



**PHASE 1**

**ARCHAEOLOGICAL IMPACT ASSESSMENT**

**RELATING TO THE PROPOSED SHAPHAT PROPERTY CASH CROP FARMING ON  
FARM NIEUW ENGELAND 60 LT, HA-VHANGANI VILLAGE, WITHIN THE COLLINS  
CHABANE LOCAL MUNICIPALITY OF THE VHEMBE DISTRICT, LIMPOPO  
PROVINCE, SOUTH AFRICA.**



***Compiled by:*** Millennium Heritage Group (PTY) LTD

***For:*** *Plantago lanceolata* (PTY)LTD

75 Durham Road, Club view, Centurion

29 September 2021

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**i. Technical and Executive Summaries**

<b>Property details</b>	
Province	Limpopo
Magisterial District	Vhembe District
Topo-cadastral map	2330
Coordinates	S23.11. 25. 01 and E 30.18.35.00
Closest town	Levubu and Vuwani CBD
Farm name	Nieuw Engeland 60 LT

<b>Development criteria in terms of Section 38 (1) of the NHR Act 25 of 1999</b>	<b>Yes</b>	<b>No</b>
Construction of road, wall, power line, pipeline, canal or other linear form of development or barrier exceeding 300m in length		No
Construction of bridge or similar structure exceeding 50m in length		No
Development exceeding 5000 sqm	Yes	
Development involving three or more existing erven or subdivisions		No
Development involving three or more erven or divisions that have been consolidated within past five years		No
Rezoning of site exceeding 10 000 sqm		No
Any other development category, public open space, squares, parks, recreation grounds		No

<b>Development</b>	
Description of development	Establishment of cash crop farming
Project name	Shaphat property cash crop farming
Developer	
Heritage consultant	Millennium Heritage (Pty) Ltd
Purpose of the study	Heritage Impact Assessment to identify and assess significance of sites (if any) to be impacted by the proposed development

<b>Land use</b>	
Previous land use	Vacant ploughing fields
Current land use	Vacant ploughing fields

## ii. Executive Summary

This report provides the results of an Archaeological Impact Assessment (AIA) study for the proposed Shaphat Cash- crop farming on farm Nieuw Engeland 60 LT, Ha- Vhangani Village. The proposed area covers roughly 2.9 hectares of vacant land which is located roughly 3,5 kilometers southeast of the Vhangani Village stands and roughly 4 kilometers east of the main tarred road from Elim to Giyani. The area is located west of a non-perennial stream where river sand deposits is currently mined by local community for house construction activities. The surrounding area is dominated by well fenced ploughing fields, some dominated by recuperating indigenous vegetation, whilst others have evidence of recent ploughing activities in a form of tractor rills. Several newly demarcated residential sites have been noted towards the western section of the proposed development, the proposed study area falls within the Collins Chabane local Municipality of the Vhembe district, Limpopo Province South Africa.

As part of the application process and good corporate citizenship, archaeological impact assessment study was conducted, and the report is an appendices for the broader Basic Assessment (BA) study which investigate the impact of the proposed development on the receiving environment including heritage resources. As part of Basic Assessments (BA), the applicant is required by law to obtain Environmental Authorization (EA) in line with the Environmental Impact Assessment (EIA) Regulation published in Government Notice R 982 of 4 December 2014 under Section 24(5) of the National Environmental Management Act No. 107 of 1998 (NEMA) as amended in 2017. An application for Basic Assessments has been lodged with the Limpopo Department of Economic Development Environment and Tourism. As part of the application process, Plantago lanceolata(PTY)LTD requested Millennium Heritage Group (Pty) Ltd, an independent heritage consulting company to assess the heritage sensitivity of the area. A multi-stepped methodology was used to address the terms of reference. To begin with, a desktop study was carried out to identify any known heritage sites and their significance in the surrounding environment. This involved consulting contract archaeology and paleontological reports filed on SAHRIS, research and academic publications. Finally, the study was guided by the National Heritage Resources Act of 1999 and SAHRA Minimum Standards for impact assessment.

Based on this study, the following conclusions were reached:

- The proposed development is scheduled to take place on already disturbed, previously cultivating land currently dominated by recuperating vegetation and grass cover.
- Ground truthing of the area proposed for cash crop establishment found no important cultural heritage resource, archaeological materials nor graves

- Although no archaeological remains were found, it is possible that some significant features may be buried beneath the ground. Should buried archaeological materials and burials be encountered during the process of development, the following must apply:
- Work must stop immediately  
A professional archaeologist or nearest heritage authority must be contacted.

Based on this assessment which found no archaeological resources in this area we recommend that the heritage authorities approve the project as planned.



**iii. ACKNOWLEDGEMENTS:**

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**CONTACT PERSON:** Mulweli Makatu

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**CONSULTANT:** Millennium Heritage Group (PTY) LTD

**REPORT AUTHOR:** Eric Ndivhuho Mathoho (PhD)

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**Declaration of Independence and CV**

I Eric Ndivhuho Mathoho declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development, application or appeal in respect of which I am appointed other than fair remuneration for work performed about the activity, application or appeal. There are no circumstances that compromise the objectivity of me performing such work.

Signed:



Eric N Mathoho, D.Phil. MPhil in Archaeology (UCT)  
ASAPA Member, Archaeologist and Heritage Expert.

TABLE OF CONTENTS

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CONTENT	PAGE
<b>I. TECHNICAL AND EXECUTIVE SUMMARIES .....</b>	<b>2</b>
<b>II. EXECUTIVE SUMMARY.....</b>	<b>3</b>
<b>III. ACKNOWLEDGEMENTS:.....</b>	<b>5</b>
<b>CONSULTANT: MILLENNIUM HERITAGE GROUP (PTY) LTD.....</b>	<b>5</b>
<b>1. INTRODUCTION.....</b>	<b>9</b>
<b>2. RELEVANT LEGISLATION.....</b>	<b>11</b>
<b>2.1. THE NATIONAL HERITAGE RESOURCE ACT (25 OF 1999).....</b>	<b>11</b>
<b>2.2. THE HUMAN TISSUE ACT (65 OF 1983).....</b>	<b>13</b>
<b>3. TERMS OF REFERENCE .....</b>	<b>14</b>
<b>4. TERMINOLOGY .....</b>	<b>14</b>
<b>5. METHODOLOGY.....</b>	<b>16</b>
SOURCE OF INFORMATION.....	16
ASSUMPTION AND LIMITATIONS .....	17
<b>6. ASSESSMENTS CRITERIA .....</b>	<b>17</b>
6.1 SITE SIGNIFICANCE .....	17
6.2 IMPACT RATING .....	18
6.3 CERTAINTY .....	20
6.4 DURATION .....	20
6.5 MITIGATION.....	20
<b>7. HISTORICAL BACKGROUND A BRIEF SYNTHESIS OF THE ARCHAEOLOGY AND HERITAGE OF THE STUDY AREA. ....</b>	<b>20</b>
<b>7.1.2. FARMING COMMUNITIES AND RECENT HISTORIES .....</b>	<b>21</b>
<b>8. SITE LOCATION AND PROJECT DESCRIPTION .....</b>	<b>26</b>
<b>9. ASSESSMENT OF SITES AND FINDS .....</b>	<b>32</b>

<b>10. CONCLUSION AND RECOMMENDATIONS .....</b>	<b>32</b>
<b>12. REFERENCE .....</b>	<b>34</b>
<b>ADDENDUM 1: DEFINITIONS AND ACRONYMS .....</b>	<b>36</b>
<b>ADDENDUM 2: TYPES AND RANGES AS OUTLINED BY THE NATIONAL HERITAGE RESOURCE ACT (ACT 25 OF 1999).....</b>	<b>38</b>

## Table of figures

Figure 1: Study area map adapted from Google earth program.....	9
Figure 2: Study area dominated by bushes and grass cover .....	29
Figure 3: Donga erosion formation across the proposed area.....	29
Figure 4: Exposed non-perennial stream that traverse the study area. ....	30
Figure 5: Open flat section of the study area.....	30
Figure 6: Road that traverse the area. ....	31
Figure 7: The dominant plant taxa of the study area is <i>Dichrostachys cineria</i> bushes. ....	31
Figure 8: Snapshot of the transects.....	32

## 1. INTRODUCTION

Shaphat property identified a vacant ploughing field and acquired the site from the local headman of the village, the area is positioned west of the non-perennial stream. The area is located on a portion of the farm Nieuw Engeland 60 LT, Ha- Vhangani Village. The unoccupied ploughing field covers roughly 2.9 hectares of slightly flat section of land which is located roughly 3,5 kilometers southeast of the Vhangani Village stands and roughly 4 kilometers east of the main tarred road from Elim to Giyani (See figure 1). The non-perennial stream forms the eastern boundary of the existing cultivating field, where river sand is currently excavated. The surrounding area is dominated by well fenced ploughing fields, some dominated by recuperating vegetation, whilst evidence of recent ploughing activities is evident from tractors ploughing rills. Several newly demarcated residential sites have been noted further to the west of the proposed area. The study area falls within Collins Chabane local Municipality of the Vhembe district, Limpopo Province South Africa.



**Figure 1:** Study area map adapted from Google earth program

Agricultural sector has been acknowledged as the prime driver of the provincial economy, its impetus is on sub-tropical fresh fruits and vegetables production. The objective behind this development is to provide fresh agricultural farm produce to the local communities while creating job opportunities. In terms of EIA Regulations promulgated on 4 December 2014, read with Section 44 of the National Environmental Management Act (Act 107 of 1998), the proposed development falls within listed Activity, Namely:

- GNR327 Listing Notice 1 Activity 27

Therefore, pre-development Environmental Impact Assessment is a prerequisite, subject to approval by the Limpopo Department of Economics Development, Environment and Tourism. To ensure that the proposed cash crop project meets the environmental requirements in line with the National Environmental Management Act 107 of 1998.

To comply with relevant legislations, Shaphat property requires information on the heritage resources that occur within or near the proposed site and their heritage significance. The objective of the study is to document the presence of archaeological and historical sites of significance to inform and provide guidance on the proposed development activities. Apart from contributing towards the preservation of the heritage resources, the studies provide information and awareness of the types of archaeological and heritage sites that occur within the proposed study area. The document enables the developer to align their functions and responsibilities to advance proposed activities and at the same time minimizing potential impact on archaeological and heritage sites. This study was conducted in line with the National Heritage Resources Act of 1999 (Act No. 25 of 1999). The Act protects heritage resources through formal and general protection. The Act provide that certain developmental activities require consents from relevant heritage resources authorities such as Limpopo Heritage Resources Authorities (LIHRA) and South African Heritage Resources Agency (SAHRA). In addition to heritage legislations, the South African Heritage Resources Agency has developed minimum standards used in impact assessment, while these local standards, are operational they are strengthened by the International Council of Monuments and Sites (ICOMOS) published guideline for assessing impacts. The Burra Charter of 1999, requires a cautious approach to the management of sites; it sets out firmly that the cultural significance of heritage places must guide all decisions.

The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (Section, 34), archaeological sites and materials (Section 35) and graves and burial sites (Section, 36). To comply with the legislation, the applicant requires information on the heritage resources, that occur in the area proposed for development and their significance. This will enable the Applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources.

## **2. RELEVANT LEGISLATION**

Two sets of legislation are relevant for the purposes of this study in as far as they contain provisions for the protection of tangible and intangible heritage resources including burials and burial grounds.

### **2.1. The National Heritage Resource Act (25 of 1999)**

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

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

#### **Historical remains**

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

#### **Archaeological remains**

**Section 35(3)** Any person who discovers archaeological and paleontological materials and meteorites during development or agricultural activity must immediately report the find to the responsible heritage resource authority or the nearest local authority or museum.

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

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- trade in, sell for private gain, export or attempt to export from republic any category of archaeological or paleontological material or object or any meteorite; or

- bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment which assist with the detection or recovery of metal or archaeological material or object or such equipment for the recovery of meteorites.

**Section 35(5)** When the responsible heritage resource authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or paleontological site is underway, and where no application for a permit has been submitted and no heritage resource management procedures in terms of section 38 has been followed, it may

- serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order
- carry out an investigation for obtaining information on whether an archaeological or paleontological site exists and whether mitigation is necessary;
- if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and
- recover the cost of such investigation from the owner or occupier of the land on which it is believed an archaeological or paleontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.

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

### **Burial grounds and graves**

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

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

**Subsection 36 (6)** Subject to the provision of any person who during development or any other activity discover the location of a grave, the existence of which was previously unknown, must



immediately cease such activity and report the discovery to the responsible heritage resource authority which must, in co-operation with the South African Police service and in accordance with regulation of the responsible heritage resource authority-

- (I) carry out an investigation for obtaining information on whether such grave is protected in terms of this act or is of significance to any community; and  
if such grave is protected or is of significance, assist any person who or community which is a direct descendant to decide for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangement as it deems fit.

### **Cultural Resource Management**

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

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

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

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

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

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

## **2.2. The Human Tissue Act (65 of 1983)**

This act protects graves younger than 60 years, these falls under the jurisdiction of the National Department of Health and the Provincial Health Department. Approval for the exhumation and reburial must be obtained from the relevant provincial MEC as well as relevant Local Authorities.

### **3. TERMS OF REFERENCE**

The terms of references for the study were to undertake an Archaeological Impact Assessment relating to the proposed Shaphat property cash crops farming project and submit a specialist report, which addresses the following:

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

### **4. TERMINOLOGY**

The Heritage Impact Assessment (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act, 1999 (Act No 25 of 1999). Heritage resources, (Cultural resources) include all human-made phenomena and intangible products that are result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyle of the people or groups of people of South Africa.

The term ‘pre-historical’ refers to the time before any historical documents were written or any written language developed in a area or region of the world. The historical period and historical remains refer, for the project area, to the first appearance or use of ‘modern’ Western writing brought South Africa by the first colonist who settled in the Cape in the early 1652 and brought to the other different part of South Africa in the early 1800.

The term ‘relatively recent past’ refers to the 20<sup>th</sup> century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may soon, qualify as heritage resources.

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

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

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

The term 'Early Iron Age' and Late Iron Age respectively refers to the periods between the first and second millenniums AD.

The 'Late Iron Age' refers to the period between the 17<sup>th</sup> and the 19<sup>th</sup> centuries and therefore includes the historical period.

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

The term 'study area' or 'project area' refers to the area where the developers wants to focus its development activities (refer to plan)

Phase I studies refer to survey using various sources of data to establish the presence of all possible types of heritage resources in each area.

Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include documenting of rock art, engravings or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavation of archaeological sites; the exhumation of bodies and the relocation of grave

yards, etc. Phase II work may require the input of specialist and require the co-operation and the approval of SAHRA.

## **5. METHODOLOGY**

### ***Source of information***

#### ***i. Desktop studies***

A desktop study was performed to gain information on the heritage resources in the area. The region boasts its diverse history that stretches back to Stone Age. The fact that this community were present in the region is well confirmed by the occurrence of scattered stone artefacts on the surface as deposits in the caves and rock shelters and rock overhangs. Records show that some of the earliest rock art paintings has been recorded in association with stone tools deposits within the Soutpansberg, Dambale and Masea villages and alongside the Limpopo Valley. The Early, Middle and Later Iron Age periods sites are well represented in the region, some of these sites were identified alongside the Luvuvhu river bank, while the newly introduced sites that represent the Middle Iron Age sites have been documented within the Mapungubwe National park and world heritage sites (Huffman 2007). Generally, those that represent the Early Iron Age and Late Iron Ages archaeological sites have been found within the region, very few of these sites have been subjected to further investigations. Most of these sites were excavated as part of the Phase two (Phase 2) Cultural Resource Management for the constructions of the Nandoni Dam. Records exist of the presence of Early Iron Age sites, at Tsianda on farm Reubander, however the site has been disturbed by cultivation activities (Huffman 2007). Most of the cultural materials from these sites are currently housed at the University of Venda Archaeological Section. Studies conducted in the nearby Schiel and Schunshoogte farms indicated that the area is rich in metal production and mining sites, dated to the Late Iron Age period (Mathoho 2012; 2016). Previous archaeological excavation by Archaeo -Info (2001) uncovered one of the most trading centers located north of the Middle Letaba dam which dated to the early 1800s. The subsequent seasonal excavation of the Magoro hill by the University of South Africa shed more light in the historical past injustices suffered by the Magoro clan on top of the Magoro hill. The expectation from this desktop study is that it is highly impossible to identify archaeological sites in this area because of the existence of cultivating activities.

#### ***ii. Field surveys***

To identify sites on the ground and assess their significance, a dedicated field survey was performed to the site for the proposed extension of the proposed development and associated infrastructure development. The fieldwork was performed on the 29 September 2021, the process

followed systematic inspections of predetermined linear transects which resulted in the maximum coverage of the entire site. The sampling method selected was the stratified random technique where the study area was taken as strata with random field walking around them. Standard archaeological observation practices were followed; visual inspection was supplemented by relevant written source, and oral traditions with local communities from the surrounding Ha-Masia and Mashau villages. The site was recorded by hand held GPS and plotted on 1:50 000 Topographical and Google Earth maps. The general condition of the terrain was photographed with a Canon 1000D Camera.

### ***Assumption and Limitations***

It must be pointed out that heritage resources can be found in the unexpected places, it must also be borne in mind that survey may not detect all the heritage resources in each project area. While some remains may simply be missed during surveys (observations) under tall grass and vegetational concealment, others may occur below the surface of the earth and may be exposed once development (such as the construction of the proposed facilities) commences.

## **6. ASSESSMENTS CRITERIA**

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

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

### **6.1 Site Significance**

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

The classification index is represented in the Table below that show grading and rating systems of heritage resources in South Africa.

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

## ***6.2 Impact Rating***

### **VERY HIGH**

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

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

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

## **HIGH**

These impacts will usually result in long term effects on the social and /or natural environment. Impacts rated as HIGH will need to be considered by society as constituting an important and usually long-term change to the (natural and/or social) environment. Society would probably view these impacts in a serious light.

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

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

## **MODERATE**

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

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

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

## **LOW**

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

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

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

## **NO SIGNIFICANCE**

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

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

### **6.3 Certainty**

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

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

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

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

### **6.4 Duration**

*SHORT TERM* : 0 – 5 years

*MEDIUM:* 6 – 20 years

*LONG TERM:* more than 20 years

*DEMOLISHED:* site will be demolished or is already demolished

### **6.5 Mitigation**

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

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

## **7. Historical background a brief synthesis of the archaeology and heritage of the study area.**

### **7.1.1. The Stone Age Period**

Most of the archaeological research in and around the region took place further north and in the Limpopo Valley. Nevertheless, a general account of the nature of the Stone Age can be provided. Conventionally speaking, the Stone Age period has been divided into the Early Stone Age (ESA) (3.5 million and 250 000 BP), the Middle Stone Age (MSA) (250 000 – 25000 BP) and the Later Stone Age (25000 – 2000 BP) (Phillipson 2005). Early Stone Age stone tool assemblages are made up of the earlier Oldwan and later Acheulian types. The Oldwan tools were very crude and were used for chopping and butchering. These were replaced by Acheulian ESA tools dominated by hand axes and cleavers which are remarkably standardized (Wadley, 2007; Sharon, 2009). Evidence presented from Makapansgat caves shows that the first tool making hominids belong to either an early species of the Homo or an immediate ancestor which is yet to be discovered here in South Africa (Phillipson 2005; Esterhuysen, 2007). Both the Oldwan and Acheulian industries are well



represented in the archaeology of northern South Africa as shown by studies in the Makapansgat valley (Kuman et al. 2005; Sumner and Kuman 2014).

The Middle Stone Age dates to between 250 000 ago and 25 000 years ago. In general, Middle Stone Age tools are characterized by a size reduction in tools such as hand axes, cleavers, and flake and blade industries. The period is marked by the emergence of modern humans and was accompanied by change in technology, behavior, physical appearance, art, and symbolism (Phillipson 2005). A variety of MSA tools includes blades, flakes, scraper and pointed tools that may have been hafted onto shafts or handles and used as spear heads. Surface scatters of these flake and blade industries occur widespread across southern Africa (Klein 2000; Thompson & Marean, 2008). Residue analyses on some of the stone tools indicate that these tools were certainly used as spear heads (Wadley, 2007). From about 25 000 BP, stone tool assemblages generally attributed to the Later Stone Age emerged. This period is marked by a reduction in stone tool sizes. Typical stone tools include microliths and bladelets. Later Stone Age stone tools were recovered in the Soutpansberg and well known sites of the Mapungubwe National Park. This period is also associated with the development of rock art whose distribution is known across southern Africa (Deacon and Deacon 1999; Phillipson 2005).

### **7.1.2. FARMING COMMUNITIES AND RECENT HISTORIES**

Cultural Resource Management survey program conducted for the development of Nandoni dam has recorded the existence of cultural material fingerprints which represents diverse periods. Archaeologically, the proposed study area lies within the asserted traditional territories with density of archaeological sites most of which are located on higher elevations along the water sources such as Luvuvhu River and its tributaries. These studies shed light on the understanding of pre- history south of the Soutpansberg Mountain, aerial photographic survey and the layout of the study area showed that the region starting from the western end of the mountain had major concentration of recent to historical settlements, with various scattered iron production sites along the main rivers. Recent studies classified these settlements and activity areas mainly comprised of four basic units, namely: homesteads, terraces, livestock enclosure and Iron production sites.

The general archaeology within the study area took place during the Iron Age period, where these communities moved into southern Africa by c. AD 200, entering the area either by moving down the coastal plains, or by using a more central route. It seems more likely that the first option was what brought people into the study area. From the coast, they followed various rivers inland. Being cultivators, they preferred the rich alluvial soils to settle on. One of the earliest dated sites is located near Tzaneen (Silver Leaves). This sequence owes much to the work undertaken by Menno

Klapwijk, in the Tzaneen area, specifically at the site referred to as the earliest component of the Iron Age period i.e. Silver Leaves site. The site was occupied in the third century, being dated by radiocarbon to circa 280 AD. Similar dates also came from Eiland sites discovered few kilometres south east of Tzaneen in the then Northern Transvaal. On both sites, direct evidence of cultivation was extremely limited, but impressions of *Pennisetum millet* seeds were discovered. This was the principal evidence of the earliest Iron Age penetration with the then dominant crop being brought in and introduced to the area (Klapwijk 1974).

Another archaeological evidence of great significance was the discovery of an archaeological site near the present town of Lydenburg in the Mpumalanga Province. The Lydenburg archaeological assemblage consists of the remains of the well-known seven terracotta heads (Lydenburg heads). The site was radiocarbon dated AD 470 becoming the oldest African Iron Age artwork ever found below the equator (Inskeep & Maggs 1975).

Iron Age occupation of the region seems to have taken place on a significant scale and at least three different phases of occupation have been identified. Sites dating to the Early Iron Age are found in the Luvuvhu River valley. These settlements seem to have been followed at a slightly later date by settlements linked to the Eiland Phase of the EIA (c. AD 1000). The last period of pre-colonial occupation consisted of Vhavenda who settled on stone-walled, sites at the foot on the mountains. At present, it is not clear, but, judged on the pottery found here; these sites might even date to early historic times. As this was a period of population movement, conflict and change, in large part set the scene for the current population situation within the study area. Considering the period that they were occupied, some of these sites also feature in the early historic writings. For example, the Magoro site near the Middle Letaba Dam.

Approximately 69 archaeological sites were recorded alongside the Luvuvhu river valley, during the impact assessment program of the proposed Nandoni dam 1993-1997. Sites location and distributions varied considerably, some were geo-referenced on promontory hills, ridges while others were noted on flat flood plains. One of the interesting site excavated in the study area, was Mut2/2 site, an Early Iron Age site located on river bluff, promontory ridge situated approximately 600m west of the current dam wall. Archaeological excavations yielded evidence of the early traded pieces of porcelain. Research analysis shows that Porcelain pieces originated in Mesopotamia, unfortunately the early trade route network is not known, with possibilities link to Middle East via Mozambique ports.

Another site with extra ordinary information was MUT26, (iron smelting site) excavated on rocky granite out crop on the bank of the Mahebe River, characterized by dry stone walls with livestock enclosures, archaeological excavations revealed that this site, was occupied more than one period, from the early iron smelting to historical period. The general evidence of metal production in the Limpopo Province has been recorded throughout the province in places such as Silver Leaves (Klapwijk, 1974), Eiland Salt Works (Evers, 1974) Nanđoni (Fish, 1995), Phalaborwa (Evers and van der Merwe, 1987; Thondhlana, 2013; 2016; Moffet, 2016; Moffet, Hall and Chirikure, 2020; Miller and Killick, 2019), Musina, (Mamadi, Dzivhani, Motenda and Mudau, 1940; Joubert, 2019) Vuu or Tshimbupfe (Mathoho, 2012; 2016) with more than 20 sites recently geo-referenced near Nsami River around Thomo village. Archaeological evidence from these sites was represented by exposed hut floors, grain bin foundation and lapa floor with burnt dark brown and gray soil, and high slag concentration. Archaeological excavation of MUT26 exposed remnants of smelting furnace roughly triangular with three tuyere inlets. Similar furnace has been found elsewhere in Phalaborwa area (Mathoho 2012). The site (MUT26) was destructed by the proposed concrete quarry activities for the proposed dam construction.

To attain more understand of relative chronology of these archaeological sites, a description of pottery from different sites was carried out. The most dominant method of classifying ceramics in southern Africa is that of Huffman (2007) which combines different shape profiles with decoration techniques and motifs. Due to heavy vessel fragmentation and the small number of samples from our sites, general descriptions of the ceramics were given. Although largely descriptive, this approach identifies and characterise ceramic traditions making it possible to relate ceramics from our sites to sequences established elsewhere in northern South Africa. The ceramic analysis revealed that sites excavated ranged from the Early Iron Age to the Historical period. The ceramics from Mut 26 (Dovheni iron production site) were highly fragmented making it difficult to reconstruct the shape profiles. When cleaned, it became clear that some of the pottery fragments were decorated with designs formed by red ochre and graphite burnishing, cross hatched and fine lines of incisions which appeared on some of the recovered potsherds. These designs are typical of Letaba facies which have been dated elsewhere to between AD1600 and 1840 (Huffman 2007).

A large representative sample of undiagnostic and diagnostic ceramic were retrieved from surface collection at Mut2/2 site on the Luvuvhu River, on average, the pots were well made and fired. The decoration techniques include punctuates on the rim and multiple bands in the neck. The decoration is placed on the rim, the neck and on the shoulders/body. The decoration on the potsherds from Mut 2/2 closely resembles that observed on Early Iron Age sites in the region, particularly the Garonga phase of Silver Leaves (see Mathoho 2012). According to Huffman (2007: 133), Garonga ceramics

combine the features of Mzonjani and Happy Rest. Huffman also places Garonga (AD750-900) third in a sequence that starts with Silver Leaves (AD300-450) and Mzonjani (AD450-750). The excavations yielded numerous and diverse materials of importance. The excavated ceramics were described and compared to the established typologies of Huffman (2007). For our area, the descriptions revealed the existence of not only Early Iron Age sites but also Late Iron Age and historical period. Given that the ceramics for early and later periods are different. There is no doubt that some of the archaeological sites found here belongs to the pre- Vhavenda nation, unfortunately the Vha-Venda history is so complex and subject of unending disputes amongst different parties and dynastic group that inhabit the territory. Writings of the early 1930s has placed Vhavenda as composite people, who don't see themselves as cultural homogenous or political united nation. Oral traditions suggest that most of the important migrations to the territory known today as Venda came from the north of the Limpopo River among these migrations two are particularly significant in the history of the area (Stayt, 1968, Loubser, 1991).

Vhavenda of today are descendants of various groups and previous studies coupled with old traditions agrees that there was at one stage an aboriginal population in the region called Vha-Ngona whether this group had chief or tribal cohesion it is not recorded in the history; it was previously rare for a person prepared to admit that they are descendent of this despised race. The historic period started c. 1840s, with the arrival of the first white settlers. Elephant hunting and the ivory trade were the most important economic activities of Zoutpansbergers, who depended increasingly on African marksmen as elephant herds retreated north into the tsetse belt. Thus, many African hunters were equipped with guns while on expedition to raid settlement for black ivory. Negotiations between the trekkers and Vhavenda resulted in certain areas south of the Soutpansberg becoming the border between cultural groups as influenced by the early trade routes system via Mozambique. Later, tension developed between these cultural groups, giving rise to armed conflict.

One of the better-known incidents is the so-called the black ivory and indenture system and slavery in the Soutpansberg between 1848 to 1869, where young children were classed as inboekenlinge (the so called 'apprentices' another name of slavery) were acquired and traded most of which were captive from African villages distributed among Boer themselves. These captives were produced by wars waged to open certain areas of the far north for white settlement. Therefore, the clashes resulted mainly from African resistance to attempts by the Boers to enforce their newly acquired authority by demanding labor and tribute among Vhavenda chiefs. According to Boeyens (1994) Soutpansberg was, after all, an open frontier where the authorities of the whites was continually challenged, resulting in regular clashes and war with local communities. Children were taken as spoils of war because they had export market value (slavery), because of this process Venda

children's who were regarded as spoils of war from different Venda chiefdoms were displaced as far as Pretoria. The Soutpansberg was known from the coast as the major source of white ivory and other game products. Under the indenture system many such labor was obtained through capture or trade. According to instruction report received by Lydenburg military officers in November 1851, only children's who were found helpless at least half a day after a military clash could be taken and indentured, children from opposing African village chiefs, orphaned because of combat where taken by the Boers. Indenture system was disguised from slavery, in order not to transgress the legal aspects of the ZAR and confront the quilt question. Even president M.W. Pretorius, who took a strong public stand against slavery, participated occasionally in the illegal trade in African children. For example, Soutpansberg commandant J.H Jacobs led a patrol against Rasikhuthuma, son of the Venda chief Ramabulana, in 1855 after Joao Albasini had accused Rasikhuthuma of stock theft. In the attack on Tshitungulu, Rasikhuthuma strongholds subjects were shot and 76 cattle's, 108 sheep's and goats as well as 13 young African were captured and divided amongst the Boers commander. In the same year (November 1855) L.M. Bronkhorst raided Ramabulana where eleven people were killed and five children were taken and divided amongst the burgers. In 1860 J. du Plessies led a commando against chief Mashau, who was reportedly being disobedient, livestock's, women and children were taken as spoils of war. From this point raids were confined almost entirely to Africans from whom the Boers claimed tribute which is equated with indentured children.

In October 1863, Albasini dispatched Va-Tsonga force under Munene against Chief Rambuda, because he refused to pay tribute to the burgers and had closed the hunting trails through his territory. Munene force fails to defeat Rambuda but they managed to kill seventy-seven and abducted several women and children's. On 15 July 1867 Schoemansdal was evacuated following a protracted conflict with the Vha- Venda. For two years, the ZAR government tried to subdue the Vha-Venda by diplomatic and military means but abandoned their attempt at the end of 1869, the Boers were forced to assemble in laagers for their own protection, especially during the hunting season when many men were away in quest of ivory. One visitor reported that the number of white population within the Soutpansberg region being 1800 between 1855-1856, with 260 families, but archaeological findings show that no more than 100 families, this show that the number decreases due to African resistance and conflict. Some of the African Chief such as Madzhie, a Venda chief whose capital was situated in the mountains above Schoemansdal, he was reported to have been a regular supplier of labor to the white community. After the death of the Venda chief, Ramabulana, whites were involved in the succession dispute between his sons, Makhado and Davhana, caused conflict that spread to other part of the Soutpansberg. In August 1865, the Venda chief Magoro, who occupied a strong hold south of the Klein Letaba river, was besieged and attached by Va-

Tsonga, and the Boers who claimed that Magoro had colluded with Makhado, there by killing Chief Magoro and his subjects (Boeyens,1994).

## **8. SITE LOCATION AND PROJECT DESCRIPTION**

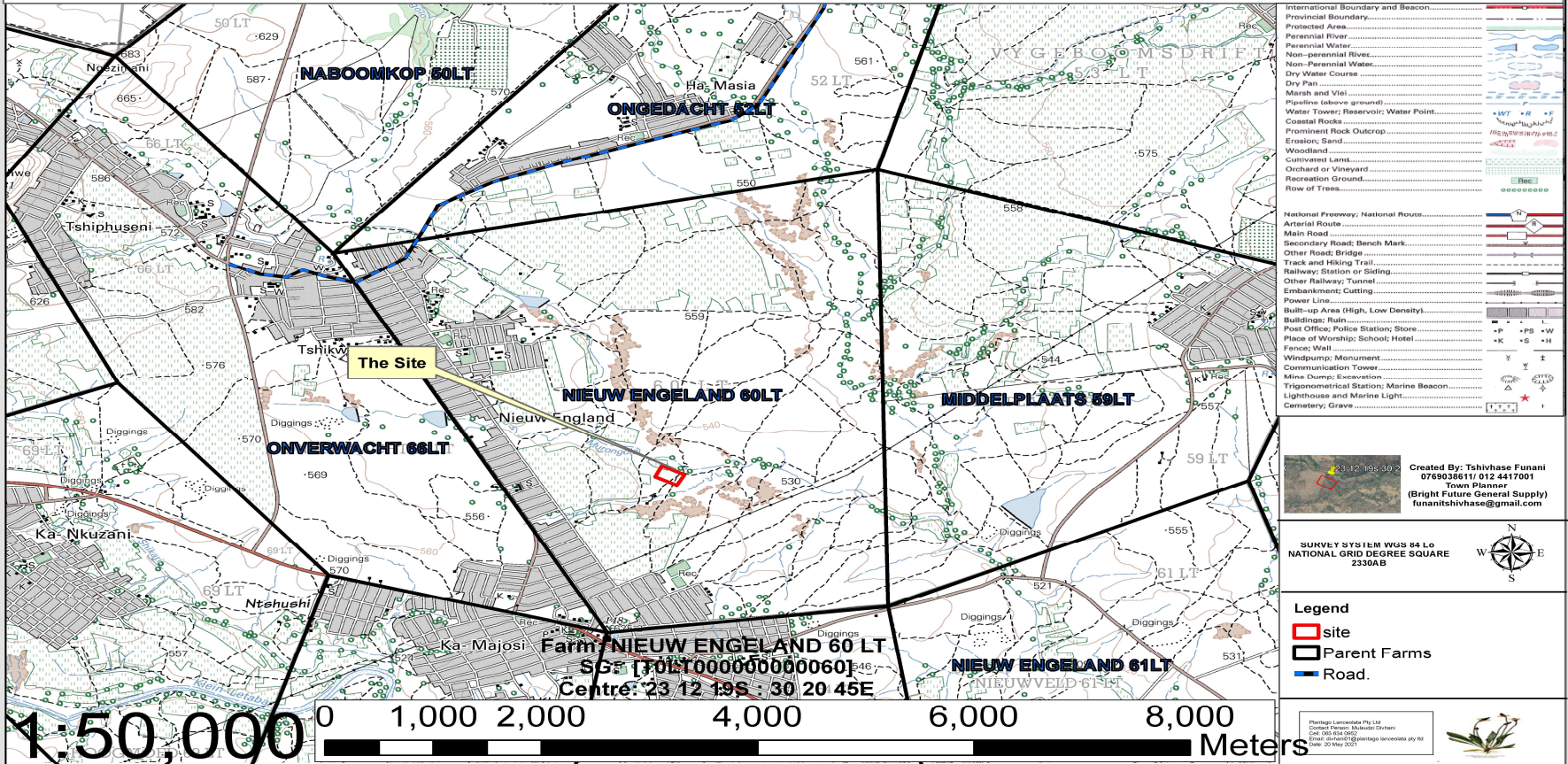
The proposed Shaphat Cash- crop farming on farm Nieuw Engeland 60 LT, Ha- Vhangani Village. The proposed area covers roughly 2.9 hectors of vacant land which is located roughly 3,5 kilometers southeast of the Vhangani Village stands and roughly 4 kilometers east of the main tarred road from Elim to Giyani. The area is located west of a non-perennial stream where river sand deposits is currently mined by local community for house construction activities (see Topographical map). The surrounding area is dominated by well fenced ploughing fields, some dominated by recuperating indigenous vegetation, whilst others have evidence of recent ploughing activities in a form of tractor rills. Several newly demarcated residential sites have been noted towards the western section of the proposed development, the proposed study area falls within the Collins Chabane local Municipality of the Vhembe district, Limpopo Province South Africa.

The area is situated on slightly flat section currently covered by recuperating indigenous vegetation and grass cover. Rain runoff from the raised area and from the village stands has formed a deep incision which developed into a donga formation cutting the study area into two sections. This has in several instances exposed rocky outcropped which form the non-perennial bed. The area is still vacant with no infrastructure; however, sign of previous cultivations activities is evident on the surface of the site. An access gravel road traverse the area connecting the non-perennial stream nearby and the village, here local community are currently mining river sand to be used for house constructions. The area has been fenced, with evidence of previous cultivations indicated by tractor tilling rills. The vegetation and land feature is characterized by tall shrubs with few trees to moderate dense low woodland on deep sandy upland. The dominant plant taxa include, *Combretum Imberbe*, *Combretum hereroinsis*, *combretum colinum*, *Dichrostachy cineria*, *Acacia Negrences*, *Sclerocarya birrea*, *Ziziphus Mucronata*, *Acacia Karroo*, The ground layer of the proposed area is covered by *Themeda trianda*, *Erogrostic rigidor*, *aristida congesta*, (Acocks 1975, Mucina & Rutherford, 2003). This vegetation distributions extend form a north - south belt incorporating plains and escarpment from Thohoyandou towards the Kruger National Park. However, the vegetation distribution is further interrupted in the Bolobedu area.

The general geology and soil of the study area is characterized by the Swazian Goudplaats gneiss, Makutswi Gneiss and the Nelspruit suit (granite gneiss and migmatite) further south of the area is characterized by the younger Mpuluzi Granite (Radian) from the major basement geology of the area. The Archaean granite and gneiss weather into sandy soils in the upland and clayey soil with high sodium content in the lowlands (Mucina & Rutherford, 2003).

# Locality Map

## Proposed Cash Crop Farming on the portion of the farm NIEUW ENGELAND 60 LT located at Vhangani Village under Collins Chabane Local Municipality , Limpopo Province



International Boundary and Beacon	
Provincial Boundary	
Protected Area	
Perennial River	
Non-perennial River	
Dry Water Course	
Dry Pan	
Mereb and Vlei	
Pipeline (above ground)	
Water Tower; Reservoir; Water Point	
Coastal Rocks	
Prominent Rock Outcrop	
Erosion, Sand	
Woodland	
Cultivated Land	
Orchard or Vineyard	
Recreation Ground	
Row of Trees	
National Freeway; National Route	
Arterial Road	
Main Road	
Secondary Road; Bench Mark	
Other Road; Bridge	
Track and Hiking Trail	
Railway; Station or Siding	
Other Railway; Tunnel	
Embankment; Cutting	
Power Line	
Built-up Area (High, Low Density)	
Buildings; Raft	
Post Office; Police Station; Store	
Place of Worship; School; Hotel	
Fence; Wall	
Windpump; Monument	
Communication Tower	
Mine Dump; Excavation	
Trigonometrical Station; Marine Beacon	
Lighthouse and Marine Light	
Cemetery; Grave	

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SURVEY SYSTEM WGS 84 LO  
 NATIONAL GRID DEGREE SQUARE  
 2330AB

**Legend**  
 Site  
 Parent Farms  
 Road.

Plantago Landscapes Pty Ltd  
 Certified Planner, Makuzeli City  
 Cell: 081 806 5622  
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 Date: 20 May 2021





**Figure 2:** Study area dominated by bushes and grass cover



**Figure 3:** Donga erosion formation across the proposed area.





**Figure 4:** Exposed non-perennial stream that traverse the study area.



**Figure 5:** Open flat section of the study area.



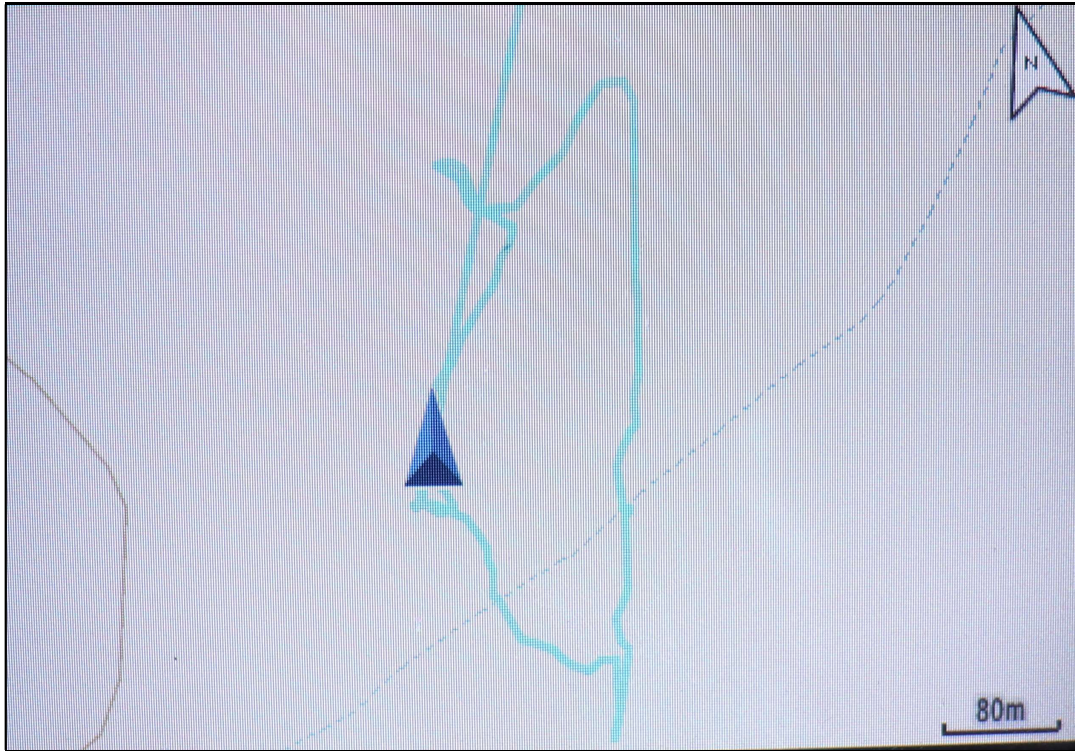


**Figure 6:** Road that traverse the area.



**Figure 7:** The dominant plant taxa of the study area is *Dichrostachys cineria* bushes.





**Figure 8:** Snapshot of the transects

## **9. ASSESSMENT OF SITES AND FINDS**

This section contains the results of the heritage sites/finds assessment. The phase 1 Archaeological scoping assessment program as required in terms of the Section 38 of the National Heritage Resource Act (Act 25 of 1999) was done for the proposed cash crop project. No sites were found during the desktop study and the subsequent field survey. There are no primary or secondary effect at all that are important to scientist or the public that will be impacted by the proposed project activities.

*Heritage Significance:* No significance

*Impact:* Negative

*Impact Significance:* High

*Certainty:* Probable

*Duration:* Permanent

*Mitigation:* A

## **10. CONCLUSION AND RECOMMENDATIONS**

Based on this study, the following conclusions were reached:

- The proposed development is scheduled to take place on already disturbed, previously cultivating land currently dominated by recuperating vegetation and grass cover.
  - Ground truthing of the area proposed development found no important cultural heritage resource, archaeological materials nor graves
  - Although no archaeological remains were found, it is possible that some significant features may be buried beneath the ground. Should buried archaeological materials and burials be encountered during the process of development, the following must apply:
    - Work must stop immediately
    - A professional archaeologist or nearest heritage authority must be contacted.

Based on this assessment which found no archaeological resources in this area we recommend that the heritage authorities approve the project as planned.

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### **Addendum 1: Definitions and Acronyms**

**Archaeological** Material remains resulting from human activities, which 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.

**Chance Finds** Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

**Cultural Heritage Resources** Same as Heritage Resources as defined and used in the South African Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and paleontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or *graves* and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

**Cultural Significance** The complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

**Grave** A place of interment (variably referred to as burial), including 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.

**Historic** Material 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.

***In Situ material*** *Material culture* and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

**Late Iron Age** this period is associated with the development of complex societies and state systems in southern Africa.

**Material culture** Buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

**Site** A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.



**Acronyms:**

<b>AIA</b>	Archaeological Impact Assessment
<b>EIA</b>	Environmental Impact Assessment
<b>EIA</b>	Early Iron Age
<b>EMP</b>	Environmental Management Plan
<b>MHG</b>	Millenium Heritage Group (PTY)LTD
<b>NEMA</b>	National Environmental Management Act, 1998 (Act No.107 of 1998)
<b>NHRA</b>	National Heritage Resources Act, 1999 (Act No.25 of 1999)
<b>SAHRA</b>	South African Heritage Resources Agency
<b>ESA</b>	Early Stone Age
<b>MSA</b>	Middle Stone Age
<b>LSA</b>	Late Stone Age
<b>IA</b>	Iron Age
<b>LIA</b>	Late Iron Age
<b>UNESCO</b>	United Nations Educational, Scientific and cultural Organization
<b>WHC</b>	World Heritage Conventions of 1972

**ADDENDUM 2: Types and ranges as outlined by the National Heritage Resource Act (Act 25 of 1999)**

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

- (a) Places, buildings structures and equipment of cultural significance;
- (b) Places to which oral tradition are attached or which are associated with living heritage;
- (c) Historical settlement and townscapes
- (d) Landscape and natural features of cultural significance;
- (e) Geological sites of scientific or cultural importance
- (f) Archaeological and paleontological sites
- (g) Graves and burial ground including-
  - (I) Ancestral graves
  - (II) Royal graves and graves of traditional leaders
  - (III) Graves of victim of conflict
  - (IV) Graves of individuals designated by the minister by notice in the gazette;
  - (V) Historical graves and cemeteries; and
  - (VI) Other human remains which are not covered by in terms of the Human Tissue Act,1983(Act No 65 of 1983)
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including-
  - (I) object recovered from soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
  - (II) objects to which oral traditions are attached or which are associated with living heritage
  - (III) ethnographic art and objects;
  - (IV) military objects;
  - (V) objects of decorative or fine art;
  - (VI) object of scientific or technological interest; and
  - (VII) books, records, documents, photographs, positive and negatives, graphic, film or video material or sound recording, excluding those that are public records as defined in section1(xiv) of the National Archives of South Africa Act,1996(Act No 43 of 1996).

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

- (a) its importance in the community, or pattern of South Africa’s history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa’s natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa’s natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa’s natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons
- (h) Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa
- (i) Sites of significance relating to the history of slavery in South Africa.