APPENDIX K: HERITAGE, CULTURAL AND PALAEONTOLOGICAL ASSESSMENTS

Prepared for:

THARISA MINE

METAGO ENVIRONMENTAL ENGINEERS

A PHASE I HERITAGE IMPACT ASSESSMENT STUDY FOR THE PROPOSED NEW THARISA MINE ON THE FARMS KAFFERSKRAAL 342 AND ELANDSDRIFT 467 NEAR MARIKANA IN THE NORTH-WEST PROVINCE OF SOUTH AFRICA

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September 2007

EXECUTIVE SUMMARY

This Phase I Heritage Impact Assessment (HIA) study for the proposed new Tharisa Minerals on Kafferskraal 342 and Elandsdrift 467 was done according to Section 38 of the National Heritage Resources Act (No 25 of 1999). The aims with the Phase I HIA study were to establish whether any of the types and ranges of heritage resources (the 'national estate', see Box 1) as outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999) occur within the perimeters of the proposed new project area and, if so, to determine the significance of these heritage resources and to make recommendations regarding the mitigation or the conservation of these heritage resources if they are to be affected by the development project.

The Phase I HIA study for the proposed Tharisa Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the project area:

- Stone walled settlements which date from the Late Iron Age.
- Historical structures such as farm houses with outbuildings, agricultural infrastructure and the van Rensburg School (now called the Retief Primary School).
- At least six graveyards.
- Objects with heritage significance such as outdated and discarded agricultural implements.

Heritage resources with significance also occur outside the Tharisa Project Area. These include amongst others historical farm homesteads with outbuildings, the Marikana Mill and associated shops complex and an English NG Church which is used by some of the local people for church services. At least three graveyards were also observed. This brief inventory may be extended with more heritage sites if a thorough survey of the area to the north of the proposed Tharisa Project Area is undertaken. However, these heritage resources are not discussed further as they are not part of the project area.

The heritage resources in the Tharisa Project Area have been geo-referenced and mapped (Figure 3; Tables 1-3). The significance of the heritage resources has been determined as some may be affected by the proposed new development project (Tables 1-3).

The Late Iron Age stone walled sites qualify as archaeological sites, some of which may date from the Historical Period. All archaeological (historical) and paleontological sites are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999).

All buildings and structures older than sixty years are protected by Section 34 of the National Heritage Resources Act (No 25 of 1999) and may not be affected (demolished, altered, renovated, removed) by the mining development project without permission. This includes the van Rensburg School as well as any other earlier school buildings whose remains may still exist in the project area.

All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

Various kinds of objects (cultural, historical, scientific, technological, etc) are protected by Section 32 of the National Heritage Resources Act (No 25 of 1999). Discarded agricultural implements such as ploughs, tractors etc in the Tharisa Project Area therefore have cultural-historical (technological) significance. If they are left behind when their original owners move these objects become the property of Tharisa Minerals.

Mitigation measures for those types and ranges of heritage resources which may be affected by the mining development project are the following:

The remaining stone walled sites on Kafferskraal 342 are remnants of a possible large settlement complex which used to exist on this farm before recent farming practises gradually destroyed the complex. These stone walled sites may not be affected (demolished, altered, renovated, removed) by the proposed new mining development project before the North-West Provincial Heritage Resources Authority (NW PHRA) has approved such alterations.

An archaeologist accredited with the Association for Professional Archaeologists (ASAPA) must apply for a permit from the NW PHRA which would authorise that the stone walled sites may be destroyed by the mining development project. However, the archaeologist has to subject the stone walled sites to a Phase II investigation *prior* to their destruction. This implies that the stone walled sites have to be mapped and that test excavations in these sites have to be undertaken. The results of the Phase II investigation have to be published in a report which must be preserved in the NW PHRA's data bank.

None of the historical houses and their associated outbuildings as well as other infrastructure such as the tobacco drying shed and the van Rensburg School as well as earlier remains of this school may be affected (demolished, altered, renovated, removed) by the proposed new mining development project *prior* to the NW PHRA issuing the necessary permits for such alterations.

All historical buildings that may be affected by the proposed mining development project must be investigated *prior* to these buildings being affected (impacted) by the development activities. This investigation must be done by a historical architect accredited with the SAHRA. The historical architect must apply for a permit from the NW PHRA which will authorise the necessary affect (impact) on any historical structure which then may be demolished, altered, renovated or removed. The latter actions must be preceded by documenting the historical structures by means of plan and profile drawings, photographs and descriptions of the building. The results of the Phase II investigation have to be published in a report which must be preserved in the NW PHRA's data bank.

None of the graveyards may be affected by the proposed mining development project. The following mitigation measures can be applied to the graveyards:

The graveyards can be preserved in situ. The graveyards can be demarcated
with brick walls or with fences. Conserving graves and graveyards in situ creates
the risk and responsibility that they may be damaged (accidentally), that the mine
remains responsible for their future unaffected existence, maintenance and that
controlled access must exist for any relatives or friends who wish to visit the
deceased.

• Graveyards can be exhumed and relocated. The exhumation of human remains and the relocation of graveyards are regulated by various laws, regulations and administrative procedures. This task is undertaken by forensic archaeologists or by reputed undertakers who are acquainted with all the administrative procedures and relevant legislation that have to be adhered to whenever human remains are exhumed and relocated. This process also includes social consultation with a 60 days statutory notice period for graves older than sixty years. Permission for the exhumation and relocation of human remains have to be obtained from the descendants of the deceased (if known), the National Department of Health, the Provincial Department of Health, the Premier of the Province and the local police.

It is recommended that objects such as discarded farming and agricultural implements be mitigated in the following way:

- To encourage owners of historical significant objects to accept responsibility for these items when they move. However, they should be made aware of the significance of these objects in order to prevent that objects are injudiciously earmarked for the scrap yard.
- To approach a cultural historical museum (such as the Willem Prinsloo Agricultural Museum) to collect all objects with historical significance to be incorporated in the museum's collection.

If any heritage resources of significance is exposed during this development project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all construction activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from the NW PHRA to conduct the mitigation measures.

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1 INTRODUCTION

Tharisa Minerals intends to develop a new open cast and underground mine on the farms Kafferskraal 342 and Elandsdrift 467. This document contains the report on the results of a Phase I Heritage Impact Assessment (HIA) study which was done in accordance with Section 38 of the National Heritage Resources Act (No 25 of 1999) for the proposed new mining operations on Kafferskraal 342 and Elandsdrift 462 near Marikana in the North-West Province of South Africa.

The Tharisa Project Area is located in the Central Bankeveld which is situated, ecologically speaking, between the Bushveld to the north and the Highveld to the south. The Central Bankeveld includes the areas around Rustenburg, Marikana and Madibeng as far as Pretoria in the east. The Central Bankeveld is rich in heritage resources incorporating all the types and ranges ('national estate') as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (see Box 1).

Box 1: Types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (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
 - (vi) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
- (h) 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, Art 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

Tharisa Minerals intends to establish a new open cast and underground mine on the farms Kafferskraal 342 and Elandsdrift 467 near Marikana in the North-West Province of South Africa. The proposed new mining development may have an impact on heritage resources that may occur in the proposed new Tharisa Project Area. Tharisa Minerals and Metago Environmental Engineers therefore commissioned the author to undertake a Phase I Heritage Impact Assessment (HIA) study for the proposed new Tharisa Project Area with the following aims:

- To establish whether any of the types and ranges of heritage resources (the 'national estate', see Box 1) as outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999) occur within the perimeters of the proposed new project area and, if so
- to determine the significance of these heritage resources; and
- to make recommendations regarding the mitigation or the conservation of these heritage resources if they are to be affected by the development project.

3 THE THARISA ROJECT AREA

3.1 Location

The Tharisa Project Area involves various portions of the farms Kafferskraal 342 and Elandsdrift 467 which is located on a relatively level piece of land between Western Platinum Limited in the north and the N4 in the south.

The Sterkstroom running from the Magaliesberg in the south roughly bisects the Tharisa Project Area running parallel with the Buffelspoort-Marikana road in a south to north direction. The Tharisa Project Area directly borders on the northern shoulder of the N4 running between Rustenburg and Buffelspoort in the North-West Province of South Africa (Figures 1-3) (Rustenburg East 2527CB; 1:50 000).

3.2 The nature of the project area

The Tharisa Project Area is situated on a level piece of turf veldt which has been used for agricultural activities since the first colonial farmers occupied this part of the North-West Province after the 1840's. Agriculture activities were intensified after the canal system running from the Buffelspoort Dam towards Kafferskraal 342 and Elandsdrift 467 was completed by 1930. Only a patch of land near the far western border of the Tharisa Project Area is still covered with indigenous vegetation.

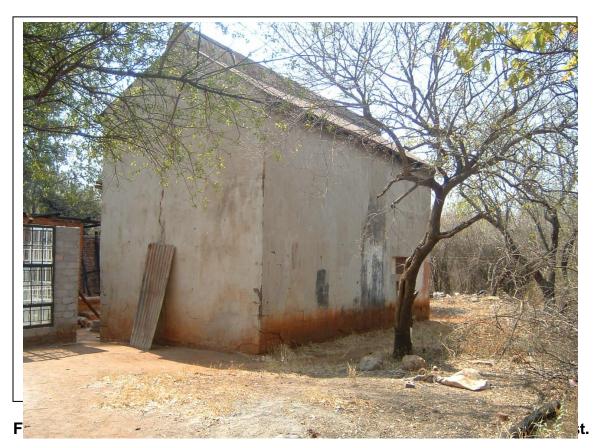
3.3 Project and peripheral areas

The Tharisa Project Area includes a peripheral (non-critical) area that surrounds the proposed mining area (critical area) where the mining activities will be established. The peripheral area is not currently endangered by the proposed new mining activities but provide options available for surface infrastructure. Consequently, heritage resources in this area may be affected by planned surface infrastructure in the medium or long term. The critical and peripheral areas will be severely

impacted by the new development and are the primary concern of this study (see Box 2, 'Terminology'). The critical and peripheral areas incorporate surface infrastructure, facilities and activity areas such as the following (Figure 4):

- The elongated proposed Open Cast Pit.
- A Concentrator Plant.
- The Process and Return Water Dams.
- Tailings Dam, Waster Rock Facility and Waste Rock Berm.

This surface infrastructure, facilities and activity areas will be located on Elandsdrift 467 with the proposed Open Cast Pit running from the east towards the west across both Kafferskraal 342 and Elandsdrift 467.



New farming practices, the encroachment of mining and modernization has changed its historical character the last few decades. Note abandoned tobacco dry shed (above).



mini and a rew snops used to resemble a historical landscape belore modernization changed the historical character of this village during the last decades of the 20th century (above).

3.4 In a cultural landscape

The Tharisa Project Area considered from a pre-historical and historical perspective is part of the archaeological sensitive Central Bankeveld which is an eco-zone situated between the bushveld savannah further to the north and the grass veldt of the Highveld further to the south.

The project area has been occupied by hunter-gathers whilst the first farmers who practised a mixed agricultural existence settled in this region where the first large towns developed south of the Limpopo River. The Late Iron Age Tswana chiefdoms were followed by the first white colonists who settled along the fertile banks of the Crocodile and Sterkstoom Rivers, north of the Magaliesberg. Here these colonists'

occupied farms such as Schaapkraal 292, Zwartkopjes 296 and Kafferskraal 341 which eventually lead to the establishment of the village of Marikana on the Rustenburg-Thabazimbi rail way line.

The discovery of the western leg of the Merensky Reef in the 1920's led to the rise of a mining industry in this part of the country which has not yet reached full potential.

It is necessary that the archaeological and historical significance of this cultural landscape be briefly outlined before the results of the Phase I HIA study are discussed (see Part 5, 'Contextualising the Project Area' and Part 9, 'Select Bibliography').



characterised by agricultural fields. Most of Tharisa Mine's surface infrastructure will be established on this farm (above).

4 METHODOLOGY

4.1 Method

This Phase I HIA study was conducted by means of consulting heritage data bases; doing a survey with a vehicle while selected spots in the project area were surveyed on foot; studying maps of the project area; interviewing spokespersons well acquainted with the project area and by reviewing some literature relating to the pre-historical and historical context of the Central Bankeveld.

- Heritage data bases kept at 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 significance occur in or near the Tharisa Project Area.
- The proposed Tharisa Project Area was surveyed with a vehicle while selected spots which the archaeologist deemed necessary to investigate were surveyed on foot.
- The 1: 50 000 and 1: 250 000 maps on which the Tharisa Project Area appears, were studied.
- Farmers and farm workers well acquainted with the project area were interviewed during the fieldwork.
- All the heritage resources that were found in the Tharisa Project Area were geo-referenced using a GPS instrument and they were thereafter mapped in Arch View.
- A brief review of some literature relating to the pre-historical and historical context of the Central Bankeveld were undertaken in order to contextualise the proposed new Tharisa Project Area (See Part 9, 'Select Bibliography').

4.2 Assumptions and limitations

It is possible that this Phase I HIA study may have missed heritage resources in the proposed Tharisa Project Area as heritage resources may be hidden in thick clumps of vegetation. Others may lie below the surface of the earth and may only be exposed once development (such as mining) commences.

If any heritage resources of significance are exposed during mining operations the South African Heritage Resources Authority (ASAPA) should be notified immediately and all development activities must be stopped. An archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation and permits from SAHRA to conduct mitigation measures on any uncovered heritage resources or human remains.

4.3 Some remarks on terminology

Terminology that may be used in this report is outlined in Box 2 (below, next page).

Box 2. Terminologies that may be used in this report.

The <u>Heritage Impact Assessment</u> (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act, 1999 (Act No 25 of 1999) (See Box 1).

<u>Heritage resources</u> (<u>cultural resources</u>) include all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.

The term 'pre-historical' refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the project area, to the first appearance or use of 'modern' Western writing brought to the Marikana area by the first Colonists who settled in this area during the late 1830's.

The term 'relatively recent past' refers to the 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may, in the near future, qualify as heritage resources.

It is not always possible, based on observations alone, to distinguish clearly between <u>archaeological remains</u> and <u>historical remains</u>, or between <u>historical remains</u> and remains from the <u>relatively recent past</u>. Although certain criteria may help to make this distinction possible, these criteria are not always present, or, when they are present, they are not always clear enough to interpret with great accuracy. Criteria such as square floor plans (a historical feature) may serve as a guideline. However, circular and square floors may occur together on the same site.

The term 'sensitive remains' is sometimes used to distinguish graves and cemeteries as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves in particular are not necessarily heritage resources if they date from the recent past and do not have head stones that are older than sixty years. The distinction between 'formal' and 'informal' graves in most instances also refers to graveyards that were used by colonists and by indigenous people. This distinction may be important as different cultural groups may uphold different traditions and values with regard to their ancestors. These values have to be recognised and honoured whenever graveyards are exhumed and relocated.

The term 'Stone Age' refers to the prehistoric past, although Late Stone Age peoples lived in South Africa well into the historical period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 200 years ago).

The term '<u>Late Iron Age</u>' refers to the period between the 17th century and the 19th century and can therefore include the historical period.

<u>Mining heritage sites</u> refer to old, abandoned mining activities, underground or on the surface, which may date from the prehistorical, historical or the relatively recent past.

The term "project area" refers to the critical area where the developer wants to focus its development activities. The peripheral area is the area(s) where no impact will occur as a result of the development.

<u>Phase I studies</u> refer to surveys using various sources of data in order to establish the presence of all possible types of heritage resources in any given area.

<u>Phase II studies</u> include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include the documenting of rock art, engraving or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation of bodies and the relocation of graveyards, etc. Phase II work may require the input of specialists and requires the co-operation and approval of SAHRA

5 CONTEXTUALISING THE THARISA PROJECT AREA

5.1 Location

The Tharisa Project Area falls within the ambits of the Central Bankeveld which is a narrow stretch of land running from east to west between the Bushveld in the northern part of South Africa and the centrally situated Highveld. The core of this area is situated between Krugersdorp in the south, the Pienaars River to the north, the town of Bronkhorstspruit in the east and the Pilanesberg to the west. This region can be divided into three parallel vegetation zones: the grassveld of the Highveld in the south, the Bushveld savannah in the north and the Magaliesberg valley as a zone situated between the grassveld and the savannah veld. The region has abundant surface water supplies, because the local Pienaar, the Moretele, the Hex and the Apies Rivers all drain their waters into the Crocodile River.

5.2 Stone Age

Interaction over millions of years between the climate, geology, topography, fauna and flora in the Bankeveld established a milieu in which the earliest ancestors of modern humans emerged some two to three million years ago. The remains of *Australopithecine* and *Homo habilis* were found in dolomite caves and underground dwellings at Sterkfontein and Swartkrans near Krugersdorp, outside the project area. *Homo habilis*, one of the **Early Stone Age** hominids, is associated with Oldowan artefacts which include crude implements manufactured from pebble stones.

The Acheul industrial complex replaced the Oldowan industrial complex during the Early Stone Age. This phase of human existence was widely distributed across the world and is associated with *Homo Erectus* who manufactured hand axes and cleavers from as early as one and a half million years ago. One of the earliest

discoveries of an Acheul site was made at Wonderboompoort, in a part of the Magaliesberg to the east of the Tharisa Project Area.

Middle Stone Age sites dating from as early as two hundred thousand years ago have been found all over South Africa. Middle Stone Age hunter-gatherer bands lived and hunted to the north and to the south of the Magaliesberg. These people, who probably looked like modern humans, occupied camp sites near water but also used cave sites in the Magaliesberg. They manufactured a wide range of stone tools, including blades and points that may have been hafted by long wooden sticks and were used as spears.

The Late Stone Age commenced twenty thousand years ago or somewhat earlier. Various Late Stone Age industries are scattered across the country and are associated with the historical San and Khoi-Khoi people. The San were renowned as formidable hunter-gatherers, while the Khoi-Khoi herded cattle and small stock during the last two thousand years. Late Stone Age people manufactured microlithic tools that were small but highly effective, such as arrow heads and knives. Later Stone Age people also occupied the cave sites that were used by their predecessors. The Late Iron Age people were also known for their rock art skills. Rock engravings have been found near Maanhaarrand and Rustenburg.

5.3 Iron Age

Early Iron Age farming communities practised a mixed economy consisting of plant cultivation and stock herding, in the interior of South Africa during the first half of the first millennium AD. These Bantu-Negroid people were ironworkers of some repute and established the first permanent villages south of the Limpopo River. Some of their settlements occur in the Magalies Valley along the lower slopes of the Magaliesberg and the Witwatersberge.

During the **Late Iron Age**, farming was practised in the northern, central and eastern parts of the country. Stone walled settlements built from the 17th century onwards are numerous in the Central Bankeveld, where they are associated with the Tswana. Small vanguards of these agro-pastoralists may, however, have been present in this area as early as the 14th century. One of the earliest ancestors was known as Mogale, from whose name the Magaliesberg derives its name. The settlements of these early Tswana chiefdoms are characterised by an impressive and elaborate stone-built tradition. Hundreds of sites were built along the bases of the granite hills that run across the Central Bankeveld.

There were numerous **pre-***difaqane* and *difaqane* wars in the Bankeveld during the last quarter of the 18th century and during the first three decades of the 19th century. These wars led to the displacement of large numbers of Late Iron Age communities. The Matabele of Mzilikazi caused chaos and havoc in the Bankeveld. The Matabele established several village complexes in the Bankeveld from whence they maintained their hold on the indigenous population. Two Matabele strongholds, one at Silkaatsnek and the second near Madibeng (Brits), were located some distance from the project area.

5.4 Early historical period

During the first half of the 19th century, numerous **traders**, **adventurers and explorers** visited the Bankeveld. A hunting group from Somerset West and traders such as Schoon and McLuckie (1829) were the first white people to visit the area north of the Magaliesberg. Missionaries such as Robert Moffat (1829), the scientist Andrew Smith (1835) and the adventurer Cornwallis Harris (1836) moved through the Magaliesberg. Some of these traders visited Mzilikazi of the Ndebele (Matabele) in his village complexes in the region.

These early travellers were followed from the 1840's by the **first colonists** who settled in various places in the Magaliesberg such as Rustenburg, Marikana and

Madibeng (Brits) near the Crocodile River close to the Tharisa Project Area. Farms near the Project Area that were early occupied by the Voortrekkers were De Kroon 444, Krokodildrift 446 and Kafferskraal 342.

5.5 The farm Kafferskraal 342

The farm Kafferskraal 342 was established by Willem Cornelis Janse van Rensburg (born, 16 May 1818) married to Elisabeth Maria Jacoba du Plessis (born, 31 Oct 1819) during the early 1850's. W.C.J. van Rensburg and family members survived the massacre of Voortrekker parties at Bloukrans and Moordspruit in 1838 when they were saved due to the actions of Marthinus Oosthuizen.

After Natal was annexed by the British, W.C.J. van Rensburg moved to the Transvaal, initially settling at Ohrigstad and then on Kafferskraal. The farm took its name from the stone walled settlements ('kraals') which used to exist on the property.

5.5.1 President W.C. J. van Rensburg

During 1850-1855 W.C.J. van Rensburg was a member of the Transvaal Volksraad and in February 1858 he became a member of the Executive Committee. When M.W. Pretorius left for the Free State in January 1860 van Rensburg was nominated as acting president for the Z.A.R. For reasons unknown he did not except the position. In April 1862 he was elected acting president of the Z.A.R. and served until October 1863 when the presidential election took place. He was elected president with a majority vote. However, a new presidential election was held in 1864 upon which M.W. Pretorius was reelected president. Due to deteriorating health C.W.J. van Rensburg withdrew to his farm on Kaffreskraal where he died on 13 August 1865 at the age of 47 years.

W.C.J. van Rensburg was buried in August 1865 on Kafferskraal together with his wife who died in 1895. The exact location of their residence on Kafferskraal is unknown. It was searched for by the historian, Dr. H.M. Rex, but could not be found. Together with his wife, W.C.J. van Rensburg was exhumed and reburied in the 'Heldeakker' (Heroes Acre) in Church Street in Pretoria on 17 August 1974.

The van Rensburg couple had five sons and one daughter who inherited various portions of the farm which again were divided and passed down to their descendants and their offspring. Many of W.C.J. van Rensburg's descendants therefore still occupy the farms Kafferskraal 342 and Elandsdrift 467.

5.5.1 Early farming

The original Kafferskraal was approximately 2 000 morgen in size. It was situated on the banks of the Sterkstroom which roughly divided the farm in two halves. It was close to the original road which ran between Pretoria and Rustenburg. It was a fertile piece of land characterised by a temperate climate, adequate summer rain falls and with a variety of soil types. Fruits and vegetables as well as tobacco and sorghum were planted on the black soils to the west and east of the Sterkstroom and on the sandy and loam soils in the south-west. The tobacco and sorghum were replaced with citrus in the more recent past. The farm was irrigated from the river as well as from the Buffelspoort Dam with a network of canals which were constructed during the 1930's.

General business on Kafferskraal was conducted at the station at Marikana which is situated on the Pretoria-Thabazimbi railway line which was established in 1910. Marikana is situated five kilometres to the north of Kafferskraal. Here various shops, a post office, police station and two Afrikaans churches (Dutch

Reform and N.G. Church) existed from an early period. However, main business was conducted in Rustenburg, 20 kilometres to the west.

The main occupants of Kafferskraal for many years were seventy Afrikaans speaking families who were born here and who made farming their lively hood. They were relatively affluent, ambitious and progressive and maintained a keen interest in affairs pertaining to the state, school and church. Several old farm homesteads with outbuildings still exist. These farmers and their co-workers therefore occupied the farm without interruption since the 19th century. However, the historical character of the farm has changed over the last few decades as a result of changing agricultural practices, the expansion of mining industries near Marikana and general development in the wider region.

5.1.2 The van Rensburg School

Kafferskraal 342 had its own farm school from as early as 1851. In later years education made provision for learners to obtain Standerd 6 and even Standard 8. A small community hall at the last school which was established in 1910 served as a focal point for the community's social life and functions.

The first school was located approximately 100m from the existing school, closer to the canal, and was established in 1851. The first permanent teacher was Albert Christiaan Teesen, a Dutch citizen, who joined the school in 1886 and who taught at the school for two years. He was succeeded by Mr. De Brugge whose school stood on the opposite side of the river. At least thirteen to fourteen children attended this school although many more attended schools in the wider area at the time.

The third school was established on the erf which belongs to Mr. Henken van Rensburg. Mr. Peterse taught at this school for two years after which the school again moved to a location close to C.W.J. van Rensburg residence. Mr. Van der Merwe served as teacher at this school for four years.

During the Anglo Boer War (1899-1902) the school near the president's residence was attended by approximately eighty children while Mr. Isak Bosman served as principal at the time.

The next school building was constructed near Mr. Jan de Beer's house. The first teacher here was Sam Ravenscroft and the last one Mr. van Limpen who also moved to the new (existing) school which was established in 1910. Enrolment at the school for the last ten years (before 1974) varied between eighty to ninety pupils per annum. Today, the school's original name has been changed. It is primarily occupied by pupils from local informal settlements that have arisen around Kafferskraal and Marikana as a result of the centrifugal forces associated with expanding economic activities in the area.

6 THE PHASE I HERITAGE IMPACT ASSESSMENT STUDY

6.1 Types and ranges of heritage resources

The Phase I HIA study for the proposed Tharisa Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the project area:

- Stone walled settlements which date from the Late Iron Age.
- Historical structures such as farm houses with outbuildings, agricultural infrastructure and the van Rensburg School (now called the Retief Primary School).
- At least six graveyards.
- Objects with heritage significance such as outdated and discarded agricultural implements.

Heritage resources with significance also occur outside the Tharisa Project Area. These include amongst others historical farm homesteads with outbuildings, the Marikana Mill and associated shops complex and an English NG Church which is used by some of the local people for church services. At least three graveyards were also observed. This brief inventory may be extended with more heritage sites if a thorough survey of the area to the north of the proposed Tharisa Project Area is undertaken. However, these heritage resources are not discussed further as they are not part of the project area.

The heritage resources in the Tharisa Project Area have been geo-referenced and mapped (Figure 3; Tables 1-3). The significance of these heritage resources have also been indicated (Tables 1-3). Mitigation measures for heritage resources which may be affected by the mining activities are discussed.

The heritage resources in the Tharisa Project Area are now briefly discussed and illuminated with photographs.

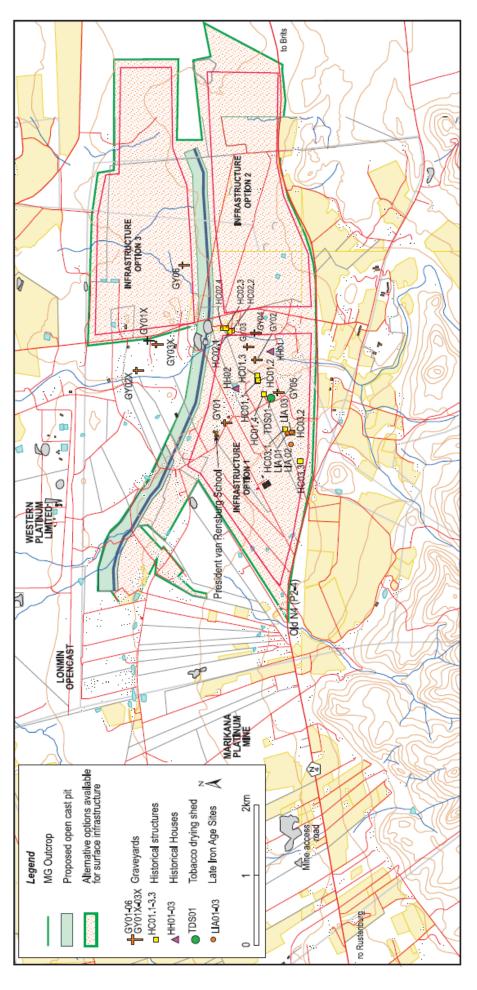


Figure 4- The Tharisa Project Area on the farms Kafferskraal 342 and Elandsdrift 467 near Marikana in the North-West Province. Note the presence of heritage resources such as Late Iron Age sites, historical structures such as farm houses and outbuildings and graveyards in the project area (apove)

6.2 Stone walled settlements

Remains of stone walled sites occur in the far south-western corner of the project area. These sites have been preserved as they occur on a low dolerite protrusion which could not be used for agricultural activities due to its rocky nature. At least one of these sites in the far south-western corner of the project area has not been affected by any development activities in the past (Figure 5).

Stone walled sites used to occur across Kafferskraal 342 but that they have been replaced by farm homesteads and agricultural activities after the first colonists' established themselves close to the Sterkstroom during the latter part of the 19th century. Insignificant remains of sites occur across the project area.



Figure 5- A stone walled site from the Late from Age on Namerskraal 342. Many of these sites were destroyed over time to make way for agricultural activities. The name 'Kafferskraal' is derived from these sites (above).

| Late Iron Age settlements | Coordinates | Significance |
|---------------------------|--------------------------|--------------|
| LIA01 | 25° 44′.889; 27° 28′.602 | HIGH |
| LIA02 | 25° 44′.917; 27° 28′.519 | HIGH |
| LIA03 | 25° 44′.929; 27° 28′.602 | HIGH |

Table 1- Late Iron Age settlements, their coordinates and significance (above).

The stone walled sites were occupied by Sotho-Tswana communities who lived here from the 17th century until the early part of the nineteenth century. Their sites represent *dikgôrô* which was composed of various family groups (*masika*) living under the authority of *dikgosana* and possibly a chief who occupied an own village.



Karrerskraai 342. The enclosure has been adapted to be used as a shelter in which cooking is done nowadays (above).

6.3 Historical houses, outbuildings and other infrastructure

The following historical houses, some with outbuildings or other related infrastructure such as tobacco drying sheds occur in the Tharisa Project Area, namely:

6.3.1 Historical Complex 01 (HC01)

At least four historical houses with outbuildings occur on the properties of Mr. Hannes and Theuns van Rensburg, some of the oldest living inhabitants of Kafferskraal 342. These include three farm houses which are grouped together and which were constructed during the time period 1860 to 1935. Two of the houses are associated with a rondavel and a garage.

All three structures have been altered and extended to a considerable degree over the years. The original architectural appearance of these structures is therefore not recognisable any longer. However, all three houses have their original nucleus which used to be a rectangular house which was constructed with stone foundations, brick walls and pitched corrugated iron roofs.

The oldest of the three houses (HC01.1) date from 1860 whilst the second oldest (HC01.2) was constructed during the 1890's. These two buildings represent some of the oldest farm houses in the project area as they were probably constructed after the first generation of 'hartbeeshuisies' (clay dwellings with grass roofs) have disappeared from the project area.

The youngest of the three farm residences (HC01.3) on Mr. Hannes van Rensburg's property was built in c.1935. This house is part a generation of houses which were built after the Buffelspoort Dam and its irrigation scheme was

completed in the 1930's and when agricultural practises flourished on Kafferskraal 342.

The fourth historical house (HC01.4) is occupied by Mr. Theuns van Rensburg. This house was constructed during 1905 and has been modernised. This house is also associated with a historical tobacco drying shed (see Part 6.3.8).



Figure 7- One of the historical houses (HC01.4) which is part of Historical Complex 01 (above). It has been modernised but its historical core can still be recognised. This house was constructed in c.1905.

6.3.2 Historical Complex 02 (HC02)

At least four historical farm houses are clustered together near the western shoulder of the road running between Buffelspoort and Marikana. These houses are the following:

- Frik Linde's dwelling which has been altered extensively over the years but which still has its historical core (HC02.1). This dwelling probably dates from the 1930's or 1940's.
- Henco Smit's dwelling next to Frik Linde's dwelling. This house has not been renovated and can clearly be distinguished as a residence with historical significance (HC02.2). This house dates from the 1930's or 1940's.
- A farm house on Nico Smit's property which may date from the late 1880's or 1890's. (HC02.3). It is not occupied any longer.
- A residence on Manie van Rensburg's property which probably dates from the 1930-40's but which has been renovated extensively (HC02.4).



Figure 8- A historical nouse (mco1.3) which is part of historical complex of (above). The original rectangular core of the house was extended with several rooms. The house (core) was constructed during the 1860's.



be one of the pioneer farm awenings that were built in the project area. It is part of Historical Complex 02 (above).

6.3.3 Historical Complex 03 (HC03)

This complex consists of three historical dwellings located in the south-western corner of the project area, namely:

- Two farm residences on Mr. At Schoeman's property which is respectively occupied by Piet Schoeman (HC03.1) and Pietie van Rensburg (HC03.2). Dwelling HC03.1 has only one frontal extension and largely maintained its original architectural style. It dates from the 1930's. Dwelling HC03.2 has been extended backwards. It probably dates from the same time period.
- A third historical residence in the south-western corner of the project area used to be occupied by Boshoff van Rensburg (HC03.3). Today, it is owned

by Rina Grobler. This residence and an associated outbuilding also probably date from the 1930's. This house was renovated extensively.

| Historical structures | Coordinates | Significance |
|----------------------------|--------------------------|--------------|
| Historical Complex 01 | | |
| HC01.1 (1890's) | 25° 44′.657; 27° 29′.004 | HIGH |
| HC01.2 (with garage, 1935) | 25° 44′.663; 27° 29′.008 | HIGH |
| HC01.3 (1860's) | 25° 44′.660; 27° 29′.047 | HIGH |
| HC01.4 (1905) | 25° 44′.714; 27° 28′.898 | HIGH |
| Historical Complex 02 | | |
| HC02.1 | 25° 44′.445; 27° 29′.386 | HIGH |
| HC02.2 | 25° 44′.460; 27° 29′.392 | HIGH |
| HC02.3 | 25° 44′.416; 27° 29′.409 | HIGH |
| HC02.4 | 25° 44′.395; 27° 29′.410 | HIGH |
| Historical Complex 03 | | |
| HC03.1 (1930's) | 25° 44′.878; 27° 28′.633 | HIGH |
| HC03.2 (1930's) | 25° 44′.929; 27° 28′.602 | HIGH |
| HC03.3 (1930's?) | 25° 44′.991; 27° 28′.390 | HIGH |
| Historical Houses | | |
| HH01 (1936) | 25° 44′.769; 27° 29′.231 | HIGH |
| HH02 | 25° 44′.501; 27° 28′.949 | HIGH |
| HH03 | | HIGH |
| Tobacco drying shed | 25° 44'.761; 27° 28'.879 | HIGH |

Table 2- Historical houses and tobacco drying sheds, their level of significance, coordinates and the magnitude of impact on these remains in the Tharisa Project Area (above).



o project area (apove).

6.3.4 Historical House 01 (HH01)

A historical house with an associated rondavel and second outbuilding (possible garage) occurs in the south-western part of the project area. This dwelling, and possibly the outbuildings as well, date from c.1936.

6.3.5 Historical House 02 (HH02)

This historical house is located closer to the central part of Kafferskraal 342, near the van Rensburg School. It is the property of Mrs. Korp.

HH02 is still in an immaculate condition although it was altered to some extend when a third sleeping room was added to house and the outside toilet replaced with a toilet and bathroom in the house.

HH02 is associated with a garage as well as with an outside oven in which bread used to be baked.

6.3.6 Historical House 03 (HH03)

HH03 is located next to GY01 in the central part of the project area. This house has been altered to a large extend. It also probably dates from the 1930's.

6.3.7 President van Rensburg School

The current President van Rensburg School (now named Retief Primary School) has been preceded by various other school buildings dating from the 19th century. (At least five earlier school buildings are referred to in a literary source). These school buildings were located on different sites on Kafferskraal 342 and it can be expected that some of the earliest constructions were built with rudimentary building material such as sun-dried clay bricks and grass roofs. It seems as if these

structures have disappeared as a result of development on Kafferskraal 342 during the last hundred and fifty years.

The current school buildings consist of at least two class rooms which were constructed during 1910. Two additional class rooms were added as well as a school hall. The four class rooms and teacher's residence are constructed with red face bricks and fitted with pitched corrugated iron roofs. These structures are still in a good order today and are older than sixty years.



Figure 12- The red face-brick class room buildings belonging to the van Rensburg School which is older than sixty years and which therefore qualify as historical structures (above).

6.3.8 A tobacco drying shed

A tobacco drying shed on Mr. Theuns van Rensburg's property still has historical significance although this structure is severely cracked.

6.4 Graveyards

A number of graveyards occur inside the Tharisa Project Area as well as near the border of the project area and therefore outside the project area. They are the following:

6.4.1 Graveyards in the project area

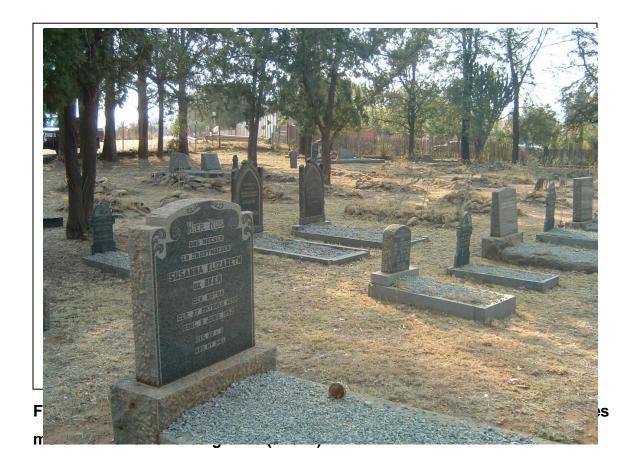
6.4.1.1 Graveyard 01 (GY01)

This is a large formal graveyard in the central part of the project area which contains more than one hundred graves. A large number of the graves are historical as they are older than sixty years. Most of the graves are fitted with granite slabs and edged with granite strips. Many graves are merely covered with heaps of stone.

Inscriptions on some of the older headstones read as follow:

- 'In liefdevolle herinnering aan ons liefste eggenoot en vader M.T. Roux Geb
 8 Junie 1865 Oorl 8 JUnie 1928'
- 'Ter herinnering aan my eggenoot en ons vader Jan Christiaan Ellis 8 Okt
 1883-10Okt 1945 Dit is die maand Oktober'
- 'Hier rus ons liefling seuntjie Tjaart J Olivier Geb 5 Jan 1940 Oorl 26 Maart
 1940 God gee aan sy geliefde rus A. en H. Olivier'

 'In liefdevolle herinnering aan my dierbare eggenote en ons moeder Anna Cornelia Janse van Rensburg Geb van der Westhuizen 25 Mei 1861 Oorl 23 Des 1906 Sou ik na die kroon niet striven P.S.J. van Rensburg Ges 182:3'



6.4.1.2 Graveyard 02 (GY02)

This graveyard is also referred to as the 'Presidential Graveyard' as C.W.J. van Rensburg and his wife was buried in this graveyard before they were exhumed and reburied in the Heroes Acres in Church Street in Pretoria.

This graveyard also holds victims of the 'Groot Griep' ('Big Flue') which occurred during 1918. The graveyard is located in a clump of *Celtis Africanus* ('Witstinkhout' trees) in an agricultural field on the property of Mr. Hannes van Rensburg.

None of the graves are decorated. Therefore only five graves that are covered with heaps of stone and clay bricks can be recognised. It is uncertain how many individuals were interred in this historical graveyard.



Figure 13- G Y U3 where farm workers were buried near the Sterkstroom on Mr. Hannes van Rensburg's property (above).

6.4.1.3 Graveyard 03 (GY03)

This graveyard is located on the property of Mr. Hannes van Rensburg and contains the graves of five labourers who used to work for the van Rensburg family. All the graves are edged with stones. No inscriptions of any nature occur on the graves.

6.4.1.4 Graveyard 04 (GY04)

Graveyard 04 is located near the road running between Marikana and Buffelspoort. It contains nine or ten graves. Most are edged with stones while one is fitted with a granite head stone. It bears the following inscription:

 'In loving memory of our mother Katerena Kgomo Born 10-06-1927 Died 03-05-1984 Rest in peace'



shoulder of the road running between Marikana and Buffelspoort (above).

6.4.1.5 Graveyard 05 (GY05)

Graveyard 05 contains the remains of four members of the van Rensburg family.

One grave is fitted with a simple headstone made from bricks while two others graves are fitted with small slate headstones. These head stones contain no inscriptions. All four graves are covered with stones.

6.4.1.6 Graveyard 06 (GY06)

Graveyard 06 is located on the southern edge of Maditlhokwa village and contains approximately 70 graves, most of which consist of piles of stone. Two of the graves are fitted with headstones. They bear the following inscriptions:

- 'Bogatsu Ephraim Molatlhegi, Born 17031975, Died 18102006, Buried 29102006, May you soul rest in peace'
- 'Jacob Kgwatlhane Tshelane, *03101926, †11081996, Robala ka kgotso kgabo'

6.4.2 Graveyards outside the project area

The following three graveyards were observed close to the Tharisa Project Area, namely:

6.4.2.1 Graveyard 01X (GY01X)

This graveyard contains approximately 65 graves and is located between informal houses directly to the west of the Buffelspoort-Marikana tar road. Most of the graves are covered with piles of stones.

6.4.2.2 Graveyard 02X (GY02X)

GY02X is located west of the Buffelspoort-Marikana road not far from the Sterkstroom. It contains approximately 27 graves, most of which are edged with pebble stones derived from the river.

6.4.2.3 Graveyard 03X (GY03X)

This graveyard is marked by two piles of stone near a norite knoll. The remains of a few stone walls previously part of a Late Iron Age site occur near the graves.

| Graveyards | Coordinates | Significance |
|-----------------------------------|--------------------------|--------------|
| GY01 Principal graveyard | 25° 44′.421; 27° 28′.681 | HIGH |
| GY02 Small graveyard. Formerly | 25° 24′.662; 27° 29′.162 | HIGH |
| known as 'presidential graveyard' | | |
| GY03 Five labourers graves | 25° 44′.591; 27° 29′.262 | HIGH |
| GY04 Ten squatter graves | 25° 44′.650; 27° 29′.362 | HIGH |
| GY05 Four van Rensburg's family | 25° 44′.828; 27° 28′.919 | HIGH |
| members in unmarked graves | | |
| GY06 Approximately 70 graves in | 25° 44′.140; 27° 29′.933 | HIGH |
| Maditlhokwa village | | |

Table 3- Graveyards in the Tharisa Project Area, their coordinates and significance (above).

| Graveyards | Coordinates | Significance |
|------------------------------------|--------------------------|--------------|
| GY01X Approximately 65 graves | 25° 43′.822; 27° 29′.309 | HIGH |
| GY02X Approximately 25 graves near | 25° 43'.733; 27° 29'.084 | HIGH |
| the Sterkstroom | | |
| GY03X Two piles of stone near | 25° 43'.875; 27° 29'.285 | HIGH |
| remains of a Late Iron Age site | | |

Table 4- Graveyards outside the Tharisa Project Area, their coordinates and significance (above).

6.5 Objects with heritage significance

Some objects with heritage significance occur randomly across the Tharisa Project Area. These objects primarily include implements relating to agricultural activities such as tractors, ploughs, threshing machines and other implements.

Most of these implements became redundant and were abandoned after farming methods have been modernized. The tobacco industry's declined during the last decades of the 20th century also lead to a change in subsistence patterns and new agricultural practises.

7 THE SIGNIFICANCE AND MITIGATION OF THE HERITAGE RESOURCES

The Phase I HIA study for the proposed Tharisa Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the project area:

- Stone walled settlements which date from the Late Iron Age.
- Historical structures such as farm houses with outbuildings, agricultural infrastructure and the van Rensburg School (now called the Retief Primary School).
- At least six graveyards.
- Objects with heritage significance such as outdated and discarded agricultural implements.

7.1 The significance of the heritage resources

The significance of the heritage resources has been determined as some may be affected by the proposed new development project (Tables 1-3).

7.1.1 The stone walled sites

The Late Iron Age stone walled sites qualify as archaeological sites, some of which may date from the Historical Period. All archaeological (historical) and paleontological sites are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999).

7.1.2 The historical houses, outbuildings and van Rensburg School

All buildings and structures older than sixty years are protected by Section 34 of the National Heritage Resources Act (No 25 of 1999) and may not be affected (demolished, altered, renovated, removed) by the mining development project. This includes the van Rensburg School as well as any other possible earlier school buildings whose remains may still exist in the Tharisa Project Area.

7.1.3 The graveyards

All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

7.1.4 Objects

Various kinds of objects (cultural, historical, scientific, technological, etc) are protected by Section 32 of the National Heritage Resources Act (No 25 of 1999). Discarded agricultural implements such as ploughs, tractors etc in the Tharisa Project Area therefore have cultural-historical (technological) significance. If they are left behind when their original owners move these objects become the property of Tharisa Minerals.

7.2 Mitigating the heritage resources

Mitigation measures for those types and ranges of heritage resources which may be affected by the mining development project are now discussed.

7.2.1 The stone walled sites

The remaining stone walled sites on Kafferskraal 342 are remnants of a possible large settlement complex which used to exist on this farm before recent farming practises gradually destroyed the complex. The remaining stone walled sites on Kafferskraal 342 may not be affected (demolished, altered, renovated, removed) by the proposed new mining development project before the North-West Provincial Heritage Resources Authority (NW PHRA) has approved such alterations.

An archaeologist accredited with the Association for Professional Archaeologists (ASAPA) must apply for a permit from the NW PHRA for a permit which would authorise that the stone walled sites may be destroyed by the mining development project. However, the archaeologist has to subject the stone walled sites to a Phase II investigation *prior* to their destruction. This implies that the stone walled sites have to be mapped and that test excavations in these sites have to be undertaken. The results of the Phase II investigation have to be published in a report which must be preserved in the NW PHRA's data bank.

7.2.2 The historical houses, outbuildings and van Rensburg School

None of the historical houses and their associated outbuildings as well as other infrastructure such as the tobacco drying shed and the van Rensburg School as well as earlier remains of this school may be affected (demolished, altered, renovated, removed) by the proposed new mining development project *prior* to the NW PHRA issuing the necessary permits for such alterations.

All historical buildings that may be affected by the proposed mining development project must be investigated *prior* to these buildings being affected (impacted) by the development activities. This investigation must be done by a historical architect accredited with the SAHRA. The historical architect must apply for a

permit from the NW PHRA which will authorise the necessary affect (impact) on any historical structure which then may be demolished, altered, renovated or removed. The latter actions must be preceded by documenting the historical structures by means of plan and profile drawings, photographs and descriptions of these building. The results of the Phase II investigation have to be published in a report which must be preserved in the NW PHRA's data bank.

7.2.3 The graveyards

None of the graveyards may be affected by the proposed mining development project. The following mitigation measures may be applied to the graveyards:

- The graveyards can be preserved in situ. The graveyards can be demarcated with brick walls or with fences. Conserving graves and graveyards in situ creates the risk and responsibility that they may be damaged (accidentally), that the mine remains responsible for their future unaffected existence, maintenance and that controlled access must exist for any relatives or friends who wish to visit the deceased.
- Graveyards can be exhumed and relocated. The exhumation of human remains and the relocation of graveyards are regulated by various laws, regulations and administrative procedures. This task is undertaken by forensic archaeologists or by reputed undertakers who are acquainted with all the administrative procedures and relevant legislation that have to be adhered to whenever human remains are exhumed and relocated. This process also includes social consultation with a 60 days statutory notice period for graves older than sixty years. Permission for the exhumation and relocation of human remains have to be obtained from the descendants of the deceased (if known), the National Department of Health, the Provincial Department of Health, the Premier of the Province and the local police.

7.2.4 Objects

It is recommended that objects such as discarded farming and agricultural implements be mitigated in the following way:

- To encourage owners of historical significant objects to accept responsibility
 for these items when they move. However, they should be made aware of
 the significance of these objects in order to prevent that objects are
 injudiciously earmarked for the scrap yard.
- To approach a cultural historical museum (such as the Willem Prinsloo Agricultural Museum) to collect all objects with historical significance to be incorporated in the museum's collection.

8 CONCLUSION AND RECOMMENDATION

The Phase I HIA study for the proposed Tharisa Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the project area:

- Stone walled settlements which date from the Late Iron Age.
- Historical structures such as farm houses with outbuildings, agricultural infrastructure and the van Rensburg School (now called the Retief Primary School).
- At least six graveyards.
- Objects with heritage significance such as outdated and discarded agricultural implements.

Heritage resources with significance also occur outside the Tharisa Project Area. These include amongst others historical farm homesteads with outbuildings, the Marikana Mill and associated shops complex and an English NG Church which is used by the local black population for church services. At least three graveyards were also observed). This brief inventory may be extended with more heritage sites if a thorough survey of the area to the north of the proposed Tharisa Project Area is undertaken. However, these heritage resources are not discussed further as they are not part of the project area.

The heritage resources in the Tharisa Project Area have been geo-referenced and mapped (Figure 3; Tables 1-3). The significance of the heritage resources has been determined as some may be affected by the proposed new development project (Tables 1-3).

The Late Iron Age stone walled sites qualify as archaeological sites, some of which may date from the Historical Period. All archaeological (historical) and paleontological sites are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999).

All buildings and structures older than sixty years are protected by Section 34 of the National Heritage Resources Act (No 25 of 1999) and may not be affected (demolished, altered, renovated, removed) by the mining development project. This includes the van Rensburg school as well as any other possible forerunners school buildings whose remains may still exist in the project area.

All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

Various kinds of objects (cultural, historical, scientific, technological, etc) are protected by Section 32 of the National Heritage Resources Act (No 25 of 1999). Discarded agricultural implements such as ploughs, tractors etc in the Tharisa Project Area therefore have cultural-historical (technological) significance. If they are left behind when their original owners move these objects become the property of Tharisa Minerals.

Mitigation measures for those types and ranges of heritage resources which may be affected by the mining development project are the following.

The remaining stone walled sites on Kafferskraal 342 are remnants of a possible large settlement complex which used to exist on this farm before recent farming practises gradually destroyed the complex. These stone walled sites may not be affected (demolished, altered, renovated, removed) by the proposed new mining development project before the North-West Provincial Heritage Resources Authority (NW PHRA) has approved such alterations.

An archaeologist accredited with the Association for Professional Archaeologists (ASAPA) must apply for a permit from the NW PHRA which would authorise that the stone walled sites may be destroyed by the mining development project. However, the archaeologist has to subject the stone walled sites to a Phase II investigation *prior* to their destruction. This implies that the stone walled sites have to be mapped and that test excavations in these sites have to be undertaken. The results of the Phase II investigation have to be published in a report which must be preserved in the NW PHRA's data bank.

None of the historical houses and their associated outbuildings as well as other infrastructure such as the tobacco drying shed and the van Rensburg School as well as earlier remains of this school may be affected (demolished, altered, renovated, removed) by the proposed new mining development project *prior* to the NW PHRA issuing the necessary permits for such alterations.

All historical buildings that may be affected by the proposed mining development project must be investigated *prior* to these buildings being affected (impacted) by the development activities. This investigation must be done by a historical architect accredited with the SAHRA. The historical architect must apply for a permit from the NW PHRA which will authorise the necessary affect (impact) on any historical structure which then may be demolished, altered, renovated or removed. The latter actions must be preceded by documenting the historical structures by means of plan and profile drawings, photographs and descriptions of the building. The results of the Phase II investigation have to be published in a report which must be preserved in the NW PHRA's data bank.

None of the graveyards may be affected by the proposed mining development project. The following mitigation measures may be applied to the graveyards:

 The graveyards can be preserved in situ. The graveyards can be demarcated with brick walls or with fences. Conserving graves and

- graveyards in situ creates the risk and responsibility that they may be damaged (accidentally), that the mine remains responsible for their future unaffected existence, maintenance and that controlled access must exist for any relatives or friends who wish to visit the deceased.
- Graveyards can be exhumed and relocated. The exhumation of human remains and the relocation of graveyards are regulated by various laws, regulations and administrative procedures. This task is undertaken by forensic archaeologists or by reputed undertakers who are acquainted with all the administrative procedures and relevant legislation that have to be adhered to whenever human remains are exhumed and relocated. This process also includes social consultation with a 60 days statutory notice period for graves older than sixty years. Permission for the exhumation and relocation of human remains have to be obtained from the descendants of the deceased (if known), the National Department of Health, the Provincial Department of Health, the Premier of the Province and the local police.

It is recommended that objects such as discarded farming and agricultural implements be mitigated in the following way:

- To encourage owners of historical significant objects to accept responsibility
 for these items when they move. However, they should be made aware of
 the significance of these objects in order to prevent that objects are
 injudiciously earmarked for the scrap yard.
- To approach a cultural historical museum (such as the Willem Prinsloo Agricultural Museum) to collect all objects with historical significance to be incorporated in the museum's collection.

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Mr. John Botilo, local resident and pastor of the Baptists Church.

<u>Declaration: J.C.C. Pistorius. Academic and professional qualifications</u>

BA (Hons) Archaeology; MA (Archaeology); D Phil (Archaeology), Post graduate Diploma in Museum Sciences.

Extended academic, research, lecturing and archaeological (heritage) contract work experience for numerous environmental companies and Eskom.

Developing and maintaining cultural heritage management programmes for granite fraternity, Rio Tinto EXP, PMC and Anglo Plats.

Working on the development of the Ga-Nape Heritage Park and Wilderness Area with Bafokeng Royal Resources, Impala Platinum and Anglo Plats.

Accredited member with the Association for Southern African Professional Archaeologists (ASAPA)

I hereby declare that I am an independent consultant with no interest or personal gains in this project whatsoever, except receiving fair payment for rendering an independent professional service.