

Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

#### A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED ALKMAAR INDUSTRAIL DEVELOPMENT, MPUMALANGA PROVINCE

For:

Aurecon PO Box3135 Nelspruit 1200

#### REPORT: AE01256V

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# SUMMARY

Archaetnos cc was requested by Aurecon to conduct a cultural heritage impact assessment for a proposed new industrial development at the town of Alkmaar. This is close to Nelspruit in the Mpumalanga Province.

A survey of the available literature was undertaken in order to obtain background information regarding the area. This was followed by the field survey which was conducted according to generally accepted HIA practices, aimed at locating all possible objects, sites and features of cultural significance in the area of the proposed development.

During the survey no sites of cultural heritage significance was located in the area to be developed. The entire area has been disturbed by previous agricultural activities and therefore finding no heritage sites, is no surprise. The development may therefore continue.

It should be noted however that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Care should therefore be taken when the development commences that if any of these are discovered, a qualified archaeologist be called in to investigate.

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## 1. INTRODUCTION

Archaetnos cc was requested by Aurecon to conduct a cultural heritage impact assessment for a proposed industrial development at the town of Alkmaar. The planned site is located on the farm Alkmaar 286 JT. This is approximately 16km to the west of Nelspruit in the Mpumalanga Province (Figure 1-3).

The client indicated the area where the proposed development is to take place. The field survey was confined to this area, which has a size of 32.5 Ha.

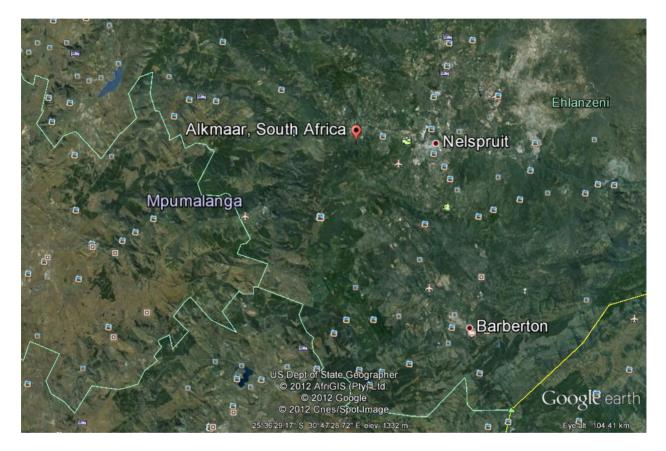


Figure 1 Location of the town of Alkmaar in relation to Nelspruit in the Mpumalanga Province. North reference is to the top of the map.

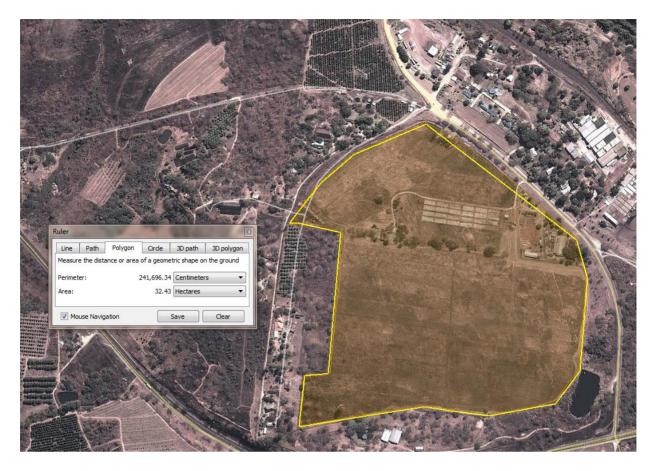


Figure 2 Location of the surveyed area (yellow shading). North reference is to the top.

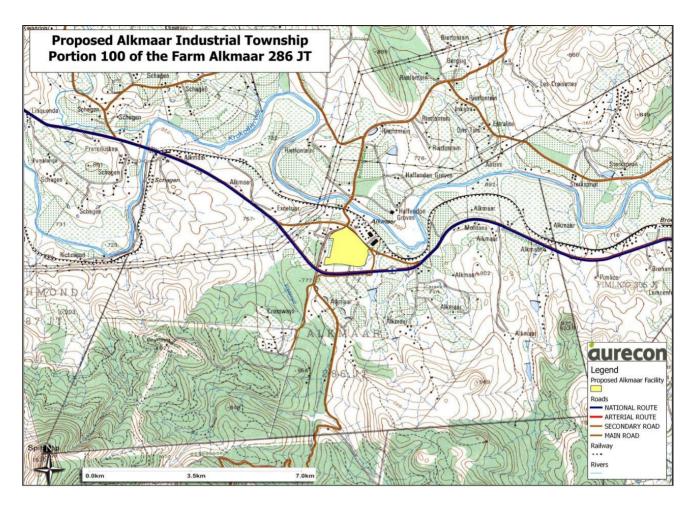


Figure 3 Location of the site (yellow marker).

# 2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

- 1. Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
- 2. Study background information on the area to be developed.
- 3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
- 4. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 5. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
- 6. Review applicable legislative requirements.

# 3. CONDITIONS & ASSUMPTIONS

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

- 1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
- 2. The significance of the sites, structures 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. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
- 3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix C).
- 4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
- 5. All recommendations are made with full cognizance of the relevant legislation.
- 6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. Developers should however note that the report should make it clear how to handle any other finds that might occur. In this case the grass cover within the surveyed area was very dense which affected archaeological visibility for small finds.

### 4. 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).

### 4.1 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 or scientific or technological value.

The national estate (see Appendix D) 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. Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, 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 only looks at archaeological resources. The different phases during the HIA process are described in Appendix E. 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  $5\ 000\text{m}^2$  or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding  $10\ 000\ \text{m}^2$
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

### <u>Structures</u>

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 this act deals with archaeology, palaeontology and meteorites. The act 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 paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological 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 paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological 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.

### <u>Human remains</u>

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.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

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 (i.e. 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)**.

### 4.2 The National Environmental Management Act

This act (Act 107 of 1998) 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.

# 5. THE INTERNATIONAL FINANCE CORPORATIONS' PERFORMANCE STANDARD FOR CULTURAL HERITAGE

This standard recognizes the importance of cultural heritage for current and future generations. It aims to ensure that clients protect cultural heritage in the course of their project activities.

This is done by clients abiding to the law and having heritage surveys done in order to identify and protect cultural heritage resources via field studies and the documentation of such resources. These need to be done by competent professionals (e.g. archaeologists and cultural historians). Possible chance finds, encountered during the project development, also needs to be managed by not disturbing it and by having it assessed by professionals.

Impacts on the cultural heritage should be minimized. This include the possible maintenance of such sites in situ, or when impossible, the restoration of the functionality of the cultural heritage in a different location. When cultural historical and archaeological artifacts and structures need to be removed is should be done by professionals and by abiding to the applicable legislation. The removal of cultural heritage resources may however only be considered if there are no technically or financially feasible alternatives. In considering the removal of cultural resources, it should be outweighed by the benefits of the overall project to the effected communities. Again professionals should carry out the work and adhere to the best available techniques.

Consultation with affected communities should be engaged in. This entails that access to such communities should be granted to their cultural heritage if this is applicable. Compensation for the loss of cultural heritage should only be given in extra-ordinary circumstances.

Critical cultural heritage may not be impacted on. Professionals should be used to advise on the assessment and protection thereof. Utilization of cultural heritage resources should always be done in consultation with the effected communities in order to be consistent with their customs and traditions and to come to agreements with relation to possible equitable sharing of benefits from commercialization.

# 6. METHODOLOGY

### **6.1** Survey of literature

A survey of literature was undertaken in order to obtain background information regarding the area. Sources consulted in this regard are indicated in the bibliography.

# 6.2 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. One regularly looks a bit wider than the demarcated area, as the surrounding context needs to be taken into consideration.

If required, the location/position of any site was determined by means of a Global Positioning System (GPS)<sup>1</sup>, while photographs were also taken where needed. The survey was undertaken by a physical survey via off-road vehicle and on foot (Figure 4). Nine hours were spent in the field.

### 6.3 Oral histories

People from local communities are 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 the bibliography.

### 6.4 Documentation

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of the Global Positioning System (GPS). The

<sup>&</sup>lt;sup>1</sup> A Garmin Oregon 550 with an accuracy factor of a few meters.

information was added to the description in order to facilitate the identification of each locality.



Figure 4 GPS track of the surveyed area<sup>2</sup>. North reference is to the top.

6.5 Evaluation of Heritage sites

The evaluation of heritage sites is done by giving a field rating of each (see Appendix C) using the following criteria:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Uniqueness of the site and
- Potential to answer present research questions.

<sup>&</sup>lt;sup>2</sup> As the vegetation cover, although dense was not high and the area clearly disturbed, it was possible to see possible features as far away as 500m.

# 7. DESCRIPTION OF THE AREA

The farm/ town of Alkmaar is situated to the west of Nelspruit. This is in the Mpumalanga Province. The area that was investigated has been totally disturbed by past human interventions, namely agriculture.

The vegetation mostly consists of pioneer species, mainly grass and weeds. Although these are dense it does not grow very high (Figure 5-7). This means that the archaeological visibility is good for identifying medium to large features, but bad for identification of small objects. Old ploughed furrows could clearly be seen throughout the area.

In the northern centre of the surveyed area the cement remains of either flower beds or vegetable gardens are visible (Figure 8). These are even visible on the Google image (see Figure 2). Buildings and the remains of buildings, some still in a good condition, are found to the north (Figure 9). These are all younger than 60 years.

No water courses are found nearby. A dam is however situated just outside and to the southeast of the surveyed are. The topography has a medium slope which falls from west to east towards the dam.



Figure 5 General view of the surveyed area.



Figure 6 Another view of the surveyed area showing weed growth.



Figure 7 Old plough furrows are visible on this photograph.



Figure 8 Remains of flower beds/ vegetable gardens in the surveyed area.



Figure 9 Some of the buildings in the surveyed area.

## 8. HISTORICAL CONTEXT

No sites of cultural heritage significance were located in the surveyed area. However, in order to enable the reader to understand the history of the broader geographical area as well as finds that could be unearthed during construction activities, it is necessary to give a background regarding the different phases of human history.

### 8.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is, however, important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million  $-150\ 000$  years ago Middle Stone Age (MSA)  $150\ 000 - 30\ 000$  years ago Late Stone Age (LSA)  $40\ 000$  years ago -1850 - A.D.

No Stone Age sites are indicated close to Alkmaar/ Nelspruit on a map contained in a historical atlas of this area. The closest known Stone Age occurrence is that of Late Stone Age sites close to Barberton (Bergh 1999: 4). However many rock art sites are shown around Nelspruit (Bergh 1999: 5). Rock art is mostly associated with the Late Stone Age people.

The few sites indicated should however rather be seen as a lack of research in the area and not as an indication that such features does not occur. Although there is no water course in the surveyed area, the relative close vicinity of water sources and ample grazing would have made it a prime spot for hunting and obtaining water during the past. Therefore one may assume that Stone Age people probably would have moved through the area. They probably would have stayed in the nearby mountains where shelter would have been available.

### 8.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (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.

The nearest Early Iron Age site to the surveyed area is the sites at Lydenburg and Klingbeil to the north-east of the surveyed area. A large number of Late Iron Age sites have previously

been identified in an area roughly stretching between Lydenburg, Nelspruit and Badplaas (Bergh 1999: 6-7).

The good grazing and access water in the area would have provided a good environment for Iron Age people. They would therefore most likely have utilized the area. Iron Age people probably only resided nearby, closer to the mountains.

### 8.3 Historical Age

The Historical Age started with the first recorded oral histories in the area. It includes the inmigration of people that were able to read and write. None of the early trade routes passed along Alkmaar or Nelspruit (Bergh 1999: 9).

At the beginning of the 19<sup>th</sup> Century some Sotho groups, the Pai and Pulana lived to the north of the Crocodile River and the Swazi to the south thereof (Bergh 1999: 10). During the Difaquane they fled to the north from the Ndebele of Mzilikazi and the Swazi moved into this area (Bergh 1999: 11).

White farmers only settled here after 1845 (Bergh 1999: 16, 130). Many grave yards are known from the wider geographical area (Archaetnos Database). Remains from this era may have been expected, but due to the disturbance of the surveyed area, nothing was found.

# 9. DISCUSSION OF SITES FOUND DURING THE SURVEY

No sites of cultural importance were identified.

### **10. CONCLUSION AND RECOMMENDATIONS**

The survey of the indicated area was completed successfully.

The following is recommended:

- The proposed development may continue.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Care should therefore be taken when development commences that if any of these are discovered, a qualified archaeologist be called in to investigate the occurrence.

### **11. REFERENCES**

Archaetnos database.

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

- Coertze, P.J. & Coertze, R.D. 1996. Verklarende vakwoordeboek vir Antropologie en Argeologie. Pretoria: R.D. Coertze.
- Huffman, T.N. 2007. Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa. Scotsville: University of KwaZulu-Natal Press.
- International Finance Corporation. 2012. Overview of performance standards on Environmental and Social Sustainability. Performance Standard 8, Cultural Heritage. World Bank Group.
- Knudson, S.J. 1978. Culture in retrospect. Chicago: Rand McNally College Publishing Company.
- Korsman, S.A. & Meyer, A. 1999. Die Steentydperk en rotskuns. Bergh, J.S. (red.). Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Pretoria: J.L. van Schaik.
- Republic of South Africa. 1980. Ordinance on Excavations (**Ordinance no. 12 of 1980**). The Government Printer: Pretoria.
- Republic of South Africa. 1983. **Human Tissue Act** (Act 65 of 1983). The Government Printer: Pretoria.
- 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.
- Van der Ryst, M.M. & Meyer, A. 1999. Die Ystertydperk. Bergh, J.S. (red.). Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Pretoria: J.L. van Schaik.

#### **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 in conjunction 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 in history.	
Aestetic value:	Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.	
Scientific value:	Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period	
Social value:	Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.	
Rarity:	Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.	
Representivity:	Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.	

#### **APPENDIX C**

## SIGNIFICANCE AND FIELD RATING:

# **Cultural significance:**

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

#### Heritage significance:

- Grade I	Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II	Heritage resources with qualities giving it provincial or regional importance although 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 be
		mitigated (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 terms of 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, make comments on the impact of the development and makes recommendations for mitigation or conservation.
- 4. Letter of recommendation for exemption if there is no likelihood that any sites will be 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 may be lost.

Phase III management plan – for rare cases where sites are so important that development cannot be allowed.