
A HERITAGE IMPACT ASSESSMENT REPORT FOR THE PROPOSED MINING PERMIT APPLICATION FOR A QUARRY TO MINE GRAVEL, AGGREGATE, AND OTHER STONES AT YANGENI TRIBAL AREA RESERVE 16 15836 SITUATED WITHIN THE AMBIT OF JOZINI LOCAL MUNICIPALITY, THE MAGISTERIAL DISTRICT OF UMKHANYAKUDE, KWAZULU NATAL PROVINCE SOUTH AFRICA

Compiled for:

ANKONE CONSULTING (PTY) LTD
PostNet Suite 435, Private Bag X 4,
WierdaPark, 0149
Email: charles@ugwa.co.za
Cell: 079 062 6318

Compiled by:

INTEGRATED SPECIALIST SERVICES (PTY) LTD
135 Pitzer Road, Glen Austin, Midrand, 1685
Tel: 011 037 1565
Cell: 0716859247
Fax: 086 652 9774
E-mail: trust@issolutions.co.za

Document information

Item	Description
Proposed development and location	The proposed mining permit application at Yangeni Village in the Jozini Local Municipality, Umkhanyakude District Municipality in KwaZulu Natal Province.
Title	Proposed mining permit application at Yangeni Village within the Jozini Local Municipality, Umkhanyakude District Municipality in KwaZulu Natal Province: Archaeological and Heritage Impact Assessment Report
Purpose of the study	The purpose of this document is an Archaeological and Heritage Impact Assessment report that describes the cultural values and heritage factors that may be impacted on by the proposed mining development in the Yangeni area in Umkhanyakude District Municipality of KwaZulu Natal Province.
1:50 000 Topographic Map	
Coordinates	S27 17 54.47 E 032 04 24.09 (Also see Figures 1)
Municipalities	Joni Local Municipality, Umkhanyakude District Municipality.
Predominant land use of surrounding area	Vacant, agricultural, industrial, residential, road and transport (See land use map)
Applicant	KhanyaMhlaba Primary Co-operative Ltd ("KhanyaMhlaba").
Heritage Consultant	Integrated Specialist Services (Pty) Ltd
Date of Report	Draft Report 14 June 2017
ISS Contact person	Trust Miilo (trust@issolutions.co.za)
Ankone Contact Person	thembiilen@ankoneconsulting.co.za / charles@ugwa.co.za
Author identification	Trust Miilo (Archaeologist and Heritage specialist)

COPYRIGHT

Authorship: This AIA/HIA Report has been prepared by Mr Trust Mlilo (Professional Archaeologist). The report is for the review of the Heritage Resources Agency (Amafa).

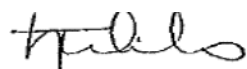
Copyright: This report and the information it contains is subject to copyright and may not be copied in whole or part without written consent of Ankone Consultants (Pty) Ltd, and Integrated Specialist Services (Pty) Ltd except that the report can be reproduced by the Khanya Mhlaba Primary Co-operative Ltd and Amafa to the extent that this is required for the purposes of the Archaeological and Heritage Management purposes in accordance with the National Heritage Resources Act, Act 25 of 1999

Geographic Co-ordinate Information: Geographic co-ordinates in this report were obtained using a hand-held Garmin Global Positioning System device. The manufacturer states that these devices are accurate to within +/- 5 m.

Maps: Maps included in this report use data extracted from the National Topographic Survey Map and Google Earth Pro.

Disclaimer: The Author is not responsible for omissions and inconsistencies that may result from information not available at the time this report was prepared. The Study was carried out within the context of tangible and intangible cultural heritage resources as defined by the SAHRA Regulations and Guidelines regarding authorisation of the proposed mining permit application being proposed by Khanya Mhlaba Primary Co-operative Ltd.

Signed by



June 2017

ACKNOWLEDGEMENTS

The authors acknowledge Ankone Consultants (Pty) Ltd and the Headman Buthelezi for their assistance with project information, and the associated project BID as well as responding to technical queries related to the project.

TABLE OF CONTENT

EXECUTIVE SUMMARY	VI
ABBREVIATIONS	VIII
KEY CONCEPTS AND TERMS	IX
1. INTRODUCTION.....	1
1.1 BACKGROUND	1
1.2 LOCATION OF THE PROPOSED MINING PERMIT APPLICATION AREA	2
1.3 DESCRIPTION OF THE PROPOSED PROJECT	- 5 -
2. LEGAL REQUIREMENTS	- 5 -
3. TERMS OF REFERENCE	- 8 -
4. METHODOLOGY.....	- 20 -
4.1 ASSUMPTIONS AND LIMITATIONS.....	- 21 -
4.2 CONSULTATION.....	- 22 -
5. CULTURE HISTORY BACKGROUND OF THE PROJECT AREA.....	- 22 -
5.1 INTANGIBLE HERITAGE	- 25 -
5.2 SAHRIS DATABASE AND IMPACT ASSESSMENT REPORTS IN THE PROJECT AREA	- 25 -
6. RESULTS OF THE ARCHAEOLOGICAL/HERITAGE ASSESSMENT STUDY	- 26 -
ARCHAEOLOGICAL AND HERITAGE SITE	- 26 -
HISTORICAL BUILDINGS AND STRUCTURES	- 26 -
BURIAL GROUNDS AND GRAVES	- 26 -
HISTORICAL MONUMENTS AND MEMORIALS	- 27 -
MITIGATION MEASURES.....	- 27 -
7. DISCUSSIONS	- 28 -
8. CULTURAL HERITAGE SITE ASSESSMENT OF SIGNIFICANCE.....	- 29 -
9. ASSESSMENT CRITERIA	- 30 -
10. STATEMENT OF SIGNIFICANCE.....	- 31 -
11. RECOMMENDATIONS	- 33 -
12. CONCLUDING REMARKS.....	- 35 -
13. BIBLIOGRAPHY	- 36 -
14. APPENDIX 1: HERITAGE MANAGEMENT PLAN INPUT INTO THE MINING PERMIT APPLICATION PROJECT EMP	- 41 -

TABLE OF PLATES [PHOTOGRAPHS]

Plate 1: Photo 1: View of burial site (YBS1) on the northern side of the proposed mining development area (Photograph © by Author 2017)	- 9 -
Plate 2: Photo 2: View of the Nduna Buthelezi showing graves at burial site YBS1 (Photograph © by Author 2017)	- 9 -
Plate 3: Photo 3: View of grave at burial site YBS1 (Photograph © by Author 2017)	- 10 -
Plate 4: Photo 4: View of Nduna Buthelezi showing graves at YBS1(Photograph © by Author 2017).	- 10 -
Plate 5: Photo 5: View of Nduna Buthelezi showing graves at YBS1 (Photograph © by Author 2017)	- 11 -
Plate 6: Photo 6: View of grave at burial site YBS1 (Photograph © by Author 2017)	- 11 -
Plate 7: Photo 7 shows Nduna Buthelezi showing graves at burial site YSB1 (Photograph © by Author 2017)	- 12 -
Plate 8: Photo 8 shows proposed reservoir site (Photograph © by Author 2017)	- 12 -
Plate 9: Photo 9 view of previously cleared section of the proposed Mining Permit Application area (Photograph © by Author 2017)	- 13 -
Plate 10: Photo 10 view of dilapidated structures at an abandoned homestead (Photograph © by Author 2017)	- 13 -
Plate 11: Photo 11 shows Nduna Buthelezi showing some dilapidated dwellings within the proposed Mining Permit Application Area (Photograph © by Author 2017)	- 14 -
Plate 12: Photo 12 shows Nduna Buthelezi showing a grave covered by logs at Burial site YBS2 within the mining permit application area (Photograph © by Author 2017)	- 14 -
Plate 13: Photo 13: Closer view of grave at burial site YBS2 covered by logs (Photograph © by Author 2017)	- 15 -
Plate 14: Photo 14: View of dilapidated structures within the mining development site (Photograph © by Author 2017) .	- 15 -
Plate 15: Photo 15: View of village road cutting across the mining development site (Photograph © by Author 2017	- 16 -
Plate 16: Photo 16: View of backside of the abandoned homestead marked by an imported aloe tree (Photograph © by Author 2017)	- 16 -
Plate 17: Photo 17: View of stone edging along the village road (Photograph © by Author 2017)	- 17 -
Plate 18: Photo 18: View of derelict structures within an abandoned homestead (Photograph © by Author 2017	- 17 -
Plate 19: Photo 19: View of dilapidated structures on the edge of the mining development site (Photograph © by Author 2017	- 18 -
Plate 20: Photo 20: View of abandoned structures within mining development area (Photograph © by Author 2017	- 18 -
Plate 21: Photo 21: View of road, powerlines and pipelines on the boundary of the proposed mining development site (Photograph © by Author 2017	- 19 -
Plate 22: Photo 22: View of road marking boundary of proposed mining development site (Photograph © by Author 2017-	- 19 -

TABLE OF FIGURES

Figure 1: Proposed Mining Permit Application area	- 3 -
Figure 2: - Proposed Mining Permit Application area and recorded burial sites shown by black crosses (Ankone Consultants 2017)	- 4 -

EXECUTIVE SUMMARY

This Archaeological and Heritage Impact Assessment (AIA/HIA) Report has been prepared to address requirements of Section 38 of the National Heritage Resources Act, Act 25 of 1999 and KwaZulu Natal Heritage Act 4 of 2008. Integrated Specialist Services (Pty) Ltd (STEC) was appointed by Ankone Consultants (Pty) Ltd to conduct this Archaeological and Heritage Impact Assessment (AIA/HIA) Study for the proposed Mining Permit Application for mining aggregate, gravel, and other stones in Jozini Local Municipality of KZN Province. The proposed Mining Permit Application area is situated within the Umkhanykude District Municipality area of KwaZulu Natal Province. This report includes an impact study on potential archaeological and cultural heritage resources that may be associated with the proposed Mining Permit Application project area. This study was conducted as part of the specialist input for the Basic Assessment process. The Mining Permit Application area has been determined by the applicant and project information has been passed to ISS research team by the project EAP (Ankone Consultants). Analysis of the archaeological, cultural heritage, environmental and historic contexts of the study area predicted that archaeological sites, cultural heritage sites, burial grounds or isolated artefacts were likely to be present on the mining permit application area. The field survey was conducted to test this hypothesis and verify this prediction within the proposed mining permit application area. The proposed mining permit area is located approximately 15km north east of Jozini town.

The report makes the following observations:

- The findings of this report have been informed by desktop data review, field survey and impact assessment reporting which include recommendations to guide heritage authorities in making decisions with regards to the proposed project.
- Most sections of the project area are very accessible and the field survey was effective enough to cover most sections of the project receiving environs. However, some portions of the proposed mining development area had limited access because of the thick vegetation cover and steep mountain edges.
- The project area is predominantly rural agricultural and residential area.
- Although the possibility of archaeological or historical sites associated with the general project area is high, however, from a contextual studies perspective, no medium to high significance archaeological, heritage landmark or monument was recorded on the direct footprint of the proposed Mining Permit Application area.

The report sets out the potential impacts of the proposed mining development on heritage resources and recommends appropriate safeguard and mitigation measures that are designed to minimize the impacts where appropriate. The Report makes the following recommendations:

- The proposed mining development may be approved by Amafa to proceed as planned subject to heritage monitoring measures being incorporated into the project construction EMP.
- The recorded burial sites must be preserved *in situ* and barricaded to avoid any accidental damage during mining operations.
- Should it become necessary to relocate the graves the affected families must be adequately consulted and consent must be sought from custodians, traditional authorities, local municipality/ward councillor, SAPS and department of health as prescribed by the heritage legislation.
- Having obtained consent a professional archaeologist/heritage practitioner must lodge a burial permit application to Amafa

Should mining activities commence for this project:

- The proposed mining teams should be inducted on the significance of the possible archaeological resources that may be encountered during subsurface construction work before they work on the area in order to ensure appropriate treatment and course of action is afforded to any chance finds.
- If archaeological materials are uncovered, work should cease immediately and the Amafa be notified and activity should not resume until appropriate management provisions are in place.
- The findings of this report, with approval of the Amafa, may be classified as accessible to any interested and affected parties within the limits of the relevant legislation.

The conclusion of the HIA is that the impacts of the proposed development of the cultural environmental values are not likely to be significant if the EMP includes recommended safeguard and mitigation measures identified in this report.

ABBREVIATIONS

AIA	Archaeological Impact Assessment
BID	Background Information document
CRM	Cultural Resource Management
ECO	Environmental Control Officer
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EM	Environmental Manager
EMP	Environmental Management Plan
ESA	Early Stone Age
HIA	Heritage Impact Assessment
ISS	Integrated Specialist Services (Pty) Ltd
KM	Kilometres
KV	Kilo Volts
KZN	KwaZulu Natal Province
LIA	Late Iron Age
M	Metres
MSA	Middle Stone Age
NHRA	Nation Heritage Resources Act, Act 25 of 1999
PM	Project Manager
SM	Site Manager
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Agency Data Base

KEY CONCEPTS AND TERMS

Periodization Archaeologists divide the different cultural epochs according to the dominant material finds for the different time periods. This periodization is usually region-specific, such that the same label can have different dates for different areas. This makes it important to clarify and declare the periodization of the area one is studying. These periods are nothing a little more than convenient time brackets because their terminal and commencement are not absolute and there are several instances of overlap. In the present study, relevant archaeological periods are given below;

Early Stone Age (~ 2.6 million to 250 000 years ago,)

Middle Stone Age (~ 250 000 to 40-25 000 years ago,)

Later Stone Age (~ 40-25 000, to recently, 100 years ago,)

Early Iron Age (~ AD 200 to 1000)

Late Iron Age (~ AD1100-1840)

Historic (~ AD 1840 to 1950, but a Historic building is classified as over 60 years old)

Definitions Just like periodization, it is also critical to define key terms employed in this study. Most of these terms derive from South African heritage legislation and its ancillary laws, as well as international regulations and norms of best-practice. The following aspects have a direct bearing on the investigation and the resulting report:

Cultural (heritage) resources are all non-physical and physical human-made occurrences, and natural features that are associated with human activity. These can be singular or in groups and include significant sites, structures, features, ecofacts and artefacts of importance associated with the history, architecture or archaeology of human development.

Cultural significance is determined by means of aesthetic, historic, scientific, social or spiritual values for past, present or future generations.

Value is related to concepts such as worth, merit, attraction or appeal, concepts that are associated with the (current) usefulness and condition of a place or an object. Although significance and value are not mutually exclusive, in some cases the place may have a high level of significance but a lower level of value. Often, the evaluation of any feature is based on a combination or balance between the two.

Isolated finds are occurrences of artefacts or other remains that are not in-situ or are located apart from archaeological sites. Although these are noted and recorded, but do not usually constitute the core of an impact assessment, unless if they have intrinsic cultural significance and value.

In-situ refers to material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Archaeological site/materials are remains or traces of human activity that are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures. According to the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), no archaeological artefact, assemblage or settlement (site) and no historical building or structure older than 60 years may be altered, moved or destroyed without the necessary authorisation from the South African Heritage Resources Agency (SAHRA) or a provincial heritage resources authority.

Historic material are remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

Chance finds means archaeological artefacts, features, structures or historical remains accidentally found during development.

A grave is a place of interment (variably referred to as burial) and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery (contemporary) or burial ground (historic).

A site is a distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

Heritage Impact Assessment (HIA) refers to the process of identifying, predicting, and assessing the potential positive and negative cultural, social, economic and biophysical impacts of any proposed project, which requires authorisation of permission by law and which may significantly affect the cultural and natural heritage resources. Accordingly, an HIA must include recommendations for appropriate mitigation measures for minimising or circumventing negative impacts, measures enhancing the positive aspects of the proposal and heritage management and monitoring measures.

Impact is the positive or negative effects on human well-being and / or on the environment.

Mitigation is the implementation of practical measures to reduce and circumvent adverse impacts or enhance beneficial impacts of an action.

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

Study area or 'project area' refers to the area where the developer wants to focus its development activities (refer to plan).

Phase I studies refer to surveys using various sources of data and limited field walking in order to establish the presence of all possible types of heritage resources in any given area.

1. INTRODUCTION

1.1 Background

This Archaeological and Heritage Impact Assessment (AIA/HIA) Report has been prepared by Integrated Specialist Services (Pty) Ltd (ISS) (Heritage Division) for the purpose of Basic Impact Assessment being conducted by Ankone Consulting (Pty) Ltd on behalf of KhanyaMhlaba Primary Co-operative Ltd (“KhanyaMhlaba”). KhanyaMhlaba Primary Co-operative Ltd (“KhanyaMhlaba”) the applicant is proposing to mine aggregate, gravel, and other stones at a proposed quarry site within Jozini Local Municipality in KwaZulu Natal Province. This report details the field study, results of the study as well as discussion on the anticipated impacts of the proposed mining development as is required by Section 38 of the National Heritage Resources Act, Act 25 of 1999 and KwaZulu Natal Heritage Act 4 of 2008. It focuses on identifying and assessing potential impacts on archaeological resources as well as on other physical cultural properties including historical heritage resources in relation to the proposed Mining Permit Application. ISS heritage specialists undertook the assessments, research and consultations required for the preparation of the report comprising archaeological and heritage impacts for the purpose of ensuring that the cultural environmental values are taken into consideration and reported into the Basic Assessment Process.

The study was designed to ensure that any significant archaeological or cultural physical property or sites are located and recorded, and site significance is evaluated to assess the nature and extent of anticipated impacts from the proposed development. The assessment includes recommendations to manage the expected impact of the Mining Permit Application. The report includes recommendations to guide heritage authorities in making appropriate decision with regards to approval process for the proposed mining development. The report concludes with detailed recommendations on heritage management associated with the proposed mining development work. ISS, an independent consulting firm, conducted the assessment; research and consultations required for the preparation of the HIA report in accordance with obligations set out in the NHRA as well as the environmental management legislations.

In line with SAHRA guidelines, this report, not necessarily in that order, provides:

- 1) Executive summary
- 2) Methodology
- 3) Information with reference to the desktop study
- 4) Map and relevant images and data
- 5) GPS co-ordinates
- 6) Nature of proposed development and its location
- 7) Directions to the site
- 8) Site description and interpretation of the cultural area where the project will take place

- 9) Management details, description of affected cultural environment, photographic records of the project area
- 10) Recommendations regarding the significance of the site and recommendations regarding further monitoring of the site
- 10) Conclusion.

1.2 Location of the proposed mining permit application area

The proposed mining project is located at Yangeni Tribal area, Reserve 16 15836 situated within ambit of Jozini Local Municipality, the Magisterial District of Umkhanyakude, KwaZulu Natal Province, South Africa (see Figure 1&2). This project is situated 15.2km from Jozini town traveling north on D850 Road, the alternative route to Ingwavuma town, north Kwazulu Natal. (see Figures 1-2)

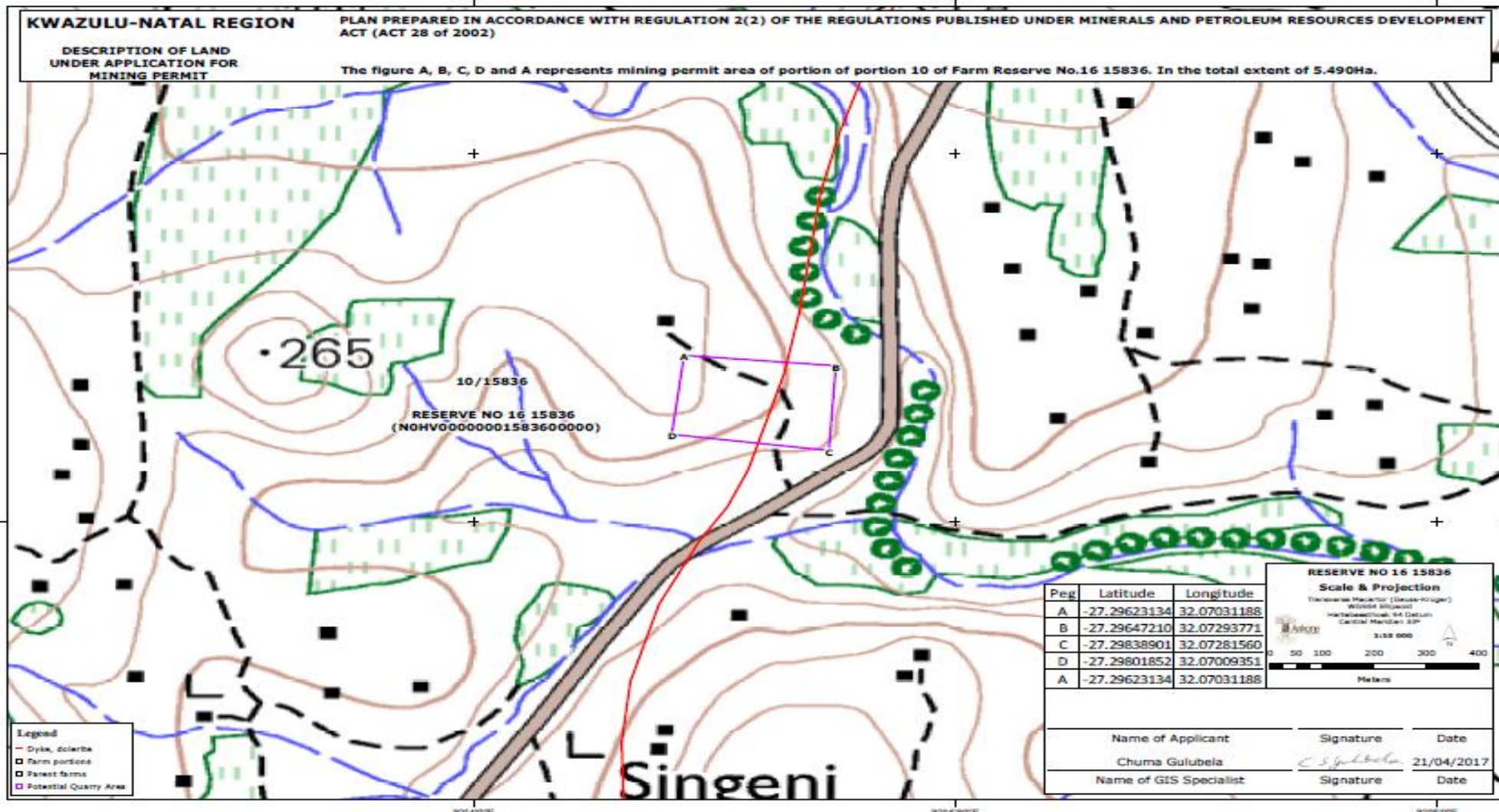


Figure 1: Proposed Mining Permit Application area



Figure 2: - Proposed Mining Permit Application area and recorded burial sites shown by black crosses (Ankone Consultants 2017)

1.3 Description of the proposed project

KhanyaMhlaba has submitted a Mining Permit application to conduct quarry mining; aggregate, gravel and/or any type of stone that can be richly excavated in the proposed area; covering an extent of 5Ha. The applicant, KhanyaMhlaba may embark on in-depth mining under mining right, which can only be applied for at that stage; this likelihood is to be executed after this project is completed under the mining permit. The proposed quarry mining will be undertaken using open cast mining methods, where the following steps will be considered;

- The topsoil or overburden will be removed and stockpiled, for the purpose of use at rehabilitation phase;
- The light blasting method will be considered;
- The material will be excavated using large excavators, tractor-loader-backhoe(TLB), shovels;
- Material will then be processed through the use of mobile crushing and screening plant on site;
- The final product will be stockpiled on site until it is transported by trucking to desired destination/s.

Once the project is complete under mining permit, and the applicant does not further apply to mine at full scale, the applicant will embark decommissioning and rehabilitation of the impacted area to the best possible condition to enable the next potential use of land.

2. LEGAL REQUIREMENTS

This HIA report addresses the requirements as is stipulated in the KwaZulu Natal Heritage Act 4 of 2008 and the NHRA Act 25 of 1999 Section 38 as well as EIA Terms of Reference in relation to the assessment of impacts of the proposed Mining Permit Application on the cultural and heritage resources associated with the receiving environment. The statutory mandate of heritage impact assessment studies is to encourage and facilitate the protection and conservation of archaeological and cultural heritage sites, in accordance with the provisions of the KwaZulu Natal Heritage Act 4 of 2008, National Heritage Resources Act, Act 25 of 1999 and auxiliary regulations. Therefore, in pre-development context, heritage impact assessment study is conducted to fulfil the requirements of Section 38 (1) of the National Heritage Resources Act (No 25 of 1999).

The legislations require that when constructing a linear development exceeding 300m in length or developing an area exceeding 5000 m² in extent, the developer must notify the responsible heritage authority of the proposed development and they in turn must indicate within 14 days whether an impact assessment is required. The NHR Act notes that “any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent”, the heritage authority here being KZN Provincial Authority (Amafa KwaZulu Natal).

Both the national legislations and provincial provisions provide protection for the following categories of heritage resources:

Landscapes, cultural or natural;

- Buildings or structures older than 60 years;
- Archaeological Sites, palaeontological material and meteorites;
- Burial grounds and graves;
- Public monuments and memorials;
- Living heritage (defined as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships).

KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008

“General protection: Structures.

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
 - Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
 - The Council may, by notice in the *Gazette*, exempt
 - A defined geographical area; or
 - defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
 - A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.
- General protection: Graves of victims of conflict.
- No person may damage, alter, exhume, or remove from its original position
 - the grave of a victim of conflict;
 - a cemetery made up of such graves; or
 - any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.
- No grave not otherwise protected by this Act; and not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.
 - The Council may only issue written approval once the Council is satisfied that—

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave. General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.
- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must cease forthwith and a person who made the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.
- The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.” (KZN Heritage Act of 2008)

Furthermore, the proposed development is guided and governed by legislative acts and regulations including environmental, spatial planning, land use and heritage management laws and regulations. The following acts have relevance to the management of heritage sites (archaeological, cultural and historical sites) wherever they are found in the Republic:

- Environmental Conservation Act, No.73 of 1989
- National Environment Management Act (NEMA), No.107 of 1998

- Mineral and Petroleum Resources Development Act (Act 28 of 2002) (MPRDA)

3. TERMS OF REFERENCE

The author was requested to conduct an AIA/HIA study addressing the following issues:

- Archaeological and heritage potential of the proposed Mining Permit application area including any known data on affected areas;
- Provide details on methods of study; potential and recommendations to guide the Amafa to make an informed decision with regards to authorization of the proposed mining development.

Photographic Presentation of the project area



Plate 1: Photo 1: View of burial site (YBS1) on the northern side of the proposed mining development area (Photograph © by Author 2017)



Plate 2: Photo 2: View of the Nduna Buthelezi showing graves at burial site YBS1 (Photograph © by Author 2017)



Plate 3: Photo 3: View of grave at burial site YBS1 (Photograph © by Author 2017)



Plate 4: Photo 4: View of Nduna Buthelezi showing graves at YBS1(Photograph © by Author 2017).



Plate 5: Photo 5: View of Nduna Buthelezi showing graves at YBS1 (Photograph © by Author 2017)



Plate 6: Photo 6: View of grave at burial site YBS1 (Photograph © by Author 2017)



Plate 7: Photo 7 shows Nduna Buthelezi showing graves at burial site YSB1 (Photograph © by Author 2017)



Plate 8: Photo 8 shows proposed reservoir site (Photograph © by Author 2017)



Plate 9: Photo 9 view of previously cleared section of the proposed Mining Permit Application area (Photograph © by Author 2017)



Plate 10: Photo 10 view of dilapidated structures at an abandoned homestead (Photograph © by Author 2017)



Plate 11: Photo 11 shows Nduna Buthelezi showing some dilapidated dwellings within the proposed Mining Permit Application Area (Photograph © by Author 2017)



Plate 12: Photo 12 shows Nduna Buthelezi showing a grave covered by logs at Burial site YBS2 within the mining permit application area (Photograph © by Author 2017)



Plate 13: Photo 13: Closer view of grave at burial site YBS2 covered by logs (Photograph © by Author 2017)



Plate 14: Photo 14: View of dilapidated structures within the mining development site (Photograph © by Author 2017)



Plate 15: Photo 15: View of village road cutting across the mining development site (Photograph © by Author 2017)



Plate 16: Photo 16: View of backside of the abandoned homestead marked by an imported aloe tree (Photograph © by Author 2017)



Plate 17: Photo 17: View of stone edging along the village road (Photograph © by Author 2017)



Plate 18: Photo 18: View of derelict structures within an abandoned homestead (Photograph © by Author 2017)



Plate 19: Photo 19: View of dilapidated structures on the edge of the mining development site (Photograph © by Author 2017)



Plate 20: Photo 20: View of abandoned structures within mining development area (Photograph © by Author 2017)



Plate 21: Photo 21: View of road, powerlines and pipelines on the boundary of the proposed mining development site (Photograph © by Author 2017)



Plate 22: Photo 22: View of road marking boundary of proposed mining development site (Photograph © by Author 2017)

4. METHODOLOGY

The proposed Mining Permit Application requires clearance and authorisation from government compliance agencies (DEA) including the heritage authority of Amafa. Key AIA/HIA objectives for this project are to:

- Fulfil the statutory requirements of Section 38 of the National Heritage Resources Act, Act 25 of 1999 and KwaZulu Natal Heritage Act 4 of 2008.
- Identify and describe, (in terms of their conservation and / or preservation importance) sites of cultural and archaeological importance that may be affected by the proposed mining development. This study identified sites and features of historical, social, scientific, cultural, and aesthetic significance within the broad study area.
- Assess the significance of the resources where they are identified.
- Evaluate the impact thereon with respect to the socio-economic opportunities and benefits that would be derived from the proposed development.
- Provide guidelines for protection and management of identified heritage sites and places (including associated intangible heritage resources management that may apply).
- Consult with the affected and other interested parties, where applicable, regarding the impact on the heritage resources in the project's receiving environment.
- Make recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the heritage resources.
- Take responsibility for communicating with the Amafa/ SAHRA and other authorities in order to obtain the relevant permits and authorization with reference to heritage aspects.

In order to meet the objectives of the AIA/HIA Phase 1 study, the following tasks were conducted: 1) site file search (SAHRIS), 2) limited literature review, 3) consultations with the affected communities, 4) completion of a field survey and assessment and 5) analysis of the acquired data and report production. The following tasks were undertaken:

- Preparation of a predictive model for archaeological heritage resources in the study area.
- A review and gap analysis of archaeological, historical, and cultural background information, including possible previous heritage consultant reports specific to the affected project area, the context of the study area and previous land use history as well as a site search;
- Physical cultural property recording of any identified sites or cultural heritage places;
- Identification of heritage significance; and
- Preparation of AIA/HIA report with recommendation, planning constraints and opportunities associated with the proposed mining development.

Walking surveys were conducted in order to identify and document archaeological and cultural sites in the areas affected by the proposed pipeline development. Formal and informal settlements, cornfields, grazing lands, vegetated river valleys; access and main road infrastructures, bulk water pipelines, existing transmission and

distribution, residential areas and other auxiliary infrastructures dominate the affected project area. The entire project area was accessible through district roads and village tracks used to access the settlements. Although limited sections of ground surface were covered with grass and thick bushes, this did not impede identification of possible archaeological sites in surveyed areas particularly those earmarked for the mining development. Geographic coordinates were obtained with a handheld Garmin GPS global positioning unit. Photographs were taken as part of the documentation process during field study.

4.1 Assumptions and Limitations

The investigation has been influenced by the unpredictability of buried archaeological remains (absence of evidence does not mean evidence of absence) and the difficulty in establishing intangible heritage values. It should be remembered that archaeological deposits (including graves and traces of mining heritage) usually occur below the ground level. Should artefacts or skeletal material be revealed at the site during construction, such activities should be halted immediately, and a competent heritage practitioner, Amafa or SAHRA must be notified in order for an investigation and evaluation of the find(s) to take place (see KwaZulu Natal Heritage Act 4 of 2008 or NHRA (Act No. 25 of 1999), Section 36 (6)). Recommendations contained in this document do not exempt the developer from complying with any national, provincial, and municipal legislation or other regulatory requirements, including any protection or management or general provision in terms of the NHRA. The author assumes no responsibility for compliance with conditions that may be required by SAHRA in terms of this report

The field survey did not include any form of subsurface inspection beyond the inspection of burrows, road cut sections, and the sections exposed by erosion or field ploughing. Some assumptions were made as part of the study and therefore some limitations, uncertainties and gaps in information would apply. It should however, be noted that these do not invalidate the findings of this study in any significant way:

- The proposed Mining Permit Application will be limited to specific right of corridors as detailed in the development layout (Figure 1).
- The construction team to provide link and access to the mine site and service sites will use the existing access roads and there will be no construction without any major deviations.
- Given the heavily degraded nature on most affected project area and the level of high existing developments within the affected landscape, most sections of the project area have low potential to yield significant in situ archaeological or physical cultural properties.
- No excavations or sampling were undertaken, since a permit from heritage authorities is required to disturb a heritage resource. As such the results herein discussed are based on indicators observed on the surface. However, these surface observations concentrated on exposed sections such as road cuts and clear farmland.
- This study did not include any ethnographic and oral historical studies nor did it investigate the settlement history of the area.

4.2 Consultation

The study team consulted Nduna Buthelezi who showed us the two burial sites near the proposed Mining Permit Application area. He confirmed that the abandoned homesteads are younger than 60 years and therefore not protected by the NHRA. The EIA Public Participation Process invited comments from affected municipalities and other interested parties on any archaeological heritage matter related to the proposed development.

5. CULTURE HISTORY BACKGROUND OF THE PROJECT AREA

The project area is located in the Jozini area, Jozini Local Municipality within Umkhanyakude District Municipality of KwaZulu Natal Province that boasts a rich traditional history of contemporary Zulu people (Huffman 2007, Coetzee 2010). Archaeological and heritages studies in the KwaZulu Natal region indicate that the project area is of high pre-historic and heritage significance. It is in fact a cultural landscape where Stone Age, Iron Age and Historical period sites contribute the bulk of the cultural heritage of the region (also Bryant 1965, Maggs 1989, Huffman, 2007). Literature in the KwaZulu-Natal Museum, indicates that the Jozini area is rich in archaeological sites covering diverse time-periods and cultural traditions. These include Early, Middle and later Stone Age sites, Early Iron Age sites, Later Iron Age sites, and some historical sites (Prins 2013). Various buildings and farmsteads occur in the area (Van Schalkwyk 2013). However, the study area has not been systematically surveyed for archaeological sites in the past (Anderson 2013). As such, the specific affected project-receiving environment has low potential for Stone Age sites (Prins 2016).

Stone Age sites are general identifiable by stone artefacts found scattered on the ground surface, as deposits in caves and rock shelters as well as in eroded gully or river sections. Archaeological sites recorded in the project region confirms the existence of Stone Age sites that conform to the generic SA periodization split into the Early Stone Age (ESA) (2.5 million years ago to 250 000 years ago), the Middle Stone Age (MSA) (250 000 years ago to 22 000 years ago) and the Late Stone Age (LSA) (22 000 years ago to 300 years ago). Stone Age sites in the region are also associated with rock painting sites. Cave sites also exist on the landscape south west of the project area.

From an archaeological perspective, the Jozini area, like most of KwaZulu Natal region has potential to yield Stone Age period sites (also see Deacon and Deacon, 1997). The Jozini area often referred to as Maputaland is rich in cultural heritage sites of various traditions and periods spanning the Stone Ages, Iron Ages and the historical period. Most of these sites occur mainly to the west of the Phongola river in the foothills of the Lebombo Mountains. A second large concentration occurs adjacent to and on the dune Gordon along the coastline. The coastal plain, has not yielded known archaeological sites. Oliver Davies an archaeologist who conducted pioneer research and surveys in northern KwaZulu Natal in the 1960's and 1970's suggested that the coastal plain has low potential for archaeological research due to its being covered by superficial sands and bush coverage which affect preservation and visibility (Avery 1980).

Stone Age sites of all the main periods and cultural traditions occur along the Lebombo Mountain Ranges. Most of these occur in open air contexts as exposed by excessive erosion. The occurrence of Early Stone Age tools in the near vicinity of permanent water resources is typical of this tradition. These tools can be attributed to early hominins such as *Homo erectus*. Based on typological criteria they most probably date back to between 300 000 and 1.7 million years ago. A few MSA blades and flakes which date back to between 40 000 and 200 000 years ago are on record in the project area. The later Stone Age flakes and various rock painting sites associated with San are also on record in the general project area (Prins 2013a, 2013b, 2015). These most probably dates back to between 200 and 20 000 years ago.

The early periods in Stone Age archaeology of the region are recorded amongst others in Sibudu Cave on the coast of KwaZulu-Natal and which shows evidence for early forms of cognitive human behavioural patterns in the Middle Stone Age of South Africa some 40 000 years BP (e.g. Wadley, 2005; Wadley *et al*, 2004; Wadley, 2001). Border Cave is well known Stone Age material culture (Fourie, 2003). KwaZulu Natal is known to have been occupied by the San people. They occupied caves, plains, valleys and hills. Evidence for this includes stone artefacts and an abundance of rock art, predominantly in the form of rock paintings in areas such as the Giants Castle and Kamberg in the Drakensburg Mountains located south and east of the province of KwaZulu-Natal (Vinnicombe 1976).

The Iron Age of the KwaZulu Natal region dates back to the 5th Century AD when the Early Iron Age (EIA) proto-Bantu-speaking farming communities began arriving in this region, which was then occupied by hunter-gatherers. These EIA communities are archaeologically referred to as the Kwale branch of the Urewe EIA Tradition (Huffman, 2007: 127-9). The Iron Age communities occupied the foot-hills and valley lands introducing settled life, domesticated livestock, crop production and the use of iron (also see Maggs 1984a; 1984b; Huffman 2007). Alongside the Urewe Tradition was the Kalundu Tradition whose EIA archaeological sites have been recorded along the KwaZulu Natal region.

The second period of occupation in KwaZulu-Natal was during the Early and Middle Iron Age; an occupation of the KwaZulu-Natal region by the Bantu speakers who migrated from as far as the Great Lakes regions of Congo and Cameroon. The site of Mzonjani, near Durban is the oldest known Iron Age site in KwaZulu-Natal, dating to the 3rd Millennium AD (Huffman, 2010). The Mzonjani facies is the type of pottery most likely to be found within the study area. This pottery is characterized by punctures on the rim and spaced motifs on the shoulder (see Huffman 2007)

From about 15 00 AD the region was occupied by new coming groups of Late Iron Age farmers of the Kalundu Tradition (*ibid*). The region was the centre of immigration and migration of different African groups some of which are ancestors of the contemporary Zulu predominant in the region. The archaeological evidence of the Iron Age people in the region is represented through distinct ceramic traditions, stone walls and other structural features such as grain bins and hut floor remains, kraal remains, vitrified cattle dung slugs, iron implements, bellows and

furnaces. The earliest known type of stonewalling that characterises the Central Cattle Pattern in KwaZulu Natal region (KZN) is known as Moor Park, which dates from 14th to 16th Centuries AD (Huffman, Whitelaw, Davis 1974). This type of stonewalling can be found in defensive position on hilltops in the Midlands of KZN (Huffman, 2010 & 2007). Archaeologists have concluded that the function of these structures was to serve mainly defensive purposes - the site of Moor Park is "located on the spurs and ends of hills, stone walls cut the settlement off from remaining terrain perimeter walls enclose about two thirds of the settlement, leaving the back free" (Huffman, 2007). However, it has to be noted that the Central Cattle Pattern and other forms of Iron Age stonewalling features are not unique to the eastern Bantu Speaking language groups (Nguni) (Huffman's 2007).

Other than stone walled structures, the other form of Iron Age structures are the 'beehive huts'- documented in many of historical records dating as far back as the colonial times. Beehive structures presents a challenge to the archaeological study of Iron Age in the province because they often not adequately preserved in the archaeological record. Huffman (2007) argues that the archaeology of the KwaZulu-Natal is not as prominent as is in other parts of the country because most of the structures were built of thatch material that do not preserve well. The same is true for their ceramic traditions. The type site of Moor Park therefore presents a unique view of the Iron Age in this region and is worth a mention in this report.

The Late Iron Age in KwaZulu-Natal and other parts of southern Africa this period was characterised by a variety of expansionists' battles fought by different chiefdoms, culminating in the pre-colonial southern African war called *Imfecane* (Ommer-Cooper, 1993). Throughout the middle of the 1800s the region witnessed the Mfecane migrations and displacements linked to Tshaka's expansionist policy. One of the prominent local chiefdoms that was conquered was the Ndwandwe chiefdom of Zwide kaLanga which were situated north of King Shaka's territory around the modern day kwaNongoma (Knight, 1998). Shaka managed to achieve his ideal kingdom by strategically expanding the traditional *amabutho* system. King Shaka's reign as the Zulu King did not last long as he was assassinated by his younger brothers in September 1828. One of them, Dingane KaSenzangakhona later became the king of Zulu. King Shaka moved the royal homestead to KwaDukuza in Stanger, south of upper Thukela River before his assassination by Dingane (and Mpande) who later re-relocated and rebuilt it at eMgungundlovu. Umgungundlovu is 'The Place Surrounding the Elephant' in the emaKhosini valley where King Shaka and King Dingane's forefathers are buried. It has been suggested that one important reason for the relocation of the royal homestead back to uMgungundlovu- north of the upper Thukela River was the growing influence of the white community at Port Natal (settlers) and the encroaching Trek Boers who crossed uKhahlamba Mountains into Natal in the 1837 (Knight, 1998). Dingane, then King of the Zulus died in February 1840 under the defeat of his brother Mpande with the assistance of the Voortrekkers in the battle on the Maqongqo Hills. Mpande had initially assisted Dingane to assassinate Shaka. His grave is found in the Hlatikulu area in Jozini.

The Voortrekkers arrived in Natal regions in the shadow of the weakened African kingdoms and chiefdoms in the

aftermath of the Mfecane. This effectively ushered in new era of colonial occupation by succeeding Afrikaans and British colonial administration authorities through the last half of the 1800s and into the last 1900s. By 1850s the region witnessed the influx of more settler communities which triggered settler wars between the African chiefdoms and the incoming Afrikaner settlers. Some of these colonial wars and battles lasted into Anglo-Boer wars of 1899-1902. The later effectively led to complete subjugation of African communities to settler administration starting as part of the ZAR of Transvaal. There after the region was subsequently annexed by the British and effectively placed the majority of African communities under the Union of South Africa in 1910, which eventually ended with the establishment of the new South Africa in 1994.

5.1 Intangible Heritage

As defined in terms of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) intangible heritage includes oral traditions, knowledge and practices concerning nature, traditional craftsmanship and rituals and festive events, as well as the instruments, objects, artefacts, and cultural spaces associated with group(s) of people. Thus, intangible heritage is better defined and understood by the particular group of people that uphold it. In the present study area, very little intangible heritage remains because no historically known groups occupied the study area and most of the original settler descendants moved away from the area.

5.2 SAHRIS DATABASE AND IMPACT ASSESSMENT REPORTS IN THE PROJECT AREA

The Natal museum Archaeological database was consulted, some MSA donga sites were recorded to the south of the Mkuze River, but no sites are on record for the study area. Very few previous archaeological and Heritage Impact Studies are on record for the larger study area (SAHRIS 2017). Anderson also recorded a number of sites consisting of stone walled features, graves and historical homesteads (Anderson 2013a, 2013b, 2013b, 2013 c, 2013d, 2014, 2015). Fourie recorded Stone Age material and also mentions the site of Magudu Hill. Van Schalkwyk recorded low significance Stone Age find spots and structures older than 60 years mainly bridges. Several Phase 1 Heritage Impact Studies were conducted in the general vicinity of the study area. The studies include powerline project completed by Fourie (2012), Van Schalkwyk (2013), Murimbika (2013) Prins (2013). No significant archaeological and Heritage sites were recorded, but the reports mention that structures older than 60 years occur in the area, Prins (2013a, 2013b, 2013c, 2015, 2016) for a township development survey also recorded no sites. Murimbika and Mlilo (2014) noted graves located within homesteads. Prins (2013a, 2013b, 2013c, 2015) recorded no sites in a project area. The SAHRIS Palaeontological Sensitivity map places the scheme with a blue delimitation and thus of low palaeontological potential. The study area is underlain by Jurassic aged igneous rocks of the Jozini Formation and dolerite intrusion through Karoo shales. Due to the igneous nature of these rocks the study area is located in a low palaeontological sensitivity rating. No further palaeontological mitigation is required (Groenewald 2013)

6. RESULTS OF THE ARCHAEOLOGICAL/HERITAGE ASSESSMENT STUDY

The proposed Mining Permit Application area is located on vacant land in Yangeni area. The proposed mining development site has been established through consideration of biophysical, social, technical, and cultural aspects. The process will aim to provide a final site selection of the mining development site based on biophysical, social, cultural, and technical considerations. The following section presents results of the archaeological and heritage survey conducted within the proposed Mining Permit Application area.

Archaeological and Heritage Site

The proposed Mining Application Area did not yield any verifiable archaeological sites or material. Some sections of the affected landscape are heavily degraded from previous agricultural land use, and from residential developments (see Figure 1). This limited the chances of encountering significant *in situ* archaeological sites to be preserved *in situ*. The chances of recovering significant archaeological materials were seriously compromised and limited due to infrastructural developments and other destructive land use patterns such as deep ploughing, bulk water pipeline, road works and residential areas that already exist on the project area.

Based on the field study results and field observations, the author concluded that the receiving environment for the proposed Mining Permit Application has low to medium potential to yield previously unidentified archaeological sites during subsurface excavations and construction work associated with the proposed mining development.

Historical Buildings and Structures

The affected general landscape is associated with broader historical events such as white settler migration, colonial wars and the recent African peopling of the region, however no listed specific historical sites are on the direct footprint of the proposed mining development. The study recorded two recently abandoned homesteads, one belonging to the Nyathi Family and the other belonging to the Khumalo Family. These were identified of the boundary of the proposed Mining Permit application area. The abandoned homesteads are associated with burial sites described below. Both homesteads were built in the 1980s and abandoned in the 1990s. The homesteads are characterised by traditional huts and modern brick and mortar structures. Since the homesteads are more than 60 years, the study did not document the remains in detail.

Burial grounds and graves

The field survey recorded two traditional burial sites YBS1 and YBS2. Burial site YBS1 is located GPS Coordinates 27° 17' 17.718" S 32° 04' 219" E on the boundary of the proposed mining permit application area. The site is located at the apex of the hill. The burial site is associated with the Nyathi Family abandoned homestead. The burial site has 6 traditional graves located in one cluster which comprise of 4 adult graves and 2 infant graves (see Plate 1-6). The graves are marked by oval shaped stone piles with tombstones with distinctive headstones. All the graves

are facing west. No grave goods were recorded on the surface. Nduna Buthelezi confirmed that the custodians of the graves (Nyathi Family) are known and they are still leaving at his village. The affected graves were confirmed to be younger than 60 years old.

Burial Site YBS2 is located on the south-eastern boundary of the proposed Mining Permit Application area near the road. YBS2 is located GPS Coordinates 27° 17' 9.38" S 32° 04' 328" E near point C of the proposed mining permit application area. One grave covered by logs was recorded at this site. The grave site is associated with the Khumalo Family abandoned homestead. The grave is marked by oval shaped stone piles covered by logs (see Plate 11&12). The grave site is associated with the abandoned Khumalo homestead. The Khumalo family resided at the site in the 1980s and left in the 1990s. The grave was confirmed to be younger than 60 years. Nduna Buthelezi also confirmed that the custodians of the grave are known and they still reside in his village. Should they be need for consulting them, the induna promised to facilitate the meeting.

Burial grounds and gravesites are accorded the highest social significance threshold (see Appendix 3). They have both historical and social significance and are considered sacred. They are accorded the highest level of protection and may not be disturbed without both family consent and a permit from Amafa/SAHRA in accordance with NHRA. Wherever they exist or not, they may not be tempered with or interfered with during any development. It is important to note that the possibility of encountering human remains during subsurface earth moving works anywhere on the landscape is ever present. Although the possibility of encountering previously unidentified burial sites is low on the Mining Permit Application area, should such sites be identified during subsurface construction work, they are still protected by applicable legislations and they should be protected (also see Appendixes for more details).

Historical Monuments and Memorials

The survey did not record any monument or memorial on the proposed Mining Permit Application Area.

Mitigation Measures

The recorded burial sites must be clearly demarcated during mining and associated activities. The affected families must be informed about the proposed mining development and they must be involved in any discussion relating to the fate of their family graves. Should it become necessary to remove the affected graves appropriate steps must be taken to ensure that affected families and stakeholders are adequately consulted before applying for a burial permit.

7. DISCUSSIONS

Several Archaeology and Heritage specialist studies were conducted in the study area since 2005. The studies were conducted for various infrastructure developments such as powerlines and substations, pipelines, and residential developments. The studies recorded archaeological and heritage remains of varying sizes and significance for example, Anderson (2005), Prins (2013a, 13b, 13c, 2015, 2016& 2016) Murimbika and Mlilo (2014), Nemaï (2013), Tomose (2015) and Van Schcalwyk and Wahl (2014). Therefore, the current study should be read in conjunction with previous Phase 1 Impact Studies conducted in the proposed project area.

No archaeological sites were recorded on all proposed mining permit application area. The lack of confirmable archaeological sites recorded during the current survey is thought to be a result of two primary interrelated factors:

1. That the survey focused on sample sections that had high potential to yield possible archaeological sites.
Due to the size of the proposed mining development area, it was impractical to cover every inch of the project area. As such, there is a possibility that low to medium archaeological sites exist in the project area whereas the sampled sections fell outside sections with potential distinct archaeological sites.
2. Limited ground surface visibility on sections of all the proposed mining project area that were not cleared at the time of the study may have impeded the detection of other physical cultural heritage site remains or archaeological signatures immediately associated with the proposed mining development site. This factor is exacerbated by the fact that the study was limited to general survey without necessarily conducting any detailed inspection of specific locations that will be affected by the proposed mining development.

The absence of confirmable and significant archaeological cultural heritage site is not evidence in itself that such sites did not exist in the project area. It may be that, given the dense development in most sections of the mining development site, if such sites existed before, changing earth-moving activities may have destroyed their evidence on the surface. Furthermore, some sections were not accessible due to thick vegetation cover and mine restrictions. Significance of the Sites of Interest is not limited to presence or absence of physical archaeological sites. Abandoned contemporary homestead remains were recorded within the proposed mining permit area. This confirms the fact that the project area has several generations of human settlements. These discoveries testify to the significance of the project area as a cultural landscape of note, which has discernible links to local oral history and folk stories, environmental and ethnobotanical aesthetics, popular memories etc. associated with significance emanating from intangible heritage of the region.

Chance finds procedures

It has already been highlighted that sub-surface materials may still be lying hidden from surface surveys. Therefore, absence (during surface survey) is not evidence of absence all together. The following monitoring and reporting procedures must be followed in the event of a chance find, in order to ensure compliance with heritage laws and policies for best-practice. This procedure applies to the developer's permanent employees, its subsidiaries, contractors and subcontractors, and service providers. Accordingly, all construction crews must be properly inducted to ensure they are fully aware of the procedures regarding chance finds.

- If during the construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance, work must cease at the site of the find and this person must report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.
- The senior site manager must then make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area before informing (ISS)
- The client will then contact a professional archaeologist for an assessment of the finds who will in turn inform Amafa

8. CULTURAL HERITAGE SITE ASSESSMENT OF SIGNIFICANCE

The appropriate management of cultural heritage resources is usually determined on the basis of their assessed significance as well as the likely impacts of any proposed developments. Cultural significance is defined in the Burra Charter as meaning aesthetic, historic, scientific, or social value for past, present, or future generations (Article 1.2). Social, religious, cultural, and public significance are currently identified as baseline elements of this assessment, and it is through the combination of these elements that the overall cultural heritage values of the site of interest, associated place or area are resolved.

Not all sites are equally significant and not all are worthy of equal consideration and management. The significance of a place is not fixed for all time, and what is considered of significance at the time of assessment may change as similar items are located, more research is undertaken and community values change. This does not lessen the value of the heritage approach, but enriches both the process and the long-term outcomes for future generations as the nature of what is conserved and why, also changes over time (Pearson and Sullivan 1995:7). This assessment of the Indigenous cultural heritage significance of the Site of Interest as its environments of the study area is based on the views expressed by the Claimant and his community representatives consulted documentary review and physical integrity.

African indigenous cultural heritage significance is not limited to items, places or landscapes associated with pre-European contact. Indigenous cultural heritage significance is understood to encompass more than ancient archaeological sites and deposits, broad landscapes, and environments. It also refers to sacred places and story sites, as well as historic sites, including mission sites, memorials, and contact sites. This can also refer to modern sites with resonance to the indigenous community. The site of interest considered in this project falls within this realm of broad significance.

9. ASSESSMENT CRITERIA

The Guidelines to the SAHRA Guidelines and the Burra Charter define the following criterion for the assessment of cultural significance:

Aesthetic Value

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture, and material of the fabric; sense of place, the smells and sounds associated with the place and its use.

Historic Value

Historic value encompasses the history of aesthetics, science, and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase, or activity. It may also have historic value as the site of an important event. For any given place, the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.

Scientific value

The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality, or representativeness, and on the degree to which the place may contribute further substantial information. Scientific value is also enshrined in natural resources that have significant social value. For example, pockets of forests and bushvelds have high ethnobotany value.

Social Value

Social value embraces the qualities for which a place has become a focus of spiritual, religious, political, local, national, or other cultural sentiment to a majority or minority group. Social value also extends to natural resources such as bushes, trees and herbs that are collected and harvested from nature for herbal and medicinal purposes.

10. STATEMENT OF SIGNIFICANCE

Aesthetic Value

The aesthetic values of the proposed mining development, the and the overall project area are contained in the valley bushveld environment and landscape typical of this part of the KZN Province. The visual and physical relationship between study area and the surrounding historical Cultural Landscape demonstrates the connection of place to the local and oral historical stories of the African communities who populated this region going back into prehistory.

The proposed Mining Permit Application will be situated within an environment and associated cultural landscape, which, although developed by existing settlements, remains representative of the original historical environment and cultural landscape of this part of KZN area. The local communities consider the project area a cultural landscape linked to their ancestors and history. However, the proposed developments will not alter this aesthetic value in any radical way since it will add to the constantly changing and developing settlements.

Historic Value

The Indigenous historic values of the Sites of Interest and overall study area are contained in the claim of possible historic homesteads being located on the affected area. The history of generations of the Zulu clans is tied to this geographical region. Such history goes back to the pre-colonial period, through the colonial era, the colonial wars and subsequent colonial rule up to modern day KZN Province.

Scientific value

Past settlements and associated roads, mines and other auxiliary infrastructure developments and disturbance within the HIA Study Area associated with the proposed mining permit application has resulted in limited intact landscape with the potential to retain intact large scale or highly significant open archaeological site deposits.

Social Value

The project sites fall within a larger and an extensive KZN cultural landscape that is integrated with the wider inland south west KZN. The overall area has social value for the local community, as is the case with any populated landscape. Literature review suggests that social value of the overall project area is also demonstrated through local history which associates the area with the rise of Shaka's Zulu Kingdom in the early 1800s from the east coast, the subsequent Mfecane, the African struggle against settler colonialism in the second half of the 1800s and at the end of the 1800s, the colonial wars of resistance, the century long struggle for democracy that followed colonial subjugation. Several generations of communities originate from the project area and continue to call it home. As such, they have ancestral ties to the area. The land also provides the canvas upon which daily socio-cultural activities are painted. The remains of historic homesteads recorded in the project area testify to the fact of generational homes and settlements. All these factors put together confirms the social significance of the project area. However, this social significance is unlikely to be negatively impacted by the proposed Mining Permit

Application especially given the fact that the development will add value to the human settlements and activities already taking place.

Sections of the proposed mining permit application covered in thick bushes and vegetation retain social value as sources of important herbs and traditional medicines. As such, they must be considered as significant social value sites.

11. RECOMMENDATIONS

Two burial sites were recorded on the fringes of the Study Area associated with the proposed Mining Right Application area. The recorded burial sites are located in abandoned homesteads with little or no care. Although slightly outside the Mining Permit Application area, they fall within the general impact zone of the proposed Mining Right Application area. The affected burial sites must be preserved *in situ* and barricaded to avoid accidental damage during mining and other associated activities. The following recommendations are based on the results of the AIA/HIA research, cultural heritage background review, site inspection and assessment of significance. Based on the findings of this study, the proposed Mining Permit Application is feasible from an archaeological perspective. Although the study recorded two burial sites in the fringes of the proposed Mining Permit Application area, the project can be allowed to proceed subject to the following recommendation:

- From a heritage point of view all the proposed Mining Application is viable. The foot print impact of the proposed mining development to the affected burials can be mitigated without stalling the project.
- The recorded burial sites must be preserved *in situ* by barricading them to avoid accidental damage during mining and associated activities
- The affected families must form part of the mitigation process and should be involved in any mitigation work involving their family graves.
- The layout plans must provide for access to the burial sites by family members.
- The mining company must maintain a 20m buffer zone from the burial sites
- Should it be necessary to relocate the graves, the affected families /custodians must be consulted and consent must be sought from the direct custodians, traditional authorities, SAPS, Jozini Local Municipality as represented by the ward councilor and the Provincial Department of Health. Having obtained consent, the project archaeologist/heritage practitioner must then submit an application to Amafa in accordance with the relevant heritage legislation.
- Public participation process must request homeowners to declare any graves located within the Mining Permit Application area
- Location of proposed mining infrastructure should be restricted to minimum footprint impact especially where such infrastructure falls within bushy area. Such bushy sections have local ethno-botany significance as sources of traditional herbs and medicines. As such disruption and vegetation clearance should be minimal.
- Overall, impacts to heritage resources are not considered to be significant for the project receiving environment. It is thus concluded that the project may be cleared to proceed as planned subject to the Heritage Authority ensuring that a detailed heritage monitoring procedures are included in the project EMP for the construction phase, include chance archaeological finds mitigation procedure in the project EMP.

- The chance finds process will be implemented when necessary especially when archaeological materials and burials are encountered during subsurface construction activities.
- If archaeological materials are uncovered, work should cease immediately and the Amafa be notified and activity should not resume until appropriate management provisions are in place.
- If during the construction or operations phases of this mining project, any person employed by the developer (mine), one of its subsidiaries, contractors and subcontractors, or service provider, finds any artifacts of cultural significance, work must cease at the site of the find and this person must report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.
- The senior-site/mine manager must then make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area before informing SAHRA/Amafa
- If a human grave/burial is encountered, the remains must be left as undisturbed as possible before the local police and SAHRA or Amafa are informed. If the burial is deemed to be over 60 years old and no foul play is suspected, an emergency rescue permit may be issued by SAHRA/Amafa for an archaeologist to exhume the remains.
- The Project Public Participation Process should ensure that any cultural heritage related matters for this project are given due attention whenever they arise and are communicated Amafa throughout the proposed project development. This form of extended community involvement would pre-empt any potential disruptions that may arise from previously unknown cultural heritage matter that may have escaped the attention of this study.
- The findings of this report, with approval of the Amafa/SAHRA, may be classified as accessible to any interested and affected parties within the limits of the laws.

12. CONCLUDING REMARKS

The literature review and field research confirmed that the project area is situated within a contemporary cultural landscape dotted with settlements with long local history. Field survey established that the affected project area is partially degraded by two abandoned homesteads. In terms of the archaeology and heritage with respect to the proposed mining permit application area there are no obvious 'Fatal Flaws' or 'No-Go' areas. No archaeological sites were recorded within the mining permit application site. The recorded burial sites are not within the direct footprint of the proposed mining developments. Any potential threats can be mitigated without stalling the project. Although the area is degraded, there is a possibility of encountering archaeological remains especially during excavation within the mining area. This report concludes that the proposed mining development may be approved by Amafa to proceed as planned subject to recommendations herein made.

13. BIBLIOGRAPHY

- Anderson, G and Anderson, L. 2005. The Archaeological Surveys for Shelly Beach Villas, Old Macdonals farm and Horseshoe Farm.
- Anderson, G. 2009. Heritage Survey of the Proposed P435 Road Upgrade, Ndumu, Northern KwaZulu-Natal. For Afzelia Environmental Consultants
- Anderson, G. 2011. Heritage Desktop Survey of the Proposed Candover-Mbazwana-Gezisa 132kv Powerlines and 132/22kv Mbazwana and Gezisa Substations, Kwazulu-Natal. For A. Van Jaarsveld
- Anderson, G. 2012a. Heritage Survey of the Phinda Game Reserve, Kwa-Zulu Natal, for Phinda Game Reserve.
- Anderson, G. 2012b. Heritage Survey of the Proposed Ndumo-Nondabuyo 132kv Line, Northeastern Kwa-Zulu Natal. For SRK Consulting
- Anderson, G. 2012c. Heritage Survey of The Proposed Community Health Care Centre, Jozini, Kwa-Zulu Natal. For WSP Environment and Energy (WSP). 02 July 2012
- Anderson, G. 2013. Desktop Heritage Survey of the Pongolapoort Dam, Kwazulu- Natal. For Afzelia Environmental Consultants
- Anderson, G. 2015. Proposed Mabhathini expansion irrigation scheme Northern KwaZulu Natal.
- Avery, G. 1980. Palaeontology and archaeology of Maputaland. In Bruton, M. N. and Cooper, K. H. (eds). *Studies on the Ecology of Maputaland*. Rhodes University. Pg: 346-357.
- Australia ICOMOS (1999) The Burra Charter: The Australia ICOMOS charter for places of cultural significance. Burwood.
- Brousse-James & Associates, 2006. Environmental Scoping Report for District Road D168. Unpublished Report
- Bryant, A. T. 1965. Olden times in Zululand and Natal. Cape Town: C. Struik.
- Bergh, J.S., (ed.) *Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies*. Pretoria: J. L. van Schaik Uitgewers. 1999.
- Bickford, A. and Sullivan, S. 1977. "Assessing the research significance of historic sites" in S Sullivan and S Bowdler (eds) *Site Surveys and Significance assessment in Australian Archaeology*. Canberra: ANU.
- Burke, H. and Smith, C. 2004. *The archaeologist's field handbook*. Australia. Allen and Unwin.
- Cable, J. H. C. 1984. *Economy and technology in the Late Stone Age of southern Natal*. Cambridge monographs in African archaeology, 9 BAR international series, 201. Oxford: British Archaeological Reports.
- Cooper, M. A; Firth, A. Carman, J. & Wheatley, D. (eds.)1995: *Managing Archaeology*. London: Routledge.
- Deacon, H. J. and Deacon J. 1999. *Human beginnings in South Africa*. Cape Town: David Philips Publishers.
- Derwent, S 2008. *KwaZulu-Natal Heritage Sites: A Guide to Some Great Places*. David Philip: Pietermaritzburg

- Gillings, K. 2010. *Battles of KwaZulu-Natal: A pictorial souvenir of the Battles of KwaZulu-Natal 1818-1906*.
- Glazewski, J., 2000: Environmental Law in South Africa. Durban: Butterworths.
- Felgate, W. S. 1982. *The Tembe Thonga of Natal and Mozambique: An Ecological Approach*. Occasional Publications Number 1. Department of African Studies. University of Natal, Durban.
- Fourie, W. 29 April 2013. Phase 1-Heritage Impact Assessment: Ndumo-Gezina 132 KV Powerline, Manguzi, UMkhanyakude District Municipality, Maputaland Region of KwaZulu-Natal Province.
- Fourie, W. 2013. Biomass Power Plant Near Mkuze, Kwazulu-Natal – Heritage Impact Assessment Adjustment of Foot Print Area. Letter of exemption.
- Fourie, W. 2013. Pongola–Candover 132kV power line, upgrades to the Pongola Substation and Candover switching station, development of the Golela 132/22 kV substation
- Groenewald, G. 2013. Desktop Palaeontological Assessment of the Jozini-Ingwavuma Water Supply Project, Nondabuya Pipeline and Regional Water Treatment Works. WSP Environmental (KZN).
- Hammond-Tooke, D.1993. The roots of Black South African. Johannesburg: WUP.
- Huffman, T.N. 2007. Handbook for the Iron Age. Pietermaritzburg: UKZN Press.
- Hamilton, C. (ed.). 1995. The Mfecane Aftermath: Reconstructive debates in Southern African History. Johannesburg: WUP.
- Junod, H.A. 1962. *The Life of a South Africa Tribe*. New York:Two Volumes, University Books Inc.
- Maggs, T. 1989. The Iron Age of Natal. In Duminy, A. and Guest, B. 1989. Natal and Zululand: from Earliest Times to 1910. A New History. University of Natal Press. Pietermaritzburg
- Maggs, T. 1984a. Ndongondwane: a preliminary report on an Early Iron Age site on the lower Tugela River. Annals of the Natal Museum 26: 71-93.
- Maggs, T.M., Ward, V. 1984b. Early Iron Age sites in the Muden area of Natal. Annals of the Natal Museum 26: 105-140.
- Mamoluoane, S. 2013. Redevelopment and upgrade of the Port Edward Resort, Port Edward, KwaZulu Natal, Phase 1 Cultural Heritage Impact Assessment.
- Mazel, A., 1989. The Stone Age peoples of Natal. In Duminy, A. and Guest, B. 1989. Natal and Zululand: from Earliest Times to 1910. A New History. Pg. 28-46. University of Natal Press. Pietermaritzburg.
- Murimbika, M. and Mlilo, T. 2013. Phase 1 Archaeological and Heritage Impact Assessment Report for proposed water supply pipeline and sewage Treatment Plant in Ingwavuma Town, Jozini Local Municipality in KZN Province.
- Murimbika, M. and Mlilo, T. 2014. Archaeological and Heritage Impact Assessment Report for proposed construction of Umzumbe Municipal offices within Umzumbe Local Municipality in KZN Province.

- Nemai, 2013. Phase 1 Heritage Impact Assessment for the proposed new train Repater High site within the Green Point Lighthouse site in Port Shepstone, KZN Province.
- Nemai, 2014. Phase 1 Heritage Impact Assessment for the proposed new Further Education Training College (FTT) Mbhambana KZN Province.
- Omer-Cooper, J. D. 1993. Has the Imfecane a Future? A Response to the Cobbing Critique. *Journal of Southern African Studies*, Vol.9 (2): 273-294.
- Prins, F. 2013. Cultural Heritage Impact Assessment of the proposed P443, D1886, and L1380 Road upgrade near Ingwavuma Northern KwaZulu Natal
- Prins, F. 2013a. Heritage Impact Assessment of the proposed Nqabeni/Eros/Oribi 132kv loop in Loop out powerlines, Ugu District Municipality.
- Prins, F. 2013b. Heritage Impact Assessment of the proposed Mqangqala access Road, Umzumbe Local Municipality.
- Prins, F. 2013. Heritage Impact Assessment of the Harding Landfill site, Umuziwabantu Municipality, KZN Province
- Prins, F. 2014. Cultural Heritage Impact Assessment of District Road D1851 Ndumo, Northern KwaZulu Natal
- Prins, F. 2014. Cultural Heritage Impact Assessment of the proposed construction of Mkhuze Interchange on National Route 2 Section 31 (km29.30) Mkuze Jozini Local Municipality.
- Prins, F. 2015. Phase one Heritage Impact Assessment of the proposed upgrade of the P57 Road from Ezinqoleni to the Mtamvuma River Bridge within the Enqoleni Local Municipality, Ugu District Municipality.
- Prins, F. 2016. First Phase Heritage Impact Assessment of the proposed upgrade of District Road D168 near Highflats, KwaZulu Natal.
- Rasmussen, R.K. 1978 Migrant kingdom: Mzilikazi's Ndebele in South Africa. London: Rex Collings
- Ross, R. 1999 A concise history of South Africa. Cambridge University Press. Cambridge.
- South Africa, 1983. Human Tissue Act. Government Gazette.
- South Africa 1999. National Heritage Resources Act (No 25 of 1999), Government Gazette. Cape Town.
- SAHRA APMHOB. 2004. Policy for the management of Archaeology, Palaeontology, Meteorites and Heritage Object. SAHRA: Cape Town.
- SAHRA APM. 2006. Guidelines: Minimum standards for the archaeological and palaeontological Component of Impact Assessment Reports. SAHRA: Cape Town.

- SAHRA APMHOB 2002. General Introduction to surveys, impact assessments and management plans. SAHRA: CT.
- SAHRA. 2002. General guidelines to Archaeological Permitting Policy. SAHRA: Cape Town.
- SAHRA. 2002. General Introduction to surveys, impact assessments and management plans.
- SAHRA. What to do when Graves are uncovered accidentally.
- SAHRA Report Mapping Project Version 1.0, 2009
- SAHRIS (Cited 16 February 2016)
- Smith, I. R. 1996. *The Origins of the South African War 1899-1902*, Longman, London New York.
- Tomose, N.G. 2014. A Heritage Impact Assessment Study for the proposed Numo Rental Stock, Ndumo North, Jozini Local Municipality, Umkhanyakude District Municipality, KwaZulu Natal South Africa.
- Tomose, N.G. 2015. Proposed Ariadne-Eros 400/132kv multicircuit Transmission powerline
- Van Schalkwyk and Wahl, E. 2014. Phase 1 Heritage Impact Assessment Report: proposed St Faith 400/132kv Substation and associated powerlines, Port Shepstone, Umzumbe, Hibiscus Coast and Ezingoleni Local Municipality, Ugu District Municipality, KZN Province.
- Van der Walt, J. 20 2015. Archaeological Impact Assessment for the Mkuze Biomass Plant Associated infrastructure near Mkuze KwaZulu Natal
- Van Jaarsveld, A. 20 January 2011. Heritage Impact Assessment: Proposed Nondabuya-Ndumu 132Kv line and substation, Makhathini Flats, Northern KwaZulu Natal.
- Van Schalkwyk, J. 2013. Cultural Heritage Resource impact assessment for the proposed Swaziland rail link, Southern section.
- Van Schalkwyk, J. and Wahl, 2014. Application for a Phase 1 Heritage Impact Assessment for proposed Jozini-Ingwavuma Water Supply Scheme Zones 8-12, Jozini Local Municipality, Umkhanyakude District Municipality KwaZulu Natal
- Vinnicombe, P. 1976. *People of the Eland: Rock Paintings of the Drakensberg Bushmen a Reflection of their Life and Thoughts*. University of Natal Press.
- Wells, H. B. S. C. B. D. M. L. H., 1945. Fossil Man in the Lebombo Mountains, South Africa: The 'Border Cave,' Ingwavuma District, Zululand. *Man*, Volume 45, pp. 6-13.
- Whitelaw, G. 1991. Pre-colonial iron production around Durban and in southern Natal. *Natal Museum Journal of Humanities* 3: 29–39.
- Whitelaw, G. 1993. Customs and settlement patterns in the first millennium AD: evidence from Nanda, an Early Iron Age site in the Mngeni Valley, Natal. *Natal Museum Journal of Humanities* 5: 47–81.

Wilson, M. 1969. Changes in social structure in southern Africa: the relevance of kinship studies to the historian. In: L. Thompson, ed., *African societies in southern Africa*. London: Heinemann, pp. 71–85.

Wright, J. & C. Hamilton 1989. 'Tradition and transformations. The Phongolo-Mzimkhulu region in the late eighteenth and early nineteenth centuries.' In A. Duminy and BGuest (eds.) *Natal and Zululand from Earliest Times to 1910. A New History*. Pietermaritzburg: University of Natal, 49-82.

www.heritagekzn.co.za

www.sahonline.org.za South African History on line (19 August 2014)

14. APPENDIX 1: HERITAGE MANAGEMENT PLAN INPUT INTO THE MINING PERMIT APPLICATION PROJECT EMP

Objectiv	<ul style="list-style-type: none"> • Protection of archaeological sites and land considered to be of cultural value; • Protection of known physical cultural property sites against vandalism, destruction, and theft; and • The preservation and appropriate management of new archaeological finds should these be discovered during construction. 							
No.	Activity	Mitigation Measures	Duration	Frequency	Responsibility	Accountable	Contacted	Informed
Pre-Construction Phase								
1	Planni ng	Ensure all known sites of cultural, archaeological, and historical significance are demarcated on the site layout plan, and marked as no-go areas.	Throughout Project	Weekly Inspection	Contractor [C] CECO	SM	ECO	EA EM PM
Construction Phase								
1	Emergency Response	Should any archaeological or physical cultural property heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped until heritage authority has cleared the development to continue.	N/A	Throughout	C CECO	SM	ECO	EA EM PM
		Should any archaeological, cultural property heritage resources be exposed during excavation or be found on development site, a registered heritage specialist or PHRA-G official must be called to site for inspection.		Throughout	C CECO	SM	ECO	EA EM PM
		Under no circumstances may any archaeological, historical or any physical cultural property heritage material be destroyed or removed form site;		Throughout	C CECO	SM	ECO	EA EM PM
		Should remains and/or artefacts be discovered on the development site during earthworks, all work will cease in the area affected and the Contractor will immediately inform the Construction Manager who in turn will inform PHRA-G.		When necessary	C CECO	SM	ECO	EA EM PM

		Should any remains be found on site that is potentially human remains, the PHRA-G and South African Police Service should be contacted.		When necessary	C CECO	SM	ECO	EA EM PM
Rehabilitation Phase								
		Same as construction phase.						
Operational Phase								
		Same as construction phase.						

1. APPENDIX 2: LEGAL BACK GROUND AND PRINCIPLES OF HERITAGE RESOURCES MANAGEMENT IN SOUTH AFRICA

Extracts relevant to this report from the National Heritage Resources Act No. 25 of 1999, (Sections 5, 36 and 47):

General principles for heritage resources management

5. (1) All authorities, bodies and persons performing functions and exercising powers in terms of this Act for the management of heritage resources must recognise the following principles:

(a) Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and as they are valuable, finite, non-renewable and irreplaceable they must be carefully managed to ensure their survival;

(b) every generation has a moral responsibility to act as trustee of the national heritage for succeeding generations and the State has an obligation to manage heritage resources in the interests of all South Africans;

(c) Heritage resources have the capacity to promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity; and

(d) Heritage resources management must guard against the use of heritage for sectarian purposes or political gain.

(2) To ensure that heritage resources are effectively managed

(a) The skills and capacities of persons and communities involved in heritage resources management must be developed; and

(b) Provision must be made for the ongoing education and training of existing and new heritage resources management workers.

(3) Laws, procedures and administrative practices must—

(a) Be clear and generally available to those affected thereby;

(b) In addition to serving as regulatory measures, also provide guidance and information to those affected thereby; and

(c) Give further content to the fundamental rights set out in the Constitution.

(4) Heritage resources form an important part of the history and beliefs of communities and must be managed in a way that acknowledges the right of affected communities to be consulted and to participate in their management.

(5) Heritage resources contribute significantly to research, education and tourism and they must be developed and presented for these purposes in a way that ensures dignity and respect for cultural values.

(6) Policy, administrative practice and legislation must promote the integration of heritage resources conservation in urban and rural planning and social and economic development.

(7) The identification, assessment and management of the heritage resources of South Africa must—

(a) Take account of all relevant cultural values and indigenous knowledge systems;

(b) Take account of material or cultural heritage value and involve the least possible alteration or loss of it;

- (c) Promote the use and enjoyment of and access to heritage resources, in a way consistent with their cultural significance and conservation needs;
- (d) Contribute to social and economic development;
- (e) Safeguard the options of present and future generations; and
- (f) Be fully researched, documented and recorded.

Burial grounds and graves

36. (1) where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.

(2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.

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

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

(4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.

(5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority—

(a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and

(b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.

(6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers 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 resources authority which must, in co-operation with

the South African Police Service and in accordance with regulations of the responsible heritage resources authority—

(a) 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

(b) 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 arrangements as it deems fit.

(7) (a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.

(b) The Minister must publish such lists as he or she approves in the Gazette.

(8) Subject to section 56(2), SAHRA has the power, with respect to the graves of victims of conflict outside the Republic, to perform any function of a provincial heritage resources authority in terms of this section.

(9) SAHRA must assist other State Departments in identifying graves in a foreign country of victims of conflict connected with the liberation struggle and, following negotiations with the next of kin, or relevant authorities, it may re-inter the remains of that person in a prominent place in the capital of the Republic.

General policy

47. (1) SAHRA and a provincial heritage resources authority—

(a) must, within three years after the commencement of this Act, adopt statements of general policy for the management of all heritage resources owned or controlled by it or vested in it; and

(b) may from time to time amend such statements so that they are adapted to changing circumstances or in accordance with increased knowledge; and

(c) must review any such statement within 10 years after its adoption.

(2) Each heritage resources authority must adopt for any place which is protected in terms of this Act and is owned or controlled by it or vested in it, a plan for the management of such place in accordance with the best environmental, heritage conservation, scientific and educational principles that can reasonably be applied taking into account the location, size and nature of the place and the resources of the authority concerned, and may from time to time review any such plan.

(3) A conservation management plan may at the discretion of the heritage resources authority concerned and for a period not exceeding 10 years, be operated either solely by the heritage resources authority or in conjunction with an environmental or tourism authority or under contractual arrangements, on such terms and conditions as the heritage resources authority may determine.

(4) Regulations by the heritage resources authority concerned must provide for a process whereby, prior to the adoption or amendment of any statement of general policy or any conservation management plan, the public and interested organisations are notified of the availability of a draft statement or plan for inspection, and comment is invited and considered by the heritage resources authority concerned.

(5) A heritage resources authority may not act in any manner inconsistent with any statement of general policy or conservation management plan.

(6) All current statements of general policy and conservation management plans adopted by a heritage resources authority must be available for public inspection on request.