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**PHASE 1 HIA REPORT FOR THE
D432 NORTHERN BYPASS ROAD RE-ALIGNMENT PROJECT
LOCATED ON PORTION 4 AND 39 OF THE FARM HARTEBEESTLAAGTE 325JS
CLOSE TO PHOLA, PROVINCE OF MPUMALANGA**

For:

Ecological Fields Environmental Consultancy

REPORT: **APAC019/34**

by:

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March 2019

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SUMMARY

A Pelsers Archaeological Consulting (APAC) was appointed by Ecological Fields Environmental Consultancy to undertake a Phase 1 Heritage Assessment Report for D432 Northern Bypass Road Re-Alignment Project. The study area is located on Portion 4 and Portion 39 of the farm Hartebeestlaagte 325JS, to the north of Phola/Ogies in Mpumalanga. The D432 Northern Bypass Road lies approximately 40 km west of Witbank. The project is located to the East and North of the town of Ogies, as well as East of Phola settlement in Mpumalanga Province.

Background research indicates that there are a number of cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. The assessment recorded one site of cultural heritage origin and significance close to the proposed development's area of impact. This report discusses the results of both the background research and physical assessment conducted in March 2019.

From a Cultural Heritage Resources point of view it is recommended that the proposed Northern Road Re-Alignment be allowed to continue, taking into consideration the recommendations put forward at the end of this document.

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1. INTRODUCTION

A Pelsers Archaeological Consulting (APAC) was appointed to undertake a Phase 1 HIA for the KPSX Northern Bypass Road Re-Alignment Project. The study area is located on Portion 4 & Portion 39 of the farm Hartebeestlaagte 325JS, to the north of Phola/Ogies in Mpumalanga.

Background research indicates that there are a number of cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. The assessment recorded one site of cultural heritage origin and significance close to the proposed development's area of impact.

The client indicated the location and boundaries of the study area and the assessment concentrated on this portion. The Specialist Team was accompanied to the study area during the duration of the assessment.

2. TERMS OF REFERENCE

The Terms of Reference for the study was 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 by the 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 cultural resources;
5. Review applicable legislative requirements;

Declaration of Interest

1. Declaration by Specialist

I, Anton Johan Pelsers, of APELSER ARCHAEOLOGICAL CONSULTING cc declare that;

- I act as an independent specialist in this application.
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant.
- there are no circumstances that may compromise my objectivity in performing such work;

- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant/ Environmental Assessment Practitioner appointed by applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- **all the particulars furnished by me in this form are true and correct; and**
- **I realise that a false declaration is an offence in terms of Regulation 48 and is punishable in terms of Section 48B(2) of the Act.**



Signature of the specialist

APELSER ARCHAEOLOGICAL CONSULTING cc

Name of company (if applicable)

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:

- Archaeological artifacts, structures and sites older than 100 years
- Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- Objects of decorative and visual arts
- Military objects, structures and sites older than 75 years
- Historical objects, structures and sites older than 60 years
- Proclaimed heritage sites
- Grave yards and graves older than 60 years**
- Meteorites and fossils
- Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

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

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (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 the bibliography.

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 Portion 4 of the farm Hartebeestlaagte 325JS, north of Phola/Ogies in Mpumalanga. The D432 Northern Bypass Road Re-alignment project lies approximately 40 km west of Witbank. The project is located to the East and North of the town of Ogies, as well as East of Phola settlement in Mpumalanga Province. The N12 National road transects the southern portion of the project site.

The topography of the study area is relatively flat and open, with little or no rocky ridges or outcrops present. Although grass cover was relatively dense in sections, there is very little tree cover except for some clumps of Black Wattles in some areas. Visibility during the assessment was fairly good. Parts of the area were & are utilized for agricultural purposes (ploughing/crop growing and cattle grazing). These activities would have impacted greatly on any cultural heritage (archaeological and/or historical) sites, features or material that might have existed here in the past. Other impacts include farm tracks traversing the area.

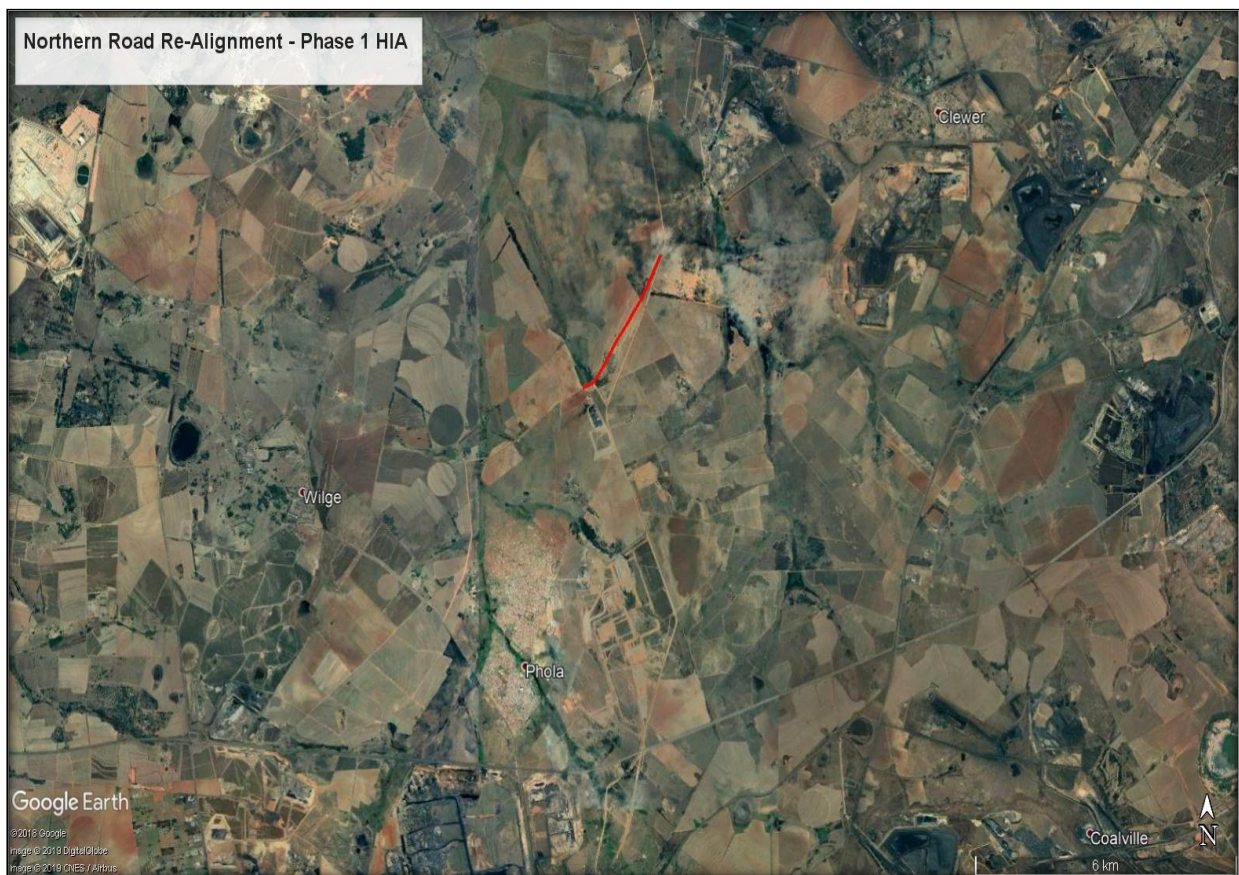


Figure 1: General location of study area showing Road Alignment in red (Google Earth 2019).



Figure 2: Closer view of study area & proposed road alignment (Google Earth 2019).

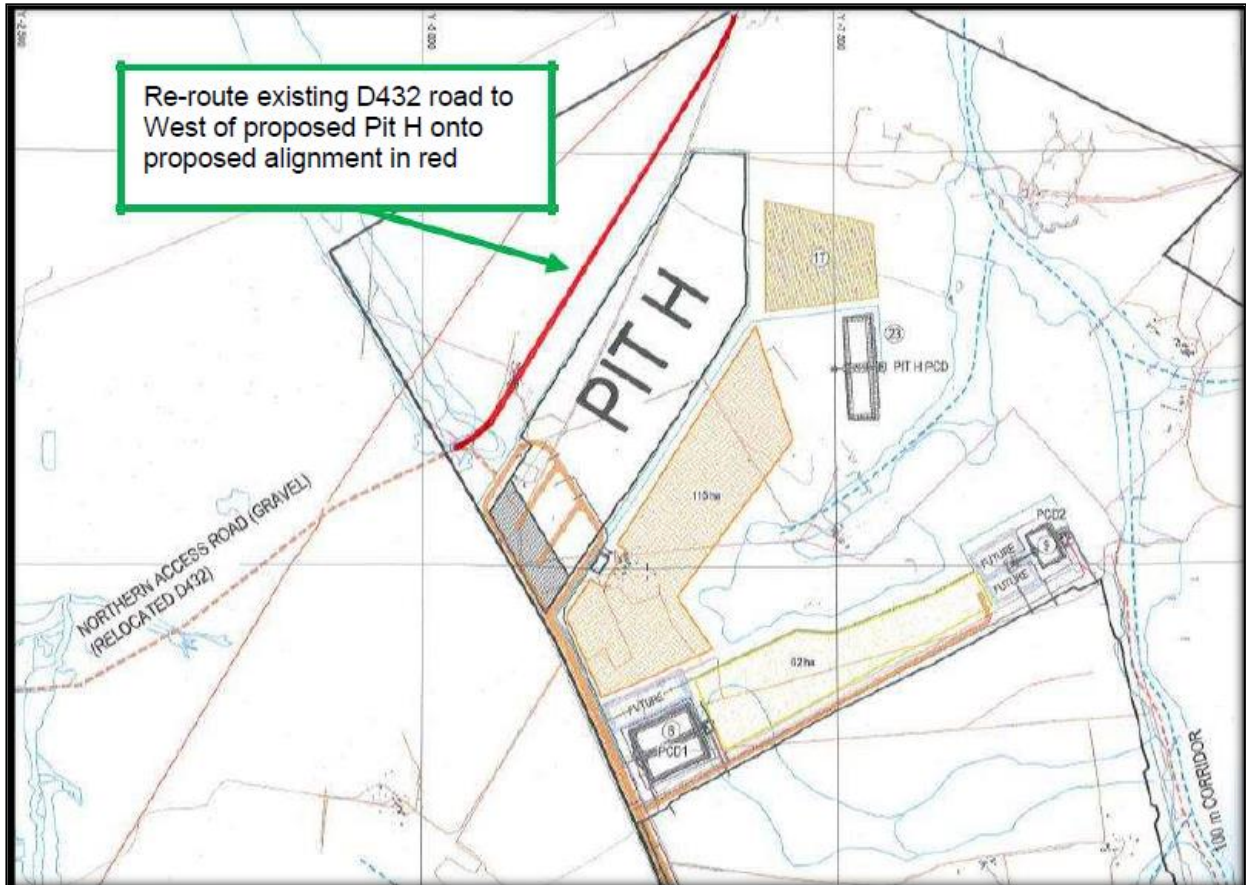


Figure 3: Location of proposed road re-alignment (map provided by client).



Figure 4: A view of a section of the area where the road will run close to the existing farm house here.



Figure 5: Another general view of area.



Figure 6: Current and old agricultural fields characterize large portions of the study area.



Figure 7: A small rocky outcrop near the road alignment. This was the only one identified in the study area.



Figure 8: A section of the road traverses old agricultural fields.



Figure 9: A view of the area where the road will connect to an existing road close to the end the proposed re-alignment.

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).

There are no known Stone Age sites (including rock art) in the area, with the closest ones located to the south of Witbank.

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.

Based on Tom Huffman's research LIA sites, features or material that could present in the larger area will be related to the Ntsuanatsatsi facies of the Urewe Tradition, dating to between AD1450 and AD1650 (Huffman 2007: 167) or the Makgwareng facies of the same dating to between AD1700 & AD1820 (Huffman 2007: 179).

There are no known Iron Age sites, features or cultural material in the specific study area and none was identified during the assessment.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The earliest European group to move through the larger geographical area close to the study area was that of Scoon in 1836 (Bergh 1999: 13).

Background information on the archaeology and history of the specific study area and larger geographical area is contained in a 2015 report by Celliers, while information on cultural heritage sites located in the study area was also found in the same report. Historians agree that the earliest Africans to inhabit in the Lowveld in Mpumalanga were of Sotho, or more particularly Koni-origin. According to Bergh no signs of major Stone Age or Iron Age terrains are present in the vicinity of the Ogies area. The Ogies area was vacant of any settlement until the advent of the nineteenth century, when the Phuthing Tribe was prominent in the area to the north thereof (Celliers 2015: 11).

The Difaqane (Sotho), or Mfekane ("the crushing" in Nguni) was a time of bloody upheavals in Natal and on the Highveld, which occurred around the early 1820's until the late 1830's. It came about in response to heightened competition for land and trade, and caused population groups like gun-carrying Griquas and Shaka's Zulus to attack other tribes. Mzilikazi and his raiders had moved from the Northern Nguni area to the area north of the Vaal River by 1821. It has been recorded that the Ndebeles first attacked the Phuthing tribe, which in turn migrated to the south of the Vaal River and joined groups of Southern Sotho speakers. The Phuthing and Southern Sotho tribes moved westward and northward and started raiding Tswana communities in the surrounding area. The Phuthing were commanded first by Chief Tshane, and later Ratsebe. As the Phuthing under Ratsebe moved eastwards along the Vaal River, they collided with Mzilikazi's Ndebele once more. The Phuthing and other raiding groups were finally taken captive in 1823 by Mzilikazi's men (Celliers 2015: 10-11).

During the time of the Difaqane, a northwards migration of white settlers from the Cape was also taking place. Some travellers, missionaries and adventurers had gone on expeditions to

the northern areas in South Africa – some as early as in the 1720's. One such an adventurer was Robert Scoon, who formed part of a group of Scottish travellers and traders who had travelled the northern provinces of South Africa in the late 1820s and early 1830s. Scoon had gone on two long expeditions in the late 1820s and once again ventured eastward and northward of Pretoria in 1836. During the latter journey, he passed by the area where Ogies is located today (Celliers 2015: 11).

By the late 1820's, a mass-movement of Dutch speaking people in the Cape Colony started advancing into the northern areas. This was due to feelings of mounting dissatisfaction caused by economical and other circumstances in the Cape. This movement later became known as the Great Trek. This migration resulted in a massive increase in the extent of that proportion of modern South Africa dominated by people of European descent. As can be expected, the movement of whites into the Northern provinces would have a significant impact on the black farmer - herders who populated the land. By 1860, the population of whites in the central Transvaal was already very dense and the administrative machinery of their leaders was firmly in place. Many of the policies that would later be entrenched as legislation during the period of apartheid had already been developed (Celliers 2015: 11-12).

The discovery of diamonds and gold in the Northern provinces had very important consequences for South Africa. After the discovery of these resources, the British, who at the time had colonized the Cape and Natal, had intentions of expanding their territory into the northern Boer republics. This eventually led to the Anglo-Boer War, which took place between 1899 and 1902 in South Africa, and which was one of the most turbulent times in South Africa's history. During the British march into the Transvaal between February and September 1900, several troops passed by the area where Ogies is situated today. The battalions of Lieutenant Generals J. French, R. Pole-Carew and F. Roberts all travelled close by the Witbank area and through Middelburg. A railway line ran along this route at the time (Bergh, 1999: 51). At the time of the War, two railway stations were located in the vicinity of the Witbank/Ogies area, and close to each a black concentration camp had been established.

At Middelburg, about 20 kilometers to the east of Witbank, one white and one black concentration camp was also set up. No skirmishes took place in the direct vicinity of the Ogies area (Celliers 2015: 12-13). Ogies is a small town situated 27 km south of Witbank in the Mpumalanga province. It is surrounded by coal-mines. The name is derived from the farm Oogiesfontein (fountain with many "eyes") on which the railway station was built. According to Celliers the name of the town was originally misspelt as Oogies, but corrected by the Place Names Commission in 1939. Ogies is on the link railway from Springs to Witbank and is the junction for the Broodsniersplaas, where a large power station was erected (Celliers 2015: 17).

The oldest map for the farm Hartebeeslaagte 325JS (for Portion 1) that could be obtained from the database of the Chief Surveyor General dates to 1890 (www.csg.dla.gov.za – CSG Document 10FL2B01). It shows that the farm was then located in the Ward of Steenkoolspruit and District of Witbank. The map indicates that the farm was originally given on loan to one M.P. Klaasse on the 2nd of June 1870 by Government and that Portion 1 was then surveyed in April 1890. A 1990 map for Portion 4 (CSG Document 10265049) shows that this portion was

surveyed in April 1969 for a pipeline servitude. No historical sites or features could be identified from these maps however.

Results of the study area assessment

One site was identified during the assessment of the study area. The grave site is located close to but east of the proposed road re-alignment and north of the existing farmhouse here, and will therefore not be directly impacted by it. Mitigation measures to minimize any possible (even indirect) impacts on the graves and site are however provided in the discussion below.

The farmhouse and related outbuildings and structures on it will be directly impacted by the proposed road re-alignment development. The farmhouse and other structures are however not of any cultural heritage significance and not older than 60 years of age and no further mitigation measures from a cultural heritage point of view is required.



Figure 10: Partial view of farmhouse.



Figure 11: One of the other farm structures on the property.



Figure 12: More farming related structures.



Figure 13: Another view of the farmyard and some structures here.

Site 1

Site 1 is a grave site, located to the north of the existing farmhouse and a few meters east of the proposed road re-alignment position.

The site contains at least 10 graves of the Prinsloo and Vermaak families. The oldest grave is that of Ignatius Michael Prinsloo who was born in 1848 & died in 1889. Ouma Vermaak (born Mostert) died in 1926. Pieter Johannes Prinsloo was born in 1873 and died in 1940, while Cornelia Petronella Prinsloo (born Potgieter) was born in 1910 and passed away in 1942. The youngest identified grave was that of Martha Maria Prinsloo who was born in 1874 and passed away in 1963. The other graves on the site did not have identifiable headstones with inscriptions.

Graves always carry a High Significance Rating from a Cultural Heritage point of view and should be handled with care. Although the site is not located directly in the study area, it is located close to it (approximately 150m from the western edge of the road). There is always a possibility of the site being indirectly impacted upon by the road re-alignment project and any possible negative impacts on the grave site and the graves on it need to be avoided. There are options available to minimize any possible negative impacts on the site and graves. The 1st would be to properly clean and fence-in the site, clearly marking the site to prevent accidental impacts such as vandalism to it. The 2nd option would be to exhume and relocate the graves from the site after obtaining consent from any possible descendants of the deceased buried here and obtaining permits from various National, Provincial and Local Authorities dealing with Graves and Grave Sites (including SAHRA as the graves are older than 60 years of age).

GPS Location of Site 1: S25 56 53.40 E29 03 20.50

Cultural Significance: High.

Heritage Significance: Grade III: Other Heritage resources of Local importance and therefore worthy of conservation.

Field Ratings: Local Grade IIIB: Should be included in the heritage register and may be mitigated (High/Medium significance)

Mitigation: See Above Recommended Mitigation Measures.

Table 1.

Heritage site	Probability of impact	Magnitude of impact	Duration of impact	Scale	Significance points	Significance rating	Significance after management
Site 1 (Graveyard)	2	2	4	3	3	High (4)	Low (2)

(Points accredited from 1 to 5: 1 very low, 2 low, 3 medium, 4 high, 5 very high)



Figure 14: A view of Site 1.



Figure 15: The grave of Ignatius Michael Prinsloo.



Figure 16: Close-up of headstone of Ignatius Michael Prinsloo.



Figure 17: The grave of Ouma Vermaak.



Figure 18: The headstone of the grave of Pieter Johannes Prinsloo.



Figure 19: The graves of Martha Maria Prinsloo.



Figure 20: The grave of Cornelia Petronella Prinsloo.

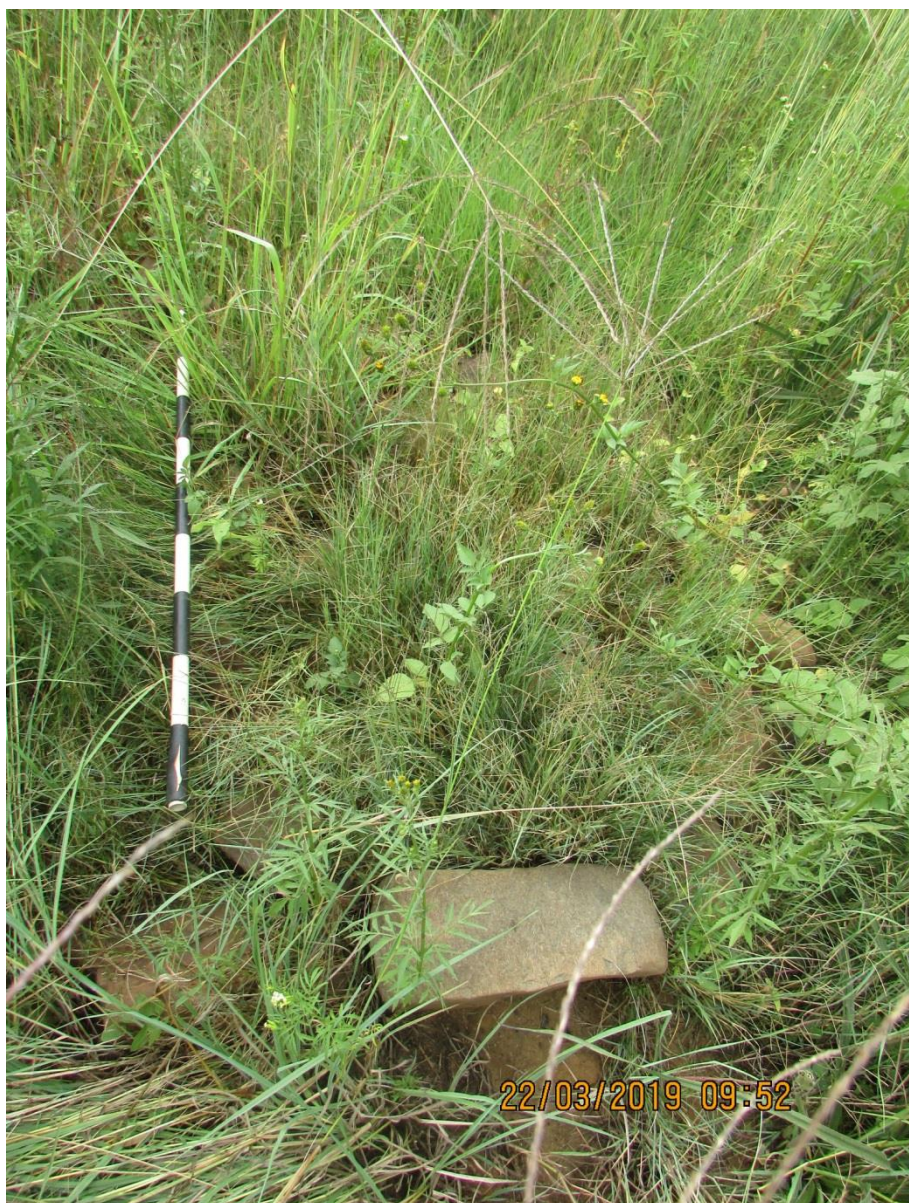


Figure 21: One of the other graves on the site.

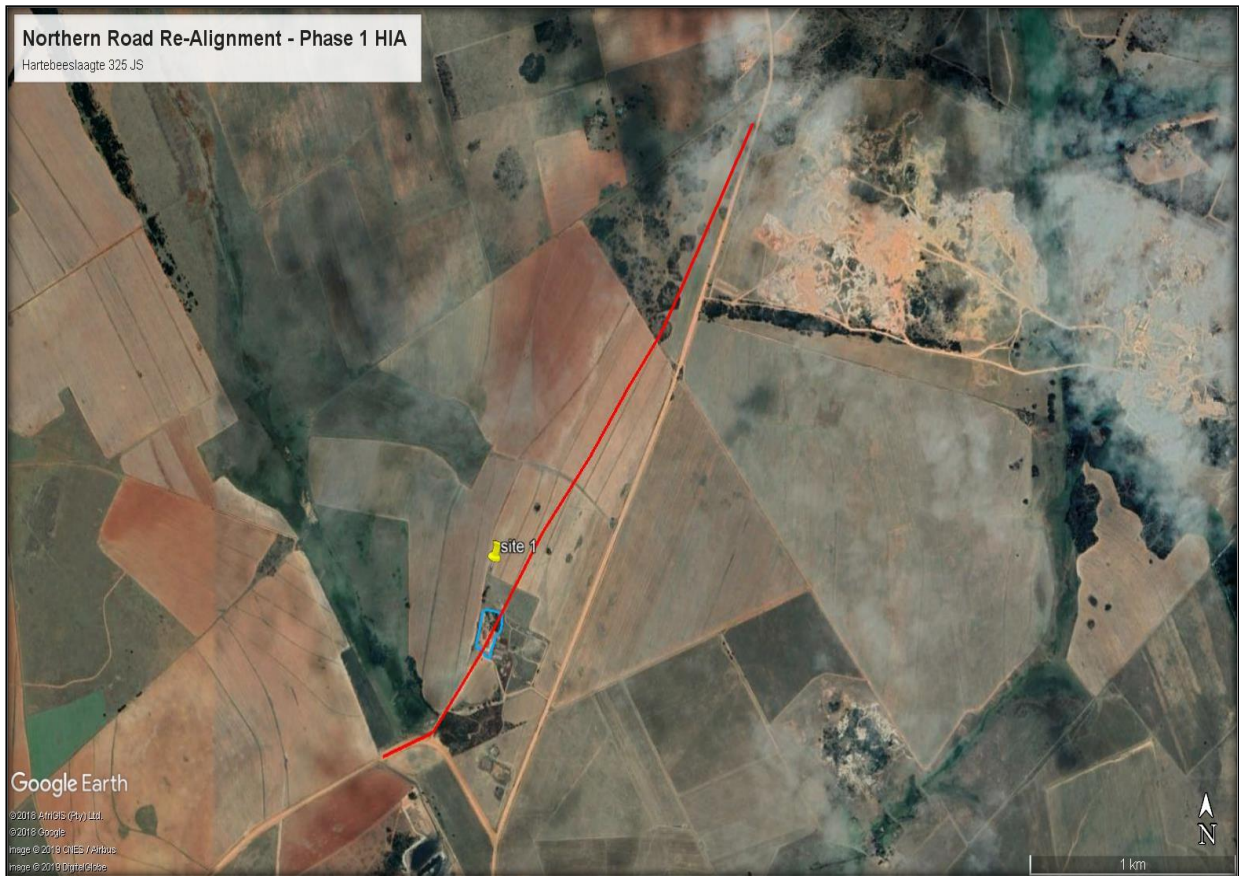


Figure 22: Aerial view showing the location of Site 1 in relation the proposed road. The blue polygon indicates the existing farmstead on the farm (Google Earth 2019).

It should be noted that although all efforts are made to cover a total area during any assessment and therefore to identify all possible sites or features of cultural (archaeological and/or historical) heritage origin and significance, that there is always the possibility of something being missed. This will include low stone-packed or unmarked graves. This aspect should be kept in mind when development work commences and if any sites (including graves) are identified then an expert should be called in to investigate and recommend on the best way forward.

Impact Assessment Table

This denotes the impact of the proposed development on the Grave Site located close to the road area. Although the grave site is located around 150m from the edge of the proposed road there would be indirect impact on it as the site would be difficult to access during the construction and operational phases. The site needs to be properly fenced-off to protect it against accidental damage and vandalism, while still providing access to it for possible descendants and family members wishing to visit the graves.

Extent	Site
Duration	Medium Term
Intensity	Medium
Probability	Highly Likely
Significance of Impact (without Mitigation)	Medium (40-59)
Significance of Impact (with Mitigation)	Low to Medium (20 – 39)

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Phase 1 HIA for the Northern Bypass Road Re-Alignment Project was conducted successfully. The study area is located on Portion 4 & Portion 39 of the farm Hartebeestlaagte 325JS, north of Phola/Ogies in Mpumalanga. A section of the D432 gravel road needs to be re-aligned to the west of the existing alignment for an approximate distance of 2700m.

The D432 Northern Bypass Road Re-alignment project which lies approximately 40 km west of Witbank. The project is located to the East and North of the town of Ogies, as well as East of Phola settlement in Mpumalanga Province. The N12 National road transects the southern portion of the project site.

Background research indicates that there are a number of cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. The assessment recorded one site of cultural heritage origin and significance close to the proposed development's area of impact.

Site 1 is a grave site, located to the north of the existing farmhouse and a few meters east of the proposed road re-alignment position. The site contains at least 10 graves of the Prinsloo and Vermaak families. The oldest grave is that of Ignatius Michael Prinsloo who was born in 1848 & died in 1889. The youngest identified grave was that of Martha Maria Prinsloo who was born in 1874 and passed away in 1963.

Graves always carry a High Significance Rating from a Cultural Heritage point of view and should be handled with care. Although the site is not located directly in the study area, it is located close to it (approximately 150m from the western edge of the road). There is always a possibility of the site being indirectly impacted upon by the road re-alignment project and any possible negative impacts on the grave site and the graves on it need to be avoided. There are options available to minimize any possible negative impacts on the site and graves. The 1st would be to properly clean and fence-in the site, clearly marking the site to prevent accidental impacts such as vandalism to it. The 2nd option would be to exhume and relocate the graves from the site after obtaining consent from any possible descendants of the deceased buried here and obtaining permits from various National, Provincial and Local Authorities dealing with Graves and Grave Sites (including SAHRA as the graves are older than 60 years of age).

From a Cultural Heritage Resources point of view it is recommended that the proposed Northern Road Re-alignment Project be allowed to continue, taking into consideration the recommended mitigation measures related to Grave Site 1 above.

Finally, it should be noted that although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) there is always a possibility that some might have been missed as a result of grass cover and other factors. The subterranean nature of these resources (including low stone-packed or unmarked graves) should also be taken into consideration. Should any previously unknown or invisible sites,

features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.

8. REFERENCES

General, Closer views of study area location & Sites identified: Google Earth 2019.

Locality Map - BAR Scope of Work Document: Provided by Ecological Fields Environmental Consultancy.

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

Celliers, J.P. 2015. **Phase 1 Archaeological Impact and Heritage Assessment on portions of the farms Kleinziukerboschplaat 5 IS, Klipfontein 3 IS and Zondagsvlei 9 IS, in respect of the proposed construction of a 88 kV Eskom Powerline, Ogies, Mpumalanga Province**. Unpublished Report Kudzala Antiquity cc. For: Royal Haskoning DHV. May 2015.

Huffman, T.N. 2007. Handbook to the Iron Age: **The Archaeology of Pre-Colonial Farming Societies in Southern Africa**. Scottsville: 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): Documents (1) 10FL2B01 & (2) 10265049.

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.

Aesthetic 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.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.