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**HERITAGE IMPACT ASSESSMENT FOR THE
PROPOSED DEVELOPMENT ON THE FARM EVERGREEN 425IT,
PIET RETIEF DISTRICT, MPUMALANGA PROVINCE**

For:

PLAN-2-SURVEY AFRICA
P O Box 3203
Nelspruit
1200

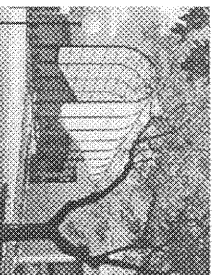
Survey conducted and report prepared by the:

NATIONAL CULTURAL HISTORY MUSEUM
PO Box 28088
SUNNYSIDE
0132

Telephone - (012) 324 6082
Telefax - (012) 328 5173

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NATIONAL CULTURAL HISTORY MUSEUM
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SUMMARY

Heritage impact assessment for the proposed development on the farm Evergreen 42511, Piet Retief district, Mpumalanga Province

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the boundaries of the area in which it is proposed to develop the lodge, housing estate and its infrastructure on the above property.

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

- The two identified sites should be avoided and development should not take place on them. A practical way in which to deal with this is to determine a buffer zone, with a radius of 50 metres by using the co-ordinates given in Appendix 2 as centre point, and treat these areas as no-go areas for development purposes.
- Prospective owners and their visitors should be informed of the importance of the cultural heritage remains and that any such objects or features are to be left in place.
- If archaeological sites are exposed during construction work, 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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HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT ON THE FARM EVERGREEN 425IT, PIET RETIEF DISTRICT, MPUMALANGA PROVINCE

1. THE SURVEY

The National Cultural History Museum was contracted by Plan-2-Survey Africa to survey an area in which it is proposed to develop a lodge and housing estate on the farm Evergreen 425IT, in the Piet Retief district of Mpumalanga. The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area that is to be impacted by the developed.

2. TERMS OF REFERENCE

The scope of work consisted of conducting a Phase 1 archaeological survey of the site in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

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;
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

3. DEFINITIONS AND ASSUMPTIONS

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

- **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.
- 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.

- 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.
- 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.

Structures:

Section 34(1) of this act states that no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

“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;

“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.

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 of 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.

4.2 Environmental Conservation Act

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.

5.1.2 Data bases

The **Archaeological Data Recording Centre (ADRC)**, housed at the National Cultural History Museum, Pretoria, was consulted. 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 field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. The area that was investigated, was identified by Plan-2-Survey Africa by means of maps, and Mr F. Ernst, son of the farm owner acted as guide, as he have a good understanding of the proposed development. The area was investigated by walking across it and each of the selected development sites (100 in total) was visited, except for a few that obviously would not have been occupied in the past. Special attention was given to topographical occurrences such as trenches, holes, outcrops and clusters of trees were investigated.

5.3 Documentation

All 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)** and plotted on a map. This information is added to the description in order to facilitate the identification of each locality.

Map datum used: Hartbeeshock 94 (WGSS84).

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

6. DESCRIPTION OF THE AREA

The survey area is located on the farm Evergreen 425IT, in the Piet Retief district of Mpumalanga Province (see Fig. 1). This area is south-east of the hamlet of Amsterdam, on the road to Piet Retief. It borders on the western boundary of Swaziland and south of the Nywenepishi River. The topography consists of high mountains, with steep cliffs, cut out by a number of rivers and smaller streams crossing the area.

The geology of the area is quite complex, with basalt in the northern section, quartzite in the southern section and flanked on the eastern and western sides by gabbro and dolerite respectively. The original vegetation is classified as North-eastern Mountain Grassland, which have been impacted on in large areas due to agricultural and forestry activities.

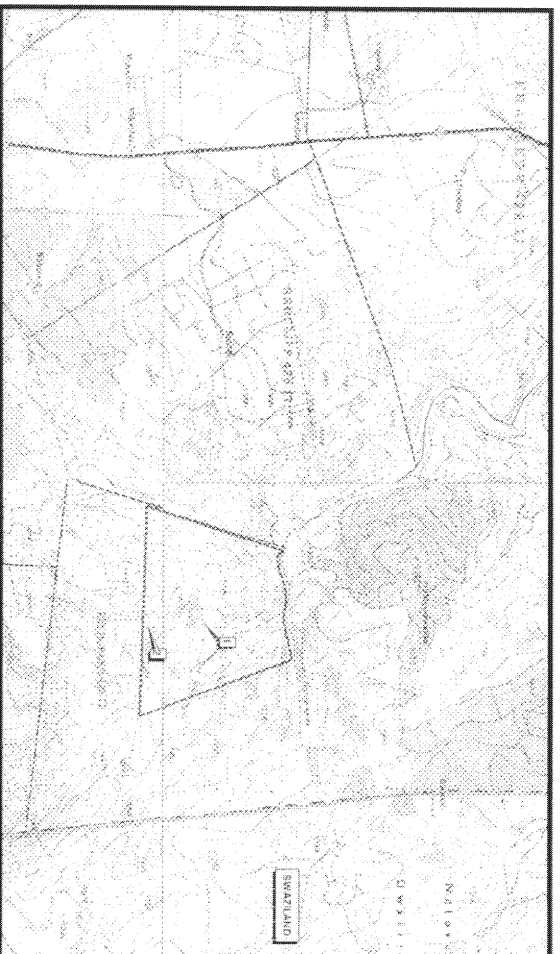


Figure 1, showing the location of the study area and the various identified sites.

7. DISCUSSION

A number of objects and sites were identified and will be described in a chronological approach.

7.1 Stone Age

Stone tools were noticed in some sections of the survey area. These consist of tools, flakes and cores dating to the Middle Stone Age, and possibly a few dating to the Late Stone Age.

However, as it is all surface material, it is not in its original context any more and therefore has little significance.

7.2 Iron Age

A small piece of pottery was found near the river. Unfortunately, as it has no diagnostic features, it cannot be identified or dated. No other features could be identified in the vicinity. It is possible that it washed down from higher up the slope of the mountain.

Some slag derived from iron smelting activities was exposed in an area where a road was made. No sign of the furnace or other related objects could be found in the vicinity and it is possible that most of the remains was destroyed when the road was made. Nevertheless, it remains an interesting find as it raises a number of questions as to when, where and by whom the iron was smelted.

7.3 Historic period

One feature, very similar to a mine adit, is located on the southern border of the proposed development area. This consists of a horizontal trench dug into an outcrop for approximately 5 metres. No other sites or features can be related to this feature and no information exists as to what possible mineral could be prospected for in this area. However, at a guess it could have been for gold.

It is also possible that this feature might be linked to the Iron Age, although no evidence to confirm that could be found. In that case, it might have been to mine red ochre

There is a small circular structure of stone, approximately 1,0 metre in diameter, located about 75 metres to the north of the adit. However, it is impossible to determine if there is a link between the two features

8. IDENTIFICATION OF RISK SOURCES

The following project actions may impact negatively on archaeological sites and other sites of cultural importance. The actions are most likely to occur during the construction as well as post construction phase of the proposed project.

- Road making, borrow pits and other such activities might expose as yet unknown sites.
- Construction of the different housing units and their infrastructure might expose as yet unknown sites.
- Curious residents may remove objects from the identified sites.

9. RECOMMENDATIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the boundaries of the area in which it is proposed to develop the lodge, housing estate and its infrastructure.

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

- The two identified sites should be avoided and development should not take place on them. A practical way in which to deal with this is to determine a buffer zone, with a radius of 50 metres by using the co-ordinates given in Appendix 2 as centre point, and treat these areas as no-go areas for development purposes.
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10. REFERENCES

10.1 Data bases

Archaeological Data Recording Centre, National Cultural History Museum, Pretoria.
Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

10.2 Literature

- Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.
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- Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.
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- Richardson, D. 2001. *Historic sites of South Africa*. Cape Town: Struik Publishers.
- 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. 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.
- ### 10.3 Maps
- 1: 50 000 Topocadastral maps – 2630DB, 2630DC, 2630DD

11. 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

Recommended management action:

For each impact, the recommended practically attainable mitigation actions that would result in a measurable reduction of the impacts, 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 that 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.]

Map datum used: Hartbeeshoek 94 (WGS84).

1. Site number: 2630DB4

Location: Evergreen 425IT: S 26.74508; E 30.76889

Description: Small scattering of iron smelting slag.

Discussion: This site should be avoided. A practical way in which to deal with this is to determine a buffer zone, with a radius of 50 metres by using the co-ordinates given above as centre point, and treat these areas as no-go areas for development purposes.

Significance of impact: Low

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

Legal requirements: None

2. Site number: 2630DD2

Location: Evergreen 425IT: S 26.75242; E 30.76942

Description: Trench excavated into the site of the mountain. It probably was a prospecting adit.

Discussion: This site should be avoided. A practical way in which to deal with this is to determine a buffer zone, with a radius of 50 metres by using the co-ordinates given above as centre point, and treat these areas as no-go areas for development purposes.

Significance of impact: Low

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

Legal requirements: None

²² 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

ADRC - Archaeological Data Recording Centre

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

PHRA – Provincial Heritage Resources Agency

SAHRA - South African Heritage Resources Agency