

**ESKOM TRANSMISSION LINE -
DUVHA (WITBANK) TO JANUS (MECKLENBURG):
CULTURAL HERITAGE SCOPING REPORT**

For:

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SUMMARY

Eskom transmission line - Duvha (Witbank) to Janus (Mecklenburg), scoping report for heritage management: cultural heritage scoping report:

It must be stated from the outset that this is not a final evaluation of either of the routes, but that it is only an evaluation, based on existing information and a short field visit, to determine which of the two routes would be the preferred option. When all factors have been considered and a decision has been made to select a route, that route would then have to be subjected to a full assessment by an archaeologist.

From a cultural heritage point of view, the overall impact of any of the two proposed transmission lines is considered to be low. This can be further minimised by the careful placing of pylons and access routes. However, some areas have a very high density of archaeological sites and it is therefore of great importance where these are erected.

Based on what was found and its evaluation, it is recommended that the proposed development can continue in both the areas, on condition of acceptance of the following recommendations:

- That an archaeologist inspects each site selected for the erection of a pylon, especially at the Janus end of the line. The likelihood of impacting on an Iron Age site in this area is very high. However, if it cannot be shifted, mitigation measures, i.e. the controlled excavation of the site prior to development, can be implemented.
- The same holds true for any infrastructure development, eg. access routes, construction camp sites, borrow pits, etc.
- Avoid riverbanks, rims of pans and other water courses, as these were selected by Iron Age communities to settle on.
- Avoid all patches bare of vegetation unless previously inspected by an archaeologist.
- Avoid all outcrops unless previously inspected by an archaeologist.
- Communities living close to the proposed line, should be consulted as to the existence of sites of cultural significance, eg. graves, as well as sites that does 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, ie. notification, consultation and permit application, should then be followed in relocating the graves.
- The developer should keep in mind that archaeological sites might be exposed during the construction work. If anything is noticed, it should immediately be reported 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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ESKOM TRANSMISSION LINE - DUVHA (WITBANK) TO JANUS (MECKLENBURG): CULTURAL HERITAGE SCOPING REPORT

1. AIMS OF THE SURVEY

The National Cultural History Museum was contracted by **EIMS** to undertake a scoping review of heritage resources that might occur and as a result be impacted upon in two proposed routes for an electricity transmission line. The aim of the review was to identify, based on existing information, which of the two proposed routes would be the most suitable for the proposed development.

2. TERMS OF REFERENCE

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

- 2.1 Assess the significance of the known cultural resources within the borders of the proposed development area, in terms of their historical, social, religious, aesthetic and scientific value.
- 2.2 Develop mitigation or control measures for impact minimization and cultural resources preservation.
- 2.3 Develop procedures to be implemented if previously unidentified cultural resources are uncovered during the construction.

3. DEFINITIONS AND ASSUMPTIONS

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

- X **Cultural resources** are all nonphysical 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.
- X The **significance** of the sites and artefacts are 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 any site is done with reference to any number of these.
- X 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.
- X The latitude and longitude of archaeological sites are to be treated as sensitive information by the developer and should not be disclosed to members of the public.

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are mainly dealt within two acts. These are the South Africa Heritage Resources Act (Act 25 of 1999) and the Environmental Conservation Act (Act 73 of 1989).

4.1 South African Heritage Resources Act

Archaeology, palaeontology and meteorites

In terms of Section 35(4) of this act, no person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; bring onto, or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

Human remains :

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- (b) destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations.

Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925). Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (ie where the graves are located and where they are to be relocated) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

This act states that a survey and an evaluation of cultural resources should be undertaken in areas where development, which will change the face of the environment, is to be made. The impact of the development on the cultural resources should also be determined and proposals to mitigate this impact are to be formulated.

5. METHODOLOGY

5.1 Preliminary investigation

5.1.1 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 the list of references below. A few published sources pertaining to the historical events that took place in sections of the route was found, as well as a number of unpublished reports on the archaeology in specific areas.

5.1.2 Data bases

The **Archaeological Data Recording Centre** (ADRC), housed at the National Cultural History Museum, Pretoria, was consulted. This was used to draw up a preliminary map to indicate the existence of known sites of cultural significance, indicating potential problem areas.

The **Environmental Potential Atlas** was also consulted.

5.1.3 Other sources

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

5.2 Field survey

The survey was aimed at getting an overview of the areas. These were identified by members of ESCOM and EIMS. The area was investigated by driving the route, or by walking across shorter sections. Special attention was given to areas of potential habitation, and unnatural topographical occurrences such as trenches, holes, outcrops and clusters of trees were investigated.

5.3 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)¹¹ and plotted on a map.

6.

8. RECOMMENDED MANAGEMENT ACTIONS

¹¹ 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.

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9. REFERENCES

9.1 Data bases

Archaeological Data Recording Centre, National Cultural History Museum, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

9.2 Literature

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

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

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

Van Schalkwyk, J.A. 2002a. *A survey of cultural resources for the proposed new Twickenham-Pachaskraal-Hackney mining development, Sekhukhune district, Northern Province*. Unpublished report 2002KH03. Pretoria: National Cultural History Museum.

Van Schalkwyk, J.A. 2002b. *A survey of cultural resources in the construction camp site, Twickenham-Pachaskraal-Hackney mining development, Sekhukhune district, Limpopo Province*. Unpublished report 2002KH12. Pretoria: National Cultural History Museum.

Van Schalkwyk, J.A. 2002c. *A survey of cultural resources for the Senior Construction Camp, Twickenham-Pachaskraal-Hackney mining development, Sekhukhune district, Limpopo Province*. Unpublished report 2002KH22. Pretoria: National Cultural History Museum.

Van Schalkwyk, J.A. 2002d. *A survey of cultural resources for the Twickenham-Hackney mine development, Sekhukhune District, Limpopo Province*. Unpublished report 2002KH39. Pretoria: National Cultural History Museum.

Van Warmelo, N.J. 1935. *A Preliminary survey of the Bantu Tribes of South Africa*. Ethnological Publications No. 5. Pretoria: Government Printer.

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

9.2.2 Maps

1: 50 000 Topocadastral maps – 2429BC, BD, CB, CD, DA, DB, DC, DD
2430AC, CA, CC
2529AC, AB, AD, BA, BB, BC, BD, CA, CB, CC, CD, DA,
DC

10. PROJECT TEAM

J van Schalkwyk

APPENDIX 1: 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

ADRC - Archaeological Data Recording Centre

core - a piece of stone from which flakes were removed to be used or made into tools

SAHRA - South African Heritage Resources Agency

APPENDIX 2: ILLUSTRATIONS



Figure 1. Some examples of typical Middle Stone Age tools found in the northern section of the route.



Figure 2. Early Iron Age ceramics found in the northern section of the route.