



25 Rood Street
P.O.Box 1856
Nelspruit, 1200
info@vhhc.co.za

Tel: 013 752 5551
Mobile: 083 357 3669
Fax: 086 263 5671
richard@vhhc.co.za

**HERITAGE IMPACT ASSESSMENT (HIA) FOR THE PROPOSED UPGRADING
FROM GRAVEL TO SURFACE STANDARD OF ROAD D417 FROM LOBATLENG
TO MOTSWEDI.**

Compiled for
Senzomanzi Pty Ltd
Tel: 083 517 0252
Cell: 083 337 1335
Fax: 086 219 3086
E-mail: info@senzomanzi.co.za

Compiled by:
**VHUFA HASHU HERITAGE
CONSULTANTS**
N0.25 Rood Street
Sonheuwel, Mbombela
Cell: 083 357 3669
Fax: 086 263 5671
P.O. Box 1856
Nelspruit, 1200
E-mail: info@vhhc.co.za

May 2022

EXECUTIVE SUMMARY

Vhufa Hashu Heritage Consultants cc has been commissioned by Senzomanzi (Pty) Ltd to conduct a Cultural Heritage Impact Assessment (HIA) study for the proposed Upgrading from Gravel to surface standard of road D417 from Lobatleng to Motswedi within Ramotshere Moiloa Local Municipality, Ngaka Modiri Molema District of North West Province. The aim of the survey was to investigate the availability of archaeological sites, cultural Heritage resources, sites associated with oral histories, graves, cultural landscapes, and any structures of historical significance that may be affected by the proposed road Improvement. The proposed Road Improvement will affect Lobatla and Motswedi Villages which are situated along the road within Ramotshere Moiloa Local Municipality, Ngaka Modiri Molema of North West Province.

To begin with, a multi-stepped methodology was used to address the terms of reference. This include a robust desktop study that involve review of the 1972 Convention, the Operational Guidelines of 2013, the ICOMOS (International Council of Monuments and Sites, 2011) guidelines on assessing impact on heritage sites. The IUCN guidelines and standards of best practice were also consulted. Subsequently, a review of the archaeology of the area was carried out using contract archaeology reports, research reports and academic publications. The desktop study was followed by fieldwork carried out by expert archaeologists in conformity with the National Heritage Resources Act (Act 25 of 1999). We conduct a detailed survey on slow moving vehicle and foot targeting specific areas which we considered more likely to contain archaeological sites. This include dongas and all areas disturbed by human activities. We are confident that we covered the most sensitive areas of the proposed Road D417 from Lobatleng to Motswedi. Based on an interdisciplinary methodology, that combined ICOMOS methodology with several techniques from various discipline, the impact of the proposed road Improvement was considered. No archaeological sites, heritage sites and graves was identified within the proposed road and proposed borrow pits.

ACKNOWLEDGEMENTS OF RECEIPTS

CLIENT NAME: Senzomanzi (Pty) Ltd

CLIENT CONTACT PERSON: Mr Tafadzwa Kelvin Dzimbahete

CLIENT CONTACT NUMBER: 083 517 0252

HERITAGE CONSULTANT: VHUFHASHU CONSULTANTS CC

A handwritten signature in black ink, appearing to read 'Rudzani Richard Munyai', with a horizontal line underneath it.

Rudzani Richard Munyai

EXPLANATION OF ABBREVIATIONS USED IN THIS DOCUMENT

AIA	Archaeological Impact Assessment
ASAPA	South African Archaeological Professional Association
CMP	Conservation Management Plan
EIA	Early Iron Age
EMP	Environmental Management Plan
ESA	Early Stone Age
GPS	Geographical Positioning System
HIA	Heritage Impact Assessment
HMP	Heritage Management Plan
ICOMOS	International Council of Monuments and sites
LIA	Late Iron Age
LSA	Late Stone Age
MIA	Middle Iron Age
MSA	Middle Stone Age
NASA	National Archives of South Africa
NHRA	National Heritage Resources Agency
PRHA	Provincial Heritage Resources Authority
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
VHHC	Vhufa Hashu Heritage Consultants

DEFINITIONS

“Aesthetic value” Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

„Alter“ any action affecting the structure, appearance or physical properties of a place or object, whether by a way of structural or other works, by painting plastering or other decoration or any other means;

“Conservation” in relation to heritage resources, includes protection maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance

“Conservation Management Plan” A policy aimed at the management of a heritage resource and that is approved by the Heritage Resources Authority setting out the manner in which the conservation of a site, place or object will be achieved

“Cultural Significance” As defined in the NHRA means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance

“Development” means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future wellbeing, including-

- (a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- (b) carrying out any works on or over or under a place;
- (c) subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- (d) construction or putting up for display signs or hoardings;
- (e) any change to the natural or existing condition or topography of land; and
- (f) any removal or destruction of trees, or removal of vegetation or topsoil.

“Heritage agreement” means an agreement referred to in section 42,

“Heritage Impact Assessment” A report compiled in response to a proposed development that must meet the minimum requirements set out in the NHRA and should be submitted to a heritage resources authority for consideration.

“Heritage site” means a place declared to be a national heritage site by SAHRA or site declared to be a provincial Heritage site by a PHRA

“Historic value” Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

“Improvement” in relation to heritage resources includes repair, restoration and rehabilitation of a place protected in terms of this Act.

“Interested and Affected Parties” Individuals, organisations or communities that will either be affected and/or have an interest in a development or the resulting impacts of a development.

“Management” in relation to heritage resources includes the conservation, presentation and improvement of a place protected in terms of this Act.

“Scientific value” Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period.

“Social value” Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

“Rarity” Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

“Representivity” Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

TABLE OF CONTENTS

Contents

EXECUTIVE SUMMARY	2
ACKNOWLEDGEMENTS OF RECIEPTS	3
EXPLANATION OF ABBREVIATIONS USED IN THIS DOCUMENT	4
DEFINITIONS.....	5
1. INTRODUCTION	8
2. SITE LOCATION AND PROJECT DESCRIPTION.....	9
3. ASSESSMENT OF SITES AND FINDS.....	12
3.1. RESULTS OF THE FIELDWORK.....	12
4. BORROW PIT SITES	12
4.1. BORROW PIT No.05.....	12
4.1.1. Results.....	12
4.2. BORROW PIT No.06.....	14
4.2.1. Results.....	14
4.3. BORROW PIT No.07.....	14
4.3.1. Results.....	15
4.4. BORROW PIT No.09.....	15
4.4.1. Results.....	15
5. RELEVANT LEGISLATION.....	16
5.1. THE NATIONAL HERITAGE RESOURCE ACT (25 OF 1999).....	16
5.2. THE HUMAN TISSUE ACT (65 OF 1983).....	20
6. TERMS OF REFERENCE	20
7. METHODOLOGY	20
7.1. SOURCE OF INFORMATION.....	20
7.2. ASSUMPTION AND LIMITATIONS	21
8. ASSESSMENTS CRITERIA.....	21
8.1. SITE SIGNIFICANCE.....	21
8.2. IMPACT RATING.....	22
8.3. CERTAINTY	24
8.4. DURATION	24
8.5. MITIGATION	24
9. CHRONOLOGICAL SEQUENCE OF THE STONE AND IRON AGE.....	25
9. CONCLUSION AND RECOMMENDATIONS.....	25
10. REFERENCE	27
APPENDIX A: TYPES AND RANGES AS OUTLINED BY THE NATIONAL HERITAGE RESOURCE ACT (ACT 25 OF 1999)	28
APPENDIX B: PROCESS OF GRAVE EXHUMATION.....	30

1. INTRODUCTION

North West Department of Public Works and Roads commissioned studies for the proposed Upgrading from Gravel to surface standard of road D417 from Lobatleng to Motswedi within Ramotshere Moiloa Local Municipality, Ngaka Modiri Molema District of North West Province. They appointed Senzomanzi (Pty) Ltd to handle the Environmental Impact Assessment to ensure that the proposed development meets the environmental requirements in line with the National Environmental Management Act 107 of 1998 as amended in 2010. They appointed Vhufahashu Heritage Consultants to conduct an Archaeological and Cultural Heritage Impact Assessment study as part of the Environmental Impact Assessment for the proposed project.

In order to comply with relevant legislations, the Applicant requires information on the heritage resources that occur within or near the proposed project. This enables the applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources. Archaeological/ Heritage Impact Assessment (AIA-HIA) are conducted in line with the National Heritage Resources Act of 1999 (Act No. 25 of 1999). The Act protects heritage resources through formal and general protection. The NHRA (Act No. 25 of 1999) provides that certain developmental activities require consents from relevant Heritage Resources Authorities or Agency. The South African Heritage Resources Agency as custodians of the South African Heritage and Monuments sites developed minimum standards for impact assessment processes, in addition to these local standards, the International Council of Monuments and Sites (ICOMOS) published guidelines that specify and guide impact assessment on heritage sites with Outstanding Universal Value. Furthermore, these guidelines and standards have been strengthened by the Burra Charter of 1999 which require a caution approach to the management of sites, it set out the need to understand the significance of heritage places and the significance guide decisions.

The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and

material (section 35) and graves and burial sites (section 36). In order to comply with the legislation, the Applicant requires information on the heritage resources, and their significance that occur within the project area. This enables the Applicant to take pro-active measures to limit the adverse effects that the development could have on such cultural and heritage resources.

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

- The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- A construction of a bridge or similar structure exceeding 50m in length
- Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof.
- Re-zoning of a site exceeding 10 000 m²
- Any other category provided for in the regulations of SAHRA or a provincial heritage authority.

2. SITE LOCATION AND PROJECT DESCRIPTION

The proposed study area is located within Ramotshere Moiloa Local Municipality, Ngaka Modiri Molema District North West Province. The proposed Road Improvement will affect Lobatleng to Motswedi Villages which are situated along the proposed road. The road will start at Lobatleng GPS (S25.1830288° 25.8271090°) and it will end at Motswedi GPS (S25.2466662° 25.8757850°) The project area could be accessed via N4 from Zeerust to Mahikeng.

The vegetation and landscape of the area is well developed tree and shrub layers, dense stands of *Terminalia sericea*.



Figure 1: View of the area where the proposed Improvement will start at Lobatla GPS (S25.1830288° 25.8271090°).



Figure 2: View of the proposed road to be upgraded.



Figure 3: View of the area where the proposed bridge will be constructed.



Figure 4: View of the area where the proposed Improvement will end at Motswedi GPS (S25.2466662° 25.8757850°).

3. ASSESSMENT OF SITES AND FINDS

3.1. Results of the Fieldwork

This section contains the results of the heritage site/find assessment. The phase 1 heritage scoping assessment program as required in terms of section 38 of the National Heritage Resource Act (Act 25 of 1999) done for the proposed development.

No cultural heritage (archaeological or historical) sites, features or objects were found within the proposed site for the road upgrade and four (04) borrow pits. If any did exist here in the past it would have been destroyed or disturbed through various developments.

4. BORROW PIT SITES

4.1. Borrow Pit No.05

Borrow Pit N0.05 is situated on the south eastern side of Lobatla Village along the road to the North (GPS S25.1825145° E25.8305278°).

4.1.1. Results

This study has been informed by comprehensive review of relevant literature and consultation with the local communities. No archaeological or any other cultural heritage resources was located within the direct path of the proposed borrow pit site. The proposed extraction of gravel material can continue as planned.

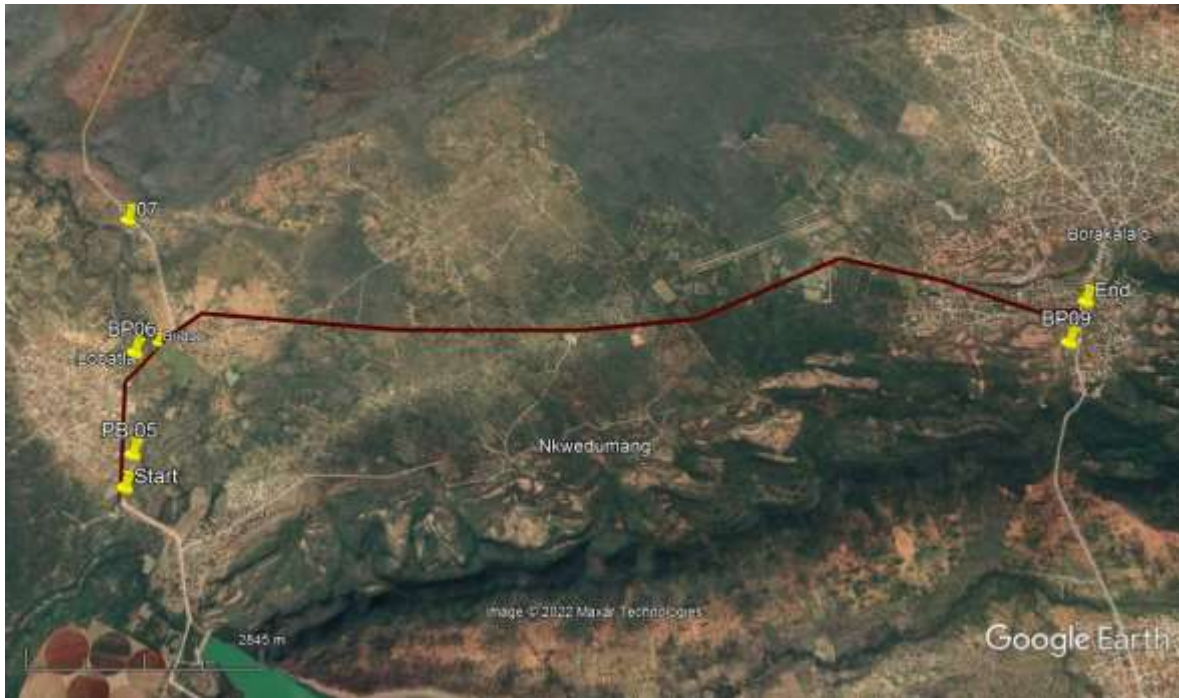


Figure 5: Map showing the proposed road and the Borrow Pit Sites.



Figure 6: View of Borrow Pit No.05.

4.2. Borrow Pit No.06

Borrow Pit N0.06 is situated on the north eastern side of Lobatla village and north of the proposed road for development (GPS S25.1774359° E25.8435972°).

4.2.1. Results

This study has been informed by comprehensive review of relevant literature and consultation with the local communities.

No archaeological or any other cultural heritage resources was located within the direct path of the proposed borrow pit site.



Figure 7: View of the proposed Borrow Pit No.06.

4.3. Borrow Pit No.07

Borrow Pit N0.07 is situated on the north eastern side of Lobatla Village on the gravel road to Driefontein GPS S25.170474° E25.862346°.

4.3.1. Results

This study has been informed by comprehensive review of relevant literature and consultation with the local communities. No archaeological or any other cultural heritage resources was located within the direct path of the proposed borrow pit site. The proposed work should continue as planned.



Figure 8: View of Borrow Pit No.07 in Lobatla on the western side of the gravel road to Driefontein.

4.4. Borrow Pit No.09

Borrow Pit N0.09 is situated in the western side of Motswedi Village GPS (S25.283938° E25.875257°).

4.4.1. Results

This study has been informed by comprehensive review of relevant literature and consultation with the local communities. No archaeological or any other cultural heritage resources was located within the direct path of the proposed borrow pit site.



Figure 9: View of borro pit No.09 in Motswedi Village.

5. RELEVANT LEGISLATION

Two sets of legislation are relevant for this study with regards to the protection of heritage resources and graves.

5.1. The National Heritage Resource Act (25 of 1999)

This Act established the South African Heritage Resource Agency (SAHRA) as the prime custodians of the heritage resources and makes provision for the undertaking of heritage resources impact assessment for various categories of development as determined by Section 38. It also provides for the grading of heritage resources (Section 7) and the implementation of a three-tier level of responsibility and functions from heritage resources to be undertaken by the State, Provincial and Local authorities, depending on the grade of heritage resources (Section 8)

In terms of the National Heritage Resource Act 25, (1999) the following is of relevance:

Historical remains

Section 34 (1) No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant Provincial Heritage Resources Authority.

Archaeological remains

Section 35(3) Any person who discover archaeological or Paleontological object or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resource authority or the nearest local authority or museum, which must immediately notify such heritage resources authority.

Section 35(4) No person may, without a permit issued by the responsible heritage resources authority-

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- trade in ,sell for private gain, export or attempt to export from republic any category of archaeological or paleontological material or object or any meteorite; or
- bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment which assist with the detection or recovery of metal or archaeological material or object or such equipment for the recovery of meteorites.

Section 35(5) When the responsible heritage resource authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or paleontological site is underway, and where no

application for a permit has been submitted and no heritage resource management procedures in terms of section 38 has been followed, it may

- serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order
- carry out an investigation for the purpose of obtaining information on whether or not an archaeological or paleontological site exists and whether mitigation is necessary;
- if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and
- recover the cost of such investigation from the owner or occupier of the land on which it is believed an archaeological or paleontological site is located or from the person proposing to undertake the development if no application for a permit is received within two week of the order being served.

Subsection 35(6) the responsible heritage resource authority may, after consultation with the owner of the land on which an archaeological or paleontological site or meteorite is situated; serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

Burial grounds and graves

Section 36 (3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority:

- (i)** destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (ii)** bring onto or use at a burial ground or grave any excavation equipment, or any equipment which assists in detection or recovery of metals.

Subsection 36 (6) Subject to the provision of any person who in the course of development or any other activity discover the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resource authority which must, in co-operation with the South African Police service and in accordance with regulation of the responsible heritage resource authority-

- (l) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this act or is of significance to any community; and
if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangement as it deems fit.

Cultural Resource Management

Section **38(1)** Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development*...

- must at the very earliest stages of initiating such development notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

development means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including:

- (i) Construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- (ii) Any change to the natural or existing condition or topography of land, and
- (iii) Any removal or destruction of trees, or removal of vegetation or topsoil;

place means a site, area or region, a building or other structure

structure means any building, works, device or other facility made by people and which is fixed to the ground.

5.2. The Human Tissue Act (65 of 1983)

This act protects graves younger than 60 years, these falls under the jurisdiction of the National Department of Health and the Provincial Health Department.

Approval for the exhumation and reburial must be obtained from the relevant Provincial MEC as well as relevant Local Authorities.

6. TERMS OF REFERENCE

The terms of reference for the study were to undertake an archaeological impacts assessment on the proposed development and submit a specialist report, which addresses the following:

- Executive summary
- Scope of work undertaken
- Methodology used to obtain supporting information
- Overview of relevant legislation
- Results of all investigations
- Interpretation of information
- Assessment of impact
- Recommendation on effective management measures
- References

7. METHODOLOGY

7.1. Source of information

Most of the information was obtained through the initial site visit made on the 21 April 2022 by Richard Munyai; where systematic inspections of the proposed area were covered along linear transects which resulted in the maximum coverage of the entire site. Standard archaeological observation practices were followed; Visual inspection was supplemented by relevant written source, and oral communications

with local communities from the surrounding area. In addition, the site was recorded by hand held GPS (Garmin Montana 650) and plotted on 1:50 000 topographical map. Archaeological/historical material and the general condition of the terrain were photographed with a Garmin 650 Camera.

7.2. Assumption and Limitations

It must be pointed out that heritage resources can be found in the unexpected places, it must also be borne in mind that survey may not detect all the heritage resources in a given project area. While some remains may simply be missed during surveys (observation) others may occur below the surface of the earth and may be exposed once constructed commences.

8. ASSESSMENTS CRITERIA

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The significance of archaeological and heritage sites were based on the following criteria:

- The unique nature of a site.
- The amount/depth of the archaeological deposit and the range of features (stone walls, activity areas etc).
- The wider historic, archaeological and geographic context of the site.
- The preservation condition and integrity of the site.
- The potential to answer present research questions.

8.1. Site Significance

The site significance classification standards as prescribed in the guideline and endorsed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used as guidelines in determining the site significance for the purpose of this report.

The classification index is represented in the Table below.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1	-	Conservation; National Site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation; Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A (GP.A)	Grade 4A	High / Medium Significance	Mitigation before destruction
Generally Protected B (GP.B)	Grade 4B	Medium Significance	Recording before destruction
Generally Protected C (GP.C)	Grade 4C	Low Significance	Destruction

Grading and rating systems of heritage resources

8.2. Impact Rating

VERY HIGH

These impacts would be considered by society as constituting a major and usually permanent change to the (natural and/or cultural) environment, and usually result in severe or very severe effects, or beneficial or very beneficial effects.

Example: The loss of a species would be viewed by informed society as being of VERY HIGH significance.

Example: The establishment of a large amount of infrastructure in a rural area, which previously had very few services, would be regarded by the affected parties as resulting in benefits with VERY HIGH significance.

HIGH

These impacts will usually result in long term effects on the social and /or natural environment. Impacts rated as HIGH will need to be considered by society as

constituting an important and usually long term change to the (natural and/or social) environment. Society would probably view these impacts in a serious light.

Example: The loss of a diverse vegetation type, which is fairly common elsewhere, would have a significance rating of HIGH over the long term, as the area could be rehabilitated.

Example: The change to soil conditions will impact the natural system, and the impact on affected parties (e.g. farmers) would be HIGH.

MODERATE

These impacts will usually result in medium- to long-term effects on the social and/or natural environment. Impacts rated as MODERATE will need to be considered by the public or the specialist as constituting a fairly unimportant and usually short term change to the (natural and/or social) environment. These impacts are real, but not substantial.

Example: The loss of a sparse, open vegetation type of low diversity may be regarded as MODERATELY significant.

Example: The provision of a clinic in a rural area would result in a benefit of MODERATE significance.

LOW

These impacts will usually result in medium to short term effects on the social and/or natural environment. Impacts rated as LOW will need to be considered by society as constituting a fairly important and usually medium term change to the (natural and/or social) environment. These impacts are not substantial and are likely to have little real effect.

Example: The temporary changes in the water table of a wetland habitat, as these systems are adapted to fluctuating water levels.

Example: The increased earning potential of people employed as a result of a development would only result in benefits of LOW significance to people living some distance away.

NO SIGNIFICANCE

There are no primary or secondary effects at all that are important to scientists or the public.

Example: A change to the geology of a certain formation may be regarded as severe from a geological perspective, but is of NO SIGNIFICANCE in the overall context.

8.3. Certainty

DEFINITE: More than 90% sure of a particular fact. Substantial supportive data exist to verify the assessment.

PROBABLE: Over 70% sure of a particular fact, or of the likelihood of an impact occurring.

POSSIBLE: Only over 40% sure of a particular fact, or of the likelihood of an impact occurring.

UNSURE: Less than 40% sure of a particular fact, or of the likelihood of an impact occurring.

8.4. Duration

SHORT TERM: 0 – 5 years

MEDIUM: 6 – 20 years

LONG TERM: more than 20 years

DEMOLISHED: site will be demolished or is already demolished

8.5. Mitigation

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be classified as follows:

- ✓ **A** – No further action necessary
- ✓ **B** – Mapping of the site and controlled sampling required
- ✓ **C** – Preserve site, or extensive data collection and mapping required; and
- ✓ **D** – Preserve site

9. CHRONOLOGICAL SEQUENCE OF THE STONE AND IRON AGE.

The Stone Age is the period in human history when lithics (or stone) was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is important to note that these dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age is as follows:

Early Stone Age (ESA): Predominantly the Acheulean hand axe industry complex dating to + 1Myr yrs-250 000 yrs. Before present.

Middle Stone Age (MSA): Various lithic industries in SA dating from \pm 250 000 yr.-30 000 yrs. before present.

Late Stone Age (LSA): The period from \pm 30 000-yr.to contact period with either Iron Age farmers or European colonists.

There are no known Stone Age sites in the area including rock art. No Stone Age sites or objects were recorded during the assessment of the area.

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts:

Early Iron Age (EIA): Most of the first millennium AD

Middle Iron Age: 10th to 13th centuries AD

Late Iron Age (LIA): 14th century to colonial period. The entire Iron Age represents the spread of Bantu speaking peoples.

10. CONCLUSION AND RECOMMENDATIONS

In conclusion it is possible to say that Phase 1 HIA for the proposed road upgrade and four (04) borrow pits has been conducted successfully. If any archaeological and historical sites, features or objects did exist here in the past it would have been

severely disturbed or destroyed as a results of several developments on the area. The proposed Road Improvement will affect Lobatleng to Motswedi Villages. Development projects that involve any form of earth-moving are potential threats to archaeological materials and sites. Archaeological sites are buried under the soil surface where they are relatively safe until natural forces such as erosion and human development actions such as road construction expose them. These sites are usually identified by exposed bone materials, pottery remains, burnt daga house remains, ash middens etc. The most sensitive of these are human burials. From a cultural heritage point of view the development should be allowed to continue taking careful attention of the above. Should any be uncovered during the development process the Archaeologist should be called in to investigate and recommend on the best way forward.

11. REFERENCE

- Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No.40. Pretoria: Botanical Research Institute.
- Deacon, J. 1997. Report: Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology. *South African Association of Archaeology*. No. 49,
- Esterhuysen, A., 2007. The Earlier Stone Age. In Bonner, P., Esterhuysen, A., Jenkins, T. (eds.): *A Search for Origins: Science, History and South Africa's (Cradle of Humankind)*, Johannesburg: Wits University Press. Pg 110 -121.
- Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik
- Huffman, T. N., 2007. The Early Iron Age at Broederstroom and around the 'Cradle of humankind'. In Bonner, P., Esterhuysen, A., Jenkins, T. (eds.): *A Search for Origins: Science, History and South Africa's (Cradle of Humankind)* Johannesburg: Wits University Press. Pg 148 -161.
- Seliane, M. 2009. Cultural Heritage Impact Assessment of the proposed WRDM Multi Purpose Community Centre at portion 26 of the farm Kromdraai 520JQ, unpublished report.
- Mason, R.J. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.
- Maggs, T. 1984. The Iron Age south of the Zambezi, in Klein, R. G 1984. *South African Prehistory and Paleoenvironments*. A.A. Balkema/Rotterdam
- Maggs. T. 1986. The early History of the Black people in southern Africa, in Cameroon. T. & S.B. Spies. 1986. An illustrated history of south Africa, Jonathan Ball Publisher, Johannesburg.

APPENDIX A: TYPES AND RANGES AS OUTLINED BY THE NATIONAL HERITAGE RESOURCE ACT (ACT 25 OF 1999)

The National Heritage Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of the 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 tradition are attached or which are associated with living heritage;
- (c) Historical settlement and townscapes
- (d) Landscape and natural features of cultural significance;
- (e) Geological sites of scientific or cultural importance
- (f) Archaeological and paleontological sites
- (g) Graves and burial ground including-
 - (I) Ancestral graves
 - (II) Royal graves and graves of traditional leaders
 - (III) Graves of victim 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) movable objects, including-
 - (I) object recovered from 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) object of scientific or technological interest; and
- (VII) books, records, documents, photographs, positive and negatives, graphic, film or video material or sound recording, 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 Resource 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 organization of importance in the history of South Africa
- (i) Sites of significance relating to the history of slavery in South Africa.

APPENDIX B: PROCESS OF GRAVE EXHUMATION

Application of a permit from SAHRA's BGG Unit or PHRA in terms of Section 36 of the National Heritage Resources Act for **graves older than 60 years.**

- **Graves of known identity:** Proof of thorough consultative process:
 - Locate next of kin and obtain letter of consent from next of kin.
 - Obtain a letter of consent or statement of no objection from the local traditional authority.
 - Determine a place for the re-burial of each grave in consultation with next of kin. In addition, also determine the arrangement of reburial, i.e., by the next of kin/community or a funeral undertaker.
 - Submit documentation of the above with the permit application to SAHRA.
 - Inform SAPS of intent to relocate the grave/s and submit a copy of the permit to SAPS.

- **Graves of unknown identity:** Proof of thorough consultative process:
 - Place advertisement in a local and national newspaper with description and location of graves and full contact detail of consultant and developer. A waiting period of 60 days applies.
 - If no reaction to advertisement follows, then apply for permit from SAHRA after the waiting period of 60 days with proof of advertisement and any other consultative process.
 - If in rural area obtain a letter of consent or statement of no objection from local traditional authority must be submitted with permit application.
 - If advertisement leads to a claim from next of kin or from a community who by tradition has an interest, then written consent from relevant party must be obtained.
 - Determine a place for the re-burial of each grave
 - Submit documentation of the above with the permit application to SAHRA.

- Inform SAPS of intent and process of re-burial and submit a copy of the permit to SAPS.

Graves less than 60 years old in terms of the Human Tissues Act (Act no. 65 of 1983) and the Removal of Graves and Dead Bodies Ordinance No. 7 of 1925

- Locate the next of kin of the buried persons and obtain consent from the next of kin for the relocation of the graves.
- Determine a place for the re-burial of each grave.
- Obtain a letter of consent or statement of no objection from the local traditional authority.
- Submit above documentation to the Department of Health and obtain permission for the relocation of the graves – which process would most probably be regulated by the District Municipality.
- Inform the Local South African Police Service and provide documentation from relevant heritage authority.
- The graves are to be exhumed under the supervision of an archaeologist.