

Prepared for:  
**LANDSCAPE DYNAMICS**

**A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY  
FOR A PROPOSED NEW RESIDENTIAL DEVELOPMENT ON  
THE FARM VLAKFONTEIN 723KS NEAR MARBLE HALL IN  
THE MPUMALANGA PROVINCE OF SOUTH AFRICA**

Prepared by:  
**DR JULIUS CC PISTORIUS**  
Archaeologist & Heritage  
Management Consultant  
Member of ASAPA

**352 Rosemary Street  
Lynnwood 0081  
Pretoria**  
Tel/fax 012 348 5668  
Cell 082 554 5449  
March 2006

## EXECUTIVE SUMMARY

A Phase I Heritage Impact Assessment (HIA) study, as required in terms of the National Heritage Resources Act (Act 25 of 1999) was done for a proposed new residential development on the farm Vlakfontein 723KS near Marble Hall in the Mpumalanga Province of South Africa. The aims of the HIA study were threefold: to determine whether any of the types and ranges of heritage resources ('national estate') as outlined in the National Heritage Resources Act (Act 25 of 1999) do occur in the proposed new residential area; to determine whether such heritage resources may be affected by the proposed new development and, if so, to determine what mitigation measures can be applied to minimize the effect of the development on such heritage resources.

\* The Phase I HIA study of the proposed new residential areas on the farm Vlakfontein 723KS revealed the following types and ranges of heritage resources outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the project area:

- Remains which can be related to prospecting activities which may approach sixty years of age and which therefore may qualify as historical remains. It is possible that at least one of the prospecting adits may be older than sixty years and that it may date from the last few hundred years (Late Iron Age).

Only the possible ancient adit in the prospecting complex was geo-referenced although the general occurrence of prospecting activities on the plateau area is indicated (Figure 1). The significance of these early prospecting activities has been determined by scrutinizing various criteria.

The prospecting remains have significance when considering the following criteria:

- These remains are approaching the age (60 years) set by the National Heritage Resources Act (No 25 of 1999) to qualify as historical remains.
- At least one of the adits may be earlier (older) than the larger part of the prospecting complex.

However, the prospecting complex mainly consisting of shallow pot holes and trenches also has little significance when considering criteria such as:

- These features do not have an appealing or aesthetic appearance and have little to add to our knowledge of ancient or recent (historical) prospecting activities.
- Little will be achieved in attempting to conserve some of these remains as very few people will make an effort to visit these unspectacular remains when preserved as part of an *in situ* display.
- If earlier (ancient) prospecting or mining did occur, it merely represents a fraction of the current younger prospecting complex. (Many of the earlier prospecting activities may not be recognisable any longer as they have may have been altered and covered by the younger [historical] prospecting activities).
- The most prominent (and ancient) feature in the prospecting complex, namely an adit, was altered significantly in recent times when its approach and entrance were reconstructed in order to be used as a shelter or hide-out. The adit's original appearance and some of its significance therefore has been lost.

The development of the proposed new residential area on the plateau will require that the prospecting activities have to be demolished in order to make way for new residences. If conserved (left unaffected) the prospecting activities can be viewed as randomly occurring excavations and heaps of soil on the landscape, as scars on the landscape and as features that contribute to erosion. The prospecting activities also create safety problems as people or animals may fall into some of these excavations.

22/10/16

It is therefore recommended that the prospecting activities be demolished when the new residential development occurs. As the prospecting activities may have pre-historical and/or historical significance they can only be destroyed after the Mpumalanga Provincial Heritage Resources Authority (Mpumalanga PHRA) has issued a permit authorising the destruction of these remains. An archaeologist accredited with ASAPA has to apply for a permit from the Mpumalanga PHRA before the demolishing of the prospecting activities may take place.

## CONTENTS

Executive Summary	2
1 INTRODUCTION	5
2 AIMS OF THIS REPORT	7
3 METHODOLOGY	8
4 THE PROJECT AREA	9
4.1 Location	9
4.2 The nature of the project area	9
5 THE HERITAGE IMPACT ASSESSMENT STUDY (HIA)	11
5.1 Types and ranges of heritage resources in the project area	11
5.1.1 Possible historical prospecting activities	11
5.2 The significance of the prospecting activities	13
5.3 The impact of the development on the prospecting activities	15
5.4 Mitigating the prospecting activities	15
6 CONCLUSION AND RECOMMENDATIONS	16
7 SELECT BIBLIOGRAPHY	19

## 1 INTRODUCTION

This document contains the report on the results of a Phase I Heritage Impact Assessment (HIA) study done for a new proposed residential development on the farm Vlakfontein 723KS near Marble Hall in the Mpumalanga Province of South Africa.

The Mpumalanga Province of South Africa has a rich heritage, comprised of remains dating from the pre-historic and from the historical (or colonial) periods of South Africa. Pre-historic and historical remains in the Mpumalanga Province form a record of the heritage of most groups living in South Africa today. Various types and ranges of heritage resources that qualify as part of South Africa's 'national estate' – outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999) – occur in this region (see Box 1).

**Box 1: Types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act, 1999 (No. 25 of 1999).**

The National Heritage Resources Act (Act No 25 of 1999, Section 3) outlines the following types and ranges of heritage resources that qualify as part of the national estate, namely:

- (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 natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and paleontological sites;
- (g) graves and burial grounds including:
  - (i) ancestral graves;
  - (ii) royal graves and graves of traditional leaders
  - (iii) graves of victims of conflict
  - (iv) graves of individuals designated by the Minister by notice in the Gazette;
  - (v) historical graves and cemeteries; and
- (h) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
- (i) sites of significance relating to the history of slavery in South Africa;
  - (i) moveable objects, including:
    - (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
    - (ii) objects to which oral traditions are attached or which are associated with living heritage;
    - (iii) ethnographic art and objects;
    - (iv) military objects;
    - (v) objects of decorative or fine art;
    - (vi) objects of scientific or technological interest; and
    - (vii) books, records, documents, photographs, positives and negatives, graphic, film or video material 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).

The National Heritage Resources Act (Act No 25 of 1999, Act 3) also distinguishes nine criteria for places and objects to qualify as part of the national estate if they have cultural significance or other special value .... These criteria are the following:

- (a) its importance in the community, or pattern of South Africa's history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
- (i) sites of significance relating to the history of slavery in South Africa

## 2 AIMS WITH THIS REPORT

In order to comply with legislation the developer of the proposed new residential development on Viakfontein 723KS requires knowledge of the possible presence and the significance of any heritage resources that may occur in the proposed new residential area. The developer needs this information in order to take pro-active measures with regard to any heritage resources that may be affected, damaged or destroyed when the new residential area is developed.

The developer therefore commissioned the author to undertake a Phase I Heritage Impact Assessment (HIA) of the new residential (project) area. The aims with the Phase I HIA study were:

- to establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) occur in the proposed new residential area and, if so, what the nature, the extent and the significance of these remains are (see Table 1);
- to determine whether such remains will be affected by the proposed new residential development; and
- to evaluate what appropriate actions could be taken to reduce the impact of the development activities on such remains.

### 3 METHODOLOGY

This Phase I HIA study was conducted by consulting archaeological data bases, by doing a survey on foot of the project area, studying maps of the project area and by using evidence derived from numerous previous surveys done by the author in the Central Bankenveld during the past two decades.

- Archaeological data bases kept at institutions such as the African Window and the South African Heritage Resources Authority (SAHRA) (Cape Town [national] and Mafekeng [provincial]) were consulted to establish whether any heritage resources of any significance occur in or near the project area.
- The project area was surveyed on foot.
- The project area was studied on the 1: 50 000 and 1: 250 000 maps.
- Areas in the Magalies Valley have been surveyed by the author in the past. Numerous sites have been recorded and at least twenty sites have been excavated in the Bankenveld.



## 4 THE PROJECT AREA

### 4.1 Location

The proposed new residential development on Vlakfontein 723KS is located approximately 14km to the north of Marble Hall in the Mpumalanga Province of South Africa. The farm Vlakfontein 723KS and adjacent farms such as Kwagarit 726KS, Rinkhalskop 727KS, Rietfontein 706KS and Kwagafontein 722KS are covered with a range of mountains which demarcate the northern boundary of the flat outstretched Springbok Flats that run further southwards towards Pretoria (2429CD Marble Hall; 2429CC [1:50 000 topographical maps]).

The proposed new residential development on Vlakfontein 723KS will be located on a plateau of a mountain as well as along the northern foot of a second smaller mountain on Vlakfontein 273KS and will incorporate an upper class residential area consisting of approximately two hundred residential units as well as a reception, a shop, a well-ness centre and staff housing.

### 4.2 The nature of the project area

The proposed new residential development will involve two mountains on Vlakfontein 723KS as well as a piece of land between these two mountains. The proposed new development therefore affects four pieces of land of which three pieces are associated with the two mountains which are located next to each while the fourth piece of land is situated between these two mountains, namely (Figure 1):

- The western, lower foot of a small mountain.
- A plateau between the small mountain and the higher, larger part of this mountain.
- The northern base of a small conical-shaped mountain which is located to the south-west of the large mountain (referred to above).

- A flat piece of land between the larger and smaller mountain.

The proposed new residential areas are relatively pristine as no large-scale agricultural or other development activities have occurred close to these two mountains on Vlakfontein 723KS. The northern base of the conical shaped mountain was slightly affected when labourers quarters were established here in the past. A new grass thatched structure and the original farm homestead have also been established on the level piece of land between the two mountains.

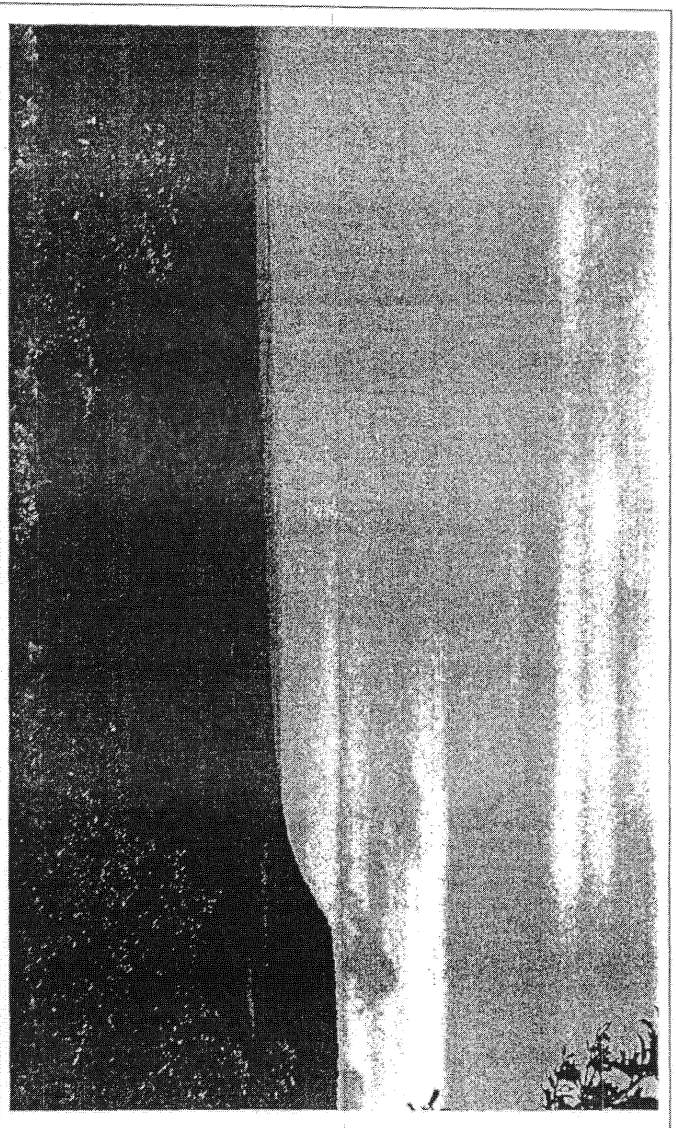


Figure 1 - View from the plateau on the large mountain in the project area across the Springbok Flats to the south (above).

## 5 THE HERITAGE IMPACT ASSESSMENT STUDY

### 5.1 Types and ranges of heritage resources in the project area

The Phase 1 HIA study of the proposed new residential areas on the farm Vlakfontein 723KS revealed the following types and ranges of heritage resources outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999) in the project area:

- Remains which can be related to prospecting activities which may approach sixty years of age and which therefore may qualify as historical remains

Only one adit in the prospecting complex was geo-referenced although the general occurrence of prospecting activities on the plateau area is indicated (Figure 1). The significance of these early prospecting activities has also been determined by means of assessing various criteria.

The possible historical prospecting activities is now briefly discussed and illustrated with photographs.

#### 5.1.1 Possible historical prospecting activities

The prospecting activities are confined to potholes, a few trenches and at least one prominent shaft or adit. These features are all associated with adjacent waste rock dumps. The prospecting complex is distributed in a line running from the north-east to the south-west along the base of the higher, larger mountain in the project area. The pot holes merely consist of holes that were dug vertically into the ground. Some are merely hollows while others are two to three meters in depth. One of the pot holes reaches several meters in depth. The sizes of the waste rock dumps associated with these features vary according to the depths of the potholes and trenches..

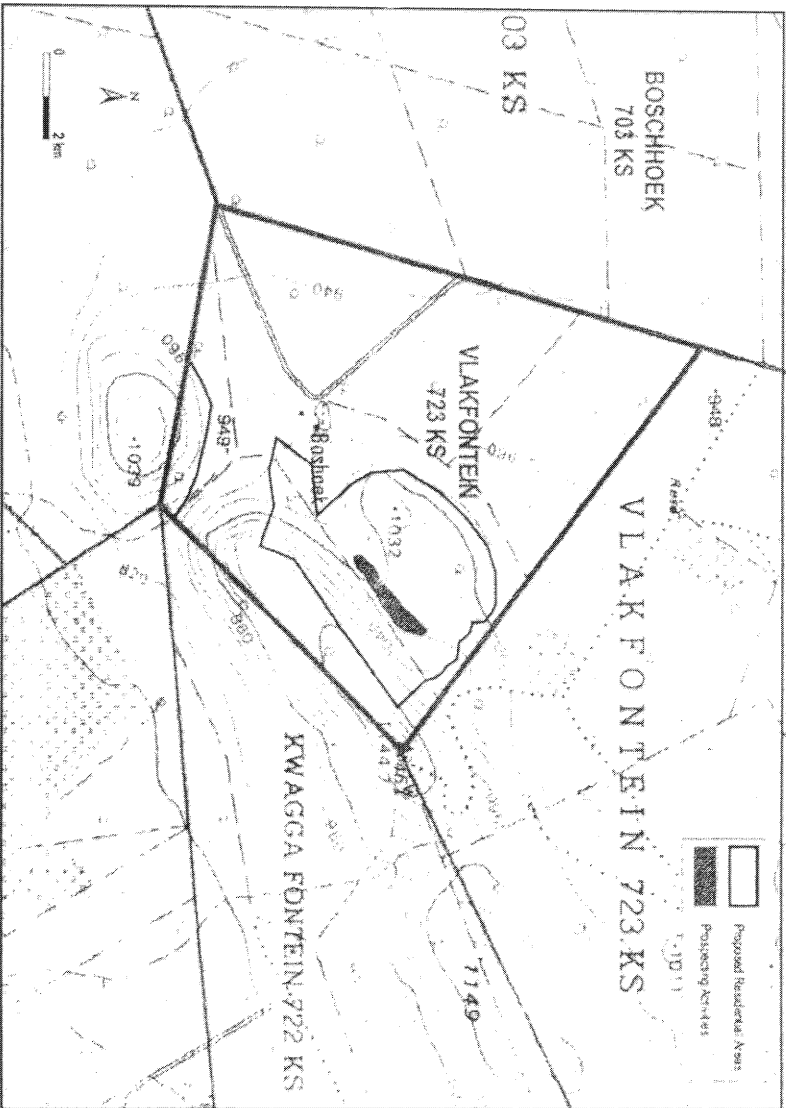
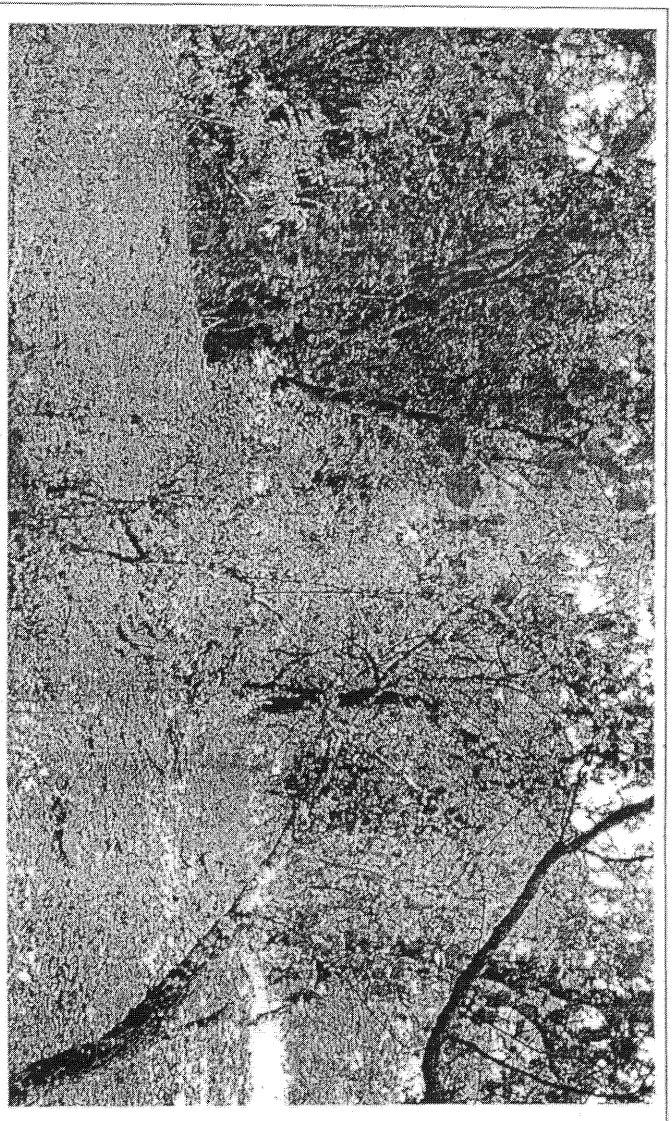


Figure 1- The proposed new residential development on the farm Vlakkfontein 723KS to the north of Marble Hall in the Mpumalanga Province of South Africa. Remains of significant in the proposed new residential development produce mining heritage remains on a plateau in the project area.

Figure 3- The shaft (adit) which was sunk into the large mountain's slope is the most prominent feature in the prospecting complex (below).





**Figure 4- Rock waste dumps collected next to the adit when the latter feature was sunk into the mountain (above).**

A single incline shaft that runs for several meters at a slight downwards angle into the slope of the large mountain is the most prominent feature in the prospecting complex. The incline shaft (adit) runs for several meters into the mountain's slope and is the most conspicuous feature in this complex (Figures 3 & 4).

## **5.2 The significance of the prospecting activities**

It is unclear how old the prospecting activities are and what minerals the prospectors were searching for. According to spokespersons living on Vlaktfontein 723KS the prospecting activities date back several decades. It is therefore possible that these prospecting activities may approach sixty years of age which means that they may gain historical significance in the near future.

It is also possible that some of the prospecting activities, such as the prominent adit, may have pre-historical connections and that this adit may have been excavated by earlier people, such as Late Iron Age miners, before this feature and other prospecting activities from the same time may have been re-explored by the younger prospecting activities.

(It was common practise for the earliest modern prospectors in South Africa, operating at the turn of the 19<sup>th</sup> century, to follow the tracks (mining activities) of the 'ancients' in their search for the mineral riches of South Africa).

It can therefore be said that the prospecting remains have significance when considering the following criteria:

- These remains are approaching the age (60 years) set by the National Heritage Resources Act (No 25 of 1999) to qualify as historical remains.
- Some of the younger prospecting activities may be superimposed on earlier (older) mining workings.

However, it is also true that the larger part of the prospecting complex consisting of shallow hollows, a few deep holes and trenches have little significance when considering criteria such as:

- These features do not have an appealing, aesthetic appearance and have little to add to our knowledge of ancient or recent prospecting activities.
- Very little will be achieved in attempting to conserve some of these remains as very few people will make an effort to visit these remains as part of a display.
- It is expected that if earlier prospecting activities did occur, that it only represented a fraction of the features that still exist and that many of the earlier prospecting activities will not be recognisable any longer as they have been altered and covered by the younger (later) prospecting activities.



- The most prominent feature in the prospecting complex, namely the adit, was altered significantly when its approach and entrance were reconstructed in order to use this feature as a shelter. The adit therefore has lost its original appearance as well as part of its significance.

(As the younger [now abandoned] and ancient Rooiberg Tin Mines occur closest to the prospecting activities on Vlakfontein 723KS, it may be possible that the early prospectors were looking for tin deposits).

### **5.3 The impact of the development on the prospecting activities**

When left unaffected the prospecting activities may also be viewed as randomly occurring excavations and heaps of soil on the landscape; as an impact on the landscape; and as features that contribute to erosion. The prospecting activities can also create safety problems as people or animals may fall into some of the deeper potholes.

However, the development of the proposed new residential area on the plateau area will require that the prospecting activities have to be demolished in order to make way for new residences.

### **5.4 Mitigating the prospecting activities**

It is recommended that the prospecting activities be demolished when the new residential development occurs. As the prospecting activities may have pre-historical and/or historical significance they can only be destroyed after the Mpumalanga Provincial Heritage Resources Authority (Mpumalanga PHRA) has issued a permit authorising the destruction of these remains. An archaeologist accredited with ASAPA has to apply for a permit from the Mpumalanga PHRA before the demolishing of the prospecting activities may take place.

## 7 CONCLUSION AND RECOMMENDATIONS

The Phase 1 HIA study of the proposed new residential areas on the farm Vlakfontein 723KS revealed the following types and ranges of heritage resources outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999) in the project area:

- Remains which can be related to prospecting activities which may approach sixty years of age and which therefore may qualify as historical remains

It is unclear how old the prospecting activities are and what minerals the prospectors were searching for. According to spokespersons living on Vlakfontein 723KS the prospecting activities date back several decades. It is therefore possible that these prospecting activities may approach sixty years of age which means that they do have historical significance. (It is possible that the prospectors were looking for tin deposits).

It is also possible that some of the prospecting activities, such as the prominent adit, may have pre-historical connections and that this adit may have been excavated by earlier people, such as Late Iron Age miners, before this feature and other prospecting activities from the same time period may have been re-explored by the younger (historical) prospecting activities.

(It was common practise for the earliest modern prospectors in South Africa, operating at the turn of the 19<sup>th</sup> century, to follow the tracks (mining activities) of the 'ancients' in their search for the mineral riches of South Africa).

It can therefore be said that the prospecting remains have significance when considering the following criteria:

- These remains are approaching the age (60 years) set by the National Heritage Resources Act (No 25 of 1999) to qualify as historical remains.



- Some of the younger prospecting activities may be superimposed on earlier (older) mining workings.

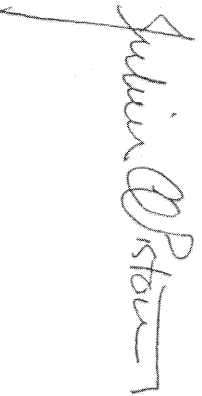
However, it is also true that the larger part of the prospecting complex such as the shallow hollows and trenches have little significance when considering criteria such as:

- These features do not have an appealing aesthetic appearance and have little to add to our knowledge of ancient or recent prospecting activities.
- Very little will be achieved in attempting to conserve some of these remains as very few people will make an effort to visit these remains as part of a display.
- It is expected that if earlier prospecting activities did occur that it represents a fraction of the features that still exist and that many of the earlier prospecting activities will not be recognisable any longer as they have been altered and covered by the younger (later) prospecting activities.
- The most prominent feature in the prospecting complex, namely the adit, was altered significantly when its approach and entrance were reconstructed in order to use this feature as a shelter. The adit therefore has lost its original appearance as well as part of its significance.

When left unaffected the prospecting activities may also be viewed as randomly occurring excavations and heaps of soil on the landscape; as an impact on the landscape; and as features that contribute to erosion. The prospecting activities can also create safety problems as people or animals may fall into some of the deeper potholes.

However, the development of the proposed new residential area on the plateau area will require that the prospecting activities have to be demolished in order to make way for new residences.

It is recommended that the prospecting activities be demolished when the new residential development occurs. As the prospecting activities may have pre-historical and/or historical significance they can only be destroyed after the Mpumalanga Provincial Heritage Resources Authority (Mpumalanga PHRA) has issued a permit authorising the destruction of these remains. An archaeologist accredited with ASAPA has to apply for a permit from the Mpumalanga PHRA before the demolishing of the prospecting activities may take place.



**DR JULIUS CC PISTORIUS**  
**Archaeologist &**  
**Heritage Management Consultant**

## 7 SELECT BIBLIOGRAPHY

- Coetzee, C.B. (red.) 1976. *Delfstowwe van die Republiek van Suid-Afrika*. 5de uitgawe. Geologiese Opname, Departement van Mynwese. Pretoria: Staatsdrukker.
- Erasmus, B.P.J. 1995. *Oppad in Suid-Afrika. 'n gids tot Suid-Afrika, streek vir streek*. Kaapstad: Jonathan Ball..
- Mining and metallurgy in South Africa. A pictorial history*. 1994. Published by Mintek in association with Phase 4.
- Pistorius, J.C.C. 2002. *A cultural heritage impact assessment for the farm Loskop 53JS for the scoping phase of the EMPR for the proposed Ridge Mining Platinum Mine in the Mpumalanga Province of South Africa*. Unpublished report prepared for SRK Consulting. (37pp.).
- Viljoen, M.J. & Reinhold, W.U. 1999. *An introduction to South Africa's geological and mining heritage*. Randburg: Mintek.
- Wilson, M.G.C. & Anhaeuser, S.C.R. (eds) 1998. *The mineral resources of South Africa*. 6<sup>th</sup> edition. The Department of Geoscience.