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**A REPORT ON AN ADDITIONAL PHASE 1 HIA  
FOR THE PROPOSED YZERMYNE UNDERGROUND COAL MINE  
NEAR DIRKIESDORP, PIXLE KA SEME LOCAL MUNICIPALITY  
MPUMALANGA PROVINCE**

For:

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**REPORT: APAC014/03**

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## EXECUTIVE SUMMARY

APELSER ARCHAEOLOGICAL CONSULTING cc was appointed by EcoPartners, on behalf of Atha Africa Venture Pty Ltd, to conduct a Phase 1 HIA for the proposed Yzermyn Underground Coal Mine near Dirkiesdorp in the Pixley ka Seme Local Municipality of Mpumalanga. A similar assessment was conducted here in 2012 by Archaetnos cc on a section of the development and the 2014 survey focused on an additional area identified for the development of a Mine Discard Facility.

The 2012 assessment by Van Vollenhoven identified 18 sites of cultural heritage (archaeological & historical) in the mining area. The significance of these sites vary and some will be directly impacted by the mining activities. Mitigation measures were recommended in his report. The 2014 survey identified an additional 8 sites located in the area of the new Discard Facility location. This document discusses the results of the assessment and provides recommendations on mitigation measures to minimize the possible negative effects of the development on these sites, taking into consideration the results of the 2012 Archaetnos survey as well.

**If the recommendations put forward at the end of this document are implemented, then, from a Heritage point of view, there would be no objection to the continuation of the proposed development.**

## CONTENTS

	page
EXECUTIVE SUMMARY .....	3
CONTENTS.....	4
1. INTRODUCTION .....	5
2. TERMS OF REFERENCE .....	5
3. LEGISLATIVE REQUIREMENTS .....	6
4. METHODOLOGY .....	8
5. DESCRIPTION OF THE AREA.....	9
6. DISCUSSION.....	13
7. CONCLUSIONS AND RECOMMENDATIONS .....	23
8. REFERENCES .....	24
APPENDIX A – DEFINITION OF TERMS.....	25
APPENDIX B – DEFINITION/ STATEMENT OF SIGNIFICANCE.....	26
APPENDIX C – SIGNIFICANCE AND FIELD RATING .....	27
APPENDIX D – PROTECTION OF HERITAGE RESOURCES.....	28
APPENDIX E – HERITAGE MANAGEMENT IMPACT ASSESSMENT PHASES .....	29

## **1. INTRODUCTION**

APELSE ARCHAEOLOGICAL CONSULTING cc was appointed by EcoPartners, on behalf of ATHA African Ventures (Pty) Ltd (hereafter ATHA), to conduct a Phase 1 Heritage Impact Assessment (HIA) for the proposed Yzermyn Underground Coal Mine near Dirkiesdorp in the Pixley ka Seme Local Municipality of Mpumalanga. A similar assessment was conducted here in 2012 by Archaetnos cc on a section of the development and the 2014 survey focused on an additional area identified for the development of a Mine Discard Facility.

The 2012 assessment by Van Vollenhoven identified 18 sites of cultural heritage (archaeological & historical) in the mining area. The 2014 survey identified an additional 8 sites located in the area of the new discard facility location. This document discusses the results of the assessment and provides recommendations on mitigation measures to minimize the possible negative effects of the development on these sites, taking into consideration the results of the 2012 Archaetnos survey as well.

The client indicated the location and boundaries of the study area and the assessment focused on this demarcated portion of land. During the survey the heritage specialist was accompanied by the client, ATHA representatives and other specialists.

## **2. TERMS OF REFERENCE**

The Basic Terms of Reference for the study, based on the methodology employed by Heritage Impact Assessors, were to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located in the proposed Mine development area;
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 Mine 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;

Previous Heritage work done in the area (Van Vollenhoven 2012) was taken into consideration as well as part of the background research. This work was done for the same Proposed Yzermyn underground mine development but focused on another area earmarked for part of the proposed mining operations. The 2014 assessment focused mainly on a new area earmarked for the mine Discard Facility.

### **3. LEGISLATIVE REQUIREMENTS**

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

#### **3.1 The National Heritage Resources Act**

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

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

The National Estate includes the following:

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

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

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing Erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>

- 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 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)**.

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

### **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, including previous heritage studies in the area, was undertaken in order to place the development area in an archaeological and historical context. The sources consulted in this regard are indicated in the bibliography.



## 4.2 Field survey

The assessment was conducted according to generally accepted HIA practices and in this case it was aimed at identifying and recording any possible cultural heritage resources that might be located in the Proposed mine development area, assessing their archaeological & historical significance, while taking into consideration the possible negative impacts of the proposed development on these resources. The location/position of all sites, features and objects are determined by means of a Global Positioning System (GPS) where possible, while photographs are also taken where needed.

## 4.3 Oral histories

People from local communities are sometimes consulted 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 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.

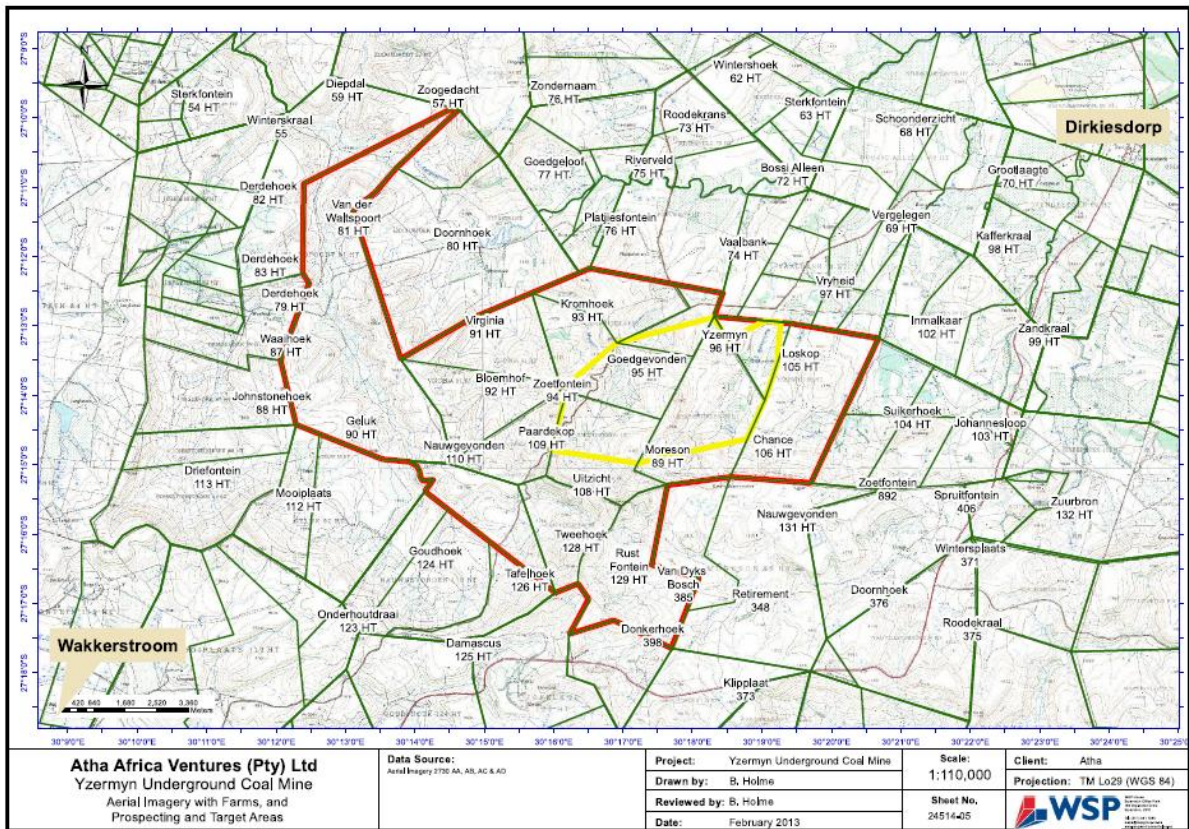
## 5. DESCRIPTION OF THE AREA

The Yzermyn farm (Project Area) is located within the local municipality of Dr Pixley Ka Isaka Seme Local Municipality (Seme Local Municipality), situated in the Gert Sibande District Municipality of the Mpumalanga Province of South Africa. The closest community settlements are:

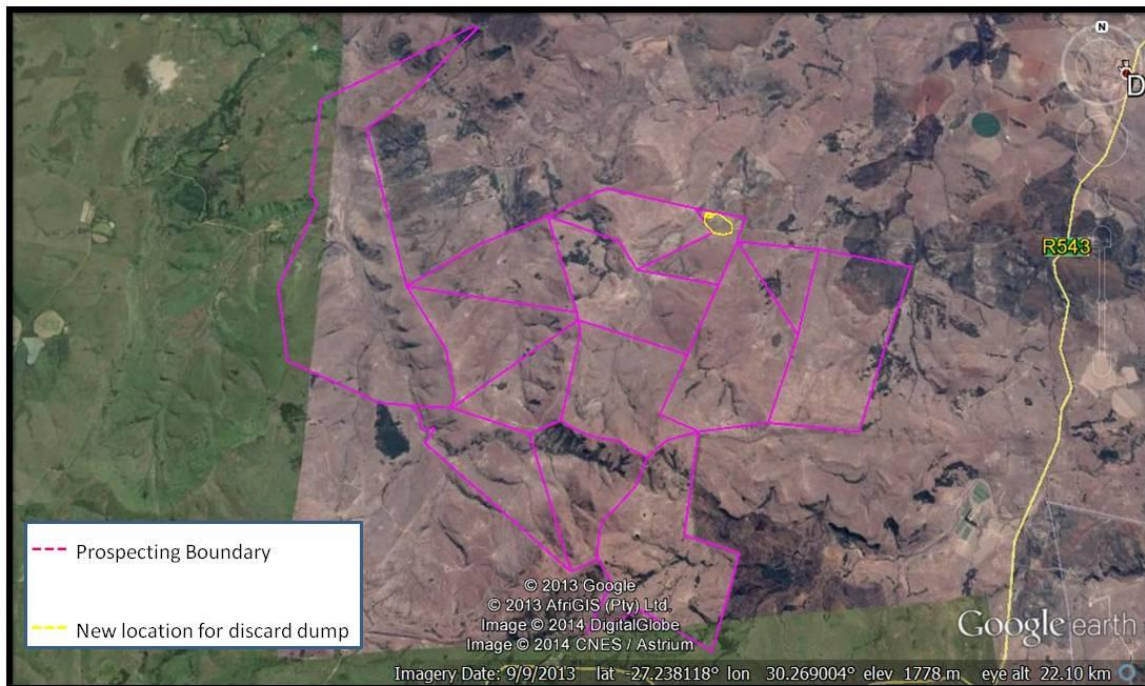
- Dirkiesdorp (Mkhondo Local Municipality), 13km northeast of the Project Area
- Wakkerstroom (Seme Local Municipality), which is 21km southwest of the Project

The Yzermyn Project is accessible by unpaved roads. The Project Area is accessed via the R543-road between Piet Retief and Wakkerstroom. Portions of the farms Zoetfontein 94HT and Goegevonden 95HT, Kromhoek 93HT and Yzermyn 96HT (Portion 1) are covered by the Proposed mine development, with the Discard Facility that formed the focus of the 2014 assessment located on Kromhoek 93HT.

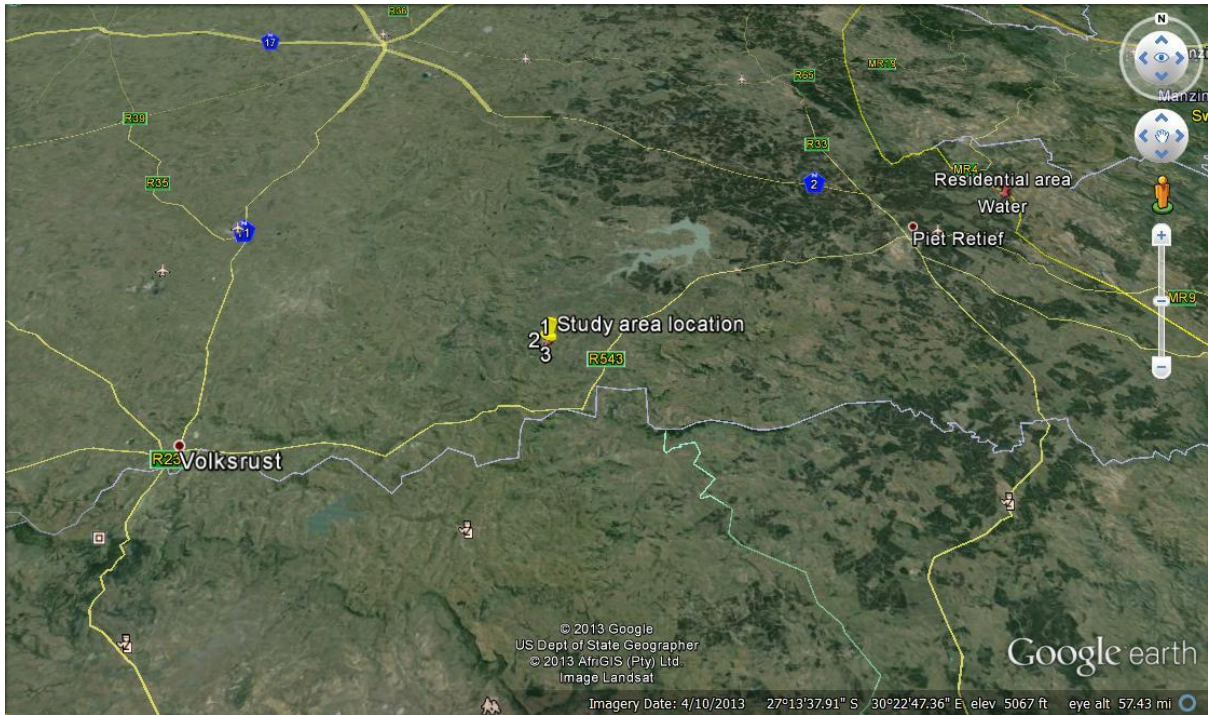
The study area is characterized by rolling grassveld and hills, as well as valleys, streams and wetlands in sections. Certain sections have been utilized in the past for agricultural purposes (crop raising and cattle grazing), as well as historical coal mining. The area of the new Discard Facility location is relatively flat and open, with little tree cover. A few low rocky ridges and outcrops are also located here. Archaeological visibility was fairly good with the area having burnt recently with only low grass cover present.



**Figure 1: Location of study area (in yellow). Map provided by EcoPartners (courtesy of WSP).**



**Figure 2: Mining layout plan. The area in yellow is the proposed Discard Facility focused on during the recent study is located on Kromhoek 93HT (Map provided by EcoPartners).**



**Figure 3: Aerial view of study area location (Google Earth 2014 – Image date 2013/04/10).**



**Figure 4: View of a section of the general area. Note the hills, grass veld and stream.**



**Figure 5: Another view of a portion of the study area.**



**Figure 6: General view of the location of the Discard Facility.**

## **6. DISCUSSION**

A short background to the archaeology & history of the larger geographical and specific study area is given in the section below before the results of the fieldwork will be discussed. Various sources will be utilized for this purpose, including the Heritage Report on previous work conducted by Archaetnos cc (See References) for the Yzermyn development.

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 basically be divided 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).

According to Van Vollenhoven no Stone Age sites have been identified by scientists previously in the study area (2012: 14). This most likely however only indicates the lack of Stone Age research in the area. This is confirmed in a historical atlas which also does not show any such sites in the broader geographical area (see Bergh 1999). This includes rock art sites which are sometimes associated with the Late Stone Age. However, a popular publication about Wakkerstroom indicates that rock art have been identified on the farms Rietvlei, Driefontein and Doornhoek. Driefontein is adjacent to the study area (Van Vollenhoven 2012: 14).

A number of natural shelters are present in the sandstone hills in the larger area and one rock art site was found in such a shelter during the 2012 survey by Archaeos (Van Vollenhoven 2012: 15; 38).

No Stone Age occurrences (stone tools) were identified during the 2014 assessment of the Tailings Dam area.

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

Early Iron Age (EIA) 200 – 1000 AD  
Late Iron Age (LIA) 1000 – 1850 AD

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

Early Iron Age (EIA) 250 – 900 AD  
Middle Iron Age (MIA) 900 – 1300 AD  
Late Iron Age (LIA) 1300 – 1840 AD

No Early or Middle Iron Age sites are known to occur in the study area (Bergh 1999: 6-7), while Late Iron Age sites are found in a band stretching from Wakkerstroom in the east to far within the boundaries of the Free State Province (Bergh 1999: 7). According to Huffman Iron Age people from the Maguga facies of the Kalundu tradition could have inhabited this area as early as 1100 A.D (Huffman 2007: 301).

During the 2012 assessment and during the 2014 assessment for the Discard Dump area a number of LIA/early historical related stone walled settlement features were identified in the area.

The historical period usually starts with the moving into an area of people that were able to read and write and record histories such as early European travellers and/or missionaries. Early Europeans did not travel to this area (Bergh 1999: 12-13). White farmers only moved into the south-eastern Mpumalanga after 1853 when the government of the South African Republic (ZAR or Transvaal) traded the land from the Swazi. Wakkerstroom became a town and district in 1859 (Bergh 1999: 17-19). The town was originally known as Marthinus Wesselstroom. Missionaries also came to this part of the country during the 19th century. The Dutch Reformed Church and the Hermannsburg Missionaries established mission stations at Volksrust and Wakkerstroom during this time (Bergh 1999: 57).

During the Anglo-Transvaal War (1880-1881) the south-eastern part of Mpumalanga was the focus point of battles between the British and the Boers. The British had a camp in Wakkerstroom and were beleaguered by the Boers. Three important battles were fought during this time. These were at Laingsnek on 25 January 1881, Schuinshoogte on 8 February 1881 and Amajuba on 27 February 1881. The Boers were victorious in all of these which led to peace being declared (Bergh 1999: 46).

The broader geographical area also experienced some action during the Anglo-Boer War (1899-1902). During the British offensive, Lt-Genl. R. Buller moved through the area and occupied Volksrust on 12 June 1900. He then moved further to the north and reached Amersfoort on 7 August 1900. At this time Boer commandos were placed at Laingsnek and Amajuba, but Buller had them on the retreat. They moved through Volksrust and Amersfoort. The only battle in this area was on 22 July 1900 when a skirmish broke out to the north of Volksrust, between the Boer commando of General D Joubert and the British troops under command of Genl. Coke (Bergh 1999: 51). There were however also a skirmish, namely at Kastrolsnek, close to Wakkerstroom (Hofmeyr & Smith 2009: 96).

The British later established a concentration camp for the Boer woman and children in Volksrust (Bergh 1999: 54). The British also occupied Wakkerstroom and established a large camp here. This included blockhouses at Kastrolsnek (Hofmeyr & Smith 2009: 99). They also erected some blockhouses (small fortifications) in the broader geographical area during this War. Between Volksrust and Wakkerstroom they build 19 of these and the line of blockhouses was completed on 6 February 1902. Unfortunately it is not known how many of these survived even partially. Between Wakkerstroom and Piet Retief the remains of 11 blockhouses have been identified (Van Vollenhoven 2012: 17). A number of recent historically related sites, including graves and remains of earlier coal mining here, were found during the 2012 survey by Archaetnos (Van Vollenhoven 2012). Some graves and LIA/early historical settlement remains were also identified in the 2014 assessment by the author of this report.

The oldest map for Kromhoek 93HT was obtained from the database of the Chief Surveyor General ([www.csg.dla.gov.za](http://www.csg.dla.gov.za)). The farm (from a map dated to 1896) was then numbered as 76, and was located in the Wakkerstroom District. It was measured for one B.P.Uys in July 1893. No sites or historical structures are shown (CSG Document No.: 10K9XN01).

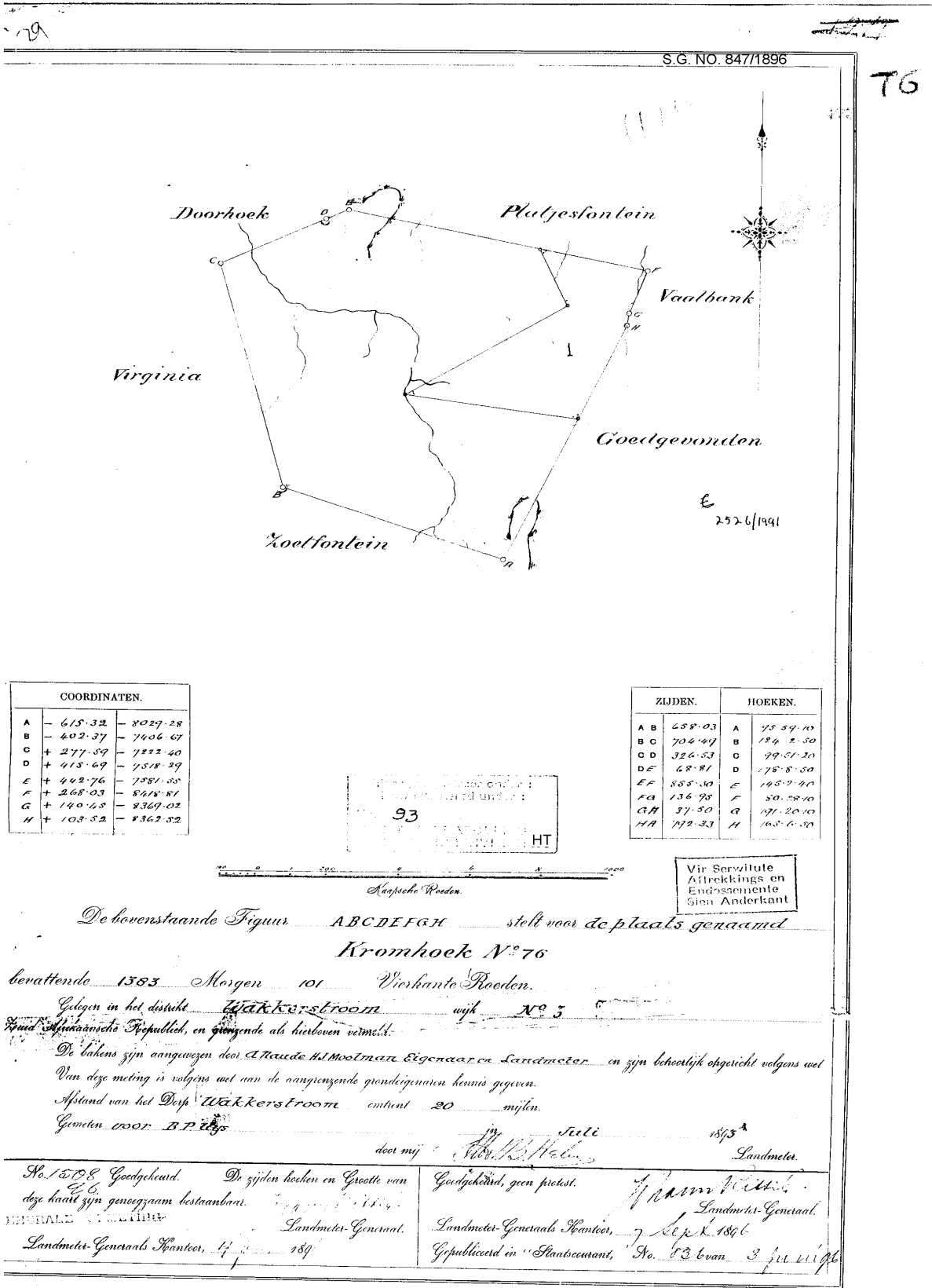


Figure 7: Old map of Kromhoek (ww.csg.dla.gov.za).

## **Results of Assessment**

During the assessment 8 sites of heritage origin were located in and close to the area where the Discard Dump is proposed. All the sites, or features, date to the LIA and recent historical time period. Sites 1 & 2 are situated directly in the Discard dump area.

### ***Sites 1 & 2***

This is the remains (Site 1) of what seem to be a historical farming settlement (possibly farmworkers or the settlement of a local black group who had settled here after the arrival of Europeans to the area). It contains the foundations of stone packed livestock enclosures (cattle kraals), huts, granary platforms and 2 stone packed graves (Site 2) enclosed in a stone packed graveyard. The way that the graves are marked and “fenced” put this site possibly within the late 19<sup>th</sup> to early 20<sup>th</sup> centuries.

If the site and especially the graves are to be impacted on negatively by the proposed development then mitigation measures will have to be implemented. Graves always carry a high cultural heritage rating and should be handled with caution. The graves can either be left in situ, fenced in and managed or they can be exhumed and relocated after all due legal processes have been followed. This will include extensive social consultation and the obtaining of permits before they are relocated. As they are probably older than 60 years of age a permit will also have to be obtained from SAHRA.

**Cultural Significance:** Medium (stone walled remains); High (Graves).

**Heritage Significance:** Grade III - Other heritage resources of local importance and therefore worthy of conservation

**Field Rating:** General protection A (IV A): Site should be mitigated before destruction (high/ medium significance)

**Mitigation:** Mapping and recording of stone walled settlement remains. If impacted and cannot be avoided then graves should be exhumed and relocated after due processes have been followed. If not then the site and graves can be properly fenced and demarcated and managed through the implementation of a Cultural Heritage Management Plan.

**Site location:** S27 12.552 E30 18.135 (Site 1) & S27 12.537 E30 18.139 (Site 2).





**Figure 8: View of location of Site 1.**



**Figure 9: Stone walled remains at Site 1.**



**Figure 10: Foundations of a hut.**



**Figure 11: The graves at Site 2.**

### ***Sites 3 -8***

All these sites or features are represented by the stone packed foundations of either livestock (cattle) enclosures, semi-circular enclosures (huts?) or stone cairns (the platforms for grain bins or grain baskets). The age of these are at this stage uncertain, but could date to the Late Iron Age or could be related to the later historical farmer settlement in the area. Although a number were identified during the survey it is possible that there are more similar sites and features in the area. No cultural material (such as pottery or others) was found in association with these sites, making identifying their occupants and time-frame of settlement difficult at this stage.

With the sites located outside the boundaries of the proposed Discard no mitigation measures are required.

**Cultural Significance:** Medium.

**Heritage Significance:** Grade III - Other heritage resources of local importance and therefore worthy of conservation

**Field Rating:** General protection B (IV B): Sites should be recorded (medium significance) if impacted.

**Mitigation:** Mapping and recording of stone walled features. Limited archaeological excavations in predetermined areas should the sites be impacted.

**Site location:** S27 12.481 E30 18.187 (Site 3); S27 12.456 E30 18.275 (Site 4); S27 12.396 E30 18.330 (Site 5); S27 12.423 E30 18.205 (Site 6); S27 12.433 E30 18.199 (Site 7); S27 12.436 E30 18.194 (Site 8).



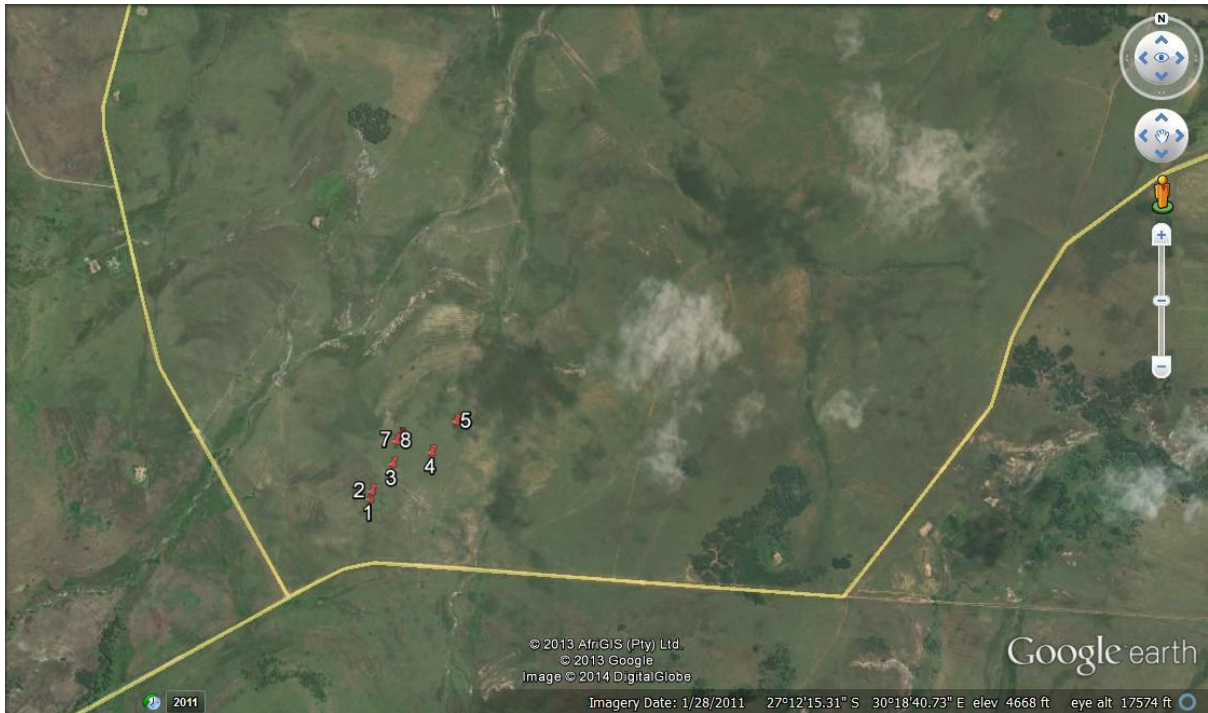
**Figure 12: One of the cattle kraals in the area (Site 4).**



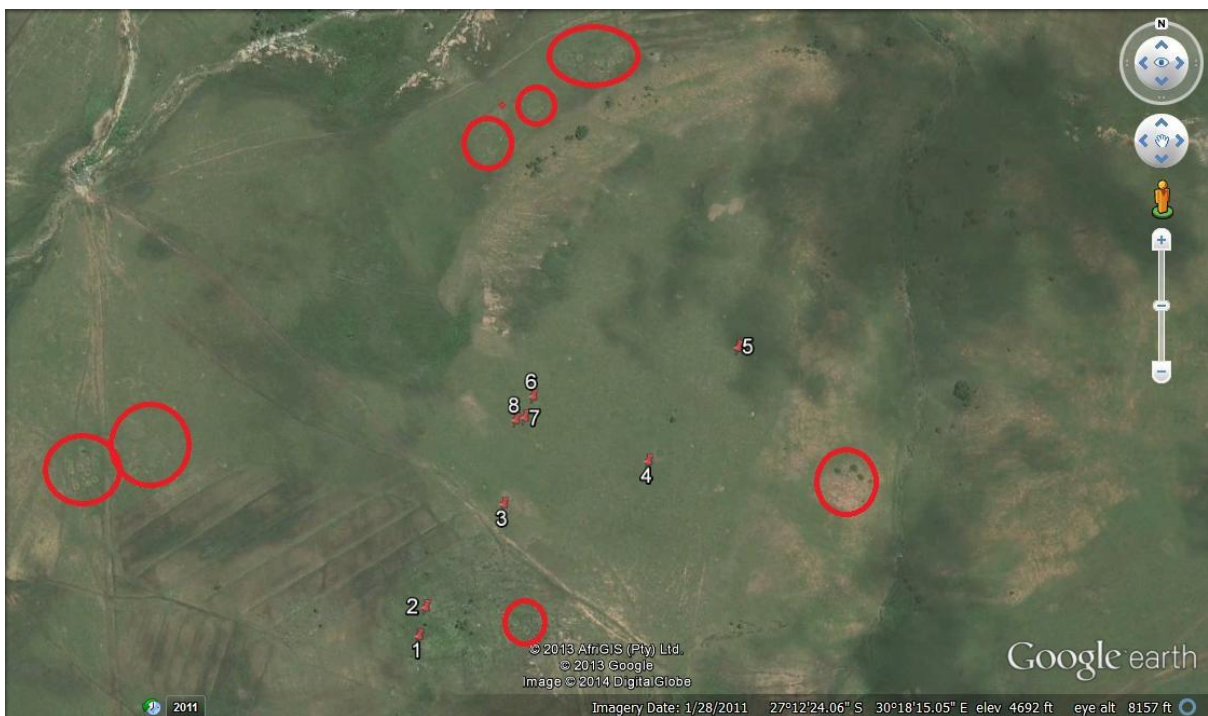
**Figure 13: Another kraal (Site 6).**



**Figure 14: Granary platform (Site 7).**



**Figure 15: Distribution of sites found during assessment (Google Earth 2014 – Image date 2011/01/28).**



**Figure 16: Closer view of area showing sites found, as well as more stone walled sites outside of study area not visible during assessment (in red circles)[Google Earth 2014 – Image date 2011/01/28].**



**Figure 17: Aerial view of study area with footprint of Discard Dump shown. Only Sites 1 & 2 is located directly in the proposed development area (Google Earth 2014 – Image date 2013/09/09).**

## 7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Phase 1 HIA for the proposed Discard dump for the Yzermyn Underground Coal Mine development on Yzermyn 96 HT Portion 1, Zoetfontein 94HT, Kromhoek 93HT and Goedgevonden 95HT, located near Dirkiesdorp in Mpumalanga, was conducted successfully. A previous survey for the Yzermyn development (done in 2012 by Archaeos cc) identified a number of cultural heritage sites and features including graves, stone walled LIA and historical sites and San rock art in the area. During the 2014 assessment 8 sites dating to the LIA and more recent historical period (including 2 graves) were identified in the proposed Discard Dump location situated on Kromhoek 93HT. Sites 1 and 2 are located within the footprint area of the Discard Dump.

It is recommended that mitigation measures are implemented to minimize the negative impacts of the development on these heritage resources. Should it not be possible to avoid the graves they should be exhumed and relocated after all due legal processes has been followed. This will include extensive social consultation to try and find any possible descendants in order to obtain consent for the removals. If possible the graves should be properly demarcated, fenced-in and left in situ, with access allowed for any family members to facilitate visits to the graves. A Management Plan should also be drafted and implemented then. Furthermore it is recommended that the stone walled settlement remains on Site 2 be mapped and drawn and that limited archaeological excavations be conducted on them.

Finally, from a Heritage point of view it is recommended that the development be allowed to continue once the mitigation measures have been implemented. **The possible subterranean presence of archaeological and/or historical sites, features or artifacts should however always be kept in mind. This could include unknown and unmarked burials. If during**

**any development activities, any sites, features and objects of a cultural heritage (archaeological or historical) nature, are exposed, an expert should be called in to investigate and suitable mitigation measures are implemented. All development in these areas should be halted until the situation had been satisfactorily resolved.**

## **8. REFERENCES**

Aerial views of study area location and distribution of sites: Google Earth 2014 - Imagery dates: 2011/01/28; 2013/04/10 & 2013/09/09.

Study area location and layout plans: Provided by EcoPartners

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[www.csg.dla.gov.za](http://www.csg.dla.gov.za): Document 10K9XN01

## **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.