



ARCHAEOLOGICAL IMPACTS ASSESSMENT PROCESS

**FOR THE PROPOSED NANDONI RESIDENTIAL ESTATE SITES
PROJECT ON PORTION 6 OF THE FARM MOLENJE 204 LT,
THULAMELA LOCAL MUNICIPALITY
OF THE VHEMBE DISTRICT,
LIMPOPO PROVINCE
SOUTH AFRICA**

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Executive Summary

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Note: This report follows minimum standard guidelines required by the South African Heritage Resources Agency (SAHRA) for compiling Archaeological Impact Assessment (AIA).

Site name and location: The proposed Nandoni Residential Estate project is located on farm portion 6 of Molenje 204LT, the area is situated approximately 16kilometers south east of Thohoyandou Central Business District, further south of Nandoni Dam, the area cover approximately 519 hectors of virgin land in between Mahebe River and Nandoni Dam, within Thulamela Local Municipality of the Vhembe District, Limpopo Province, South Africa

Local Authority: Thulamela Local Municipality

Magisterial Authority: Vhembe District Municipality

Developer: Mulenzhe Development Trust (MDT)

Date of field work: 7, 8, 9, 10, 11 August 2012

Date of report: August 2012

SURVEY AIMS AND ASSESMENT FINDINGS

The Phase 1 Archaeological scoping study (Archaeological Impact Assessments) as required in terms of section 38 of the National Heritage Resource Act (Act 25 of 1999) was done for the proposed demarcation of residential estate sites project on farm Molenje 204LT within Thulamela Local Municipality of the Vhembe District, Limpopo Province, South Africa

The aims with the Phase1 Archaeological Impact Assessment (AIA) program were the following:

- To establish whether any of the type and ranges of heritage resources as outlined in section 3 of the National Heritage Resources Act (Act 25 of

1999) do occur in or near the proposed site, and if so, to establish the significance of these heritage resources.

- To establish whether such heritage resources will be affected by the proposed development activities, and if so, to determine possible mitigation measures that can be applied to these heritage resources.

The phase 1 impact assessment survey for the proposed demarcation of Nandoni residential estate sites project revealed burial grounds, remnants remains of recent past characterized by stones/ mud huts foundation structures and one iron production site unfortunately the site is located outside the proposed site development foot print. Oral history of the study area suggest that these remains specifically house structures were evacuated in the early 1963, when the existing village was demarcated. Previous survey work carried out three years ago by Professional Land surveyor (Matibe and Associates) revealed that there were approximately 24 graves sites within the estate development footprint corridors, some of this area were visited and it became obvious that certain sites were not really burial grounds, but cairns of stones and exposed rock boulders possibly parked while clearing cultivating lands, some of these sites should be subjected to sites verification and marking, as part of the second (II) phase Mitigations program which will involves grave exhumation and reintentment into safe community graveyard for easy access by family members.

Note: The total number of identified graves may increase after social consultation process since community would be able to identify some of their relative's burial grounds and in addition there might be several still born/young babies buried underneath hut floors/hut foundation, verandah and lapa floors as part of Venda/Shangaan cultural practice customs, similar belief systems have been documented previously on the Nandoni Dam graves relocation project.

The location details and the field survey findings are presented in a Table below.

SITES	GPS-CO-ORDINATES	CULTURAL HERITAGE SITE TYPE
Site No. 001 grave	S22°.59'.39.06"&E30°.35'.11.02"	Possible grave, indicated by half circular stone outline, as grave dressing
Site No. 002	S22°.59'.39.08&E30°.35'.12.04"	Possible grave, indicated by circular

Grave		stone, as grave dressing, grave is part of recent remains structure described below.
Site No. 003 Homestead remains	S22°.59'.39.08"&E30°.35'.11.08"	Remains of recent past, represented by half circular stone outline, and remains of a hut foundation with <i>sclerocarrya beria</i> on top.
Site No. 004 Iron production site	S22°.59'.49.00"&E30°.35'.14.00"	Remains of iron smelting site, indicated by burnt dark black soil with pieces of iron slag, potsherds and tuyere fragments.
Site No. 005 Grave	S22°.59'.49.00"&E30°.35'.16.09"	Cluster of two possible graves, situated 30m east of main dividing fence which separate grazing and cultivation land.
Site No. 006 Grave	S22°.59'.50.06"&E30°.35'.18.03"	Grave indicated by oval parked stone outline as grave dressing, on top of the dressing there are iron implements as grave goods.
Site No. 007 Homestead remains	S22°.59'.50.02"&E30°.35'.19.01"	Remains of recent past, represented by five huts structure foundations, possibly related to the above grave.
Site No. 008 Homestead remains	S23°.00'.04.01"&E30°.35'.27.01"	Remains of recent past homestead, represented by structure foundations,
Site No. 009 graves	S23°.00'.04.01"&E30°.35'.27.01"	Two graves, indicated by oval parked stones, one of the grave is located underneath a <i>Combretum collinum</i> tree while the second grave is underneath a <i>Dichrostachys cineria</i> .
Site No. 010 Stone walling	S22°.59'.49.04"&E30°.35'.39.06"	Remains of recent past, stone walling with <i>optunia Ficus indica</i> on top.
Site No. 011 Graves	S22°.59'.36.04"&E30°.35'.37.00"	Four possible clustered graves, located north east of the gravel quarry site, the graves has been indicated by displaced stones.

Site No. 012 Homestead remains	S22°.59'.32.00"&E30°.35'.45.08"	Remains of recent past, represented by hut structure foundations with square stone outline.
Site No. 013 Grave	S22°.59'.11.06"&E30°.36'.03.08"	A single grave indicated by oval parked stone as grave dressing.

Sites significance

The significance of the identified burial ground sites has been indicated by means of stipulations derived from the National Heritage Resources Act (Act No 25 of 1999).

➤ *Informal graves and Formal grave yards (Cemeteries)*

Informal and formal grave yards (Cemeteries) can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (no 25 of 1999) this act applies whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regards to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on exhumation (Ordinance no 12 of 1980) and the Human Tissue Act (Act no 65 of 1983 as amended).

➤ *Historical structures, foundations, and stone walling sites.*

Old structures can be considered to be of Historical significance and are protected by section 34(1) of the National Heritage Resources Act (no 25 of 1999). **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.

Since the proposed Project will be a security estate which offer a typical fenced parameter with access gates control, backup with a range of security measures that could include electrical fence/constructed walls for safety and open door exit and entrance points. Access to Burial ground sites for ritual performance by family members will be highly impossible, therefore It should be made clear that a process of consultation with the affected families should then be initiated to start the relocation of these graves. Since the sites are situated within the proposed development foot prints corridors it is important to

exhume all these graves and bury them at a safe local cemetery. The identified graves have high significant heritage value to the relevant families. It is recommended that the identified graves should be removed from the proposed site for easy access to the graves by affected relevant families. Various applications to various Departments should be put into motion to obtain the necessary permissions and permits to perform the relocation of the graves by qualified Professional Archaeologist. These applications and permits are required by law as recent graves are protected by the Tissue Act. Only after all the required permissions and permits have been obtained, can the relocation of the graves continue as performed by archaeological professionals. After relocation has been done the proposed establishment and associated infrastructure can continue from heritage point of View.

Acknowledgements:

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PROFESSIONAL DECLARATION

I, the undersigned, Mr. Mathoho Ndivhuho Eric hereby declare that I am a Professional Archaeologist Accredited with the Association for South African Professional Archaeologist (ASAPA) Membership No# 312 and that Vhufashu Heritage Consultants is an independent consultants with no association or with no any other interest what so ever with any institution, organization, or whatever and that the remuneration earned from consulting work constitute the basis of Company livelihood and income.



.....

Mr. Mathoho Ndivhuho Eric

Archaeologist and Heritage Consultant for Vhufashu Heritage Consultants
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1. INTRODUCTION

Mulenzhe Development Trust commissioned studies for the demarcation of proposed Nandoni Residential Estate Project on farm portion 6 of Molenje 204 LT. The proposed site is located approximately 16 kilometers south east of Thohoyandou Central Business District. They appointed Vhufashu Heritage Consultants to conduct an Archaeological and Cultural Heritage Impact Assessment study as part of the Environmental Impact Assessment (EIA) for the proposed project.

The proposed activities form part of the development process, where application for Environmental Assessment Authorization must be completed. Archaeological Impact Assessment (AIA) report form part of a series of appendices prepared for Environmental Impact Assessment (Full EIA) Report to be submitted to the to the Limpopo Department of Economic Development Environment and Tourism (LIDEDET), in support of the application as amended by the National Environmental Management (NEMA) Act No. 107 of 1998. Information presented in this report form the basis of Archaeological resources assessment of the proposed project as the proposal constitutes an activity, which may potentially be harmful to heritage resources that may occur in the proposed demarcated area.

The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) and graves and burial sites (section 36). In order to comply with the legislation, the Applicant requires information on the heritage resources, and their significance that occur in the demarcated area. 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 study with regards to the protection of heritage resources and graves.

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

This Act established the South African Heritage Resource Agency (SAHRA) as the prime custodians of the heritage resources and makes provision for the undertaking of heritage resources impact assessment for various categories of development as determined by

Assessments of the proposed Nandoni Residential Estate Project on farm Molenje 204LT. 1

section 38. It also provides for the grading of heritage resources (section 7) and the implementation of a three-tier level of responsibility and functions from heritage resources to be undertaken by the State, Provincial and Local authorities, depending on the grade of heritage resources (section 8)

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

Historical remains

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

Archaeological remains

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

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

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- trade in ,sell for private gain, export or attempt to export from republic any category of archaeological or palaeontological material or object or any meteorite; or
- bring onto or use at an archaeological or palaeontological 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 palaeontological site is underway, and where no application for a permit

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

- serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order
- carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological 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 palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two week of the order being served.

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

Burial grounds and graves

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

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

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

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

Cultural Resource Management

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

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

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

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

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

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

2.1. 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 reference for the study were to undertake an impacts assessment on the proposed Nandoni residential estate 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 particular area or region of the world. The historical period and historical remains refer, for the project area, to the first appearance or use of 'modern' Western writing brought 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 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may in the near future, qualify as heritage resources.

It is not always possible, based on 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 plans (a historical feature) may serve as a guideline. However circular and square floors may occur together on the same site.

The 'term sensitive remains' is sometimes used to distinguish graves and cemeteries as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves in particular are not necessarily heritage resources if they date from the recent past and do not have head stones that are older than sixty years. The distinction between 'formal' and 'informal' graves in most instances also refers to graveyards that were used by colonists and by indigenous people. This distinction may be important as different cultural groups may uphold different traditions and values with regard to their ancestors. These values have to be 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 17th and the 19th 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 refers to survey using various sources of data in order to establish the presence of all possible types of heritage resources in a given area.

Phase II studies includes 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

Most of the information was obtained through the initial site visit made on 6, 7, 8, 10, 11 August 2012, where a systematic inspection of the proposed site was covered along linear transects which resulted in the maximum coverage of the site. Standard archaeological observation practices were followed; Visual inspection was supplemented by relevant written source, and oral communications with local communities. In addition, the sites were recorded by hand held GPS and plotted on 1:50 000 topographical map. Archaeological material and the general condition of the proposed terrain were photographed with a Canon 1000D Camera.

6. ASSESMENT CRITERIA

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

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

6.1 Site Significance

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

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION

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

Grading and rating systems of heritage resources

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 fairly common elsewhere, would have a significance rating of HIGH over the long term, as the area could be rehabilitated.

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

MODERATE

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

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

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

LOW

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

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

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

NO SIGNIFICANCE

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

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

6.3 Certainty

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

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

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

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

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. REGIONAL SETTING: ARCHAEOLOGY AND HERITAGE.

Previous Cultural Resource Management survey programs conducted for the development of Nandoni dam has recorded the existence of cultural material finger print remains from different periods. Archaeologically the proposed study area lies within the asserted Assessments of the proposed Nandoni Residential Estate Project on farm Molenje 204LT. 10

traditional territories with density of archaeological sites most of which are located on higher elevations along the water source such as Mahebe and Luvuvhu rivers.

The 1990s research by Edwin Hanisch within the study area shed light on the understanding of pre- history and historical part south of the Soutpansberg Mountain, aerial photographic survey and the layout of the study area showed that the region starting from the western end 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 since the Stone Age time as represented by some remarkable scattered distribution of stone tool most found on the lower lying areas dominated by agricultural activities (Cultivated lands) and erosion gullies. The presents of stone tools in such disturbed areas is a true reflection that early humans lived here, discontinuously, for thousands of years, from the Middle to the Late Stone Age periods. Majority of these finds are classified as isolated surface occurrences, and mostly are judged to have a low significance and they require no mitigation measures.

Iron Age people 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 site 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 Vha- Venda 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 time period that they were occupied, they also feature in the early historic period.

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. Archaeological evidence from this site 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 in shape with three tuyere inlets on three corners. Similar furnace have 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 identify 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 ones. Given that the ceramics for early and later periods are different.

There are no doubt that some of the archaeological sites found here belongs to the pre-Vha-Venda nation, unfortunately the Vha-Venda history is so complex and subject of unending dispute amongst different parties and dynastic group that inhabit the territory. Writings of the early 1930s has placed Vha- Venda 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).

Vha-Venda of today are descendents of various groups and previous studies coupled with old traditions agrees that there was at one stage an aboriginal population in the region called Vhangona 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 descendents 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 vha-Venda 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 inboekeninge (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 up 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 vha-Venda 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 is concerned. The soutpansberg was known from the coast as the major source of white ivory and other game products. Under the indenture system many such labour were 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 as a result 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, because reportedly he was disobedient, livestock's, women and children were taken as spoils of war. From this point raids were confined almost entirely to African 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 a number of 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 Madzie, a Venda chief whose capital was situated in the mountains above Schoemansdal, he was reported to have been a regular supplier of labour 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 Nandoni residential estate demarcation project is located on farm portion 6 Molenje 204LT, the area is situated approximately 16 kilometers south east of Thohoyandou Central Business District, further south of the Nandoni Dam, the area cover approximately 519 hectors of virgin land in between Mahebe river and Nandoni dam, within the Thulamela Local Municipality of the Vhembe District, Limpopo Province, South Africa.

The geology of the study area is mainly underlain by grey biotite-rich gneiss and migmatite with anatectic mobilisates, collectively known as the Goudplaats Gneiss. Highly localized pockets of metamorphic strata occur, comprising amphibolite, metaquartzite, magnetite quartzite, metapyroxenite, metapelite and serpentinite defining the Giyani Group of the Beit Bridge Complex that is associated with a large-scale structure known as the Pietersburg Greenstone Belt. Acocks (1975), Mucina and Rutherford (2006) the original vegetation for the upper area has been influenced by sandy soil, where as below in the valley it changes to sodium-rich, clayey soils, which has given rise to mixed lowveld bush complex of the Savanna Biome, most of the identified tree species includes: *Acacia karroo*, *Acacia nigrenses*, *Tereminalia prunoides*, *Sclerocarrya beria*, *Ziziphus mucronata*, *Peltoforum africanum*, *Grewia flava*, *Dichrostachys cineria* etc.

The proposed project entails the following elements:

- Establishment of 1000-1500 new residential estate stands
- Establishment of a golf course
- Establishment of hospitality infrastructure
- Establishment of a private hospital and private school,
- Establishment of sewer and water reticulation systems
- Establishment of access streets



Figure 1: View of the study area towards the eastern side, the photo was taken from the Nandoni dam wall.

9. ASSESMENT OF SITES AND FINDS

This section contains the results of the heritage sites/find assessment. The phase 1 heritage 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 project.

The location details and the field survey findings are presented in a Table below.

SITES	GPS-CO-ORDINATES	CULTURAL HERITAGE SITE TYPE
Site No. 001 Grave	S22°.59.39.06&E30°.35.11.02	Possible grave, indicated by half circular stone outline, as grave dressing. The site is located approximately 400meters from Lufhale bridge, 150m south of the main gravel road.
Site No. 002 Grave	S22°.59.39.08&E30°.35.12.04	Possible grave, indicated by circular stone, as grave dressing, grave is part of recent remains structure described below. Identified associated tree is

		<i>Euclea crispa tree</i>
Site No. 003 Homestead remains	S22°.59.39.08&E30°.35.11.08	Remains of recent past, represented by half circular stone outline, and remain of a hut foundation with <i>sclerocarrya beria</i> tree on top. The site is located approximately 300m east of the fenced ploughing fields. No associated potsherds could be found on the surface.
Site No. 004 Iron Production Site	S22°.59.49.00&E30°.35.14.00	Remains of iron Production site, indicated by burnt dark black soil with pieces of iron slag, potsherds and tuyere fragments. The site covers approximately 60X60meters in diameter. The area is located west of the proposed site (outside the development foot prints) inside the fenced ploughing field. The site is already disturbed, and will be impacted further by future development or ploughing activities.
Site No. 005 Grave	S22°.59.49.00 & E30°.35.16.09	Cluster of two possible graves, situated 30m east of main dividing fence which separate grazing and cultivation land. Associated trees include <i>Tereminalia sericea</i> and <i>Dichrostachys cineria bush</i> .
Site No. 006 Grave	S22°.59.50.06 & E30°.35.18.03	Grave indicated by oval parked stone outline as grave dressing, on top of the dressing there are iron implements as grave goods. The surrounding area has been properly cleaned, an indication that family members are taking care of the burial ground. Adjacent vegetation includes <i>Dichrostachys cineria bush</i> .
Site No. 007 Remains of a	S22°.59.50.02 & E30°.35.19.01	Remains of recent past, represented by five huts structure foundations,(soil

homestead		mounds) located at an interval of 4metres, the vast area has been engulfed by <i>Dichrostachys cineria</i> bush an indication of soil disturbances, definitely the identified single geo-referenced above is connected to this homestead.
Site No. 008 Remains of a homestead	S23°.00.04.01 & E30°.35.27.01	Remains of recent past homestead, located further south east of a non perennial stream. The area is situated on top of a raised platform, densely infested by <i>Dichrostachys cineria</i> , several hut remains foundation has been identified with one stone foundation structure, east of the identified single grave (see below for grave details).
Site No. 009 Graves	S23°.00.04.01 & E30°.35.27.01	Two indicated graves were geo-referenced within the proximity of the described above homestead. The graves are located at an interval of 5meters apart; both have been indicated by oval parked stones as grave dressing, one of the graves is located underneath a <i>Combretum collinum</i> tree while the second grave is underneath a <i>Dichrostachys cineria bush</i> .
Site No. 010 Stone wall	S22°.59.49.04&E30°.35.39.06	A half circular stone wall site, is located just at the north facing bottom section of a rocky outcrop, the stone wall can measure approximately 5meters in length with collapsed sections on top of the stone wall <i>optunia Ficus indica</i> was noticed. No associated hut remains or scattered potsherds could be found on

		the surface of the site. (this site could be linked to other related homestead encountered on site as remains of recent past)
Site No. 011 Graves	S22°.59.36.04&E30°.35.37.00	Four (4) possible clustered graves, located north east of the gravel quarry site, on an undulated section which is situated approximately 400m from the dam purchase line of main gravel road to Mulenzhe village. The graves have been indicated by displaced scattered stones as grave dressings.
Site No. 012 Hut structure foundation	S22°.59.32.00&E30°.35.45.08	Remains of recent past, represented by hut structure foundations with square stone outline. The remains is located approximately 250meters south of the dam purchase line, the site has dense <i>Dichrostachys cineria bush</i> .
Site No. 013 Grave	S22°.59.11.06 & E30°.36.03.08	A single grave indicated by oval parked stone as grave dressing, located approximately 14meters south of the main gravel access road from Mulenzhe to Mutoti area. The grave is located south east of Nandoni dam concrete spill way.

10. THE SIGNIFICANCE OF REMAINS OF RELATIVELY RECENT PAST (HOME STEADS)

Two set of criteria were used to determine the historical and cultural significance of the sites. The first set is determined by the National Heritage Resource Act which tends to focus on determining the significance of the site on national or macro geographic level. The second set of criteria is a refinement of those set out in the Act which tends to look at the site in more detail (addressing aspect such as building, structure, infrastructural elements, activities area and planted vegetation).

Several remnants remains of homesteads, and stone wall, some with square floor plans foundations were recorded, and geo- referenced occurring together some of this homesteads has burial grounds. These remains are from relatively recent past refers to the 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may in the near future, qualify as heritage resources. It is not always possible, based on 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 plans (a historical feature) may serve as a guideline. However circular and square floors may occur together on the same site. According to information supplied by Mulenzhe local headman, the site was abandoned in the early 1963, when the existing Mulenzhe village was demarcated; since they were abandoned they are 49 years old.

All buildings and structure older than sixty years are protected by section 34 of the National Heritage Resources Act (No 25 of 1999) and may not be affected (demolished, altered, renovated or removed) before the Provincial Heritage resource Authority (PHRA) or South African Heritage Agency (SAHRA) has approved such alterations.

11. THE SIGNIFICANCE OF GRAVES AND BURIAL SITES

The significance of burial grounds or graves has been indicated by means of stipulations derived from the National Heritage Resources Act (Act No 25 of 1999)

Heritage Significance:		GP.A; High/Medium Significance
Impact	:	Negative
Impact Significance	:	High
Certainty	:	Probable
Duration	:	Permanent
Mitigation	:	C

- *Informal graves and Formal grave yards (Cemeteries)*

Informal and formal grave yards (Cemeteries) can be considered to be sensitive remains of high significance and are protected by various laws. Legislation with regard to graves Assessments of the proposed Nandoni Residential Estate Project on farm Molenje 21 204LT.

includes the National Heritage Resources Act (no 25 of 1999) this act applies whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regards to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on exhumation (Ordinance no 12 of 1980) and the Human Tissue Act (Act no 65 of 1983 as amended).

12. SUGGESTED MITIGATION MEASURES.

It would be of great importance to facilitate the exhumation process of all the identified burial grounds since they will be impacted by the proposed estate development and its associated infrastructure.

13. CONCLUSIONS AND RECOMMENDATIONS

Old structures can be considered to be of Historical significance and are protected by section 34(1) of the National Heritage Resources Act (no 25 of 1999). **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.

Since the proposed site will be a security estate which offer a typical fenced parameter with access gates control, backup with a range of security measures that could include electrical fence for safe and open door living access to the grave sites will be highly Impossible, therefore it should be made clear that a process of consultation with the affected families should then be initiated to start the relocation process of these graves. Since the grave sites are situated within the proposed development foot prints corridors, it is strongly recommended to exhume all these graves and bury them at a local cemetery. Graves verification and marking should be envisaged within the homesteads proximity since there might be several still born/young babies buried underneath hut floors/hut foundation, verandah and lapa floors as part of Venda/Shangaan cultural practice, similar belief systems has been documented previously on the Nandoni Dam graves relocation project.

In conclusion identified graves have high significant heritage value to the relevant families. It is recommended that the identified graves should be removed from the proposed site for easy access to the graves by affected relevant families. Various applications to various Departments should be put into motion to obtain the necessary permissions and permits to perform the relocation of the graves. These applications and permits are required by law

as recent graves are protected by the Tissue Act. Only after all the required permissions and permits have been obtained, can the relocation of the graves continue as performed by archaeological professionals. After relocation has been done the proposed establishment and associated infrastructure can continue from heritage point of View.

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15. PHOTO ADDENDUM



Figure 2: View of a possible grave indicated by half circular stones parked as grave dressings (site No 001)



Figure 3: View of a possible grave indicated by circular parked stones as grave dressing (site No 002)



Figure 4: A single grave identified within the homesteads indicated by circular parked stones as grave dressings (site No 003).



Figure 5: Section of half circular stone wall, which forms part of a homestead (Site No 003)



Figure 6; Remains of a hut, which forms part of a homestead, on top there is a *Sclerocarrya Beria* tree (Site No 003).



Figure 7: View of the iron production site from a distance indicated by dark, burnt black soil indicated by an arrow (Site No 004).



Figure 8: Broken pieces of pottery, tuyere fragments and iron slag collected from the surface of iron production site.



Figure 9: Identified two graves indicated by parked stones as grave dressings (Site No 005)



Figure 10: View of a single grave indicated by oval parked stones as grave dressings, on top of the grave iron implements were noted (Site No 006).



Figure 11: View of the identified remains of five hut foundations, in the middle of *Dichrostachys cineria* bush (Site No 007).



Figure 12: The first grave indicated by parked stone outline marked by *Tereminalia sericea* on top of the grave (Site No 009).



Figure 13: The second identified graves, indicated by several stones (Site No 009)



Figure 14: View of the stones structure foundation; note the *Dichrostachys cineria* bush within the homestead surround (Site No 008).



Figure 15: View of the half circular stone wall, which is located at the bottom section of a raised rocky out crop (Site No 010)



Figure 16: View of the still intact stone wall (Site No 010)



Figure 17: Four clusters of graves located north east of the gravel quarry site (Site No) the graves have been indicated by several displaced scattered stones as graves dressings (Site No 011).



Figure 18: View of a relatively remains of a homestead with a square stone wall outline, the area is densely infested with *Dichrostachys cineria* bush (site No 012).



Figure 19: View of the study area towards the western section, the photo was taken from the disturbed area, possibly quarry site on Mahebe River bank.



Figure 20: View of a single indicated by packed stones as grave dressing (Site No 013)

TOPOGRAPHICAL MAP OF THE STUDY AREA

