

**A SURVEY OF CULTURAL RESOURCES FOR THE
LOMOND/SCHEERPOORT POWERLINE,
BROEDERSTROOM AREA, WEST OF PRETORIA**

For:

LANDSCAPE DYNAMICS
P O Box 947
GROENKLOOF
0027

Survey conducted and report prepared by the:

NATIONAL CULTURAL HISTORY MUSEUM
PO Box 28088
SUNNYSIDE
0132

Telephone - (012) 341 1320
Telefax - (012) 341 6146

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NASIONALE KULTURHISTORIESE MUSEUM
NATIONAL CULTURAL HISTORY MUSEUM

SUMMARY

A survey of cultural resources for the Lomond/Scheerpoort powerline, Broederstroom area, west of Pretoria.

The aim of the survey was to locate, identify, evaluate and document the sites, objects and structures of cultural importance found within the boundaries of the area in which the proposed development is to take place.

It is our viewpoint that no objects, features or sites of cultural significance occur in the direct path of the development, that would prevent the expansion of the power line. However, in section 7 of this report it is recommended that

- The developers should be notified that archaeological sites might be exposed during the construction work. If anything is noticed, it should 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.

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1. AIMS OF THE SURVEY

The National Cultural History Museum was requested by **Landscape dynamics** to survey the length of an existing powerline, known as the Lomond/Scheerpoort powerline, in the Broederstroom area, west of Pretoria. The aim of the survey was to locate, identify, evaluate and document the sites, objects and structures of cultural importance found within the boundaries of the areas that is to be developed.

2. TERMS OF REFERENCE

The **Terms of Reference** for the study were to:

- 2.1 Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural resources) located in the area of the proposed development.
- 2.2 Assess the significance of the cultural resources in terms of their historical, social, religious, aesthetic and scientific value.
- 2.3 Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 2.4 Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources. This can include recommendations for the sustainable development and use of the identified cultural resources.
- 2.5 Develop procedures to be implemented if previously unidentified cultural resources are uncovered during the construction phase.

3. DEFINITIONS

The following aspects have a direct bearing on the survey and the resulting report:

- 3.1 **Cultural resource** is a broad, generic term covering any physical, natural and spiritual properties and features adapted, used and created by humans in the past and present. They can be, but are not necessarily identified with defined locations.
- 3.2 The **significance** of the sites and artifacts is determined by means of their

historical, social, aesthetic, technological and scientific value in relation to their 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 a site is done with reference to any number of these.

- 3.3 Significance is site-specific and relates to the content and context of the site. Sites regarded as having low significance have already been recorded in full and require no further mitigation. Sites with medium to high significance require further mitigation.
- 3.4 The latitude and longitude of an archaeological site are to be treated as sensitive information by the developer, and should not be disclosed to members of the public.
- 3.5 All recommendations are made with full cognisance of the relevant legislation, in this case the **National Monuments Act (No 28 of 1969, as amended)**.

4. METHODOLOGY

4.1 Preliminary investigation

4.1.1 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 anthropological, archaeological and historical sources were consulted - see list of references below.

4.1.2 Data sources

The **Archaeological Data Recording Centre (ADRC)**, housed at the National Cultural History Museum, Pretoria, was consulted.

4.1.3 Other sources

The topocadastral and other maps were also studied - see list of references below.

4.2 Field survey

The field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. In this particular case it was simply a case of following the route of the power line. This area was then surveyed, by means of walking and driving, for potential for human use. Special attention was given to outcrops, cliffs were inspected for rock shelters, while stream beds and unnatural topographical occurrences such as trenches, holes and clusters of trees were investigated.

4.3 Documentation

All sites, objects and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities were determined by means of the **Global Positioning System** (GPS)¹ and plotted on a map. This information was added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The area surveyed is located on the farms Welgegund 491JQ, Kalkheuwel 493JQ, Broederstroon 481JQ and De Rust 478JQ in the Brits district of North-West Province. The area feature as mountainous and have a very broken topography, except in some sections located in the central and western portions of the power line. The geology is made up of dolomite, shale and quartzite, making this a sourish type of soil.

The vegetation of the study area is classified by Acocks (1975:48-49) as Sourish Mixed Bushveld. This is a rather open savanna with **Acacia caffra** the dominant tree, in a fairly tall and dense grassveld dominated by **Cymbopogon**, **Hyparrhenia** and **Themada**. The more mountainous area is classified as Bankenveld of the central variation (Acocks 1975:99-100), with **Protea**, **Acacia** and **Celtis** the dominant tree species.

All factors considered, this was not the type of environment preferred for settlement by Stone Age and Iron Age communities.

6. DISCUSSION

This larger geographical region is rich in history, as can be deduced from the large number of important archaeological sites to be found there. None of these, fortunately, are located in the area to be developed.

6.1 Stone Age

¹ 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 correlate it with reference to the physical environment before plotting it on the map.

An Early Stone Age site that might have been of some significance, was identified. However, is it already damaged due to a road that was made through the site. During the survey stone tools dating to the Middle Stone Age was noted in various section of the power line. They were without exception surface finds, and as such they are considered to be disturbed out of context. These objects and sites are therefore judged not to pose any obstacle to the proposed development.

6.2 Iron Age

One of the more important Early Iron Age sites in South Africa is located on the farm Hartebeestpoort 482JQ, adjacent to the study area. However, the environment of the area under consideration is not the fertile, easy to cultivate alluvial soils that was preferred by Early Iron Age agriculturalists for settlement. No Iron Age sites was identified in the survey area.

6.3 Historic

Many sites of historical significance occur in the larger geographical region. These include settlements of early white pioneers and battlefields. However, none were found in the area that is to be developed. One informal (not fenced) cemetery was identified, but is judged to be located far enough from the proposed development so as not to be impacted upon.

7. RECOMMENDATIONS

It is our viewpoint that no objects, features or sites of cultural significance occurs in the direct path (route of the power line) of the development that would prevent the upgrading of the power line. However, the following is recommended:

- 7.1 The developers should be notified that archaeological sites might be exposed during the construction work. If anything is noticed, it should 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.

8. REFERENCES

8.1 Unpublished sources

8.1.1 Data base

Archaeological Data Recording Centre, (former) Tvl section, National Cultural History Museum, Pretoria.

8.2 Published sources

8.2.1 Books and journals

Acocks, J.P.H. 1975. **Veld Types of South Africa**. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

Holm, S.E. 1966. **Bibliography of South African Pre- and Protohistoric archaeology**. Pretoria: J.L. van Schaik.

Horn, A.C. 1996. Okkupasie van die Bankeveld voor 1840 n.C.: 'n sintese. **South African Journal of Ethnology** 19(1):17-27.

Mason, R. 1962. **Prehistory of the Transvaal**. Johannesburg: Witwatersrand University Press.

Mason, R.J. 1986. **Origin of the Black people of Johannesburg and the south western central Transvaal AD 350-1880**. Occasional Paper No. 16. Johannesburg: Archaeological Research Unit, University of the Witwatersrand.

Rasmussen, R.K. 1978. **Migrant kingdom: Mzilikazi's Ndebele in South Africa**. London: Rex Collins.

Van Riet Lowe, C. n.d. **The distribution of Prehistoric rock engravings and paintings in South Africa**. Archaeological Survey, Archaeological Series No. 7.

Van Warmelo, N.J. 1977. **Anthropology of Southern Africa in Periodicals to 1950**. Pretoria: Government Printer.

8.2.2 Maps

1: 50 000 Topocadastral maps - 2527DD

9. PROJECT TEAM

J van Schalkwyk

APPENDIX 1: STANDARDIZED SET OF CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON CULTURAL RESOURCES

Significance of impact:

- low where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium where the impact could have an influence which will require modification of the project design or alternative mitigation
- high where it would have a "no-go" implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Status of the impact:

With mitigation and the resultant recovery of material, a negative impact can be turned positive. Describe whether the impact is positive (a benefit), negative (a cost) or neutral

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

- 1 = no further investigation/action necessary
- 2 = controlled sampling and/or mapping of the site necessary
- 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- 4 = preserve site at all costs

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

APPENDIX 2: SURVEY RESULTS²

[Previous site numbers relate to other known sites on a particular ¼ degree sheet already documented in the ADRC, and does not necessarily refer to sites occurring on or close to the specific area of development.]

1. Site number: 2527DD7

Location: Broederstroom 481JQ: S 25°49'04.6"; E 27°51'00.4"

Description: An open site containing Early Stone Age axes, pebble choppers and flakes.

Discussion: This site is damaged by a road going through it and it is suspected that most of the artifacts would be disturbed out of context.

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

2. Site number: 2527DD8

Location: De Rust 478JQ: S 25°47'13.1"; E 27°47'26.7"

Description: Informal cemetery containing approximately 30 graves, three with headstones.

Discussion: This site is located some distance from the power line and it is doubtful if it will be impacted upon.

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Neutral

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

² See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.

APPENDIX 3: GLOSSARY AND ABBREVIATIONS

This section is included to give the reader some necessary background. It must be kept in mind, however, that these dates are all relative and serve only to give a very broad framework for interpretation.

STONE AGE

Early Stone Age (ESA)	2 000 000 - 150 000 Before Present
Middle Stone Age (MSA)	150 000 - 30 000 BP
Late Stone Age (LSA)	30 000 - until c. AD 200

IRON AGE

Early Iron Age (EIA)	AD 200 - AD 1000
Late Iron Age (LIA)	AD 1000 - AD 1830

HISTORICAL PERIOD

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

National Monuments Council (NMC)