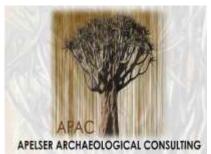
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# Comprehensive and Professional Solutions for all Heritage Related Matters **CK 2006/014630/23 VAT NO.: 4360226270**

APAC022/61

2022-07-06

To: Mr. Andrew Salomon South African Heritage Resource Agency P O Box 4637 Cape Town 8000

RE: Motivation for Exemption from a full Phase I Heritage Impact Assessment - Environmental Impact Assessment for the Proposed construction of a 3.2 km long, 132kV overhead line (to be operated at 88kV) and a 88 kV substation (To be known as Brakpan Tailings dam Substation) located on Portion 77 of the farm Withok 131IR, Portion 76 of the farm Withok 131IR and Portion 5 of the farm Rooikraal 156IR, City of Ekurhuleni Metropolitan Municipality, Gauteng Province.

APelser Archaeological Consulting cc (APAC cc) was appointed by AB Enviro Consult to provide a motivation for Exemption from a Full Phase 1 HIA for the Proposed construction of a 3.2 km long, 132kV overhead line (to be operated at 88kV) and a 88 kV substation (To be known as Brakpan Tailings dam Substation) located on Portion 77 of the farm Withok 131IR, Portion 76 of the farm Withok 131IR and Portion 5 of the farm Rooikraal 156IR, City of Ekurhuleni Metropolitan Municipality, Gauteng Province.

## Background to the Project

AB Enviro Consult was requested by DRD Gold Ergo to undertake an Environmental Impact Assessment for the Proposed construction of a 3.2 km long, 132kV overhead line and a 88 kV substation located on portions of the farm Withok 131IR and Portion 5 of the farm Rooikraal 156IR, City of Ekurhuleni Metropolitan Municipality, Gauteng Province. The proposed overhead line and substation is located in an area that has been extensively impacted in the past by mining related and other activities. This application is linked to the existing Mining right REF: GP158MREA.

"In terms of the National Heritage Resources Act, no 25 of 1999, heritage resources, including archaeological or palaeontological sites over 100 years old, graves older than 60 years, structures older than 60 years are protected. They may not be disturbed without a permit from the relevant heritage resources authority. This means that prior to development it is incumbent on the developer to ensure that a Heritage Impact Assessment is done. This must include the archaeological component (Phase 1) and any other applicable heritage components. Appropriate (Phase 2) mitigation, which involves recording, sampling and dating sites that are to be destroyed, must be done as required.

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The quickest process to follow for the archaeological component is to contract an accredited specialist (see the web site of the Association of Southern African Professional Archaeologists www.asapa.org.za) to provide a Phase 1 Archaeological Impact Assessment Report. This must be done before any large development takes place. The Phase 1 Impact Assessment Report will identify the archaeological sites and assess their significance. It should also make recommendations (as indicated in section 38) about the process to be followed. For example, there may need to be a mitigation phase (Phase 2) where the specialist will collect or excavate material and date the site. At the end of the process the heritage authority may give permission for destruction of the sites.

Where bedrock is to be affected, or where there are coastal sediments, or marine or river terraces and in potentially fossiliferous superficial deposits, a Palaeontological Desk Top study must be undertaken to assess whether or not the development will impact upon palaeontological resources - or at least a letter of exemption from a Palaeontologist is needed to indicate that this is unnecessary. If the area is deemed sensitive, a full Phase 1 Palaeontological Impact Assessment will be required and if necessary a Phase 2 rescue operation might be necessary. Please note that a nationwide fossil sensitivity map is available on SAHRIS to assist applicants with determining the fossil sensitivity of a study area.

If the property is very small or disturbed and there is no significant site the heritage specialist may choose to send a letter to the heritage authority motivating for exemption from having to undertake further heritage assessments. Any other heritage resources that may be impacted such as built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewscapes must also be assessed."

Last mentioned option was decided on for this project which entailed desktop research as part of the assessment. Previous work by the author of this Exemption Letter also serves as reference.

#### **Relevant Legalisation**

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).

## The National Heritage Resources Act

According to the Act the following is protected as cultural heritage resources:

- a. Archaeological artefacts, 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; and
- i. Objects, structures and sites of scientific or technological value.

#### The National Estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance;
- b. Places to which oral traditions are attached or which are associated with living heritage;
- c. Historical settlements and townscapes;
- d. Landscapes and features of cultural significance;
- e. Geological sites of scientific or cultural importance;
- f. Sites of Archaeological and palaeontological importance;
- g. Graves and burial grounds;
- h. Sites of significance relating to the history of slavery; and

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. According to Section 38 (1) of the Act 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 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof.
- d. Re-zoning of a site exceeding  $10000m^2$ .
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority.

# Results of Desktop Heritage Assessment: Proposed construction of a 3.2 km long, 132kV overhead line (to be operated at 88kV) and a 88 kV substation (To be known as Brakpan Tailings dam Substation)

The proposed development area is located on Portions 76 & 77 of the farm Withok 131IR and Portion 5 of Rooikraal156IR near Brakpan in the City of Ekurhuleni Metropolitan Municipality, Gauteng Province. The study area is bordered by established urban residential and other related developments. As a result the larger geographical area has been extensively altered from its original natural and historical landscape. As a result of these developments any archaeological and/or historical sites, features or material that could have existed here in the past would have been heavily disturbed or destroyed as a result.

The development & study area itself has been fairly extensively disturbed in the recent past, mainly by gold mining activities, with the existing and proposed new 132Kv Overhead Line and 88Kv Substation located close to and bordered by the Ergo Slimes (Brakpan Tailings) Dam. The study & development area has therefore been extensively impacted through these activities.

Aerial images (Google Earth) of the study and development footprints show the heavily disturbed nature of the area, while no remains of cultural heritage significance is visible on these images.

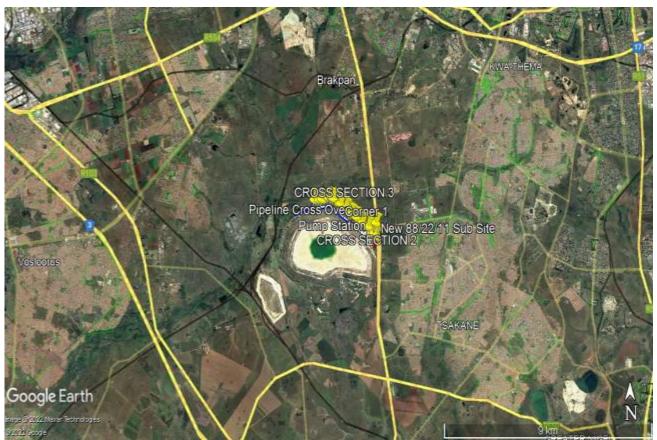


Figure 1: General Location of the study & proposed development area (Google Earth 2022).



Figure 2: Closer view of the study & proposed development area showing the route of the new line as well as location of the proposed Substation (Google Earth 2022).



Figure 3: Another view of the area without the proposed development footprint. The extensively impacted nature of the study area is clear from this (Google Earth 2022).

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 in 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).

Although there are no well-known Stone Age sites located on or around the study area there is evidence of the use of the larger area by Stone Age communities for example along the Kliprivier where ESA and MSA tools where recorded. LSA material is recorded along ridges to the south of the current study area (Van der Walt 2016: 21). Rock engravings occur at Redan as well as along the Vaal River (Berg 1999).

No Stone Age sites or material are known to exist in the specific study area. It is envisaged that if any are to be found there it would be single out of context artefacts, or small scatters of material, on the surface of the area

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

Extensive Stone walled sites are recorded at Klipriviers Berg Nature Reserve and Suikerbosrand belonging to the Late Iron Age period. A large body of research is available on this area. These sites (Taylor's Type N, Mason's Class 2 & 5) are now collectively referred to as Klipriviersberg (Huffman 2007).

These settlements are complex in that aggregated settlements are common, the outer wall sometimes includes scallops to mark back courtyards, there are more small stock kraals, and straight walls separate households in the residential zone. These sites dates to the 18th and 19th centuries and was built by people in the Fokeng cluster. In this area the Klipriviersberg walling would have ended at about AD 1823, when Mzilikazi entered the area. This settlement type may have lasted longer in other areas because of the positive interaction between Fokeng and Mzilikazi (Van der Walt 2016: 21).

No Iron Age sites, features or objects are known to exist in the study & development area. If any did exist the extensive disturbances of the recent past would have destroyed all evidence.

The historical age normally starts with the first recorded oral histories in an area. It includes the moving into the area of people that were able to read and write. The earliest Europeans to move close to the area were the group of adventurer and hunter Cornwallis Harris in 1836. They were closely followed by the first Voortrekkers after that (Bergh 1999: 13-14).

The larger area also saw action during the Anglo-Boer War (1899-1902), with the Battle of Doornkop on the 29th of May 1900, while there were also Black & White British Concentration Camps in the larger area (Bergh 1999: 54).

The oldest map for the farm Withok 131IR (for Portion 1) obtained from the database of the Chief Surveyor General (<u>www.csg.dla.gov.za</u> – **CSG Document: 10l8WQ01**) dates to 1935 & indicates that this portion of the farm was surveyed in November 1934 and that the farm was then numbered as No.7 and was located in the District of Brakpan and Province of Transvaal. A 1960 map for Portion 1 of Rooikraal 156IR dates to 1960 (**CSG Document 10l9F701**). The farm was then in the District of Heidelberg, Province of Transvaal.

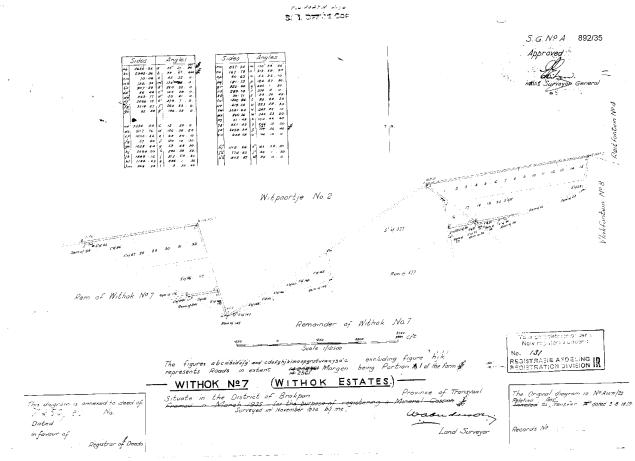


Figure 4: 1935 Map of Portion 1 of Withok 131IR (www.csg.dla.gov.za).



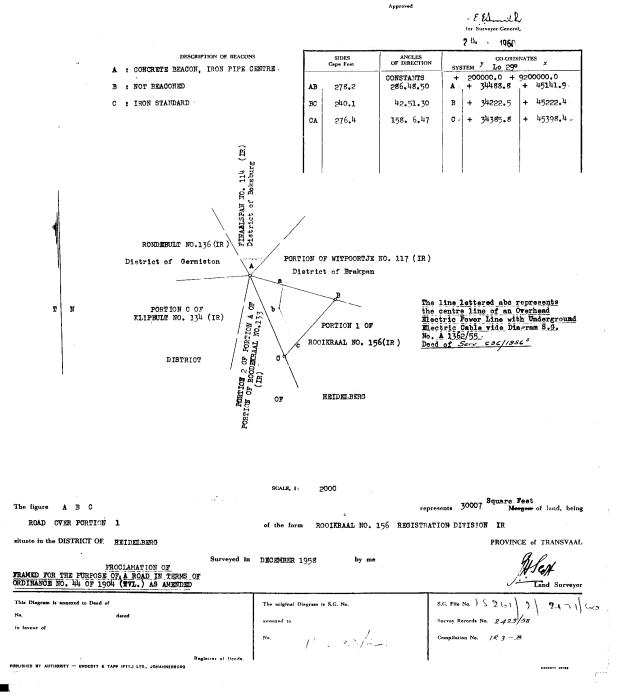


Figure 5: 1960 Map of Portion 1 of Rooikraal 156IR (www.csg.dla.gov.za).

To conclude, based on the aerial images of the area, and the heritage desktop study, it is therefore deemed unlikely that any significant sites, features or material of cultural heritage (archaeological and/or historical) origin and/or significance will exist in the study area & proposed development area. Recent historical activities (mainly mining related activities) would have impacted on any if they did exist here in the past and would have disturbed or destroyed these to a large degree. Known archaeological and historical sites, features and material have been identified in the larger geographical area and this needs to be taken into consideration during actions related to the proposed development.

It is therefore recommended that Exemption from a Full Phase 1 Heritage Impact Assessment (HIA) for the Proposed construction of a 3.2 km long, 132kV overhead line (to be operated at 88kV) and a 88kV substation (To be known as Brakpan Tailings dam Substation) located on Portion 77 of the farm Withok 131IR, Portion 76 of the farm Withok 131IR and Portion 5 of the farm Rooikraal 156IR, City of Ekurhuleni Metropolitan Municipality, Gauteng Province be granted to the applicants taking into consideration the following:

The subterranean nature of cultural heritage (archaeological and/or historical) resources must always be kept in mind. 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. This could include previously unknown and unmarked graves and/or cemeteries.

Should there be any questions or comments on the contents of this document please contact the author as soon as possible.

Kind regards

Anton Pelser

#### References

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