

# **ARCHAEOLOGICAL DESKTOP STUDY**

**for the application of a prospecting right  
on portions 7, 8 and 224 of the Farm  
Honingnestkrans 269 JR, Pretoria,  
Gauteng**

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**October 2018**

An Archaeological Desktop Study for the application of a prospecting right on portions 7, 8 and 224 of the Farm Honingnestkrans 269 JR, Pretoria, Gauteng

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Report No: Honingnestkrans Desktop Heritage 1510181

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- I, Tobias Coetzee, declare that –
- I act as the independent specialist;
- I am conducting any work and activity relating to the proposed Honingnestkrans Project in an objective manner, even if this results in views and findings that are not favourable to the client;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have the required expertise in conducting the specialist report and I will comply with legislation, regulations and any guidelines that have relevance to the proposed activity;
- I have not, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the 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 declaration are true and correct.

  
Date: 15 October 2018

## Executive Summary

The author was appointed by Elemental Sustainability (Pty) Ltd to undertake an Archaeological Desktop study for CIM International Banabatau (Pty) Ltd on the following Farm Portions within the City of Tshwane Metropolitan Municipality in the Gauteng Province: Portions 7, 8 and 224 of the farm Honingnestkrans 269 JR. The study area is located 14 km north of the Pretoria CBD and 10 km northeast of Akasia. The aim of this report is to contextualise the general study area in terms of heritage resources and will provide the developers with general information regarding potentially sensitive areas. This will also shed light on what is to be expected during a Phase 1 Archaeological Impact Assessment and aid in interpreting finds.

If possible, the areas demarcated as 'Potentially sensitive' should be avoided while care should be exercised when prospecting on the rest of the demarcated farm portions as the general study area is well known for LIA, historical and burial sites. Should any development that triggers an AIA result from the prospecting, a full Phase 1 AIA must be done.

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# 1. Project Background

## 1.1 Introduction

Elemental Sustainability (Pty) Ltd appointed the author to undertake an Archaeological Desktop study for CIM International Banabatau (Pty) Ltd on the following Farm Portions near Pretoria in the Gauteng Province: Portions 7, 8 and 224 of the farm Honingnestkrans 269 JR (**Figures 1 & 2**). The study area is located approximately 14 km north of the Pretoria CBD. The purpose of this study is to contextualise the demarcated study area in order to determine the scope of heritage resources that might be encountered during the prospecting phase and subsequent heritage studies, as well as to provide recommendations for the safeguarding of archaeological resources during prospecting. The aim of this report is to provide the developer with information regarding heritage resources in the vicinity of the study area based on results from previous studies and written historical information.

In the following report, I provide a broad overview of the proposed sand and stone aggregate prospecting and contextualise the study area in terms of heritage resources. The legislation section included serves as a guide towards the effective identification and protection of heritage resources and will apply to any such material unearthed during the prospecting phase.

## 1.2 Legislation

The South African Heritage Resources Agency (SAHRA) aims to conserve and control the management, research, alteration and destruction of cultural resources of South Africa and to prosecute if necessary. It is therefore crucially important to adhere to heritage resource legislation contained in the Government Gazette of the Republic of South Africa (Act No.25 of 1999), as many heritage sites are threatened daily by development. Conservation legislation requires an impact assessment report to be submitted for development authorisation that must include an AIA if triggered.

AIAs should be done by qualified professionals with adequate knowledge to (a) identify all heritage resources that might occur in areas of development and (b) make recommendations for protection or mitigation of the impact of the sites.

### 1.2.1 The EIA and AIA processes

Phase 1 Archaeological Impact Assessments generally involve the identification of sites during a field survey with assessment of their significance, the possible impact that the development might have, and relevant recommendations.

All Archaeological Impact Assessment reports should include:

- a. Location of the sites that are found;
- b. Short descriptions of the characteristics of each site;
- c. Short assessments of how important each site is, indicating which should be conserved and which mitigated;
- d. Assessments of the potential impact of the development on the site(s);
- e. In some cases a shovel test, to establish the extent of a site, or collection of material, to identify the associations of the site, may be necessary (a pre-arranged SAHRA permit is required); and
- f. Recommendations for conservation or mitigation.

This AIA report is intended to inform the client about the legislative protection of heritage resources and their significance and make appropriate recommendations. It is essential to also provide the heritage authority with sufficient information about the sites to enable the authority to assess with confidence:

- a. Whether or not it has objections to a development;
- b. What the conditions are upon which such development might proceed;

- c. Which sites require permits for mitigation or destruction;
- d. Which sites require mitigation and what this should comprise;
- e. Whether sites must be conserved and what alternatives can be proposed to relocate the development in such a way as to conserve other sites; and
- f. What measures should or could be put in place to protect the sites which should be conserved.

When a Phase 1 AIA is part of an EIA, wider issues such as public consultation and assessment of the spatial and visual impacts of the development may be undertaken as part of the general study and may not be required from the archaeologist. If, however, the Phase 1 project forms a major component of an AIA it will be necessary to ensure that the study addresses such issues and complies with Section 38 of the National Heritage Resources Act.

### **1.2.2 Legislation regarding archaeology and heritage sites**

*National Heritage Resource Act No.25 of April 1999*

Buildings are among the most enduring features of human occupation, and this definition therefore includes all buildings older than 60 years, modern architecture as well as ruins, fortifications and Farming Community settlements. The Act identifies heritage objects as:

- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- visual art objects;
- military objects;
- numismatic objects;
- objects of cultural and historical significance;
- objects to which oral traditions are attached and which are associated with living heritage;
- objects of scientific or technological interest;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996), or in a provincial law pertaining to records or archives;



- any other prescribed category.

With regards to activities and work on archaeological and heritage sites this Act states that:

*“No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.” (34. [1] 1999:58)*

and

*“No person may, without a permit issued by the responsible heritage resources authority:*

- (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 which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.”(35. [4] 1999:58)*

and

*“No person may, without a permit issued by SAHRA or a provincial 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, 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;*
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) and excavation equipment, or any equipment which assists in the detection or recovery of metals.” (36. [3] 1999:60)*

On the development of any area the gazette states that:

*“...any person who intends to undertake a development categorised as:*

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*

- (b) *the construction of a bridge or similar structure exceeding 50m in length;*
- (c) *any development or other activity which will change the character of a site-*
  - i. *exceeding 5000m<sup>2</sup> in extent; or*
  - ii. *involving three or more existing erven or subdivisions thereof; or*
  - iii. *involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
  - iv. *the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*
- (d) *the re-zoning of a site exceeding 10000m<sup>2</sup> in extent; or*
- (e) *any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.” (38. [1] 1999:62-64)*

and

*“The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:*

- (a) *The identification and mapping of all heritage resources in the area affected;*
- (b) *an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;*
- (c) *an assessment of the impact of the development on such heritage resources;*
- (d) *an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;*
- (e) *the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;*
- (f) *if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and*

- (g) *plans for mitigation of any adverse effects during and after the completion of the proposed development.*”  
(38. [3] 1999:64)

#### *Human Tissue Act and Ordinance 7 of 1925*

The Human Tissues Act (65 of 1983) and Ordinance on the Removal of Graves and Dead Bodies (Ordinance 7 of 1925) protects graves younger than 60 years. These fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities. Graves 60 years or older fall under the jurisdiction of the National Heritage Resources Act as well as the Human Tissues Act, 1983.

## **2. Study Area and Project Description**

### **2.1 Location & Physical environment**

The closest city to the study area is Pretoria, located about 14 km to the south. Akasia is located about 10 km southwest of the area demarcated for prospecting and Ga-Rankuwa 17 km to the west. The study area falls within the City of Tshwane Metro Municipality in the Gauteng Province. In terms of vegetation, the study area falls within the Grassland Biome and the Central Bushveld Bioregion. On a local scale the northern half of the study area falls on Central Sandy Bushveld and the southern half on Marikana Thornveld. The Grassland Biome covers approximately 28% of South Africa. According to Mucina & Rutherford (2006), the conservation status for Central Sandy Bushveld is considered vulnerable. The conservation target for this vegetation unit is 19% and less than 3% is conserved, mostly in nature reserves. About 24% is transformed, including about 19% cultivated and 4% urban built-up areas. Central Sandy Bushveld is found in Limpopo, Mpumalanga, Gauteng and the North West Provinces. This vegetation unit is associated with undulating terrain that occurs in a broad arc south of the Springbokvlakte from Pilaansberg in the west through Hammanskraal and Groblersdal to GaMasemola in the east. A narrow band along the north-western edge of the Springbokvlakte extends into some valleys and lower-altitude areas within the Waterberg. Rural communities densely populate much of the broad arc south of the Springbokvlakte. Erosion in these areas vary from very low to high (Mucina & Rutherford 2006).

Marikana Thornveld, on the other hand, is found in the North West and Gauteng Provinces only and occurs on the plains from Rustenburg in the west, through Marikana and Brits to the Pretoria area in the east. In terms of conservation, Marikana Thornveld is considered endangered with a conservation target of 19%. Less than 1% is statutorily conserved in the Magaliesberg Nature Reserve, while more is conserved in the De Onderstepoort Nature Reserve. Cultivation, urban or built-up areas transformed about 48% and erosion is generally low. Alien invasive plants generally occur in high densities along drainage lines (Mucina & Rutherford 2006).

The average elevation for Central Sandy Bushveld varies between 850 and 1450 MASL, while the elevation for Marikana Thornveld varies between 1050 and 1450 MASL. The average elevation of the project area is 1200 MASL and slopes from the slightly more elevated northern side towards the south.

The study area falls within the summer rainfall region and the average annual rainfall is roughly 463 mm per year. The average maximum temperature for the study area ranges from 19.5 °C in June to 28.7 °C in January. The lowest temperatures occur during July when an average of 2 °C is reached during the night (SA Explorer accessed 11/10/2018).

The study area falls within the A21H Quaternary Catchment that forms part of the Upper Crocodile /Hennops/Hartbeespoort catchment area. The closest major river to the study area is the Apies, a perennial river crossing the south-eastern section of portions 8 and 224.

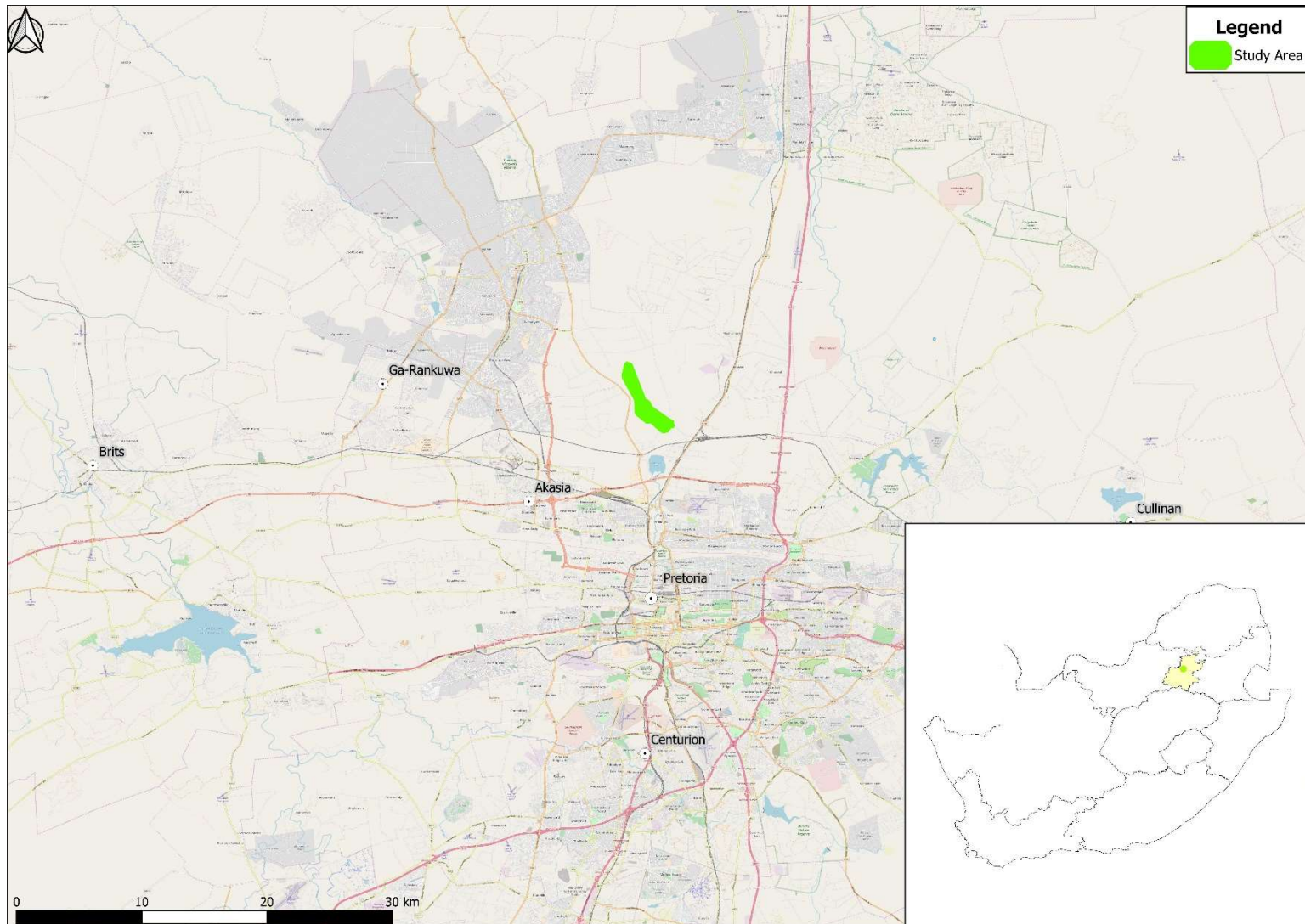
## 2.2 Project description

The area demarcated for the prospecting of sand and stone aggregate covers 276.688 ha (**Table 1 & Figure 3**). The Prospecting Right, if granted, will allow CIM International to determine if economically viable mineral deposits are present in the area. The proposed prospecting activities will be completed within five years and will consist of the following: Desktop studies, trenching (1.5m wide, 5m long, 2m deep), sampling and analysis and resources estimation. It is estimated that 5-10 trenches will be dug in the prospecting area to determine the presence of sand and stone aggregate. Afterwards the trenches will be rehabilitated. Additionally, no water, electricity or transport will be required during prospecting and no waste will be generated. Topsoil will be stripped prior to trenching and will be utilised during rehabilitation. Portable toilets will be made available to employees if and where needed (DMR 2018).

It should be noted, however, that an application for a mining right on a portion of portion 8 of the farm Honingnestkrans 269 JR for stone aggregate was refused by the DMR in 2017.

**Table 1:** Property name & coordinates

Property	Portion	Map Reference (1:50 000)	Coordinates
Honingnestkrans 269 JR	7	2528CA	S: -25.59097 E: 28.17749
Honingnestkrans 269 JR	8	2528CA	S: -25.58984 E: 28.18002
Honingnestkrans 269 JR	224	2528CA	S: -25.59021 E: 28.18324



**Figure 1:** Regional and Provincial location of the study area.

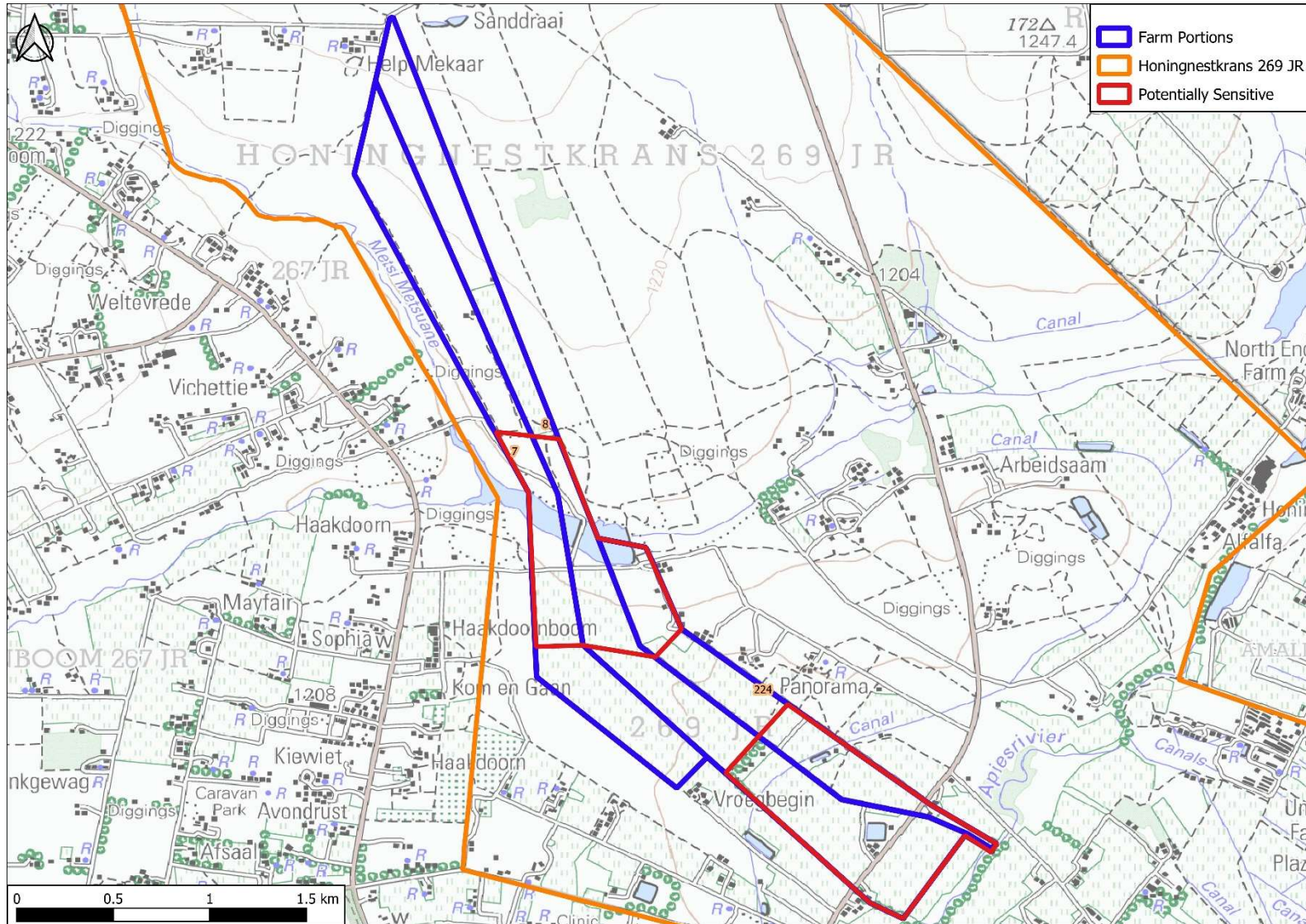
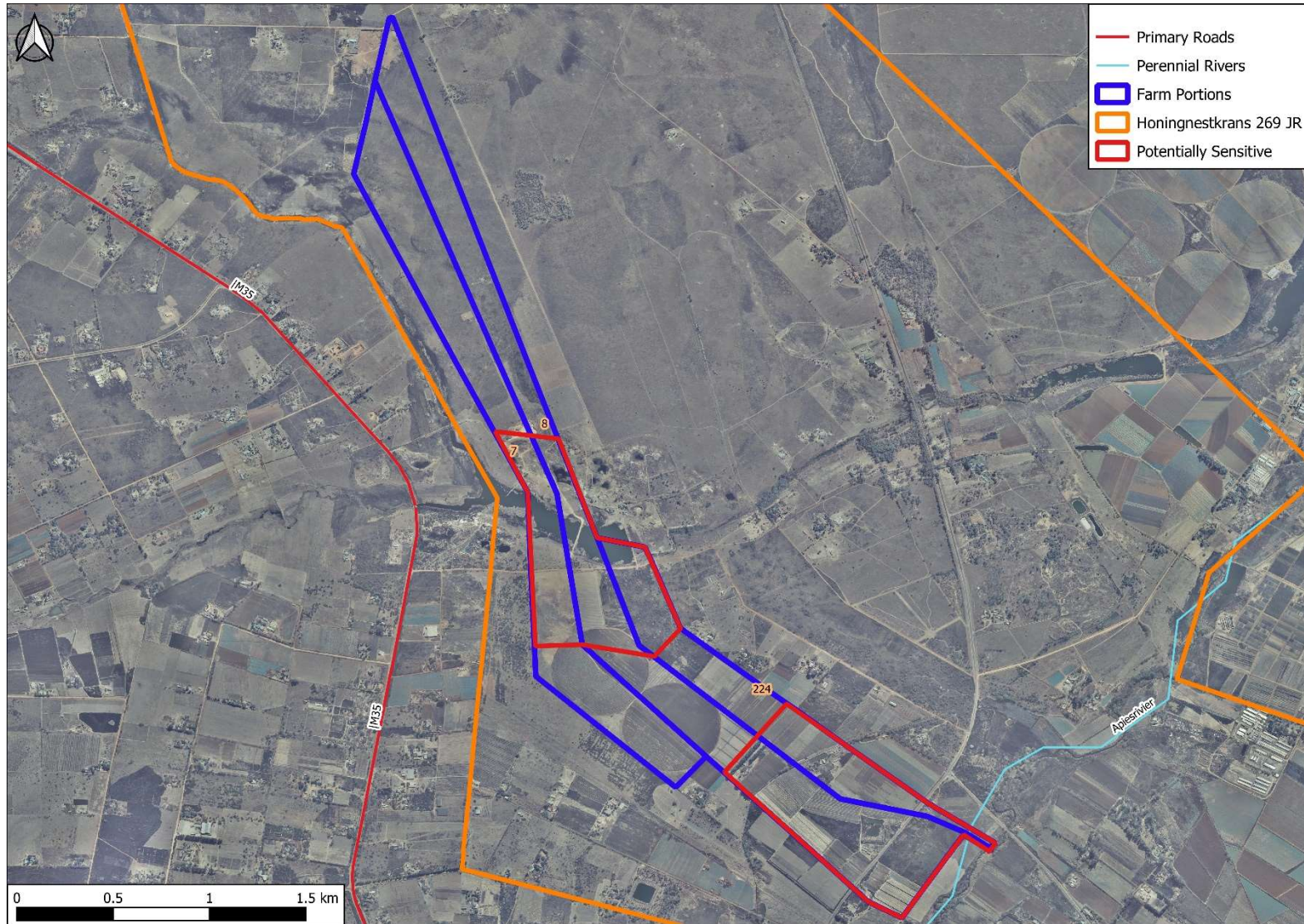


Figure 2: Segment of SA 1: 50 000 2528 CA indicating the study area.



**Figure 3:** Proposed prospecting site on an aerial backdrop.

### 3. Archaeological Background

Southern African archaeology is broadly divided into the Early, Middle and Later Stone Ages; Early, Middle and Later Iron Ages; and Historical or Colonial Periods. This section of the report provides a general background to archaeology in South Africa.

#### 3.1 The Stone Age

The earliest stone tool industry, the Oldowan, was developed by early human ancestors which were the earliest members of the genus *Homo*, such as *Homo habilis*, around 2.6 million years ago. It comprises tools such as cobble cores and pebble choppers (Toth & Schick 2007). Archaeologists suggest these stone tools are the earliest direct evidence for culture in southern Africa (Clarke & Kuman 2000). The advent of culture indicates the advent of more cognitively modern hominins (Mitchell 2002: 56, 57)

The Acheulean industry completely replaced the Oldowan industry. The Acheulean industry was first developed by *Homo ergaster* between 1.8 to 1.65 million years ago and lasted until around 300 000 years ago. Archaeological evidence from this period is also found at Swartkrans, Kromdraai and Sterkfontein. The most typical tools of the ESA are handaxes, cleavers, choppers and spheroids. Although hominins seemingly used handaxes often, scholars disagree about their use. There are no indications of hafting, and some artefacts are far too large for it. Hominins likely used choppers and scrapers for skinning and butchering scavenged animals and often obtained sharp ended sticks for digging up edible roots. Presumably, early humans used wooden spears as early as 5 million years ago to hunt small animals.

Middle Stone Age artefacts started appearing about 250 000 years ago and replaced the larger Early Stone Age bifaces, handaxes and cleavers with smaller flake industries consisting of scrapers, points and blades. These artefacts roughly fall in the 40-100 mm size range and were, in some cases, attached to handles, indicating a significant technical advance. The first *Homo sapiens* species also emerged during this period. Associated sites are Klasies River Mouth, Blombos Cave and Border Cave (Deacon & Deacon 1999).

Although the transition from the Middle Stone Age to the Later Stone Age did not occur simultaneously across the whole of southern Africa, the Later Stone Age ranges from about 20 000 to 2000 years ago. Stone tools from this period are generally smaller, but were used to do the same job as those from previous periods; only in a different, more efficient way. The Later Stone Age is associated with: rock art, smaller stone tools (microliths), bows and arrows, bored stones, grooved stones, polished bone tools, earthenware pottery and beads. Examples of Later Stone Age sites are Nelson Bay Cave, Rose Cottage Cave and Boomplaas Cave (Deacon & Deacon 1999).



## 3.2 The Iron Age & Historical Period

The Early Iron Age marks the movement of farming communities into South Africa in the first millennium AD, or around 2500 years ago (Mitchell 2002:259, 260). These groups were agro-pastoralist communities that settled in the vicinity of water in order to provide subsistence for their cattle and crops. Archaeological evidence from Early Iron Age sites is mostly artefacts in the form of ceramic assemblages. The origins and archaeological identities of this period are largely based upon ceramic typologies. Some scholars classify Early Iron Age ceramic traditions into different “streams” or “trends” in pot types and decoration, which emerged over time in southern Africa. These “streams” are identified as the Kwale Branch (east), the Nkope Branch (central) and the Kalundu Branch (west). Early Iron Age ceramics typically display features such as large and prominent inverted rims, large neck areas and fine elaborate decorations. This period continued until the end of the first millennium AD (Mitchell 2002; Huffman 2007). Some well-known Early Iron Age sites include the Lydenburg Heads in Mpumalanga, Happy Rest in the Limpopo Province and Mzonjani in Kwa-Zulu Natal.

The Middle Iron Age roughly stretches from AD 900 to 1300 and marks the origins of the Zimbabwe culture. During this period cattle herding appeared to play an increasingly important role in society. However, it was proved that cattle remained an important source of wealth throughout the Iron Age. An important shift in the Iron Age of southern Africa took place in the Shashe-Limpopo basin during this period, namely the development of class distinction and sacred leadership. The Zimbabwe culture can be divided into three periods based on certain capitals. Mapungubwe, the first period, dates from AD 1220 to 1300, Great Zimbabwe from AD 1300 to 1450, and Khami from AD 1450 to 1820 (Huffman 2007: 361, 362).

The Late Iron Age roughly dates from AD 1300 to 1840. It is generally accepted that Great Zimbabwe replaced Mapungubwe. Some characteristics include a greater focus on economic growth and the increased importance of trade. Specialisation in terms of natural resources also started to play a role, as can be seen from the distribution of iron slag which tend to occur only in certain localities compared to a wide distribution during earlier times. It was also during the Late Iron Age that different areas of South Africa were populated, such as the interior of KwaZulu Natal, the Free State, the Gauteng Highveld and the Transkei. Another characteristic is the increased use of stone as building material. Some artefacts associated with this period are knife-blades, hoes, adzes, awls, other metal objects as well as bone tools and grinding stones.

The Historical period mainly deals with Europe’s discovery, settlement and impact on southern Africa. Some topics covered by the Historical period include Dutch settlement in the Western Cape, early mission stations, Voortrekker routes and the Anglo Boer War. This time period also saw the compilation of early maps by missionaries, explorers, military personnel, etc.

### **3.3 Previous research**

#### **Mining Right application for a quarry on Portion 8 of the farm Honingnestkrans 269 JR**

A Phase 1 HIA, conducted by Leonie Marais-Botes Heritage Practitioner (2015) for a mining right application on a portion of portion 8 of the farm Honingnestkrans 269 JR revealed no material of heritage importance. However, the exact area surveyed is not clear. According to the report, one intact structure and the remains of another were identified, but did not exceed 60 years of age. The location of these structures are not mentioned. It should also be noted that the DMR refused the mining right application.

#### **Onderstepoort Ext. 33, 34, A, B and C Development**

A Heritage Impact Assessment was done for the establishment of Onderstepoort Ext. 33, 34, A, B & C located on portions 68, 69, 112, 113, 114, 115 and 116 of the farm Onderstepoort 266 JR within the Tshwane Metropolitan Municipality. The development consist of developing residential, commercial, infrastructural and municipal components. The site is located 5.6 km northwest of the proposed prospecting concerned in this report and borders Soshanguve. PGS Heritage & Grave Relocation Consultants surveyed the area and located 14 heritage sites: Two cemeteries and 12 structures. These sites include several stone-walled enclosures that might date to the South African War, circular stone-walled enclosures dating to the Late Iron Age, more recent rectangular cement brick dwellings and brick structures (Birkholtz 2012).

#### **Onderstepoort X42 mixed use Township establishment**

Van Der Walt (2015) conducted an Archaeological Impact Assessment on portions 297, 299 and 303 of the farm Haakdoornboom 276 JR for the establishment of the Onderstepoort Ext. 42 mixed use township. Although the general area is well known for LIA material culture, the study did not identify any heritage material exceeding 60 years of age. This might possibly be due to the high level of disturbance associated with the project area. The site is located about 5 km west of the proposed prospecting concerned in this report.

#### **Quarry expansion and development on the farm De Onderstepoort 300 JR**

Pelser (2017) conducted a Phase 1 AIA for the expansion of an existing quarry on portions 53, 127 and 131 of the Farm De Onderstepoort 300 JR and a new development on portion 135 of the same farm. The study mainly identified heritage sites dating to the LIA, as well as recent historical features and a graveyard. Historical and more recent quarrying caused portions 53, 127 and 131 to be relatively disturbed. Portion 135 is less disturbed and some historical diggings are found in the vicinity. The graveyard consists of roughly 50 graves, most of which are without dates but appear to exceed 60 years of age. Other remains include an abandoned brick works facility of which the date is unknown and several stone-walled features dating to the LIA. The LIA sites include cattle kraals, possible hut bays and agricultural terracing. Accordingly these sites are typical of Tswana settlements dating to between the late 17<sup>th</sup> and mid-19<sup>th</sup> Centuries (Pelser 2017).

## 4. Evaluation

The significance of an archaeological site is based on the amount of deposit, the integrity of the context, the kind of deposit and the potential to help answer present research questions. Historical structures are defined by Section 34 of the National Heritage Resources Act, 1999, while other historical and cultural significant sites, places and features, are generally determined by community preferences.

A fundamental aspect in the conservation of a heritage resource relates to whether the sustainable social and economic benefits of a proposed development outweigh the conservation issues at stake. There are many aspects that must be taken into consideration when determining significance, such as rarity, national significance, scientific importance, cultural and religious significance, and not least, community preferences. When, for whatever reason the protection of a heritage site is not deemed necessary or practical, its research potential must be assessed and if appropriate mitigated in order to gain data / information which would otherwise be lost. Such sites must be adequately recorded and sampled before being destroyed.

## 5. Statement of Significance & Recommendations

### 5.1 Statement of significance

#### **The study area: Portions 7, 8 and 224 of the Farm Honingnestkrans 269 JR**

As can be seen from previous research done in the area the general region is significant from a heritage perspective. Heritage sites are likely to include graveyards, Iron Age/Farmer and Historical remains. Since heritage sites, such as graves, are not always clearly identifiable as it might consist of stone cairns, care must be exercised when prospecting.

**Figure 4** indicates the study area on a 1939 topographical map, meaning that the features visible on the map are 79 years of age. A high concentration of huts can be observed around the middle of the area demarcated for prospecting. The topographical map dating to 1965 (**Figure 5**) shows a concentration of huts in the same location as the 1939 map, as well as further to the north and a grave to the south. Residences are also visible around the middle of the project area, as well near the southern boundary. Material culture visible on **Figure 5** will be 53 years of age. **Figure 6** indicates the study area on an aerial backdrop dating to 1958, making the visible remains 60 years of age. On this map several residential areas can be observed, as well as a disturbed area where the huts on the topographical map appear.

Based on the inspection of the historical and topographical maps two potentially sensitive areas have been identified. It should be noted, however, that the potentially sensitive areas might not be limited by these boundaries.

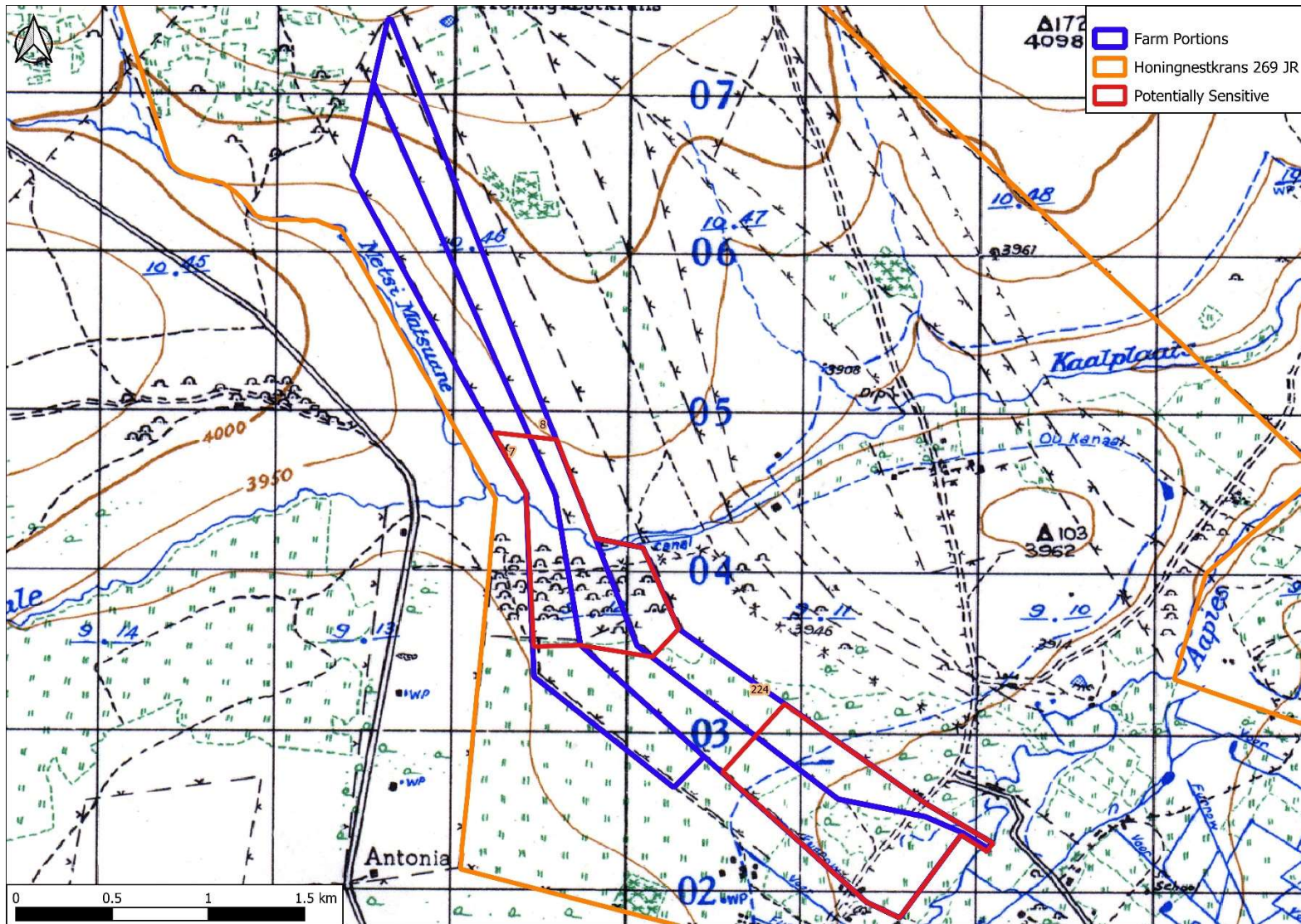
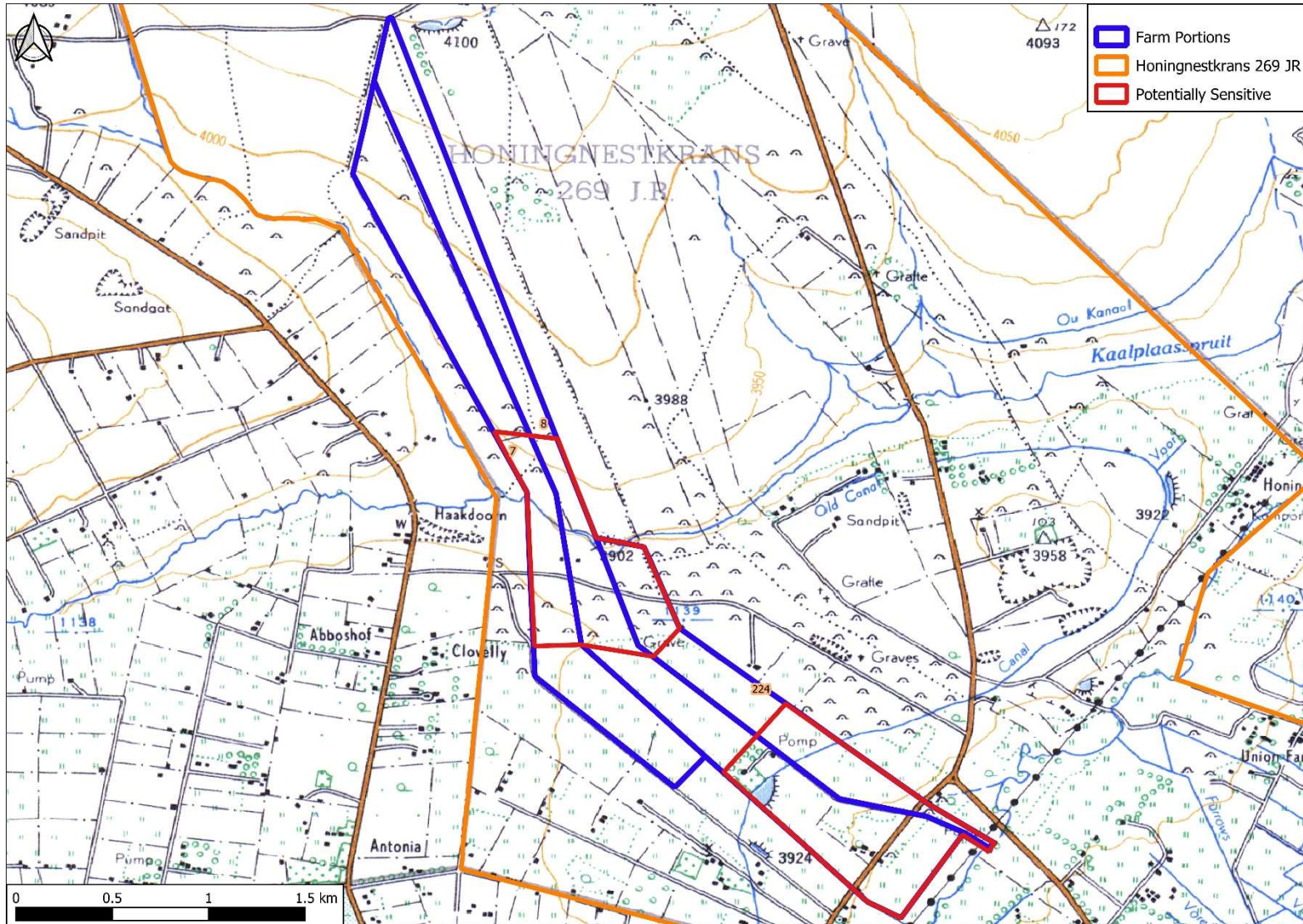
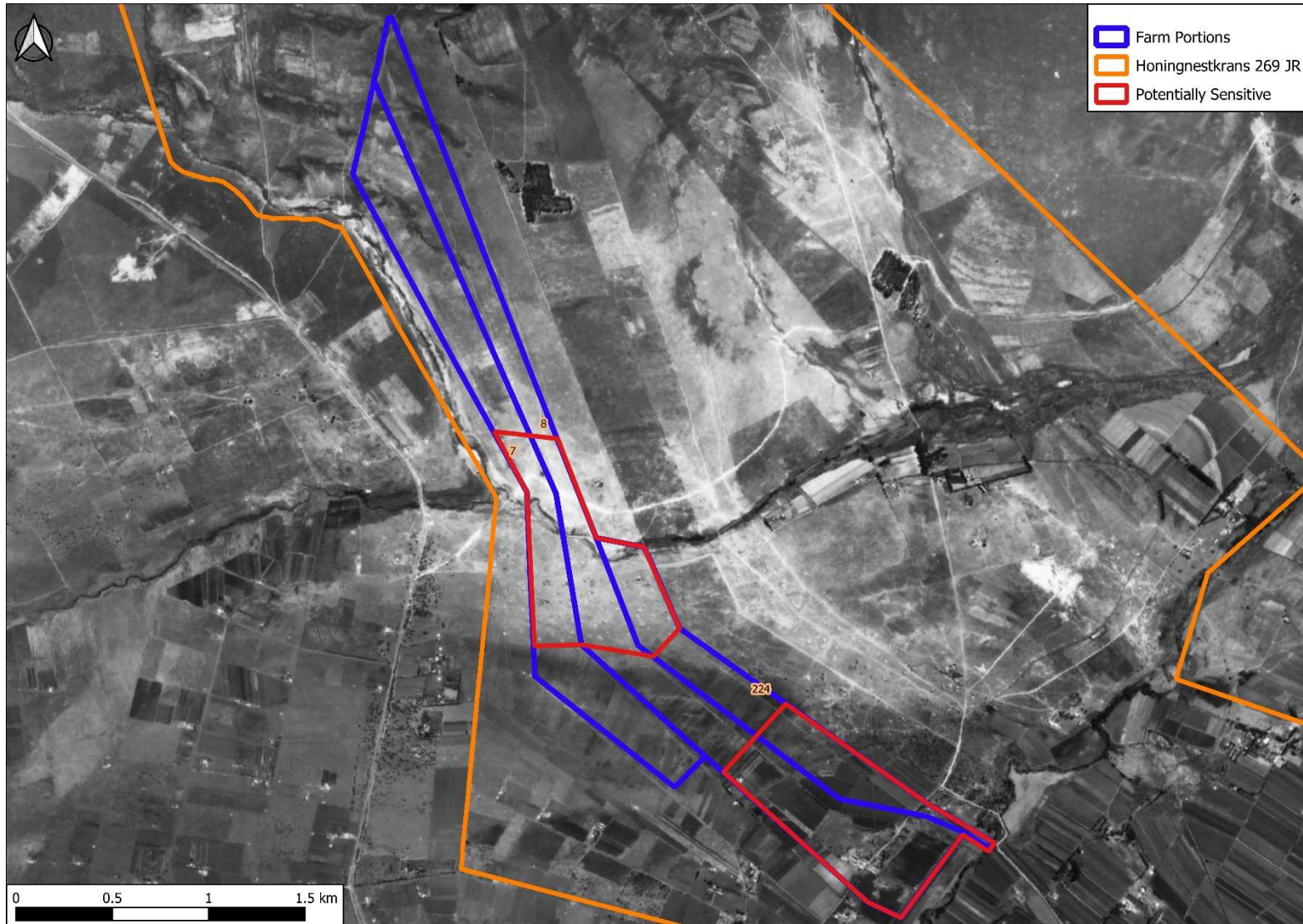


Figure 4: Segment of 1939 SA 1: 50 000 2528 CA indicating the study area.



**Figure 5:** Segment of 1965 SA 1: 50 000 2528 CA indicating the study area.



**Figure 6:** Proposed prospecting site on aerial backdrop dating to 1958.

## 5.2 Recommendations

The following recommendations are made in order to avoid the destruction of heritage remains on the areas demarcated for prospecting:

- Care should be exercised when prospecting on the demarcated farm portions and if possible the areas demarcated as 'Potentially Sensitive' should be avoided.
- It is advised that a qualified archaeologist be contacted whenever uncertainty regarding potential heritage remains are encountered.
- Prospecting should not take place in the vicinity of stone cairns, stone-walling, building ruins or any other heritage material.
- Should the prospecting outcome result in further development or construction, a full Phase 1 Archaeological Impact Assessment must be conducted on the affected area if triggered.
- Because archaeological artefacts generally occur below surface, the possibility exists that culturally significant material may be exposed during the prospecting phase, in which case all activities must be suspended pending further archaeological investigations by a qualified archaeologist. Also, should skeletal remains be exposed, all activities must be suspended and the relevant heritage resources authority contacted (See National Heritage Resources Act, 25 of 1999 section 36 (6)).



## 6. Addendum: Terminology

### **Archaeology:**

The study of the human past through its material remains.

### **Artefact:**

Any portable object used, modified, or made by humans; e.g. pottery and metal objects.

### **Assemblage:**

A group of artefacts occurring together at a particular time and place, and representing the sum of human activities.

### **Context:**

An artefact's context usually consist of its immediate *matrix* (the material surrounding it e.g. gravel, clay or sand), its *provenience* (horizontal and vertical position within the matrix), and its *association* with other artefacts (occurrence together with other archaeological remains, usually in the same matrix).

### **Cultural Resource Management (CRM):**

The safeguarding of the archaeological heritage through the protection of sites and through salvage archaeology (rescue archaeology), generally within the framework of legislation designed to safeguard the past.

### **Excavation:**

The principal method of data acquisition in archaeology, involving the systematic uncovering of archaeological remains through the removal of the deposits of soil and other material covering and accompanying it.

### **Feature:**

An irremovable artefact; e.g. hearths or architectural elements.

### **Ground Reconnaissance:**

A collective name for a wide variety of methods for identifying individual archaeological sites, including consultation of documentary sources, place-name evidence, local folklore, and legend, but primarily actual fieldwork.

### **Matrix:**

The physical material within which artefacts is embedded or supported, i.e. the material surrounding it e.g. gravel, clay or sand.

### **Phase 1 Assessments:**

Scoping surveys to establish the presence of and to evaluate heritage resources in a given area.

**Phase 2 Assessments:**

In-depth culture resources management studies which could include major archaeological excavations, detailed site surveys and mapping / plans of sites, including historical / architectural structures and features. Alternatively, the sampling of sites by collecting material, small test pit excavations or auger sampling is required.

**Sensitive:**

Often refers to graves and burial sites although not necessarily a heritage place, as well as ideologically significant sites such as ritual / religious places. *Sensitive* may also refer to an entire landscape / area known for its significant heritage remains.

**Site:**

A distinct spatial clustering of artefacts, features, structures, and organic and environmental remains, as the residue of human activity.

**Surface survey:**

There are two kinds: (1) unsystematic and (2) systematic. The former involves field walking, i.e. scanning the ground along one's path and recording the location of artefacts and surface features. Systematic survey by comparison is less subjective and involves a grid system, such that the survey area is divided into sectors and these are walked ally, thus making the recording of finds more accurate.

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