the north and to Molema's location in the north east. They also penetrated deep into Moletši country to the west and were the overlords of the Birwa. These far-flung boundaries caused enmity which precipitated wars with the Venda as well as the Moletši. This "heroic" period appears to culminate with the reigns of TSHERANE and KWADU (c. 1790-1830). The latter, KGWADU, one of the best-known rulers of the Tlokwa, ruled during the early 1800s and managed to drive the Venda from the area.

During the rule of KGWADU's son MOSIMA, Umzilikazi's Ndebele attacked the Tlokwa and murdered MOSIMA and one of his wives. A section fled to Bokhalaka (Zimbabwe), but they returned later to Mabianene (just north of the Dwars river drift). Shortly afterwards, when the Voortrekkers arrived in the Pietersburg area,⁴ a war of succession divided the Tlokwa. Because the Voortrekkers supported one of the groups (Mmantšhaka), the other (and larger group) fled to Sekhukhuneiland where they lived for a time under the rule of a queen regent before returning to their present place of residence (Botha 1983:163).

From the middle of the 1800s, the Berlin Mission Society had a number of mission stations in the then Northern Transvaal. The results of their missionary labours were, according to their own reporting, not as successful as they had hoped. It was in matters outside the church that they contributed much to the creation of the 'Sotho' as a social, political and cultural entity. They established the first schools

³ Some people would have it that they are an off shoot of the Tlokwa of Mmantatise who, with her followers, roamed across the Free State and North West Province during the early 1800s as a result of the internecine warfare brought on by the activities of Shaka and others in the KwaZuluNatal area. This would put the arrival of the Tlokwa in their present area in Northern Province approximately 100 years later, which is not acceptable if all other evidence is considered.

⁴ They settled at Schoemansdal, east of Louis Trichardt between 1849-1867.

and hospitals. They played an important role in political matters on a number of occasions, in some cases taking the side of the local people (e.g. the Hananwa in 1894), or the government of the day (e.g. Sekhukhune in 1876). They also documented much of the life of the Sotho-speakers in early colonial times. The Berlin Mission Society was active in the area until 1962. In that year, with the constituting of the Evangelical Lutheran Church in South Africa, the Society ended its activities here, as well as other places in the country (Van Schalkwyk 1990).

The area more to the east is populated by a number of smaller groups of diverse origin: Sotho, Venda, Tsonga. The latter group also form the main group in the east of the study area. Their origin is in Mozambique. Due to the wars in the coastal areas of Natal and Mozambique during the 1820-30s, they entered the (former) Transvaal, first in small groups and later, by the 1890's, due to Portuguese aggression, in larger groups with recognized chiefs. They were later given formal 'locations' to settle in, which, during the days of separate development under the previous government, became the homeland of Gazankulu.

To the south and east of the study area is found the Lobedu people, well-known for their famous 'rain-queen'. They have a strong link to the Venda located more to the north.

4.3 Description of affected environment

The settlement of groups of such cultural and historical diverse backgrounds, allows for the occurrence of interesting cultural heritage to be expected in the different regions. For the purpose of this report, the study area is subdivided into three geographical regions:

4.3.1 The western plateau area, also known as the Pietersburg plateau

Stone tools dating from all periods of the Stone Age are known to occur all over this section of the study area. As these objects are open finds and not in their original position anymore, they are viewed as having a low significance. No 'sealed' site, i.e. in a cave or rock shelter are known in this area. However, shelters containing deposits and rock paintings are known to exist to the south and west of the study area, and, consequently, it can be expected to occur within the boundaries of the study area as well.

On the farm De Gladde Klipkop, Iron Age settlement goes back to as early as AD 700. These sites are usually found at the bottom of hills, close to rivers as the people preferred to exploit the alluvial soils to cultivate their crops on. It is expected that many such sites can be found in similar locations. On some of these sites, occupation also occurred during the Late Iron Age, continuing even up to historic times. However, in this area, the granite hills provided suitable settlement for people wanting to protect

themselves, e.g. on the farm Ramagoep. This occurred from the 1600s onwards, which was a period marked by strife and resultant population movements.

As the corridor would of necessity avoid built areas, it is doubtful if it would have any impact on farmsteads or villages. The biggest problem would be small informal cemeteries that are usually scattered all over.



Fig. 2. Typical fortified hill (stone walling in the background of the picture).

4.3.2 *The escarpment area*

It is expected that, due to the ruggedness and steep slopes in this area, settlement was not as intense as in the previously described region. However, as a result of the topography in this particular area, different types of sites can be expected, e.g. caves and rock shelters.

In addition, as the rivers formed access routes into the interior, it is quite likely that the area where the Rietspruit, and the Middle Letaba River to the south, cuts through the mountain, acted as such routes during Early and Late Iron Age times. From what was seen during the site visit, this is quite possible as there are sufficient level areas for settlements to develop on.

As this area is not densely populated at present, it is doubtful if it would impact on farmsteads or cemeteries.

- The lowveld area

Being much hotter and humid, this area was not easy to populate, due to the occurrence of malaria and nangana (spread by tsetse flies). With the eradication of these problems, people could move in in larger numbers and farms were developed. This would have had a negative impact on any heritage resources that might have occurred in these areas in the past.

Although Stone Age tools are known to occur on the banks of some perennial streams, it is much less than in the previous two regions. No 'sealed' sites (i.e. caves or rock shelters) are known to occur in this region and no report of rock art in the area is known.

Sites dating to the Early Iron Age are known from various locations, mostly east of the study area and it is therefore expected that they could occur in the study area as well. Late Iron Age settlement also took place in the area. Again, these sites are located on hill-tops, or the foot of the hills. However, the malaria and tsetse flies limited the number of people to some extent.

As the corridor would of necessity avoid built areas, it is doubtful if it would have any impact on farmsteads or villages. The biggest problem would be small informal cemeteries that are usually scattered all over.



Fig. 3. Clay pot buried in a termite mound. The termites are caught and eaten as a source of protein. Based on its decorations, this particular pot can be as old as 300 years.

5. SITE SIGNIFICANCE AND ASSESSMENT

Impact analysis of cultural resources under threat of the proposed development, are based on the present understanding of the development.

The **significance** of a heritage site and artefacts is determined by its historical, social, aesthetic, technological and scientific value in relation to the uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

Sites regarded as having low significance are viewed as being recorded in full after identification and would require no further mitigation. Impact from the development would therefore be judged to be low. Sites with a medium to high significance would therefore require mitigation. Mitigation, in most cases the excavation of a site, is in essence destructive and therefore the impact can be viewed as high and as permanent.

6. IDENTIFICATION OF RISK RESOURCES

An Environmental Impact Assessment is focused on two phases of a proposed development: **the construction and operation phases**. However, from a cultural heritage perspective, this distinction does not apply. Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that cannot be avoided and that are directly impacted by the development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted, can be written into the management plan, whence they can be avoided or cared for in the future.

Construction phase:

Possible Risks	Source of the risk
Actually identified risks	
- damage to sites	Construction work
Anticipated risks	
- looting of sites	Curios workers

Operation phase:

Possible Risks	Source of the risk
Actually identified risks	
- damage to sites	Not keeping to management plans
Anticipated risks	
- damage to sites	Unscheduled construction/developments

7. RECOMMENDED MANAGEMENT MEASURES

Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that cannot be avoided and that are directly impacted by the development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted on, can be written into the management plan, whence they can be avoided or cared for in the future.

7.1 Objectives

Protection of archaeological, historical and any other site or land considered being of cultural value within the project boundary against vandalism, destruction and theft.

The preservation and appropriate management of new discoveries in accordance with the National Heritage Resources Act (Act No. 25 of 1999), should these be discovered during construction.

7.2.1 Construction phase

General management objectives and commitments:

- To avoid disturbing sites of heritage importance; and
- To avoid disturbing burial sites.

The following shall apply:

- The contractors and workers should be notified that archaeological sites might be exposed during the construction work.
- Should any heritage artefacts be exposed during excavation, work on the area where the artefacts were discovered, shall cease immediately and the Environmental Control Officer shall be notified as soon as possible;
- All discoveries shall be reported immediately to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made. Acting upon advice from these specialists, the Environmental Control Officer will advise the necessary actions to be taken;
- Under no circumstances shall any artefacts be removed, destroyed or interfered with by anyone on the site; and
- Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the National Heritage Resources Act (Act No. 25 of 1999), Section 51. (1).

7.2.2 Operation phase

General management objectives and commitments:

- To avoid disturbing sites of heritage importance.

The following shall apply:

- Continued care should be taken to observe discovery of any sites of heritage significance during operation. Should any archaeological artifacts and palaeontological remains be exposed during operations, work on the area where the artefacts were found, shall cease immediately and the appropriate person shall be notified as soon as possible;
- Upon receipt of such notification, an Archaeologist or Palaeontologist shall investigate the site as soon as practicable. Acting upon advice from these specialists, the necessary actions shall be taken;
- Under no circumstances shall archaeological or palaeontological artefacts be removed, destroyed or interfered with by anyone on the site during operations; and
- The powerline operator shall advise its workers of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the National Heritage Resources Act (Act No. 25 of 1999), Section 51(1).

7.2.3 Impact minimization

Impact analysis and resultant management of cultural resources under threat of the proposed development, are based on the present understanding of the construction and operation of a transmission line. The following objectives and design standards, if adhered to, can eliminate, minimize or enhance potential impacts.

- The developer must ensure that an archaeologist inspects each site selected for the erection of a pole structure. If a particular pole structure impacts on a heritage site but cannot be shifted, mitigation measures, i.e. the controlled excavation of the site prior to development, can be implemented. This can only be done by a qualified archaeologist after obtaining a valid permit from SAHRA.
- The same action holds true for any infrastructure development such as access routes, construction campsites, etc.
- In the past, people used to settle near water sources. Therefore riverbanks, rims of pans and smaller watercourses should be avoided as far as possible.
- In this particular part of the country, Iron Age people also preferred to settle on the saddle (or neck) between mountains (hills/outcrops). These areas should also be avoided.
- Avoid all patches bare of vegetation unless previously inspected by an archaeologist. These might be old settlement sites.
- Rock outcrops might contain rock shelters, engravings or stone walled settlements, and should therefore be avoided unless previously inspected by an archaeologist.
- Communities living close to the proposed corridor should be consulted as to the existence of sites of cultural significance, e.g. graves, as well as sites that do not show any structures but have emotional significance, such as battlefields, etc.
- All graves or cemeteries should be avoided, unless when totally impossible. The correct procedure, i.e. notification of intent to relocate them, consultation with descendants and permit application, should then be followed in relocating the graves. If any of the graves are older than 60 years, they can only be exhumed by an archaeologist. Graves of victims of conflict requires additional permits from SAHRA before they can be relocated.
- Archaeological material, by its very nature, occurs below ground. The developer should therefore keep in mind that archaeological sites might be exposed during the construction work. If anything

is noticed, work in that area should be stopped and the occurrence should immediately be reported to a museum, preferably one at which an archaeologist is available. The archaeologist should then investigate and evaluate the find.

- Any mitigation measures applied by an archaeologist, in the sense of excavation and documentation, should be published in order to bring this information into the public domain.

8. CONCLUSION

The aim of the survey was to evaluate the heritage potential of an area through which it is proposed to construct a new electricity powerline. For this purpose, four alternative routes were identified. On closer scrutiny, the alternatives are basically variants of two main routes.

The problem is that, speaking from a heritage point of view, little previous work has been done in the area. Furthermore, accessibility also proved to be a problem. The end result is that this is largely terra incognita, so to speak.

From a heritage point of view, it is anticipated that all four of the identified corridors would, at least for shorter sections, have an impact on heritage sites. Selection of the preferred corridor is then based on the criteria of the least number of sites that would be impacted on. Based on current knowledge, this would be alternative 4.

Based on the above, it is anticipated that if the development takes place, it would be on condition of acceptance of the management measures as set out in Section 7 of this report. The most important of this would be the conducting of a full Phase 1 archaeological survey of the selected corridor in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

In the case where resources do occur, assessment of the potential impact of the development can only be done once a final corridor has been selected and tower positions determined. Mitigation of heritage sites implies first of all total avoidance, or, secondly, the recovery of sufficient data from the site in order that it can be studied and understood at a later stage. This latter scenario is not necessarily negative as science stands to benefit from such actions.

9. REFERENCES

- Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.
- Botha, S.J. (ed.) 1983. *A Proposed National Development Plan for Lebowa*. Pretoria: University of Pretoria.
- Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.
- Krige, J.D. 1937. Traditional origins and tribal relationships of the Northern Transvaal. *Bantu Studies* 11(4):321-356.
- Mason, R.J. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.
- Mönnig, H.O. 1967. *The Pedi*. Pretoria: J.L. van Schaik.
- Richardson, D. 2001. *Historic sites of South Africa*. Cape Town: Struik Publishers.
- Loubser, J.H.N. 1991. The Ethnoarchaeology of Venda-speakers in South Africa. *Navorsing van die Nasionale Museum, Bloemfontein* 7(8):145-464.
- Transvaal Native Affairs Department, 1905. *Short history of the native tribes of the Transvaal*. Pretoria: Government Printer.
- Van Schalkwyk, J.A. 1990. Die kultuurhistoriese betekenis van die Berlynse sendingstasies in die Bloubergomgewing, Noord-Transvaal. *Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis* 4(4):244-249.
- Van Schalkwyk, J.A. 2001a. A survey of cultural resources in the location of the proposed Botlokwa commercial hub, Sekgoses district, Northern Province. Unpublished report 2001KH19.
- Van Schalkwyk, J.A. 2001b. Tlokwa of Northern Province: Art, craft and heritage documentation in the Sekgoses District, Northern Province. Unpublished report 2001KH20.
- Van Warmelo, N J. 1935. *Preliminary survey of the Bantu Tribes of South Africa*. Ethnological Publications No. 5. Pretoria: Government Printer.
- Van Warmelo, N.J. 1953. *Die Tlokwa en Birwa van Noord Transvaal*. Etnologiese Reeks No. 29. Pretoria: Staatsdrukker.

10. PROJECT TEAM

J van Schalkwyk: principal investigator