



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**A FINAL REPORT ON A HERITAGE IMPACT ASSESSMENT FOR THE
PROPOSED DE ANGELUS ESTATES DEVELOPMENT, NEAR VAN REENEN,
WITHIN THE FREE STATE AND KWA-ZULU NATAL PROVINCES**

For:

***TAMBHURA PROPERTY INVESTMENTS
P.O.BOX 30940
KYLAMI
1684***

REPORT: AE01209P

by:

***A.J. Pelser
Accredited member of ASAPA***

March 2012

Archaetnos
P.O. Box 55
GROENKLOOF
0027
Tel: 083 291 6104/**083 459 3091**
Fax: 086 520 0673
E-mail: **antonp21@yahoo.com**

Members: AC van Vollenhoven BA, BA (Hons), DTO, NDM, MA (Archaeology) [UP], MA (Culture History) [US], DPhil (Archaeology) [UP], Man Dip [TUT], DPhil (History)[US]
AJ Pelser BA (UNISA), BA (Hons) (Archaeology), MA (Archaeology) [WITS]

©Copyright

Archaetnos

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

DISCLAIMER:

Although all possible care is taken to identify all sites of cultural importance during the survey of study areas, the nature of archaeological and historical sites are as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof.

The South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report and clients are advised not to proceed with any action before receiving these. Because the development is located within the boundaries of both the Free State and KZN provinces, Amafa (the KwaZulu Natal Heritage Authority) also need to comment.

SUMMARY

Archaetnos cc was appointed by Tambhura Property Investments, in conjunction with DWV Environmental Consulting, to conduct a Heritage Impact Assessment for the so-called De Angelus Estates Development. The development is located close to Van Reenen on portions of various farms situated both in the Free State and Kwa-Zulu Natal Provinces.

A number of sites, features and objects of varying degrees of cultural (archaeological and historical) heritage significance, dating to the more recent Historical Age, were located and recorded during the December 2011 survey of the area. The sites are discussed in more detail in this report and a number of recommendations regarding these sites are put forward at the end.

From a Cultural Heritage point of view there is no objection to the proposed development taking place, once the mitigation measures put forward in this report have been successfully implemented.

CONTENTS

| | page |
|--|------|
| SUMMARY..... | 3 |
| CONTENTS | 4 |
| 1. INTRODUCTION..... | 5 |
| 2. TERMS OF REFERENCE | 5 |
| 3. CONDITIONS AND ASSUMPTIONS | 5 |
| 4. LEGALISLATIVE REQUIREMENTS | 6 |
| 5. METHODOLOGY | 9 |
| 6. DESCRIPTION OF THE AREA | 9 |
| 7. DISCUSSION | 14 |
| 8. CONCLUSIONS AND RECOMMENDATIONS | 32 |
| 9. REFERENCES..... | 34 |
| APPENDIX A..... | 36 |
| APPENDIX B | 37 |
| APPENDIX C | 38 |
| APPENDIX D..... | 39 |

1. INTRODUCTION

Archaetnos cc was appointed by Tambhura Property Investments, in conjunction with DWV Environmental Consulting, to conduct a Heritage Impact Assessment for the so-called De Angelus Estates Development. The development is located close to Van Reenen on portions of various farms situated both in the Free State and Kwa-Zulu Natal Provinces.

A number of sites, features and objects of varying degrees of cultural (archaeological and historical) heritage significance, dating to the more recent Historical Age, were located and recorded during the December 2011 survey of the area.

The client indicated the boundaries of the area to be investigated and the survey was confined to this area.

2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located in the area of the proposed residential 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 cultural resources.
5. 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. 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 B**).
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 be found.

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 of 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. 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 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 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 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).

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

4.2 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.

5. METHODOLOGY

5.1 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.

5.2 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 (archaeological and historical) significance in the area of proposed development. If required, the location/position of any site is determined by means of a Global Positioning System (GPS), while photographs are also taken where needed. Some sites found during previous surveys were also re-visited.

The survey was undertaken largely on foot, although certain sections were traversed by vehicle.

5.3 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 the bibliography.

5.4 Documentation

All sites, objects, features and structures identified are documented according to the general minimum standards accepted by the archaeological profession. 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.

6. DESCRIPTION OF THE AREA

The development is located on Portion 1 of the farm Paulina 1516 and the farm Geluk 969 (Free State), Portion 2 and Portion 6 of 2 of the farm Nolans Volens 2384 and Portion 20 of Scotson 4128 (KZN). The development is located within the Thabo Mofutsanyane District

Municipality and the Maluti a Phofung/Harrismith Local Municipality (Free State) and within the Uthukela District Municipality and Emnabithi/Ladysmith Local Municipality (Kwa-Zulu Natal). It is situated north-east of Van Reenen, approximately 40km east of Harrismith and 55km west of Ladysmith.

The area totals around 1117.8ha, with the building footprint only 6.5ha. The rest will be managed to ensure that the natural environment is protected. The development will involve the design, construction and operation of an agri-urban estate, consisting of 6 components namely (1) De Angelus Estate, Business Management Unit (2) Lugar de Angelus, food and beverage and temporary accommodation (3) Lugar de Angelus spiritual development, training and lifestyle counseling retreat (4) Angelus Componential Education, skills development and training (5) Agri-Urban Development, Agro-Investment, De Angelus Alpacas, Pecans, Olives, Beef, dairy, organics and fresh produce and (6) Agri-Urban Development, biotechnical research, organic fertilizers and sprays.

The development will specifically entail a pecan nut and olive production unit; Alpaca Llama breeding and production unit; horticultural production unit for growth of oil-rich herbs for pharmaceutical-grade oils; fresh produce production unit (including beef and dairy) to supply the Estates and surrounds; houses to serve as accommodation for farm manager, staff and accredited trainers; International school complex and staff quarters; Office park; Houses for owners and family members involved in the development; International spiritual retreat and wellness center and associated accommodation; Two wind turbine farms; Geothermal energy application; Algal sewerage treatment plant; Recycling plant; Hiking trails. The conservation of wetlands for endangered and Red Data-listed birds will also be undertaken, while the creation of an accredited education, growth and upliftment hub is envisaged. It is believed that the development will take 10 years to reach its optimal completion and will provide work for around 800 people on a permanent and contractor basis.

The vegetation of the area falls in Acocks' Arid Sweet Bushveld vegetation group, containing a variety of vegetation types. Some of these are endangered or vulnerable and poorly or hardly protected. Invasive species such as American bramble, blue gum and black wattle are also located in the area. There are many small wetlands in the area, while a large (96ha) wetland area straddles Paulina and Geluk. There are many small streams in the area, with the Ngwenyana and Slangspruit the two large perennial streams here.

The area is mainly used of for agricultural purposes (mostly beef cattle), although some farmers grow pecan nuts. Other developments (or disturbance) in the area include low density residential developments, Powerlines, a railway line, a recently developed pipeline, cell/Telkom towers and others. However, from a cultural heritage perspective these developments would not have impacted too much on any heritage sites located in the area. There are also many rocky ridges and valleys in the area, while large erosion dongas are found throughout.

During the survey grass cover was quite dense, making visibility in terms of archaeological sites fairly difficult. Overall visibility was however quite good.

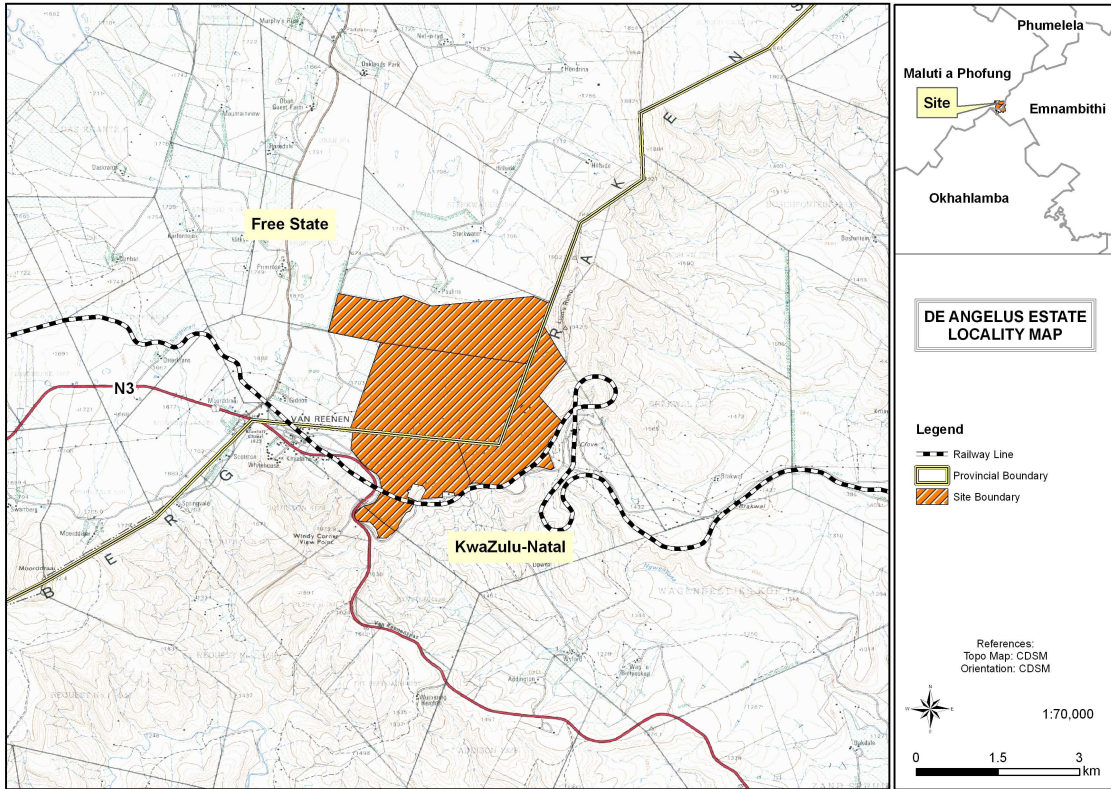


Figure 1: Location of the development area (Courtesy DWV Environmental).

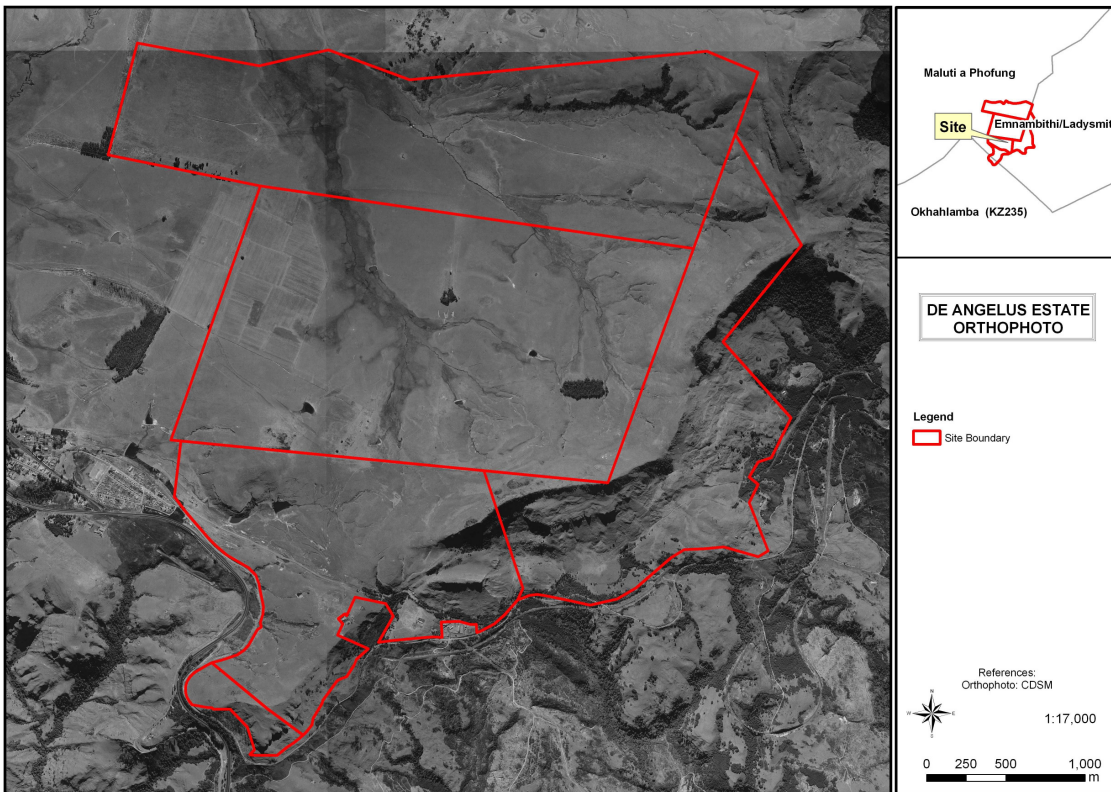


Figure 2: Ortho photo of development location (courtesy DWV Environmental).



Figure 3: General view of a section of the area.



Figure 4: Another view of the area. Note the pipeline.



Figure 5: Further view of a section of the area where the pipeline has impacted.



Figure 6: Note the hilly terrain.



Figure 7: This view shows one of the dams in the area, and a section of one of the many erosion dongas traversing the development area.

7. DISCUSSION

In order to enable the reader to understand archaeological and historical objects, features and sites that could possibly be unearthed and disturbed during development, it is necessary to give a general background regarding the different phases of human history.

7.1 Stone Age

The Early Stone Age (ESA) in South Africa dates to about 2.5 million years ago with some of the first artifacts found in the lower reaches of the Vaal River valley gravels during the early part of the 20th century. More tools from this period, known as the Oldowan, were found at Sterkfontein in the present Krugersdorp area of Gauteng, and were dated to between 2 and 1.7 mya (Deacon & Deacon 1999: 77). The Oldowan industry consists mainly of simple pebble tools and choppers. Later industries that developed are termed the Acheulian, also found and described in the Vaal River gravels. These date to about 1.4 million years ago to 250 000 years ago. The ESA have four distinct industries in South Africa, namely the Oldowan (earliest), Acheulian (large hand axes and bi-faces), Victoria West (a technique of preparing cores to produce large flakes) and the Fauresmith (noted for small bi-faces) (Deacon & Deacon 1999: 79, 86). Klipplaatdrift, Wonderboompoort and Three Rivers near Pretoria are some of these Early Stone Age sites where Acheulian stone tools were found (Mason 1962, Phillipson 2005).

The Middle Stone Age (MSA) in South Africa dates from around 250 000 years ago when the Acheulian industry was replaced by so-called flake industries (Deacon & Deacon 1999: 93). This also coincided with the emergence of anatomical modern humans in the form of *Homo heidelbergensis* or archaic *Homo sapiens* (Deacon & Deacon 1999: 90-96, Mitchell 2002: 73-77). The MSA is characterized by prepared core techniques whereby cores are prepared in order to produce various shapes and sizes of flakes and blades (Deacon & Deacon 1999: 95-

96). The MSA is spread across South Africa, with some of the most important sites located in caves and shelters on the southern coast of the Western Cape.

The Later Stone Age (LSA) is well represented throughout southern Africa and especially in the Drakensberg environment. The change from the MSA to the LSA began around 20 000 years ago, marked by a series of technological innovations. These innovations included the appearance of rock art; deliberate burials and smaller tools (Deacon & Deacon 1999: 108-109). In terms of stone tool manufacture, the LSA can be divided into industries – Smithfield, Wilton and Oakhurst. The most common found in the larger geographical area is that of Wilton (c. 4000 BP) in general, but most probably Post-Wilton (sometimes called Interior or Inland Wilton, Late Wilton or Post-Climax Wilton) (Deacon & Deacon 1999: 114-115, 119).

No Stone Age sites or objects were identified during the assessment of the area, although the many erosion dongas in the area were searched for these. Relatively dense grass cover in and around the dongas probably has something to do with this, and it's quite possible that scatters of tools and individuals objects (out of context) might be recovered in the dongas when grass cover is removed. Some recent heavy rains (prior to and during the survey) could also have resulted in the covering of exposed material by soil.

7.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce 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) 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.

Farmer archaeology (more commonly know as the Iron Age) enters the survey area at a fairly late stage. There is no evidence of Early Farmer sites in the Harrismith-Ladysmith region (eastern Free State and western Kwa-Zulu Natal). The earliest movement by Bantu-speaking farmers into the eastern Free State and western Kwa-Zulu Natal region occurred between the 15th and 18th centuries (Maggs 1976a: 307, Maggs 1976b: 320, Klatzow 1994: 9, Thorp 1996: 57). These sites are mainly associated with Sotho-speakers that entered the area from c.1500 onwards. The earliest stone walling and ceramic styles found in this area are Maggs' Type N walling and Ntsuanatsatsi pottery respectively (Maggs 1976b: 140-159, Huffman 2007: 431, 436). Moorpark walling and pottery may also be found below the escarpment into Kwa-Zulu Natal (Huffman 2007: 439-444). No Iron Age or Farmer sites or cultural material were identified during the December 2011 assessment of the area.

7.3 Historical Age

Van Reenen and the Pass have always been associated with transport. It was firstly a route for animals migrating from the Orange Free State to Kwa-Zulu Natal in winter and back again in summer. Frans Van Reenen, after whom the Pass is named, farmed at the base of Van Reenen Pass and trekked his oxen inland using the paths worn by these migrating animals. In the mid 1800's he assisted the transport riders with laying out a route for the wagons carrying supplies to the gold mines.

The area traversed by Van Reenen Pass was originally known as Underberg and there was a settlement 9 km south of the present village around Wyford where the border post was between the Orange Free State and Kwa-Zulu Natal. This was manned by Customs officials, a Dipping Officer and a Police station. There was also The Good Hope Hotel, a boarding house and two blacksmith shops.

In 1891 the railway line was opened and the present village of Van Reenen came into being as all the services were taken to the top of the Pass. The railway line was a massive engineering feat to negotiate the steep incline and involved a series of tunnels and reversing stations. The latter were later replaced by more tunnels which are the route today. A green lantern was hung at the top of the pass to signify that travelers had reached the summit as it was often very foggy. During this time, close to where the Caltex garage is today, a guard manned the border post from 6 a.m. until 6 p.m. and no movement was allowed between these hours.

The Van Reenen Hotel was built in 1892 and renamed The Green Lantern Inn in 1948. At the time of the Siege of Ladysmith in 1899 (during the Anglo-Boer War) the Van Reenen Hotel was commandeered by the British as their headquarters for the troops stationed on Gun Hill close by which gave them a commanding view of both the Orange Free State and Kwa-Zulu Natal. They also built a blockhouse, which has since been demolished. During the Second World War Van Reenen was a great tourist destination with some 4 hotels in the area. Guests arrived by train and many activities were organized such as tennis and cricket matches. The Little Church or Llandaff Oratory was built in memory of Matthew Maynard's son who was killed while trying to rescue others in a mining accident in 1925. The Moorddraai monument was erected in memory of 9 people murdered in 1865 who were transporting merchandise from Durban to Pretoria.

The above information was taken from www.drakensberg.gateway.co.za

7.4 Discussion of the various sites identified

A number of sites were identified and recorded during December 2011, mainly dating to the more recent historical time period. There could however be many other sites and material in the area that were not visible as a result of the fairly dense grass cover. This would include stone tools and low stone packed graves and other cultural material. The presence of an important palaeontological site in the area is also known, with the client providing information on this site. More detail on this site will be provided later in the report.

Site 1

The site contains 2 unidentified graves with cement dressing, and is situated close to an abandoned homestead. According to information provided by the client the graves belong to members of the Hlatshwayo family, who still lives in Van Reenen. The grave site has been demarcated and indicated as a Heritage Site. The client has ensured that the graves will not be impacted and will be kept in tact and protected.

Field Rating Grade IIIA – Local

Significance: High

GPS Location: S28.37737 E29.39141

Threats and risks: The site is located close to the proposed recycling plant and may be negatively impacted. Risks and threats could include: accidental damage caused by construction of the buildings and access routes; deliberate damage by persons working in and around the area; further damage to the site by grazing, especially cattle; uncontrolled visitor access that may result in vandalism

Recommended mitigation: Fencing the burial, with a buffer zone of at least five meters around the burial; cleaning and preservation.

Proposed Management Plan: The burial needs to be protected against any possible negative impact caused by the development activities, as well as cattle grazing. The burial site should be maintained and monitored on behalf of the absent families. Free and unrestricted access should be granted by the owners to any relative wishing to make offerings at the grave site. However, such visitors may be required to comply with any rules and regulations set out by the owners and/or management.



Figure 8: Site 1 – note the homestead close by.



Figure 9: One of the graves at Site 1.
Note the temporary barricading and Heritage Site signage.

Sites 2 - 4

This site, consisting of three “units”, is an abandoned settlement site that possibly date to the between the mid 19th and early 20th centuries. The site consists of the foundations of various square and rectangular stone-built structures (Sites 2 and 3) and the remains of a large rectangular stone enclosure, probably a cattle kraal (Site 4). Some glass and other material were recovered during the assessment. From a superficial analysis of these objects it is possible to deduct that the site date to at least the late 19th to early 20th century. Some of these are typical of material recovered from similar sites, including Anglo-Boer sites, excavated by Archaetnos in the past. The ruins could be related to some of the early farming activities in the area, and possibly to farm labourers or local black inhabitants in the area, who were removed from here at some stage. There is also a possibility of graves occurring in and around the ruins, although none were identified.

It is also possible that the site could be related to the Anglo-Boer War of 1899-1902, of which there is other evidence in the area, although this is difficult to determine at this stage. Possible trenching was identified close to the site during the field survey. The large kraal could also have been used for the horses used by the British during the Anglo-Boer War in the area.

Field Rating IV A - Generally Protected A

Significance: Medium to High. The settlement layout and architecture may also be examples of contact period between Europeans and Bantu-speaking inhabitants during the early years of farming in the area, with some research potential. If part of the Anglo-Boer War history of the area there is further historical and archaeological research potential as well. However, the site has been fairly disturbed, while robbing of stone for other building purposes across the area has taken place as well. It is therefore not in pristine condition.

GPS Location: S28.37585 E29.40188 (2 - 3) and S28.37655 E29.40228 (4)

Threats and risks: The site falls outside any proposed formal developments, although in relatively close proximity to the Estate’s Manager House. Secondary risks may include

further damage to the site by grazing cattle and uncontrolled visitor access that may result in vandalism and damage

Recommended mitigation: Although the site does not fall within any proposed construction area, some mitigation measures may be needed if any changes in the proposed development areas occur. Mitigation may include: Applying for the necessary permits from SAHRA to destroy the site; detailed mapping and recording of the structures and features; archaeological excavations and a watching brief in the event of any excavations or earth-moving taking place to monitor for the existence of burials.

Proposed management plan: The site should as far as possible be protected against any negative impacts caused by the proposed development. Should this not be possible, specialists will be required to undertake the recommended mitigation actions. Secondary impacts such as that that may be caused by grazing cattle should be minimised where possible. This could be done by erecting, and maintaining, simple wire fences around the site, in a buffer zone at least 50 m from every visible structure or feature.



Figure 10: One of the structures on Site 2.



Figure 11: Site 3 remains.



Figure 12: Close-up of one of the structures on Site 3.



Figure 13: View of the large kraal on Site 4.



Figure 14: The possible trench near Site 2 & Site 3.



Figure 15: Late 19th century glass and ceramics found during the assessment.

Site 5

This is a line of old telegraph poles that were still used to carry telephone cables until the late 1990s. The poles are made of cast iron and the makers' marks were *A & J Man & Co. Glasgow – London*. The line seems to have stretched from Van Reenen to the present petrol pump station. No information on *A & J Man & Co.* could be found as yet.

Field Rating IV C – Generally Protected C

Significance: Low to medium significance. These telegraph poles could represent some of the last remaining examples in the area and in SA in general. Further research as to their origin and early use should be undertaken.

GPS Location: S28.39065 E29.39641

Threats and risks: Vandalism and theft for scrap metal.

Recommended mitigation: A brief historical review of the poles and the placement in context of the early history of the area could be considered. Sampling for preservation.



Figure 16: One of the telegraph poles on Site 5.

Site 6 & 7

The site is situated on a low hill east of the town of Van Reenen. During the December 2011 assessment a large amount of cultural material was identified and recorded. The material includes various metal objects (tent peg, corrugated iron sheeting pieces, nails and unspent .303 cartridges [possibly Lee Enfield/Lee Metford]), ceramics, and glass. These clearly date to the late 19th/early 20th century and have a military origin as well (Anglo-Boer War). The possible remnants of a blockhouse (manifesting as depression and a soil ring wall and some stone foundations) were also identified. An old framed sketch recorded in the Green Lantern Hill in town (originally the Van Reenen Hotel used by the British during the war) confirms the existence of the British camp and fortifications here. It is a sketch by Will Saxon of the Manchester Regiment that was stationed here during the war.

The owners of the Inn also confirmed that the area where the site is located is known locally as Gun Hill. The site has clearly been damaged as a result of the implementation of the pipe line in the area.

Field Rating/Grade IIIA – Locally Protected

Significance: High. However we believe that, due to the damage caused by the pipeline, that the site should be mitigated as part of the development of the Estate.

GPS Location: S28.38148 E29.39971 (6) and S28.38128 E29.39881 (7).

Threats and risks: The sites are situated close to the Tennis and Classroom Skills areas and could therefore be impacted on even further. Secondary threats include illegal collection of surface artefacts and erosion caused by the pipeline development. The pipeline has already impacted negatively on parts of the site, resulting in the exposure of historical-archaeological material.

Recommended mitigation: The site could be developed into a tourist and/or information site based on Anglo-Boer War activities in the region. If the site is developed specialists should be consulted and the required permits be acquired. We would also recommend archaeological excavations in order to recover as much cultural material as possible, while the detailed mapping of the site should also be undertaken

Proposed management plan: A possible tourism/heritage management plan could be drafted and implemented that should take into account the archaeological and historical significance of the site.



**Figure 17: Remnants of possible blockhouse/fortification.
Note the depression and circular shape.**



Figure 18: Possible stone foundations of the blockhouse.



Figure 19: The pipeline impacted on the site already.



Figure 20: Artefacts recovered at the site. Note the unspent cartridges. These objects were found close to the possible blockhouse and was disturbed by the pipe line development.

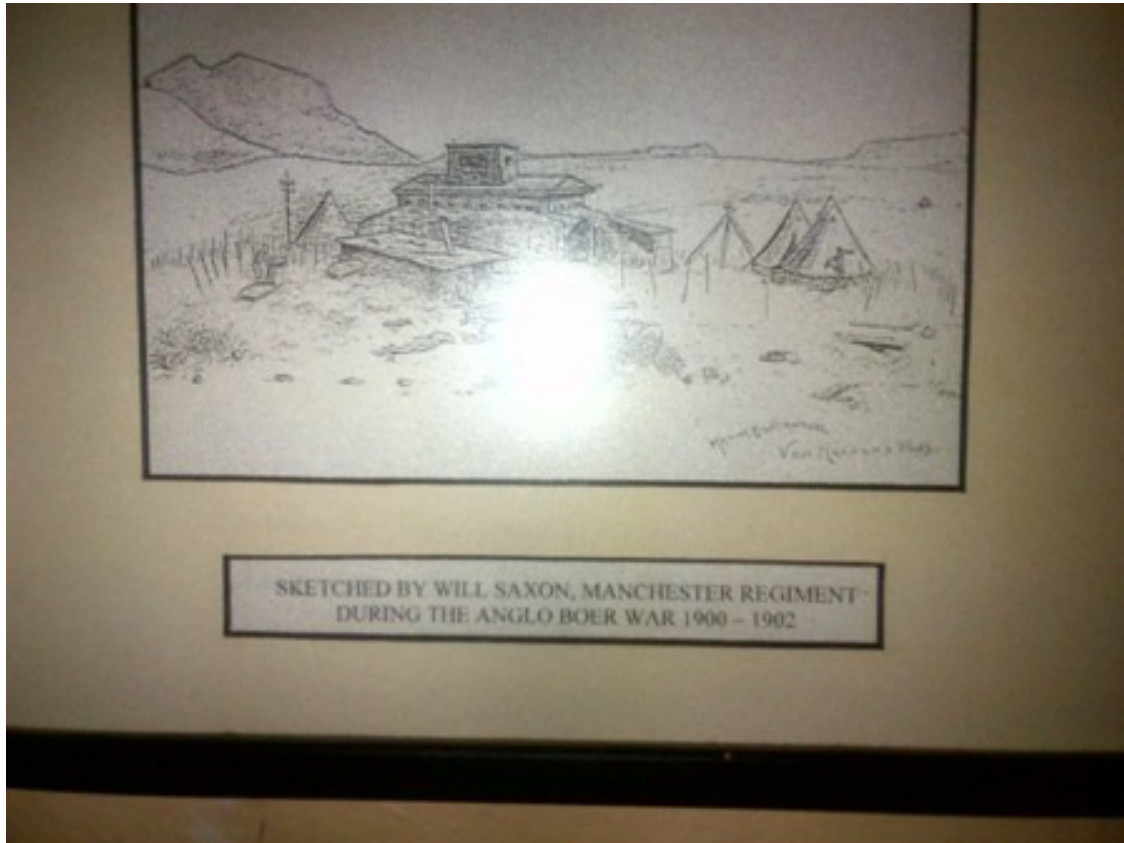


Figure 21: Picture of sketch mentioned in the discussion of the sites

Site 8

The site consists of stone walling on the crest of the hill that forms a boundary between the Free State and Kwa-Zulu Natal. The wall could have an Anglo-Boer War origin, although the walling more than likely are the remnant of an old boundary – either farm or provincial. The site is located very close to Site 9 – a site with more than likely Anglo-Boer War origins.

Field Rating IV C – Generally Protected C

Significance: Low

GPS Location: S28.38675 E29.39723

Threats and risks: None.

Recommended mitigation: None.



Figure 22: Part of the stone walling on Site 8.

Site 9

The site is located in a saddle between two hills. It consists of low stone walls approximately 5m long, forming two sides – one section to the east and one to the west. It is possible that site represent some kind of fortification (sangar/redoubt) associated with the British blockhouse and camp that was located here during the Anglo-Boer War. The site overlooks the Pass and the valley below, and has a commanding view in all directions. No cultural material was located during the assessment, and providing a date and definite function and origin of these features are tenuous at this stage

Field Rating IV B – Generally Protected B

Significance: Medium. Although the site has been damaged to a large degree, it forms part of the Anglo-Boer War history of the area. It should therefore be recorded in the event that any development takes place in the immediate vicinity of it.

GPS Location: S28.38556 E29.39783

Threats and risks: The site falls outside all formal proposed developments.

Recommended mitigation: Detailed survey, mapping and recording of the site to minimize possible negative impacts.



Figure 23: One section of walling on Site 9.

Site 10

This site is located between Van Reenen and the low cost housing village next to the access road to the area. Although it falls outside the development the developer has indicated that she would like to retain this site and incorporate it into the development (part of the access road). The site contains the remains of a late 19th/early 20th century sandstone bridge that was part of the railway line here. The site is probably unique as there are not many of these left in the region. It should therefore be preserved.

Significance: Medium to High.

GPS Location: S28.37446 E29.38528

Threats and Risks: Vandalism, general decay.

Recommended mitigation: Detailed recording and archival research. An architectural historian should be consulted to determine the significance of the structure. Should the site be retained as part of the development such an expert should also be involved in the process and a Site Management Plan should be drafted and implemented.



Figure 24: Remains of sandstone rail bridge (VR02).



Figure 25: Closer view of bridge.

Site 11

This site contains a section of a wide, stone-packed, track. It could possibly be part of an old wagon route used during the 19th and early 20th century, linking Harrismith and Ladysmith. This should however still be substantiated through thorough research. Very few sections of this route still exist due to damage caused by erosion. The site is located a few hundred meters from sites 2, 3 and 4. It could be part of the route which Frans van Reenen helped to develop during the late 1800's (See page 16 of this report)

Significance: Medium to High

GPS Location: S28.37673 E29.39957

Threats and Risks: Erosion. Falls outside any formal construction activities.

Recommended mitigation: Research, mapping. Preserve and incorporate into development as part of possible hiking trail.



Figure 26: Site 11.

Palaeontological Site

According to the client the site is located on the farm Paulina 1516, to the back of the wetlands on the farm. It contains very large pieces of fossilised tree and is possibly the remains of an ancient forest. The site was not visited or assessed during the survey, as palaeontology was outside of our scope of expertise. According to the developer this site will not be impacted on and will be left intact. There is of course a possibility that other fossils could also be present in the area.

Field Rating/Grade IIIB – Locally protected

Significance: High. The site is of palaeontological significance, and any impact should be avoided.

It is highly recommended that a palaeontological assessment be undertaken to determine the extent and significance of the site and that further recommendations be made in the resultant report.

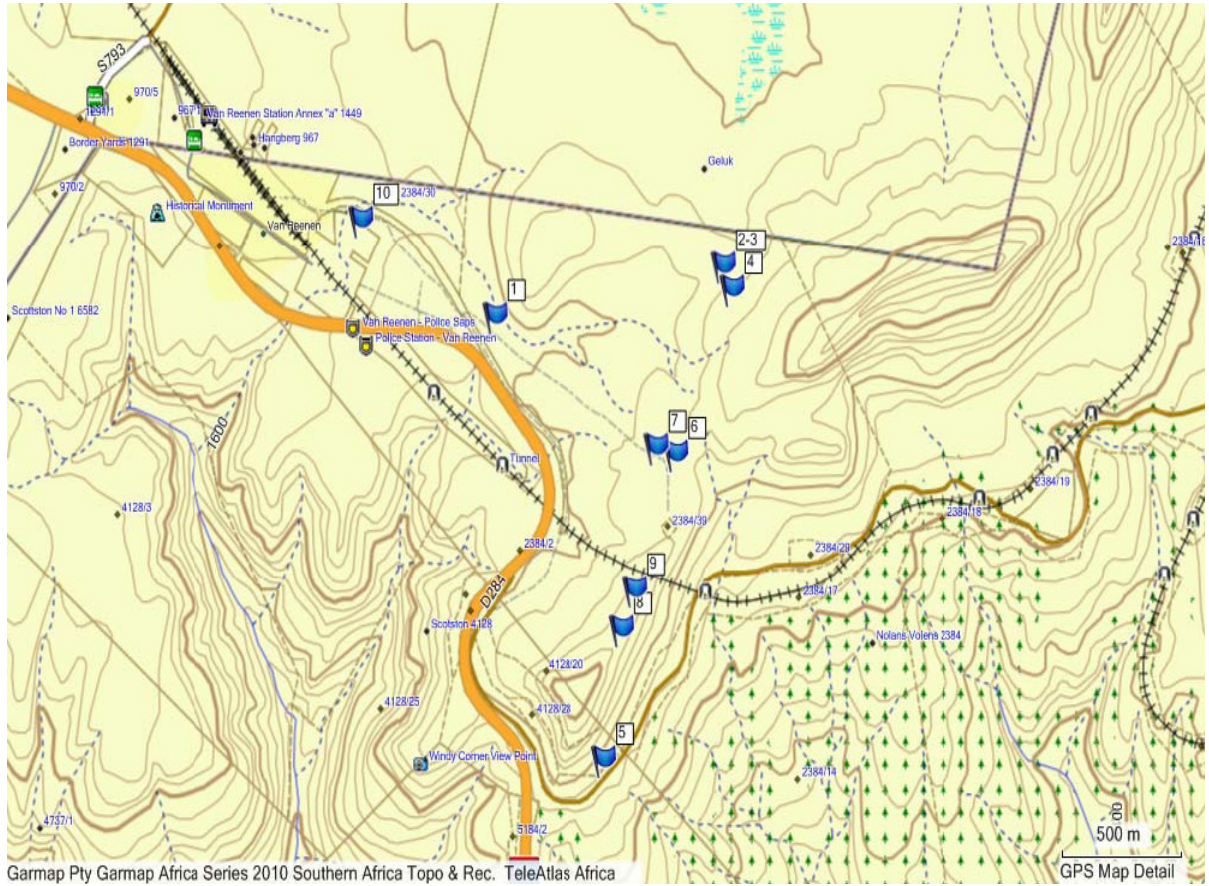


Figure 27: Distribution of sites in the area (Map Source 2010).

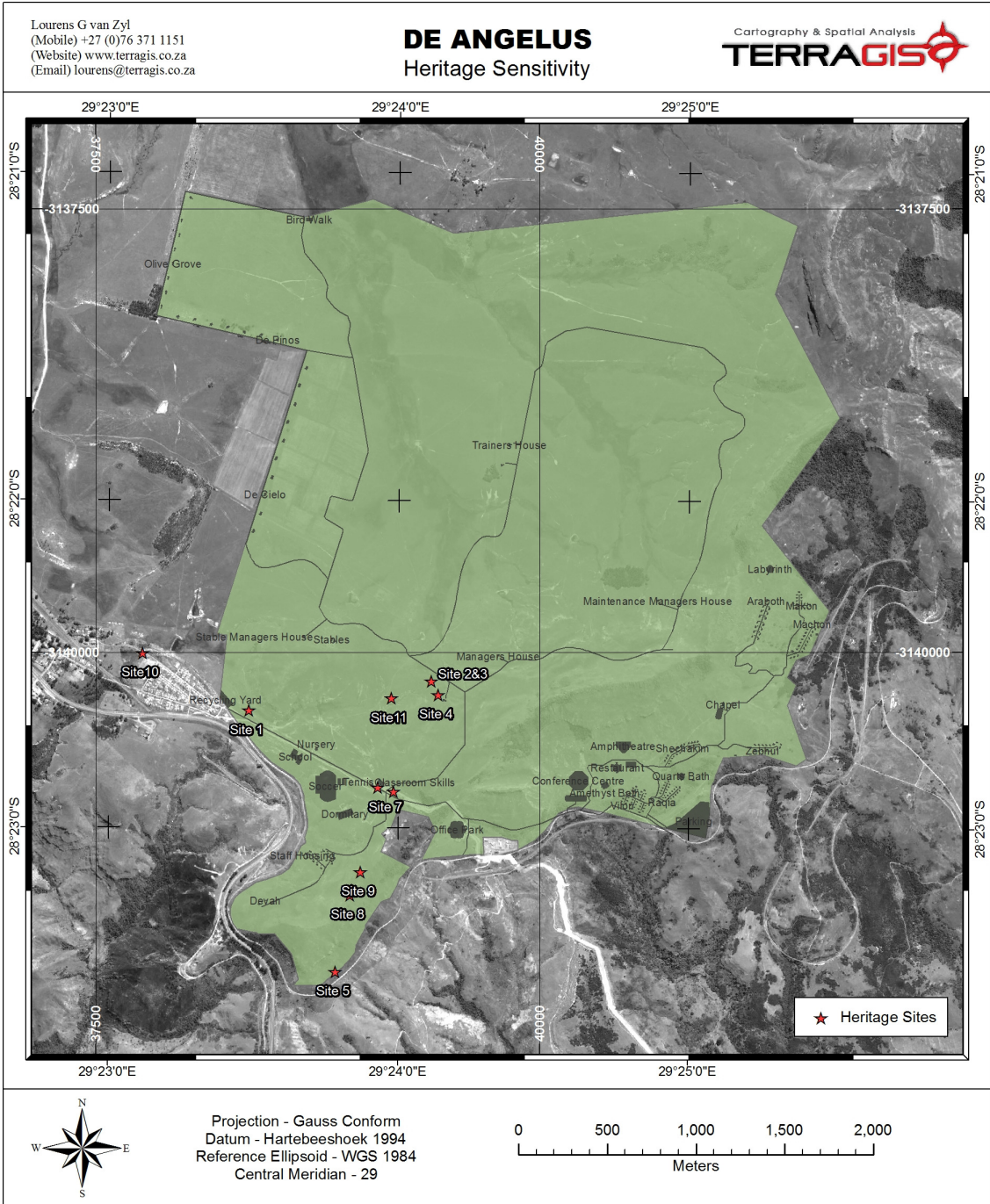


Figure 28: Heritage Sensitivity plan showing location of site in relation to development nodes/zones (Plan courtesy Terraxis).

CONCLUSIONS AND RECOMMENDATIONS

In conclusion it can be stated that the assessment of the area was conducted successfully. A number of significant cultural heritage (palaeontological, archaeological and historical) sites were identified in the area. The significance of the sites range from low to high, and some of these could be either directly or indirectly impacted on by the proposed development

activities and will require Phase 2 mitigation measurements to be implemented. The following is recommended:

Grave Sites

If possible all the graves and grave sites located in the area should be left in situ and protected (this includes all possible graves not located during the assessment). The sites should be fenced off, cleaned and access provided to potential visitors (descendants/relatives). A Graves Management Plan should then also be implemented.

Palaeontological Site

It is proposed that an accredited palaeontologist be contracted to conduct a thorough palaeontological assessment of the area.

Historical sites – Rail Bridge

An accredited Architectural Historian should be contacted to assess the site in terms of its significance. This individual would then also assist in the drafting of a Site Management Plan and in the preservation of and incorporation of the site in the development of the Estate.

Historical sites – Anglo-Boer War and others

It is recommended that detailed archival and historical research are conducted on the early history of the area and the sites located here (pre-Anglo Boer War), as well as on the Anglo-Boer War history of the area around Van Reenen. The sites should also be mapped in detail and historical-archaeological excavations be carried out to obtain a representative sample of cultural material from the sites in the area.

Finally it is also recommended that A Cultural Heritage Management Plan be drafted and implemented for the De Angelus Estates Development, specifically for those sites that will not be directly negatively impacted by the various development activities and that will be preserved. It should also be considered that a Heritage Trail, as part of the proposed Hiking Trails in the development, be developed. Any information recovered during the Phase 2 mitigations could also be developed into a Site Museum in the Estates.

As the development area (and the heritage sites) is located within the boundaries of two provinces (Free State and Kwa-Zulu Natal) both SAHRA and Amafa (KZN Heritage Authority) will have to be involved in the comments on this report.

From a Cultural Heritage perspective there would be no objection to the proposed development if these mitigation measures are implemented. **However, it should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts are always a distinct possibility. Care should therefore be taken during any development activities that if any of these are accidentally discovered, a qualified archaeologist be called in to investigate. It is virtually impossible to locate and record all features, objects or sites of a cultural heritage origin in an area and sites could therefore have been missed.**

8. REFERENCES

- Location map and ortho-photo of development area: Provided by DWV Environmental Consulting
- Location of development and distribution of sites: Images © Google Earth 2011 and Map Source 2010
- Heritage Sensitivity Plan: Produced by Terragis and provided to Archaeos cc by DWV Environmental Consulting
- 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.
- Deacon, H. J. & Deacon J. 1999. **Human beginnings in South Africa. Uncovering the secrets of the Stone Age.** 2nd impression 2003. Cape Town: David Philip Publishers
- Huffman, T. 2007. **Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa.** Pietermaritzburg: Kwa-Zulu Natal Press.
- Klatzow, S. 1994. **Roosfontein, a Contact Site in the Eastern Orange Free State.** The South African Archaeological Bulletin, Vol. 49, No. 159, pp. 9-15.
- 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.
- Maggs, T. M. O'C. 1976b. **Iron Age communities of the southern Highveld.** Pietermaritzburg: Council of the Natal Museum.
- Mitchell, P. 2002. **The archaeology of southern Africa.** Cambridge: Cambridge University Press.
- Phillipson, D. 2005. **African Archaeology. (3rd edition).** New York: Cambridge University Press.
- 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.

Thorp, C. R. 1996. **A Preliminary Report on Evidence of Interaction between Hunter-Gatherers and Farmers along a Hypothesised Frontier in the Eastern Free State.** The South African Archaeological Bulletin, Vol. 51, No. 164, pp. 57-63.

Van der Ryst, M.M. & Meyer, A. 1999. Die Ystertydperk. Bergh, J.S. (ed.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.

Verster, Diana. 2011. **Environmental Impact Assessment Process for the Proposed Development of an Agri-Urban Estate called, the 'De Angelus Estates', situated to the North-East of Van Reenen within the Free State and Kwa Zulu Natal Province Final Scoping Report.** Unpublished Report DWV Environmental Consulting. For Tambhura Property Investments Pty Limited August 2011.

www.drakensberg.gateway.co.za

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

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.

APPENDIX C

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

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