



# **AFRICAN HERITAGE CONSULTANTS CC**

2001/077745/23

**DR. UDO S KÜSEL**

Tel/fax: (012) 567 6046

Cell: 082 498 0673

E-mail: udo.heritage@absamail.co.za

P.O. Box 652

Magalieskruin

0150

---

**3 April 2012**

## **CULTURAL HERITAGE RESOURCES IMPACT ASSESSMENT OF THE PROPOSED EXTENSION OF MIDRAND ESTATE PORTIONS 35, 39, A PORTION OF PORTION 48 AND 128, REMAINDER OF PORTION 34 AND THE REMAINDER OF THE FARM OLIFANTSFONTEIN 410 JR EKURHULENI GAUTENG**

### **1. DEFINITION**

The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of palaeontological, archaeological, historical, aesthetic, scientific, architectural, religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

### **2. PROTECTED SITES IN TERMS OF THE NATIONAL HERITAGE RESOURCES ACT, ACT NO. 25 OF 1999**

The following are the most important sites and objects protected by the National Heritage Act:

- 2.1 Structures or parts of structures older than 60 years.
- 2.2 Archaeological sites and objects.
- 2.3 Palaeontological sites.
- 2.4 Meteorites.
- 2.5 Ship wrecks.
- 2.6 Burial grounds.
- 2.7 Graves of victims of conflict.

- 2.8 Public monuments and memorials.
- 2.9 Structures, places and objects protected through the publication of notices in the Gazette and Provincial Gazette.
- 2.10 Any other places or objects, which are considered to be of interest or of historical or cultural significance.
- 2.11 Geological sites of scientific or cultural importance.
- 2.12 Sites of significance relating to the history of slavery in South Africa.
- 2.13 Objects to which oral traditions are attached.
- 2.14 Sites of cultural significance or other value to a community or pattern of South African history.

### **3. METHODOLOGY**

The site was visited and inspected on foot. All appropriate documents on the area were studied.

### **4. RESULTS**

The proposed development area is Highveld grassland with patches of indigenous and exotic trees. The geological formation is mainly dolomite though no caves are present on the proposed development area. The visibility was poor because of the tall grass which is up to 1,8 metres high.

The dominant historic feature on the proposed development site is the remains of a dolomite mine and lime kiln and other structures associated with the mine. Their localities are as follows:

- Mine: S25° 55' 54.0" & E28° 12' 53.1" The mine was an opencast mine quarry. Today it is overgrown by trees and shrubs (see photograph 1).
- Kilns: S25° 55' 56.6" & E28° 12' 52.2". The kilns and associated structures were built with local stone as well as bricks and concrete. The remains of engine blocks are also visible. Most probably steam engines were used. The kilns are still in a relative good condition (see photograph 2,3 & 4).
- Workers houses/offices: West of the mine at S25° 55' 54.1" & E28° 12' 47.4" as well as at S25° 55' 56.9" & E28° 12' 46.9" are the ruins of workers houses/offices (see photograph 5 & 6).
- Two cemeteries north of the mine:
  - Cemetery1: S25° 55' 47.0" & E28° 12' 54.5" This cemetery is totally overgrown by trees and has some 130 or more graves (see photograph 7). One grave has an inscription with the date 1940 on it.

Cemetery 2: S25° 55' 50.2" & E28° 12' 55.5" This cemetery is smaller with more or less 140 graves, but also overgrown. Only one grave has a date of 1959 (see photograph 8).

Both cemeteries are most probably those of mine workers.

- Mine Managers house: S25° 55' 59.5" & E28° 12' 59.0" The ruin of the Mine Managers house is on top of the hill north of the mine. Only the foundations are still visible. The home had a large garden surrounding the house. Many of the exotic trees are still present (see photograph 9).
- Canal: The mine and farms lower down next to the Kaalspruit were fed by the canal. The water for the canal came from a dam in the Kaalspruit S25° 56' 10.2" & E28° 12' 13.7". Other coordinates of the canal are: S25° 55' 58.5" & E28° 12' 56.1" and S25° 55' 59.5" & E28° 13' 04.2" (see map & photograph 10 & 11).

According to oral information the lime mine and lime works operated from the beginning of the 20<sup>th</sup> century to about 1960.

There are six other remains of structures on the proposed development area. All these are modern and associated with later farming.

A small section of the proposed development area lies east of the tar road from Irene to Olifantsfontein (M18). Just east of the road bridge over the Kaalspruit is a beautiful old train bridge build of hand dresses sandstone S25° 55' 18.5" & E28° 13' 41.1". This is really an excellent example of sandstone architecture as the builders used red and yellow sandstone. The bridge is not in use any more as the new railway line now runs some two hundred metre to the east of the old bridge. According to Dr. Robert de Jong this bridge was build in 1901 by staff of the Imperial Military Railways after the original bridge most probably was demolished by a dynamite explosion in the Second Anglo Boer War (see photograph 12).

## 5. DISCUSSION

The farm Olifantsfontein 410 JR was originally Olifantsfontein 1. (Surveyor – General Office Pretoria 1960/61. Archival search on the farm was very difficult as the name Olifantsfontein is a very common name for farms in South Africa. In the Pretoria district there are three farms with the same name. The National Archives list nearly has 500 documents under the name. Unfortunately the farm numbers are not given on the documents which make it very difficult to locate documents on this specific farm. In TAB Volume 2370/01 WH Boshoff senior offered his farm to the Government for sale. A portion of this farm later became the town of Olifantsfontein between Pretoria and Kempton Park.

As far as mining is concerned the only document that could be traced is TAB 1741/04 in which a description of the mineral value of the farm is required. Who established the lime mine and how long it was operational could not be traced in the time available. As already mentioned and also taking into account information from the

cemeteries, the mine started some where after the beginning of the 20<sup>th</sup> century and closed down in the 1960's.

A similar lime mine was recorded at Maloney's Eye in the North West Province (see Küsel US 2008).

Published information on the sandstone bridge could not be traced. Dr. Robert de Jong said he once read a newspaper article on the bridge but could not remember in which paper it was published.

## **6. EVALUATION**

- **Lime workers and associated finds:**

Lime quarries occur all over the Highveld area where dolomite is present. What makes this specific lime works important is that the opencast mine and associated lime kilns are still in tact as well as the cemeteries of the mine workers. In most of the other lime works only the large quarries have survived. The site is at least of local (Field rating/Grade III A) significance but could most probably with more research be considered a Provincial or Grade II site.

- **Sandstone Bridge**

The sandstone Bridge over the Kaalspruit is aesthetical and technically a masterpiece It also has high historical value as it is associated with the Anglo Boer War, and is the only known bridge that has survived which was built by the Imperial Military Railways to link Pretoria with Johannesburg. Its field rating is of Provincial significance (Grade II) and should be nominated as such.

## **7. CONCLUSION**

.The lime works with its remains of a quarry, lime kilns, cemeteries and other remains are a important remnant of early lime mining on the Highveld and should be protected preserved and properly maintained. This also applies to the bridge over the Kaalspruit.

The developer has indicated that the Lime works with its cemeteries and associated structures will be incorporated in an open space public area and will be preserved and made accessible. The same applies to the bridge which will be preserved as a feature in the landscape development.

## 8. RECOMMENDATION

It is recommended that:

- the lime works and associated heritage sites and structures should be fully documented in a phase II impact assessment and preserved in situ as a heritage site. This also includes the two cemeteries. (For detail on cemetery legislation see Attachment A).
- the Sandstone Bridge be fully documented in a phase II impact assessment and be preserved in situ.
- after the completion of the phase II impact assessment a decision should be taken on the declaration of both sites as local or provincial heritage sites.
- both sites should form an integral part of the design of the new development as public heritage sites and open public areas.
- both sites will need a Heritage Management Plan.

## 9. BACKGROUND INFORMATION

Owners contact details:  <b>Jan Zeederberg</b> <b>Bondev Midrand (Pty) Ltd.</b> <b>Tel: (012) 661-1177</b> <b>e-mail address: jaz@midrand-estates.co.za</b>
Developers contact details:  <b>Same as the above.</b>
Consultants contact details:  <b>Paul Claassen</b> <b>Environomics</b> <b>Tel (087) 805-4000</b> <b>E-mail address: paulc@midrand-estates.co.za</b>
Type of development (e.g. low cost housing project, mining etc.)  <b>Mixed residential development</b>
Whether rezoning and/or subdivision of land is involved:  <b>The developers will be required to follow the township establishment process.</b>
Full location of Province, Magisterial District/Local Authority, property (e.g. farm, erf name and number):  <b>Portions 35, 39, a Portion of Portion 48 and 128, Remainder of Portion 34 and the Remainder of the Farm Olifantsfontein 410 JR</b>

Location map must have the polygon of the area to be surveyed on it and full geographical coordinates for all relevant points and where applicable indication of the area to be developed (footprint)

**See attachment**

If possible an aerial photograph of the specific area showing the location of all site.

**See attachment**

## **10. REFERENCES**

- Archaeological database of the National Cultural History Museum, Pretoria
- 1/50 000 Map 2528 CA
- De Jong Robert – Information on Kaalspruit Bridge
- Küsel U.S. 2008. Cultural heritage resources impact assessment on Remainder extent of Portion 1, Portion 2 (a Portion of Portion) and the remaining extent of Portion 3 (a Portion of Portion) of the Farm Maloney's Eye 169 IQ
- National Archives of South Africa:  
Staatssecretaris B WH Boshoff TAB SS Volume 2370/01 Reference R7670/90Part 1 WH Boshoff senior Biedt zyne plaats der Olifantsfontein Pretoria Regeering te koop aan 1890 05 07.  
TAB MM Volume 54/01 Reference CM 1741/04 Part 1 Description Master Supreme Court Mineral Value Required of Farm Olifantsfontein 1904 07 25
- Surveyor – General Office Pretoria 1960/61 Alphabetical List of Farms in the Province of Transvaal.

## **10. PHOTOGRAPHS**

See pages

## **11. MAPS**

See pages

## PHOTOGRAPHS



**No. 1 A section of the lime quarry or mine**



**No. 2 Remains of the lime works**





**No. 3 Detail of the lime kilns**



**No. 4 Remains of concrete blocks for the mounting of steam engines**





**No. 5 Ruins of mine workers house/office**



**No. 6 Ruins of mine workers house/office**





**No. 7 The only tombstone in cemetery 1**



**No. 8 One of the graves in cemetery 2**





**No. 9 Remains of mine managers house**



**No. 10 Dam wall where the canal started**





**No. 11 A portion of the canal near the lime works**



**No. 12 The sandstone Bridge over the Kaalspruit**











