

Comprehensive and Professional Solutions for all Heritage Related Matters

CK 2006/014630/23

VAT NO.: 4360226270

PHASE 1 HIA REPORT FOR PROPOSED COMMERCIAL DEVELOPMENT ON KYALAMI AGRICULTURAL HOLDINGS NO.3 KYALAMI, GAUTENG

For:

EARTH TIES (ENVIRONMENTAL SERVICES(PTY) LTD

REPORT: APAC017/23

by:

A.J. Pelser Accredited member of ASAPA

March 2017

P.O.BOX73703 LYNNWOOD RIDGE

0040

Tel: 083 459 3091 Fax: 086 695 7247

Email: apac.heritage@gmail.com

Member: AJ Pelser BA (UNISA), BA (Hons) (Archaeology), MA (Archaeology) [WITS]

©Copyright APELSER ARCHAEOLOGICAL CONSULTING

The information contained in this report is the sole intellectual property of APELSER Archaeological Consulting. It may only be used for the purposes it was commissioned for by the client.

DISCLAIMER:

Although all efforts are made to identify all sites of cultural heritage (archaeological and historical) significance during an assessment of study areas, the nature of archaeological and historical sites are as such that it is always possible that hidden or subterranean sites, features or objects could be overlooked during the study. APELSER Archaeological Consulting can't be held liable for such oversights or for costs incurred as a result thereof.

Clients & Developers should not continue with any development actionsuntil SAHRA or one of its subsidiary bodies has provided final comments on this report. Submitting the report to SAHRA is the responsibility of the Client unless required of the Heritage Specialist as part of their appointment and Terms of Reference

SUMMARY

APelser Archaeological Consulting (APAC) was appointed by EarthTies Environmental Services (Pty) Ltd to conduct a Phase 1 HIA onHolding 3 of Kyalami Agricultural Holdings, located in Kyalami, for proposed Commercial Development.

Background research indicates that there are cultural heritage (archaeological & historical) sites and features in the larger geographical area, although nothing is known for the specific area and this land parcel. The assessment of the specific study area recorded No sites, features or objects of cultural heritage origin or significance. The report discusses the results of both the background research and physical survey, and provides recommendations on the way forward.

Based on the background study and physical assessment it is recommended that the proposed development be allowed to continue, taking into consideration the recommendations put forward at the end of the report.

CONTENTS

	page
SUMMARY	3
CONTENTS	4
1. INTRODUCTION	5
2. TERMS OF REFERENCE	5
3. LEGLISLATIVE REQUIREMENTS	5
4. METHODOLOGY	8
5. DESCRIPTION OF THE AREA	9
6. DISCUSSION	11
7. CONCLUSIONS AND RECOMMENDATIONS	21
8. REFERENCES	22
APPENDIX A – DEFINITION OF TERMS	23
APPENDIX B – DEFINITION/ STATEMENT OF SIGNIFICANCE	24
APPENDIX C – SIGNIFICANCE AND FIELD RATING	25
APPENDIX D – PROTECTION OF HERITAGE RESOURCES	26
APPENDIX E – HERITAGE MANAGEMENT IMPACT ASSESSMENT PHASES	27

1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by EarthTies Environmental Services (Pty) Ltd to conduct a Phase 1 HIA on Holding 3 of Kyalami Agricultural Holdings, located in Kyalami, for proposed Commercial Development. The subject property, Holding 3, Kyalami Agricultural Holdings, was created in 1947 as part of the establishment of Kyalami Agricultural Holdings on Portion 63 (Portion of Portion called Beaulieu) of Witpoort 406 JR as indicated on General Plan S.G. No. 480/47, and which general plan was approved on 4 September 1947.

Background research indicates that there are cultural heritage (archaeological & historical) sites and features in the larger geographical area, although nothing is known for the specific area and this land parcel. The assessment of the specific study area recorded No sites, features or objects of cultural heritage origin or significance.

The client indicated the location and boundaries of the study area nd the assessment concentrated on this portion.

2. TERMS OF REFERENCE

The Terms of Reference for the study were to:

- 1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon bythe proposed development;
- 2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
- 3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
- 4. Propose suitable mitigation measures to minimize possible negative impacts on the culturalresources;
- 5. Review applicable legislative requirements;

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

3.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

a. Archaeological artifacts, structures and sites older than 100 years

- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

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

A 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 the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of the Act deals with archaeology, palaeontology and meteorites. It states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. 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.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. 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.

Human remains that are less than 60 years old are subject to provisions of the Human TissueAct (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 (i.e. where the graves are located and where they are to be relocated to) 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).

3.2 The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

4. METHODOLOGY

4.1 Survey of literature

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

4.2 Field survey

The field assessment section of the study was conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed.

4.3 Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in thebibliography.

4.4 Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The study area is located on Holding3, Kyalami Agricultural Holdings, in Kyalami, Gauteng. The subject property, Holding 3, Kyalami Agricultural Holdings, was created in 1947 as part of the establishment of Kyalami Agricultural Holdings on Portion 63 (Portion of Portion called Beaulieu) of Witpoort 406 JR as indicated on General Plan S.G. No. 480/47, and which general plan was approved on 4 September 1947.

The larger study area has been extensively disturbed and developed in the recent past, with current businesses and associated structures and a number of fairly modern homesteads located on it. It is surrounded by other recent urban residential and commercial/industrial developments as well. If any sites, features or material of culturalheritage (archaeological and/or historical) origin or significance did exist here in the past it would have been disturbed or destroyed as a result. The study area is also completely fenced and walled-in already.

The topography of the area is flat with no rocky outcrops and/or low ridges present. Dense grass and other vegetation (trees) cover did hamper the assessment to some extent with visibility made difficult. Most of the homesteads/residences in the study area are also currently inhabited and as a result access could not be gained. However, as mentioned earlier, most of these seem fairly modern (less than 60 years of age).

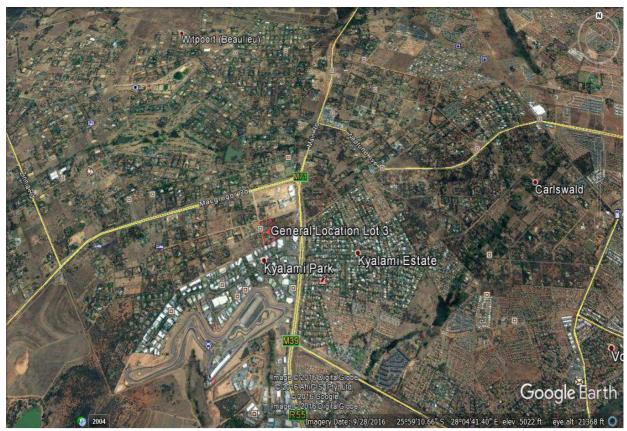


Fig.1: General location of study area in red polygon (Google Earth 2016 – Image date 9/28/2016).



Fig.2: Closer view of study area in red (Google Earth 2016 – Image date 9/24/2016).



Fig.3: A view showing a portion of the study area. Note the trees.



Fig.4: A view showing the walled nature of a section of the study area and proposed development.

6. DISCUSSION

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago Middle Stone Age (MSA) less than 300 000 – 20 000 years ago

Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

A number of Stone Age sites are known to occur in the larger geographical area, including the Glenferness Late Stone Age site, a LSA site called Pietkloof, a MSA site at Uitkomst and a LSA site on Zevenfontein, dating to around 12 000 – 8 000 BP (Before Present)[Berg 1999; 4; 94). No Stone Age sites, features or objects were identified during the survey, but care should be taken during the construction of the sewer outfall pipeline that no Stone Age sites are accidentally destroyed or disturbed. If any Stone Age artifacts are to be found in the areathen it would more than likely be single, out of context, stone tools. Urbanization over thelast 150 years or so would have destroyed any evidence if indeed it did exist.

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

```
Early Iron Age (EIA) 200 – 1000 A.D
Late Iron Age (LIA) 1000 – 1850 A.D.
```

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

```
Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.
```

No Iron Age sites, features or objects were identified during the survey in the area. If any did exist here in the past it would most likely have been disturbed extensively or completely destroyed during the recent past through developments such as the roads, Power lines, golf courses, various residential developments and agricultural activities. The closest known Late Iron Age sites are located at Melville Koppies and Bruma Lake (Berg 1999: 7).

No Iron Age occurrences were identified in the study area during the assessment

The first Europeans to move through the area, or in close proximity to it, was the group of hunter and traveler Cornwallis Harris in 1836, followed by missionary David Livingstone in 1847 (Berg 1999: 13), followed by the Voortrekkers and others from the 1850's onwards. The Kyalami and Glenferness Agricultural Holdings were established on existing farms (such as **Witpoort 406 JR** and Zevenfontein 407 JR during the late 1940's (De Jong: Pers. Comm. 2011). During the Anglo-Boer War (1899-1902) the area also saw action, with battles at Doornkop and Modderfontein, while the British march between February and September 1900, on their way to capture Johannesburg and Pretoria also moved through the area. At Olifantsfontein there was a concentration camp for black people (Berg 1999: 51; 54).

The oldest map for Witpoort that could be obtained from the Chief Surveyor General's database (www.csg.dla.gov.za) dates to 1897. The original description of the applicable land area was a Portion 63 (a portion of a Portion called Beaulieu) of the Farm Witpoort 551

(Diagram 493/1897). It was located in the District of Pretoria and Ward of Witwatersrand of the then Z.A.R. It was surveyed for one Adolph Christiaan Ellis in June 1896. In 1947 the land area received a new description, and became known as Portion 63 (a portion of Portion 4) of the Farm Witpoort 406 JR (Diagram A478/1947). No historical sites or features could be identified on these maps however.

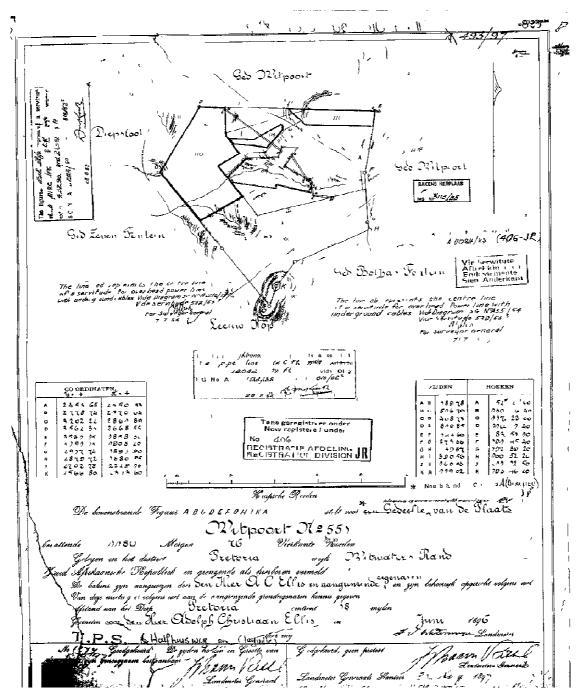


Fig.5: 1897 map of the farm Witpoort 551/406JR (courtesy EarthTies &www.csg.dla.gov.za).

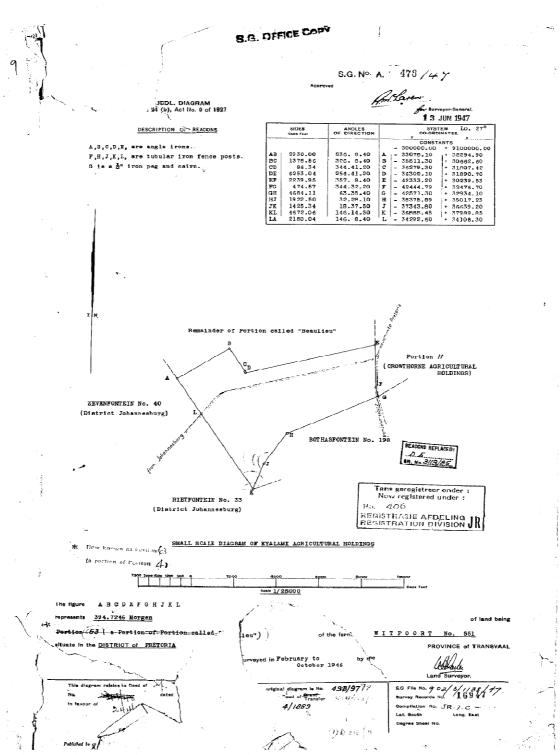


Fig.6: 1947 map of the study area (courtesy EarthTies and www.csg.dla.gov.za).

Study Area Assessment

The assessment of the study area found a number of homesteads present in the area, with most currently still inhabited. Most could therefore not be accessed as a result. One of the larger ones was however uninhabited and could be assessed. This one, and the others, however seem to be fairly recent in age (1960's to more recent) and therefore not older than 60 years of age and/or unique.

No other cultural heritage features or remains (archaeological) were identified in the area during the assessment.

The proposed development – from a Cultural Heritage point of view – can therefore be allowed to continue. It is however recommended that the consulting of an Architectural Historian be considered to assess the homesteads in the area prior to their demolition for possible significance.



Fig.7: One of the smaller homesteads in the area.



Fig.8: Another of the more modern homesteads.



Fig.9: A smaller structure located here.



Fig.10: The outside of a further homestead.



Fig.11: Partial view of outside of one of the larger homesteads.



Fig.12: The garages of the above homestead.



Fig.13: The front view of the homestead.



Fig.14: The swimming pool and section of garden of this large homestead.



Fig.15: The modern fireplace in the homestead.



Fig.16: Modern flooring.



Fig.17: Partial view of the modern kitchen of this homestead.



Fig.18: Aerial view of study area showing homesteads circled in blue (Google Earth 2016 – Image date 9/24/2016).

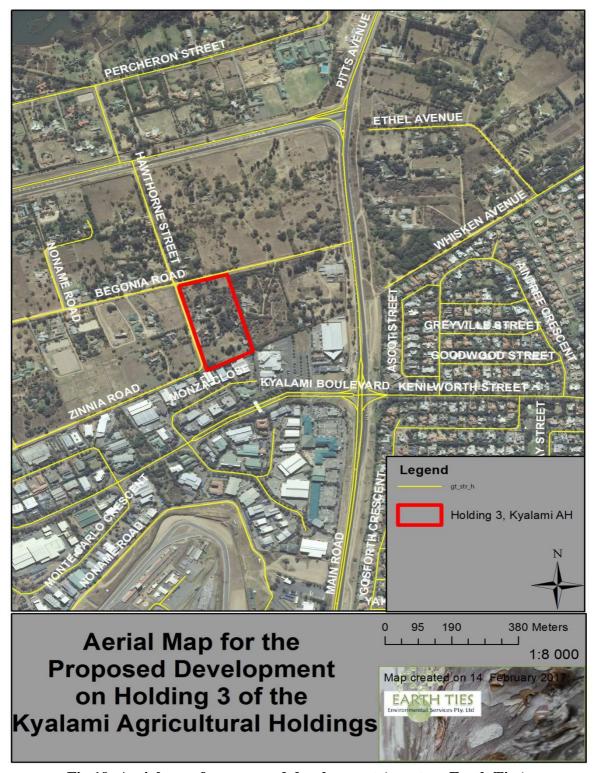


Fig.19: Aerial map for proposed development (courtesy Earth Ties).

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Phase 1 HIA on Holding 3 of Kyalami Agricultural Holdings, located in Kyalami, was conducted successfully.

Background research indicates that there are cultural heritage (archaeological & historical) sites and features in the larger geographical area, although nothing is known for the specific area and this land parcel.

The assessment of the study area found a number of homesteads present in the area, with most currently still inhabited. Most could therefore not be accessed as a result. One of the larger ones was however uninhabited and could be assessed. This one, and the others, however seem to be fairly recent in age (1960's to more recent) and therefore not older than 60 years of age and/or unique.

No other cultural heritage features or remains (archaeological) were identified in the area during the assessment. It is however recommended that the consulting of an Architectural Historian be considered to assess the homesteads in the area prior to their demolition for possible cultural heritage significance.

Finally, from a Cultural Heritage point of view the development should therefore be allowed to continue. The subterranean presence of archaeological or historical sites, features or objects is however always a possibility. Should any be uncovered during the development process an archaeologist should be called in to investigate and recommend on the best way forward. The presence of unknown and unmarked graves should also always be kept in mind.

8. REFERENCES

Aerial views of study area location: Google Earth 2016.

Aerial Map of proposed development: Earth Ties Environmental Services (Pty) Ltd.

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die viernoordelike provinsies**. Pretoria: J.L. van Schaik.

Huffman, T.N. 2007. Handbook to the Iron Age: **The Archaeology of Pre-Colonial FarmingSocieties in Southern Africa**. Scotsville: University of KwaZulu-Natal Press.

Knudson, S.J. 1978. **Culture in retrospect**. Chicago: Rand McNally College Publishing Company.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. **South African and Lesotho Stone Age Sequence Updated (I).** South African Archaeological Bulletin 67 (195): 120–144, 2012.

Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

Chief Surveyor General Database (www.csg.dla.gov.za): Diagrams 493/1897&A478/1947.

APPENDIX A DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site inconjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance inhistory.

Aestetic value: Important in exhibiting particular aesthetic characteristics valued by acommunity or cultural group.

Scientific value: Potential to yield information that will contribute to an understanding ofnatural or cultural history or is important in demonstrating a high degreeof creative or technical achievement of a particular period

Social value: Have a strong or special association with a particular community or ultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of natural orcultural heritage.

APPENDIX C SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low: A cultural object being found out of context, not being part of a site or withoutany related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number offactors, such as date and frequency. Also any important object found out ofcontext.
- High: Any site, structure or feature regarded as important because of its age oruniqueness. Graves are always categorized as of a high importance. Also anyimportant object found within a specific context.

Heritage significance:

- Grade I: Heritage resources with exceptional qualities to the extent that they are ofnational significance
- Grade II: Heritage resources with qualities giving it provincial or regional importancealthough it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not bemitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states Structures – Older than 60 years Archaeology, palaeontology and meteorites Burial grounds and graves Public monuments and memorials

APPENDIX E HERITAGE IMPACT ASSESSMENT PHASES

- 1. Pre-assessment or Scoping Phase Establishment of the scope of the project and termsof reference.
- 2. Baseline Assessment Establishment of a broad framework of the potential heritage of an area.
- 3. Phase I Impact Assessment Identifying sites, assess their significance, makecomments on the impact of the development and makes recommendations formitigation or conservation.
- 4. Letter of recommendation for exemption If there is no likelihood that any sites willbe impacted.
- 5. Phase II Mitigation or Rescue Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that maybe lost.
- 6. Phase III Management Plan For rare cases where sites are so important that development cannot be allowed.