



## PHASE ONE (1)

# ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSMENT REPORT APPLICATION FOR ENVIRONMENTAL AUTHORISATION

## THE PROPOSED FOR THE ELDORADO ESTATE DEVELOPMENT, KWA- ZULU NATAL

<p>DEVELOPED BY:</p>  <p><b>TSIMBA</b> ARCHAEOLOGICAL FOOTPRINTS (PTY) LTD</p>	<p>DEVELOPED FOR :</p>  <p><b>ENVIROPRO</b> IN ASSOCIATION WITH INKANYEZI WETHU</p>
--	---

**OCTOBER 2023**



**TSIMBA**  
ARCHAEOLOGICAL  
FOOTPRINTS (PTY) LTD

AUTHORED BY ROY MUROYI  
Tsimba Archaeological Footprints (Pty) Ltd  
74 Loyedday Street . Johannesburg Gauteng.2000  
Email: [rmuroyi23@gmail.com](mailto:rmuroyi23@gmail.com)  
[info@tsimba-arch.co.za](mailto:info@tsimba-arch.co.za)

**TSIMBA-ARCH.CO.ZA**

## **AUTHOR'S CREDENTIALS**

The report was authored by Mr. Roy Muroyi, Principal Heritage Specialist and Archaeologist for Tsimba Archaeological Footprints (Pty) Ltd. Roy is a flexible, creative, hard-working and professionally minded cultural heritage specialist with realistic methods. He has over nine years' experience in conducting and compiling Heritage Impact Assessments, Conservation Management Plans and Eco-Tourism Impact Assessments in South Africa, Botswana and the Republic of Malawi.

Roy holds a Master's Degree in Heritage Studies (University of Witwatersrand ,2022) with a research focus on transformational challenges at post-apartheid interpretation of Mapungubwe Interpretation Centre in Musina – Limpopo Province. He further holds another Master's Degree in Diversity Studies (University of Witwatersrand ,2021) focusing his research on Zulu Cultural Heritage Collections (in Kwa-Zulu Natal Province) interpretation using a decolonial lens.

Mr. Muroyi is also a holder of an Honours Degree, Archaeology, Cultural Heritage and Museum Studies (Midlands State University, 2014). His career in Cultural Resources Management kicked off at the Department of National Museums and Monuments of Botswana where he worked as an Archaeological Impact Assessment adjudicating officer in 2013.

After leaving the Department of National Museums and Monuments of Botswana Mr. Muroyi moved to South Africa where he got involved with several Cultural Resources Management consulting firms before eventually settling at Tsimba Archaeological Footprints (Pty) Ltd. He has so far conducted over a 100-200 Heritage Impact Assessment reports for proposed Phase 1 and 2 Heritage Impact Assessments for:- Linear developments, Projects with an area over 5000m<sup>2</sup>, Heritage buildings/Old buildings (demolitions and alterations), Old Bridges (demolitions) Water Pipelines, and etc .

He is accredited by Association of Southern African Professional Archaeologists (ASAPA) under the Cultural Resources Management section. He is also accredited by Association of Professional Heritage Professionals (APHP). He further holds membership with the International Association Impact Assessment South Africa (IAIASa) and KwaZulu-Natal Amafa and Research Institute.

## SPECIALIST DECLARATION OF INDEPENDENCE

I, \_\_\_\_\_ Roy Muroyi \_\_\_\_\_, declare that –

- *I act as the independent specialist in this application;*
- *I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;*
- *I declare that there are no circumstances that may compromise my objectivity in performing such work;*
- *I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;*
- *I will comply with the Act, Regulations and all other applicable legislation;*
- *I have no, and will not engage in, conflicting interests in the undertaking of the activity;*
- *I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;*
- *all the particulars furnished by me in this form are true and correct; and*
- *I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.*

**Signature of the Specialist**



## DOCUMENT INFORMATION

DOCUMENT INFORMATION ITEM	DESCRIPTION
<b>Proposed development and location</b>	The proposed construction for the Eldorado Estate Development in Pinetown Area, eThekwini Metropolitan Municipality
<b>Purpose of the study</b>	To carry out a Phase 1 Heritage Impact Assessment to determine the presence/absence of archaeological assess their archaeological significance in terms of the NHRA of 1999 the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008) and SHARA guidelines.
<b>Municipalities</b>	eThekwini Metropolitan Municipality
<b>Client</b>	The Eldorado Trust
<b>Client Details</b>	EnviroPro (Pty) Ltd Phone: (+27) 31 765 2942 Email: <a href="mailto:dustin@enviropro.co.za">dustin@enviropro.co.za</a>
<b>Heritage Consultant</b>	Tsimba Archaeological Footprints (Pty) Ltd 24 Lawson Mansions 74 Loveday Street, Johannesburg Gauteng, 2000 E-mail: <a href="mailto:info@tsimba-arch.co.za">info@tsimba-arch.co.za</a> <a href="mailto:rmuroyi23@gmail.com">rmuroyi23@gmail.com</a> Phone : (+27) 813 717 993

## EXECUTIVE SUMMARY

Tsimba Archaeological Footprints (Pty) Ltd was requested by EnviroPro (Pty) Ltd to conduct a Phase one (1) Heritage Impact Assessment (HIA) for the proposed Eldorado Estate Development in eThekweni Metropolitan Municipality, Kwa- Zulu Natal. The proposed development site is about 16 km, north-west of Durban and south-east of Pietermaritzburg. This archaeological and heritage impact assessment is meant to:

- Examine the designated survey areas to identify any archaeological and cultural heritage sites, as defined by the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008) and section 38 (1) (a, b, c) of the NHRA, No. 25 of 1999.
- Provide a recording of any sites identified to a standard consistent with a site identification level, including significance assessments, details of the locations and extents of each site; and
- Assist in the development of site avoidance and management strategies, where necessary.

EnviroPro (Pty) Ltd (hereafter referred to as “the EAP”) have been appointed by as the independent Environmental Assessment Practitioner (EAP) to undertake the Environmental Impact Assessment (EIA) for the proposed development. A review of a range of cultural heritage information was undertaken as part of the heritage assessment process.

The Phase 1 Cultural Heritage Impact Assessment field survey for the proposed development project identified no site, features or objects of cultural significance in the study area. The survey therefore notes that there would be no definite or direct impact on cultural heritage resources as a result of the proposed development. This report is an independent view and makes recommendations to Amafa Research and institute based on its findings. The authority will consider the recommendations and decide based on conservation principles.

## TABLE OF CONTENTS

---

AUTHOR'S CREDENTIALS .....	2
SPECIALIST DECLARATION OF INDEPENDENCE .....	3
DOCUMENT INFORMATION.....	4
EXECUTIVE SUMMARY .....	5
TABLE OF CONTENTS .....	6
FIGURES AND TABLES .....	7
ABBREVIATIONS .....	8
GLOSSARY .....	9
1.0 INTRODUCTION .....	10
2.0 DESCRIPTION OF THE RECEIVING ENVIRONMENT .....	12
3.0 METHODOLOGY .....	13
4.0 LEGISLATIVE FRAMEWORK.....	15
5.0 ARCHEOLOGICAL BACKGROUND OF THE STUDY AREA .....	18
6.0 HISTORICAL BACKGROUND .....	20
7.0 DISCUSSION OF FINDINGS .....	22
8.0 CONCLUSIONS .....	26
9.0 RECOMMENDATIONS .....	26
10.0 REFERENCES .....	27
APPENDIX A: DEFINITION OF TERMS ADOPTED IN THIS HIA .....	28

## FIGURES AND TABLES

Figure 1: Google earth imagery of the proposed development site (Site marked Red) .....	12
Figure 2: The Burra Charter process: steps in planning for and managing a place of cultural significance. (Reproduced from Australia ICOMOS 2013).....	17
Figure 3: View of the rubbles from the old servant's quarters .....	23
Figure 4: View of the farm grounds .....	23
Figure 5: View of the entrance to the horse stable .....	24
Figure 6: A closer view of the horse stables on the farm.....	24
Figure 7: View of the current farm manager's residence .....	25
Figure 8: View of another property on site .....	25
Table 1: Archaeological time frames and their descriptions .....	18
Table 2: Significance of Cultural Landscape Impacts.....	21

## ABBREVIATIONS

Acronyms	Description
AIA	Archaeological Impact Assessment
ASAPA	Association of South African Professional Archaeologists
CRM	Cultural Resource Management
DEA	Department of Environmental Affairs
DRDLR	Department of Rural Development and Land Reform
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
ESA	Early Stone Age
GIS	Geographic Information System
GPS	Global Positioning System
HIA	Heritage Impact Assessment
LSA	Late Stone Age
LIA	Late Iron Age
MIA	Middle Iron Age
MSA	Middle Stone Age
SAHRA	South African Heritage Resources Agency



## GLOSSARY

Achievement	✚ Something accomplished, esp. by valour, boldness, or superior ability
Aesthetic	✚ Relating to the sense of the beautiful or the science of aesthetics.
Community	✚ All the people of a specific locality or country
Culture	✚ The sum total of ways of living built up by a group of human beings, which is transmitted from one generation to another.
Cultural	✚ Of or relating to culture or cultivation.
Diversity	✚ The state or fact of being diverse; difference; unlikeness.
Geological (geology)	✚ The science which treats of the earth, the rocks of which it is composed, and the changes which it has undergone or is undergoing.
High	✚ Intensified; exceeding the common degree or measure; strong; intense, energetic
Importance	✚ The quality or fact of being important.
Influence	✚ Power of producing effects by invisible or insensible means.
Potential	✚ Possible as opposed to actual.
Integrity	✚ The state of being whole, entire, or undiminished.
Religious	✚ Of, relating to, or concerned with religion.
Significant	✚ important; of consequence
Social	✚ Living, or disposed to live, in companionship with others or in a community, rather than in isolation.
Spiritual	✚ Of, relating to, or consisting of spirit or incorporeal being.
Valued	✚ Highly regarded or esteemed

## 1.0 INTRODUCTION

EnviroPro (Pty) Ltd has been appointed by Eldorado Trust to provide Environmental services for the proposed Eldorado Estate Development in eThekweni Metropolitan Municipality, Kwa- Zulu Natal. In-turn EnviroPro (Pty) Ltd requested Tsimba Archaeological Footprints (Pty) Ltd to conduct a phase one (1) Heritage Impact Assessment (HIA) for the proposed development project.

This HIA is designed to assist statutory authorities in identifying and preventing the approval of aggressive developments, understood as the development that destroys the cultural significance of heritage properties. The provisions of the National Heritage Resources Act of 1999 and the KwaZulu-Natal Heritage Act (Act no 4 of 2008) furthermore offer comprehensive protection of the cultural heritage of South Africa as a whole. HIA structure an evaluation of the potential damage or benefits that may accrue to the significance of the cultural heritage assets.

Environmental impact assessments (EIA) are another analytic approach for evaluating the impacts of development, widely adopted as part of the land use planning system in many countries. Whenever relevant, EIA also include cultural heritage as a factor to be evaluated. Both EIA and HIA adopt a similar approach. In brief, first, the overall scope of the study is defined. Second, a baseline survey is carried out to provide a reference point against which impacts can be measured, including a desktop study and/or field research.

Cultural heritage Impact assessments are meant to draw attention to the effects of the proposed project on the heritage place and how these effects can be mitigated. A cultural heritage impact assessment report will therefore include the legislative framework, the consultation process, the cultural and environmental baseline, mitigation as well as monitoring plans. Mitigation measures aim to avoid, minimize, remedy or compensate for the predicted adverse impacts of a proposed project on a cultural heritage resource or site.

### ***1.2 The Objectives of this HIA study are:***

Heritage impact assessments (hereinafter referred to as HIA) are applied to cultural heritage assets. This is a recent notion grounded in the requirements to perform environmental assessments at the project or more strategic levels. The general objective of the cultural heritage survey is to record and document cultural heritage remains consisting of both tangible and intangible archaeological and historical artefacts, structures (including graves), settlements and oral traditions of cultural significance. As such the terms of reference of this survey are as follows:

- ➔ Identify and provide a detailed description of all artefacts, assemblages, settlements and structures of an archaeological or historical nature (cultural heritage sites) located on the study area,
- ➔ Estimate the level of significance/importance of these remains in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value,
- ➔ Assess any impact on the archaeological and historical remains within the area emanating from the development activities, and
- ➔ Propose recommendations to mitigate heritage resources where complete or partial conservation may not be possible and thereby limit or prevent any further impact.

### ***1.3 Cultural Heritage Resources Management Policy Objectives***

- i. To preserve representative samples of the National archaeological resources for the scientific and educational benefit of present and future generations;
- ii. To ensure that development proponents consider archaeological resource values and concerns during project planning; and
- iii. To ensure where decisions are made to develop land, the proponents adopt one of the following actions:
  - ➔ avoid archaeological sites wherever possible;
  - ➔ implement measures which will mitigate project impacts on archaeological sites; or
  - ➔ Compensate the local communities for unavoidable losses of significant archaeological value.

## 2.0 DESCRIPTION OF THE RECEIVING ENVIRONMENT

The proposed development site is located just under in Eldorado, which is about 25 kilometres from Durban CBD. Geographically, the larger region is made up of the Dwyka Formation, the Natal Group and the 'supracrustal gneisses' of the Mapumulo Metamorphic Suite which has been 'intruded by a series of plutonic rocks predominantly granitic in composition'. No iron ores have been reported either in these or the local Ecca sediments (Du Toit 1920).



Figure 1: Google earth imagery of the proposed development site (Site marked Red)

## 3.0 METHODOLOGY

### *3.1 Literature review*

The methodology used in this HIA is based on a comprehensive understanding of the current or baseline situation; the type, distribution and significance of heritage resources as revealed through desk-based study and additional data acquisition, such as archaeological investigations, built heritage surveys, and recording of crafts, skills and intangible heritage. This is systematically integrated using matrices with information on the nature and extent of the proposed engineering and other works to identify potential. The following tasks were also undertaken in relation to the cultural heritage and are described in this report:

The background information search of the proposed development area was conducted following the site maps from the client. Sources used in this study included:

- Published academic papers and HIA and PIA studies conducted in and around the region where the proposed infrastructure development will take place;
- Available archaeological literature on the study area was consulted;
- The SAHRIS website and the National Data Base were consulted to obtain background information on previous heritage surveys and assessments in the area; and other planning documents.
- Map Archives - Historical maps of the proposed area of development and its surrounds were assessed to aid information gathering of the proposed area of development and its surrounds.

### *3.2 Field Survey*

The field survey lasted for one day, it was conducted on the 07<sup>th</sup> of September 2023. It was conducted by an Archaeologist from Tsimba Archaeological Footprint through driving and walking. A ground survey, following standard and accepted archaeological procedures, was conducted. The survey also paid special attention to disturbed and exposed layers of soils such as eroded surfaces along the sugar cane fields and the canals. These areas are likely to be exposed or yield archaeological and other heritage resources that may be buried underneath the soil and be brought to the surface by animal and human activities including animal barrow pits and human excavated grounds.

### *3.3 Data Consolidation and Report Writing*

Data captured on the development area (during the field survey) by means of a desktop study and physical survey is used as a basis for this HIA. This data is also used to establish assessment for any possible current and future impacts within the development footprint. This includes the following:

- ✚ Assessment of the significance of the cultural resources in terms of their archaeological, built environment and landscape, historical, scientific, social, religious, aesthetic and tourism value;
- ✚ A description of possible impacts of the proposed development, especially during the construction phase, in accordance with the standards and conventions for the management of cultural environments;
- ✚ Proposal of suitable mitigation measures to minimize possible negative impacts on the cultural environment and resources that may result during construction;
- ✚ Review of applicable legislative requirements that is the NEMA (read together with the 2014 EIA Regulations) the NHRA of 1999 and the KwaZulu-Natal Heritage Act (Act no 4 of 2008).
- ✚ The consolidation of the data collected using the various sources as described above;
- ✚ Acknowledgement of impacts on heritage resources (such as unearthed graves) predicted to occur during construction; and
- ✚ Geological Information Systems mapping of known archaeological sites and maps in the region
- ✚ A discussion of the results of this study with conclusions and recommendations based on the available data and study findings.

## 4.0 LEGISLATIVE FRAMEWORK

### 4.1 National Heritage Resources Act (No 25 of 1999)

The appointment of Tsimba Archaeological Footprints (Pty) Ltd is in terms of the National Heritage Resources Act (NHRA), No. 25 of 1999 read together with the KwaZulu-Natal Heritage (Act No. 4 of 2008). The Basic Impact Assessment study includes a Heritage Impact Assessment specialist study, recommendations from the HIA report require Heritage Authority review and comments to be incorporated into the final EA or Record of Decision. This particular Development triggered the following Sections of the Heritage Legislation;

Section 38 (1) of the National Heritage Resources Act requires that where relevant, an Impact Assessment is undertaken in case where a listed activity is triggered. Such activities include:

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50 m in length; and
- (c) any development or other activity which will change the character of an area of land, or water –**
  - (i) exceeding 5 000 m<sup>2</sup> in extent;**
  - (ii) involving three or more existing erven or subdivisions thereof; or
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a Provincial Heritage Resources Authority;
- (d) the re-zoning of a site exceeding 10 000 m<sup>2</sup> in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a Provincial Heritage Resources Authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Section 3 of the National Heritage Resources Act (25 of 1999) lists a wide range of national resources protected under the act as they are deemed to be national estate. When conducting Heritage Impact Assessment (HIA) the following heritage resources must be identified:

- (a) Places, buildings structures and equipment of cultural significance;
- (b) Places to which oral traditions are attached or which are associated with living heritage;
- (c) Historical settlements and townscapes;
- (d) Landscapes and natural features of cultural significance
- (e) Geological sites of scientific or cultural importance’;



- (f) *Archaeological and paleontological sites;*
- (g) *Graves and burial grounds including-*
  - (i) *Ancestral graves;*
  - (ii) *Royal graves and graves of traditional leaders;*
  - (iii) *Graves of victims of conflict;*
  - (iv) *Graves of individuals designated by the Minister by notice in the Gazette*
  - (v) *Historical graves and cemeteries;*
  - (vi) *Other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);*
- (h) *Sites of significance relating to the history of slavery in South Africa;*
  - (i) *Moveable objects, including - objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;*
  - (ii) *Objects to which oral traditions are attached or which are associated with living heritage*
  - (iii) *Ethnographic art and objects;*
  - (iv) *Military objects;*
  - (v) *Objects of decorative or fine art; and*
  - (vi) *Objects of scientific or technological interest; and(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in Section 1 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)*

#### **4.2 The Burra Charter of 1964**

This study is further guided by the Burra Charter which offers a framework for heritage management in which multiple—sometimes conflicting—heritage and other values can be understood and explicitly addressed. The Burra Charter is based on the International Charter for the Conservation and Restoration of Monuments and Sites 1964 and was adopted by the Australian International Council on Monuments and Sites (ICOMOS) in 1979. The Burra Charter sets a standard of practice for those who provide advice, make decisions about or undertake works to places of cultural significance and is applicable to all places of cultural significance including natural, indigenous and historic places of cultural value. The Burra Charter provides for a flow chart that sets out the sequence underlining the process of heritage assessment (Figure 6).



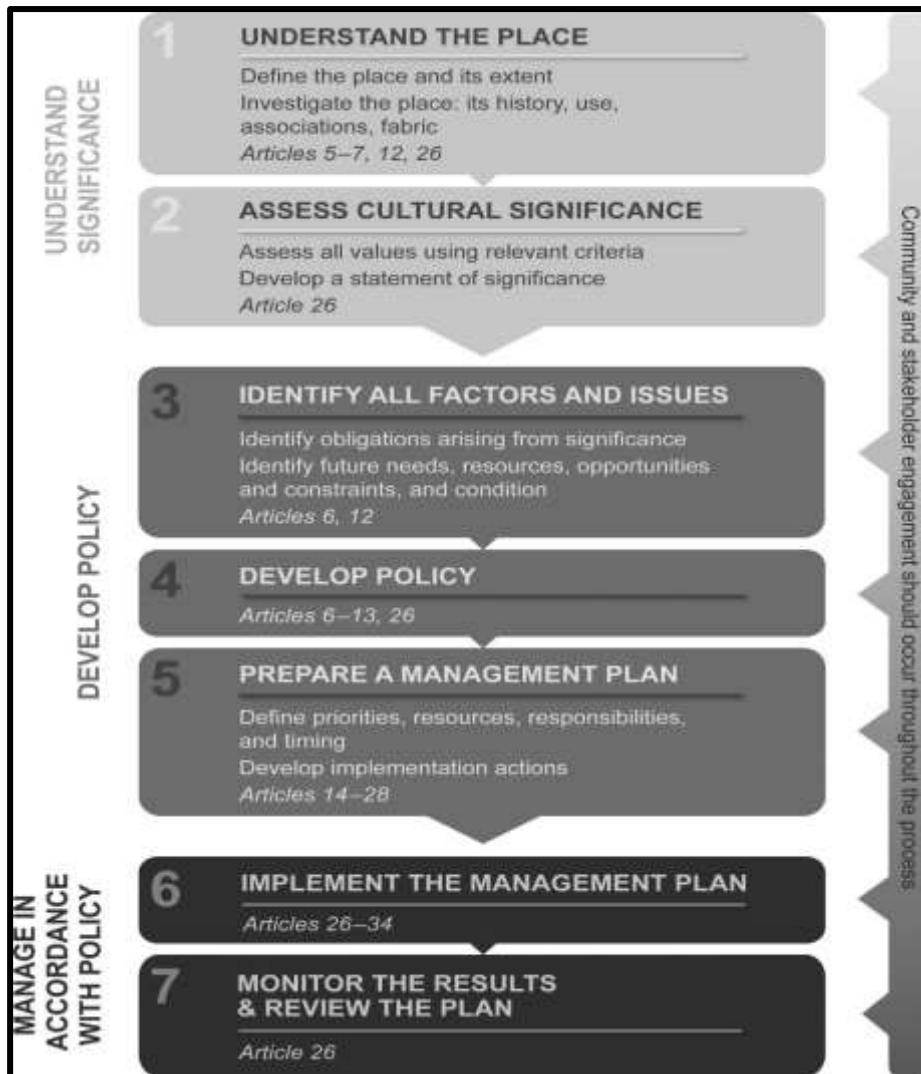


Figure 2: The Burra Charter process: steps in planning for and managing a place of cultural significance. (Reproduced from Australia ICOMOS 2013)

## 5.0 ARCHEOLOGICAL BACKGROUND OF THE STUDY AREA

The archaeological background indicates that the Stone Age dates back more than 2 million years representing a more explicit beginning of the cultural sequence divided into three epochs, the Early, Middle and Late Stone Ages. These early people made stone and bone implements. In South Africa more than 3 million years ago appeared proto-human hominids.

The Middle Stone Age is marked by the introduction of a new tool kit which included prepared cores, parallel-sided blades and triangular points hafted to make spears. By then humans had become skillful hunters, especially of large grazers such as wildebeest, hartebeest and eland.

The Later Stone Age is the third archaeological period in South Africa's history. It's linked to a plethora of microliths, which are very little stone relics. The Later Stone Age in Southern Africa is marked by the advent of rock art in the form of paintings and engravings. Given below is a table that indicates the different archaeological time frames and their descriptions;

ARCHAEOLOGICAL PERIOD	APPROXIMATE DATES <for less than and > for greater than
<b>Earlier Stone Age</b> Tools = Handaxes and cleavers	more than 2 million years ago to >200 000 years ago
<b>Middle Stone Age</b> Tools =Stone flakes such as scrapers, points and blades	<300 000 years ago to >20 000 years ago
<b>Later Stone Age (Includes gatherer rock art)</b> Tools = Wood, bone, hearths, ostrich eggshell beads and even bedding material	<40 000 years ago up to historical times in certain areas
<b>Early Iron Age</b>	c. AD 200 - c. AD 900
<b>Middle Iron Age</b>	c. AD 900 – c. AD 1300
<b>Late Iron Age</b> (Stonewalled sites)	c. AD 1300 - c. AD 1840 (c. AD 1640 - c. AD 1840)

**Table 1:Archaeological time frames and their descriptions**

The Amafa and KwaZulu-Natal Museum heritage site inventory, which include the evidence that is now accessible, show that the eThekweni region is home to a wide variety of archaeological sites from various

historical eras and cultural traditions. Sites from the Early Iron Age, Middle Iron Age, and Later Iron Age are included in this group, in addition to Early Stone Age, Middle Stone Age, and Later Stone Age ones. In the last two decades, excavations at two significant Middle Stone Age sites, namely Umlatuzana near Marianhill and Segubudu near Stanger, have produced outstanding archaeological stratigraphies linked to the time period connected with the ancestry of anatomically modern people.

Numerous sites have been found thanks to the efforts of amateur archaeologists, despite the fact that there has only been one comprehensive archaeological survey in the Durban region (Sievers 1983). These discoveries and the outcomes of the excavations close to Umhlanga Rocks (Davies 1971; Maggs 1980a); tales of sixteenth-century castaways from the 19th century suggest that Iron Age farmers were residing in the majority of the previous 1600 years in the area around Natal Bay. Early castaways from Europe mentioned forging and smelting in the Natal Bay region, and this is confirmed today. by the scrap metal industrial waste discovered on several locations in and around Durban. But no furnace has yet been discovered in the Durban region.

Thus, when Dr Tim Francis and Mr Alan Petersen of the Durban City Engineer's Department found what appeared to be the remains of an Iron Age furnace in Cato Manor, Durban, the Natal Museum Archaeology Department decided to excavate the feature. It was essentially a rescue excavation as the area is being developed as a new suburb.

## 6.0 HISTORICAL BACKGROUND

The area was occupied by the San people between 200 and 20 000 years ago. A first wave of Early Iron Age people moved into the area some 1 700 years ago, settling on sandy but humus-rich soils near the inland foot of the sand dunes, where they would have been guaranteed decent crops for the first year or two after they were removed. The Matola ceramic style was developed by these early agro-pastoralists. The Matola people also took advantage of the nearby seashore and forest's wild plant and animal life. The communities appear to have been small clusters of slash-and-burn farmers who moved into an area sparsely populated by Later Stone Age San hunter-gatherers. Another wave of Iron Age settlers arrived in the region around 1500 years ago. Their distinctive ceramics are categorized into the "Msuluzi" (AD 500–700), "Ndongondwane" (AD 700–800), and "Ntshekane" (AD 800-900) styles. The bulk of these locations are found inland in KwaZulu-Natal's main river basins below the 1000 m contour (Maggs 1989:31; Huffman 2007:325-462).

The very first Nguni-speaking agropastoralists to settle in KwaZulu-Natal left behind some of the shell middens found along the province's coastline. It has been determined that these sites date to around 1200 years ago. Additionally, a number of localities in the wider Durban area have been found to contain the remains of the close relatives of the current Zulu-speaking communities in the region. To the immediate south of the project area, there is a small group of 4 sites (Fig). While some of the stratigraphic strata may date back to Later Stone Age times, the majority of more recently discovered sites are found along the dune cordon and somewhat inland in the form of shell middens, which were mostly made by Iron Age shellfish gatherers (Anderson pers.com).

On Christmas Eve in the year 1497, the Portuguese navigator Vasco da Gama reached the present-day harbor of Durban and gave it the name "Terra do Natal," or Christmas Country. The Portuguese were not interested in establishing in a bay bordered by mangrove swamps and thick coastal forests because they had previously built up a good port at Maputo. Rarely did pirates or traders in ivory or slaves anchor there, and it wasn't until much later, in the year 1824, that a legitimate colony with the original name of "Port Natal" began. Under the direction of Henry Francis Fynn, traders from the Cape Colony founded it after reaching a legal deal with the powerful Zulu King Shaka that gave them permission to set up a trading post.

The settlement's early growth was extremely modest. The British government offered no assistance nor protection. The small harbor town's way of life was marked by ambiguity. Zulu attacks and battles occurred frequently; it is apparent that they considered Natal to be their land and only tolerated the white

settlers because the town served as a trading hub for them. Eventually the town developed and various colonial era and historical period sites occur in the greater Durban area. These date from about 1840 and are usually associated with the European as well as Indian settlers in the area. These are older than 60 years and are therefore also protected by heritage legislation (Derwent 2006).

**Table 2: Significance of Cultural Landscape Impacts**

Assessment of significance of the cultural landscape impacts			Landscape receptor sensitivity		
			High	Medium	Low
□ Red cells represent significant adverse impacts □ Yellow cells represent significant beneficial impacts □ Blue cells represent impacts that are not significant			Landscape with National heritage significance Status sites and cultural Landscapes with Provincial heritage Significance Status	Regional or Local Significance Heritage sites valued characteristics reasonably tolerant of changes of the type proposed.	A relatively unimportant cultural landscape with few features of value or interest, potentially tolerant of substantial change of the type proposed.
			<b>Major adverse</b> Significant adverse changes, over a significant area, to key characteristics or features or to the landscape's character or distinctiveness for more than 2 years	High adverse significance	High/Medium adverse significance
Magnitude of landscape impact	<b>Moderate adverse</b> Noticeable but not significant adverse changes for more than 2 years or significant adverse changes for more than 6 months but less than 2 years, over a significant area, to key characteristics or features or to the landscape's character or distinctiveness.	High/Medium adverse significance	Medium adverse significance	Low adverse significance	
	<b>Slight adverse</b> Noticeable adverse changes for less than 2 years, significant adverse changes for less than 6 months, or barely discernible adverse changes for any length of time.	Medium adverse significance	Low adverse significance	Neutral	
	<b>Neutral</b> Any change would be negligible, unnoticeable or there are no predicted changes.	Neutral	Neutral	Neutral	
	<b>Slight benefit</b> Noticeable beneficial changes for less than 2 years, significant beneficial changes for less than 6 months, or barely discernible beneficial changes for any length of time.	Medium beneficial significance	Low beneficial significance	Neutral	
	<b>Eldorado Cultural landscape</b>			Regional or Local Significance Heritage sites valued characteristics reasonably tolerant of changes of the type proposed.	
<b>Proposed development site cultural landscape</b>			A relatively unimportant cultural landscape with few features of value or interest, potentially tolerant of substantial change of the type proposed		

## 7.0 DISCUSSION OF FINDINGS

Tsimba Archaeological Footprints has conducted a number of projects around the proposed development area hence a survey methodology was established taking into account both the regional archaeological signature noted in previous research in the area and the given characteristics of the survey area. The surface was also inspected for possible Stone Age scatters as well as exposed Iron Age implements while oral traditions played a very pivotal role in accessing information regarding the location of graves and burial sites. The site manager was very helpful and we would like to express our sincere gratitude to him. The following observations were made during the field survey:

- 1) The proposed development site is a private farm that was previously used for breeding horses.
- 2) The farm exhibits signs of having been in existence for a significant period.
- 3) Rubble from what appeared to have been the "Servants Quarters" was identified on the site. These remnants indicated the presence of human habitation in the past.
- 4) The site assessment involved a thorough examination of accessible areas with built structures and immediate surroundings.
- 5) While the site contains remnants of what used to be the "Servants Quarters," these rubbles are not of any significant historical value. No evidence of Stone Age or Iron Age artifacts, burial grounds, graves, unmarked graves, public monuments, or memorials were identified during the assessment.
- 6) The absence of any Stone Age or Iron Age artifacts, burial grounds, graves, unmarked graves, public monuments, or memorials indicates that the site is not associated with any historical events.
- 7) The site did not yield any artifacts or features of archaeological significance.

Given below is a pictographic presentation of the proposed development site;





**Figure 3: View of the rubbles from the old servant's quarters**



**Figure 4: View of the farm grounds**



**Figure 5: View of the entrance to the horse stable**



**Figure 6: A closer view of the horse stables on the farm**





Figure 7: View of the current farm manager's residence



Figure 8: View of another property on site

## 8.0 CONCLUSIONS

No mitigation is required since no significant cultural heritage resources will be affected by the proposed development. The study, did not find any permanent barrier to the proposed development. The following recommendations are based on the results of the A/HIA research, cultural heritage background review, site inspection and assessment of significance. Based on the findings of this study, the proposed development is feasible from an archaeological perspective. The project may be approved subject to the recommendations given below.

## 9.0 RECOMMENDATIONS

- (i) A chance Find Protocol should be added to the EMPr if any heritage resources (listed in iv) are found by the contractor, environmental officer, or other responsible person once excavations have commenced then they should be reported to Amafa research and Institute. The structures may be demolished as they are extremely dilapidated and are no longer structurally sound.
- (ii) In the event that any cultural heritage resources are discovered operations exposing archaeological and historical residues, including modern graves, should cease immediately pending an evaluation by the heritage authorities.
- (iii) The potential impact of the development on archaeological resources is **LOW**, therefore a field survey or further mitigation or conservation measures are necessary if cultural heritage resources are found (according to SAHRA protocol).
- (iv) A Chance Finds Procedure should be implemented, and a qualified archaeologist must be called on site if cultural heritage resources are found during construction. The following indicators of unmarked sub-surface sites could be encountered;
  - Bone concentrations, either animal or human
  - Ceramic fragments such as pottery shards either historic or pre-contact
  - Stone concentrations of any formal nature

**Reasoned Opinion:** This project directly improves the lively hoods of South Africans, and it is the reasoned opinion of the author of this report, that the proposed project is acceptable. Tsimba archaeological Footprints would therefore like to request Amafa Research and Institute to exercise their discretion and offer a conditional approval for the project.

## 10.0 REFERENCES

Beaumont, P. B. & Vogel, J. C. 1972. On a new radiocarbon chronology for Africa south of the equator. African Studies 31: 65-89.

Cable, J. H. C., Scott, K. & Carter, P. L. 1980. Excavations at Good Hope Shelter, Underberg District, Natal. Annals of the Natal Museum 24: 1-34.

Du Toit 1920. Iron smelting furnace dated  $630 \pm 40$  years A.D. in the Ndumu Game Reserve.

Lammergeyer 12: 37-40.

Farnden, T. H. G. & Gibbs, W. D. 1962. A Middle Stone Age site near Pietermaritzburg, Natal. South African Archaeological Bulletin 17: 30-31.

Goodwin, A. J. H. 1943. Edged discs and armrings. South African Journal of Science 40: 296-302.

## APPENDIX A: DEFINITION OF TERMS ADOPTED IN THIS HIA

- The terminology adopted in this document is mainly influenced by the NHRA of South Africa (1999) and the Burra Charter (1979).

**Adaptation:** Changes made to a place so that it can have different but reconcilable uses.

**Artefact:** Cultural object (made by humans).

**Buffer Zone:** Means an area surrounding a cultural heritage which has restrictions placed on its use or where collaborative projects and programs are undertaken to afford additional protection to the site.

**Co-management:** Managing in such a way as to consider the needs and desires of stakeholders, neighbours and partners, and incorporating these into decision making through, amongst others, the promulgation of a local board.

**Conservation:** In relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects to safeguard their cultural significance as defined. These processes include, but are not necessarily restricted to preservation, restoration, reconstruction and adaptation.

**Contextual Paradigm:** A scientific approach which places importance on the total context as catalyst for cultural change and which specifically studies the symbolic role of the individual and immediate historical context.

**Cultural Resource:** Any place or object of cultural significance

**Cultural Significance:** Means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance of a place or object for past, present and future generations.

**Feature:** A coincidental find of movable cultural objects.

**Grading:** The South African heritage resource management system is based on a grading system, which provides for assigning the appropriate level of management responsibility to a heritage resource.

**Heritage Resources Management:** The utilization of management techniques to protect and develop cultural resources so that these become long term cultural heritage which are of value to the general public.

**Heritage Resources Management Paradigm:** A scientific approach based on the Contextual paradigm but placing the emphasis on the cultural importance of archaeological (and historical) sites for the community.

**Heritage Site Management:** The control of the elements that make up the physical and social environment of a site, its physical condition, land use, human visitors, interpretation etc. Management may be aimed at preservation or, if necessary, at minimizing damage or destruction or at presentation of the site to the public.

**Historic:** Means significant in history, belonging to the past; of what is important or famous in the past.

**Historical:** Means belonging to the past or relating to the study of history.

**Maintenance:** Means the continuous protective care of the fabric, contents and setting of a place. It does not involve physical alteration.

**Object:** Artefact (cultural object)

**Paradigm:** Theories, laws, models, analogies, metaphors and the epistemological and methodological values used by researchers to solve a scientific problem.

**Preservation:** Refers to protecting and maintaining the fabric of a place in its existing state and retarding deterioration or change and may include stabilization where necessary. Preservation is appropriate where the existing state of the fabric itself constitutes evidence of specific cultural significance, or where insufficient evidence is available to allow other conservation processes to be carried out.

**Protection:** With reference to cultural heritage resources this includes the conservation, maintenance, preservation and sustainable utilization of places or objects in order to maintain the cultural significance thereof.

**Place:** Means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.

**Reconstruction:** To bring a place or object as close as possible to a specific known state by using old and new materials.

**Rehabilitation:** The repairing and/ or changing of a structure without necessarily taking the historical correctness thereof into account.

**Restoration:** To bring a place or object back as close as possible to a known state, without using any new materials.

**Site:** A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artefacts, found on a single location.

**Sustainable:** Means the use of such resource in a way and at a rate that would not lead to its long-term decline, would not decrease its historical integrity or cultural significance and would ensure its continued use to meet the needs and aspirations of present and future generations of people