



MATAKOMA - ARM
HERITAGE CONTRACTS UNIT

UNIVERSITY OF THE WITWATERSRAND
SCHOOL OF GEOGRAPHY, ARCHAEOLOGY AND ENVIRONMENTAL
STUDIES
PRIVATE BAG 3, P O WITS 2050

TEL: +27 82 851 3575 / +27 82 373 8491,
EMAIL: INFO@MATAKOMA.CO.ZA

LOKISA ENVIRONMENTAL CONSULTING

Heritage Scoping Report

**Proposed new
residential
development on
portions 429,426
&561 of the farm
Derdepoort 326
JR, Pretoria,
Gauteng
Version 1.0**

28 May 2007

ACKNOWLEDGEMENT OF RECEIPT

CLIENT:

Lokisa Environmental Consulting

CONTACT PERSON:

Anè Agenbacht. Lokisa Environmental Consulting

P.O.BOX 219 GROENKLOOF 0027

TEL (012) 346 7655 / 8324 FAX (012) 346 6074,

SIGNATURE:

LEADING CONSULTANT:

MATAKOMA-ARM Heritage Contracts Unit

CONTACT PERSON:

Jaco van der Walt

SIGNATURE:

Copyright

Copyright in all documents, drawings and records whether manually or electronically produced, which form part of the submission and any subsequent report or project document shall vest in Matakoma Heritage Consultants (Pty) Ltd. None of the documents, drawings or records may be used or applied in any manner, nor may they be reproduced or transmitted in any form or by any means whatsoever for or to any other person, without the prior written consent of Matakoma Heritage Consultants (Pty) Ltd.

The Client, on acceptance of any submission by Matakoma Heritage Consultants (Pty) Ltd and on condition that the Client pays to Matakoma Heritage Consultants (Pty) Ltd the full price for the work as agreed, shall be entitled to use for its own benefit and for the specified project only:

- The results of the project;
- The technology described in any report
- Recommendations delivered to the Client.

EXECUTIVE SUMMARY

As we know from legislation the surveying, capturing and management of heritage resources is an integral part of the greater management plan laid down for any major development or historic existing operation. With the proclamation of the National Heritage Resources Act 1999 (Act 25 of 1999) this process has been laid down clearly. This legislation aims to underpin the existing legislation, which only addresses this issue at a glance, and gives guidance to developers and existing industries to the management of their Heritage Resources.

The importance of working with and following the guidelines laid down by the South African Heritage Resources Agency cannot be overemphasised. This document forms part of the Environmental Impact Assessment for the proposed new residential development on portion 429, 426 & 561 of the farm Derdepoort 326 JR, Pretoria Gauteng.

The following outline the findings of the report:

One highly significant Early Iron Age Site was found inside the study area **MHC-001**. The ceramics found on site resemble Mzonjani facies ceramics and date to the period around 600 AD. The finds here also correlate to another Early Iron Age Site with rich deposits found approximately 300 meters from **MHC001** just outside the study area. This site was found in the 1990 and is referred to as the Derdepoort site. Preliminary findings from the Derdepoort site was subsequently published in the South African Journal of Ethnology, 1997; Derdepoort: 'n Vroeë Ystertydperkterrein noord van die Magaliesberg. In this article the authors stress the importance of the site and the fact that rich deposits containing ash, bone, shell, ceramics and soap stone bowls occur more than a meter from the surface in stratified layers. Several mitigation measures are recommended for site **MHC-001** in Section 9 of this report.

General

If during construction any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.

CONTENTS

EXECUTIVE SUMMARY

1. INTRODUCTION.....	4
1. INTRODUCTION.....	4
2. APPROACH AND METHODOLOGY.....	4
2.1 PHYSICAL SURVEYING.....	5
3. WORKING WITH LEGISLATION.....	5
4. ASSESSMENT CRITERIA	6
4.1 IMPACT	7
4.1.1 Nature and existing mitigation	7
4.2 EVALUATION	8
4.2.1 Site Significance	8
4.2.2 Certainty	8
4.2.3 Duration	9
5. HISTORICAL BACKGROUND OF AREA	10
6. SITES OF SIGNIFICANCE.....	12
6.1 2528 CB-MHC001	12
7. ASSUMPTIONS AND LIMITATIONS.....	16
8. LEGAL AND POLICY REQUIREMENTS.....	16
9. ASSESSMENT AND RECOMMENDATIONS	18
10. LIST OF PREPARES	21
11. REFERENCES	21
11.1 ARCHAEOLOGICAL PAPERS.....	21
11.2 CULTURAL HERITAGE PAPERS.....	21

ANNEXURE

Annexure A – Locality Map

FIGURES

• <i>Figure 1: Dam with associated water tank.....</i>	12
• <i>Figure 2: Building Rubble found on site.....</i>	13
• <i>Figure 3: Bulldozed area where EIA ceramics was found.....</i>	13
• <i>Figure 4: Ceramics and tuyre fragment</i>	14

1. INTRODUCTION

Matakoma-ARM Heritage Contracts Unit was contracted by Lokisa Environmental Consulting to conduct a Heritage Scoping Assessment for the proposed new residential development on portion 429, 426 & 561 of the farm Derdepoort 326 JR, Gauteng.

The aim of the study is to identify all heritage sites, document, and assess their importance within Local, Provincial and national context. From this we aim to assist the developer in managing the discovered heritage resources in a responsible manner, in order to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

The report outlines the approach and methodology utilised before and during the survey, which includes in Phase 1: Information collection from various sources and public consultations; Phase 2: Physical surveying of the area on foot and by vehicle; and Phase 3: Reporting the outcome of the study.

During the survey, one archaeological site of high significance was identified. General site conditions and features on site were recorded by means of photos, GPS location, and description. Possible impacts were identified and mitigation measures are proposed in the following report.

This report must also be submitted to SAHRA provincial office for scrutiny.

2. APPROACH AND METHODOLOGY

The aim of the study is to extensively cover all data available to compile a background history of the study area; this was accomplished by means of the following phases.

2.1 PHYSICAL SURVEYING

Due to the nature of cultural remains, the majority that occur below surface, a physical walk through of the study area was conducted. MATAKOMA-ARM was appointed to conduct a survey of the proposed development area together with access routes and entrances to the proposed residential development. The total area of impact comprised an area of approximately 7ha in total. The study area was surveyed over one day, by means of vehicle and extensive surveys on foot by MATAKOMA-ARM.

Aerial photographs and 1:50 000 maps of the area were consulted and literature of the area were studied before undertaking the survey. The purpose of this was to identify topographical areas of possible historic and pre-historic activity. All sites discovered both inside and bordering the proposed development area was plotted on 1:50 000 maps and their GPS co-ordinates noted. 35mm photographs on digital film were taken at all the sites.

3. WORKING WITH LEGISLATION

It is very important that cultural resources be evaluated according to the National Heritage Recourse Act. In accordance with the Act, we have found the following:

- These sites are classified as important based on evaluation of the National Heritage Recourses Act 1999 (Act No 25 of 1999) section 3 (3).

A place or object is to be considered part of the national estate if it has cultural significance or other special value because of-

- o(a) its importance in the community, or pattern of South Africa's history;
- o(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- o(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;

- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
 - (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
 - (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
 - (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
 - (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
 - (i) sites of significance relating to the history of slavery in South Africa.
- (Refer to Section 9 of this document for assessment)
 - These sites should be managed through using the National Heritage Recourses Act 1999 (Act No 25 of 1999) sections 4,5 and 6 and sections 39-47.
 - Please refer to Section 9 for Management Guidelines.

4. ASSESSMENT CRITERIA

This chapter describes the evaluation criteria used for the sites listed below.

The significance of archaeological sites was based on four main criteria:

- **site integrity** (i.e. primary vs. secondary context),
- **amount of deposit, range of features** (e.g., stonewalling, stone tools and enclosures),
- **uniqueness** and
- **potential** to answer present research questions.

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be expressed 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 of the site; and
- D - Preserve site

Impacts on these sites by the development will be evaluated as follows

4.1 IMPACT

The potential environmental impacts that may result from the proposed development activities.

4.1.1 Nature and existing mitigation

Natural conditions and conditions inherent in the project design that alleviate (control, moderate, curb) impacts. All management actions, which are presently implemented, are considered part of the project design and therefore mitigate against impacts.

4.2 EVALUATION

4.2.1 Site Significance

Site significance classification standards prescribed 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 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)	-	High / Medium Significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium Significance	Recording before destruction
Generally Protected C (GP.C)	-	Low Significance	Destruction

4.2.2 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 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 likelihood of an impact occurring.

4.2.3 Duration

SHORT TERM: 0 to 5 years

MEDIUM: 6 to 20 years

LONG TERM: more than 20 years

DEMOLISHED: site will be demolished or is already demolished

Example

Evaluation

IMPACT	SIGNIFICANCE	CERTAINTY	DURATION	MITIGATION
Negative	high negative	definite	long	C

5. HISTORICAL BACKGROUND OF AREA

As heritage surveys deal with the locating of heritage resources in a prescribed cartographic landscape, the study of archival and historical data, and especially cartographic material, can represent a very valuable supporting tool in finding and identifying such heritage resources.

The historical background and timeframe can be divided into the Stone Age, Iron Age and Historical timeframe. These can be divided as follows:

Stone Age

The Stone Age is divided in Early; Middle and Late Stone Age and refers to the earliest people of South Africa who mainly relied on stone for their tools.

Early Stone Age: The period from \pm 2.5 million yrs - \pm 250 000 yrs ago. Acheulean stone tools are dominant.

Middle Stone Age: Various lithic industries in SA dating from \pm 250 000 yrs – 22 000 yrs before present.

Late Stone Age: The period from \pm 22 000-yrs before present to the period of contact with either Iron Age farmers or European colonists.

Iron Age

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic periods. Similar to the Stone Age it can be divided into three periods:

The Early Iron Age: Most of the first millennium AD.

The Middle Iron Age: 10th to 13th centuries AD

The Late Iron Age: 14th century to colonial period.

Historic Timeframe

The historic timeframe intermingles with the later parts of the Stone and Iron Age, and can loosely be regarded as times when written and oral recounts of incidents became available.

Archaeological Research in the area

A Highly significant Early Iron Age site with pottery dating from 300-600 AD has been discovered during building excavations on a small holding, not more than 300 meters from the presents study area during the 1990's. The preliminary findings and interpretation was published in the South African Journal of Ethnology., 1997, 20(1) by Nienaber, Prinsloo and Pistorius.

6. SITES OF SIGNIFICANCE

6.1 2528 CB-MHC001 S 25°41.199 E 28°17.733

6.1.1 The identification and mapping of all significant heritage resources in the area.

The larger part of the study area is void of any significant finds on the surface. The area is relatively disturbed as regular dumping of refuse and building material occur here. Two modern structures occur on site and are brick dams used for agricultural activities in the past. However a small area has been bulldozed on the property and it is here that Early Iron Age ceramics and signs of Iron smelting in the form of slag and broken *tuyeres* have been exposed.



•Figure 1: Dam with associated water tank



• *Figure 2: Building Rubble found on site*



• *Figure 3: Bulldozed area where EIA ceramics was found*



• Figure 4: Ceramics and tuyre fragment

6.1.2 An assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 3(3) of the National Heritage Recourses Act 1999 (Act No 25 of 1999).

The site is of high significance and is graded Grade GP.A

This site is classified based on evaluation of the National Heritage Recourses Act 1999 (Act No 25 of 1999)

- Section 3(3)(c) - its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- Section 3(3) (d) – its importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects;
- Section 3(3)(f) - its importance in demonstrating a high degree of creative or technical achievement at a particular period.

The impact on the site is seen as moderate.

Impact Evaluation

Impact	Impact Significance	Heritage Significance	Certainty	Duration	Mitigation
Negative	High significance	Grade GP.A	Possible	Long term	C

7. ASSUMPTIONS AND LIMITATIONS

Due to the nature of cultural remains that occur, in most cases, below surface, the possibility remains that some cultural remains may not have been discovered during the survey. These EIA finds occur between one and half meters from the surface and it is very probable that more sites can be found across the study area. Although MATAKOMA-ARM surveyed the area as thorough as possible, it is incumbent upon the developer to inform the relevant heritage agency should further cultural remains be unearthed or laid open during the process of development.

8. LEGAL AND POLICY REQUIREMENTS

In areas where there has not yet been a systematic survey to identify conservation worthy places, a permit is required to alter or demolish any structure older than 60 years. This will apply until a survey has been done and identified heritage resources are formally protected.

Archaeological and palaeontological sites, materials, and meteorites are the source of our understanding of the evolution of the earth, life on earth and the history of people. In the new legislation, permits are required to damage, destroy, alter, or disturb them. People who already possess material are required to register it.

The management of heritage resources are integrated with environmental resources and this means that before development takes place heritage resources are assessed and, if necessary, rescued.

In addition to the formal protection of culturally significant graves, all graves, which are older than 60 years and are not in a cemetery (such as ancestral graves in rural areas), are protected. The legislation protects the interests of communities that have interest in the graves: they may be consulted before any disturbance takes place.

The graves of victims of conflict and those associated with the liberation struggle will be identified, cared for, protected and memorials erected in their honour.

Anyone who intends to undertake a development must notify the heritage resource authority and if there is reason to believe that heritage resources will be affected, an impact assessment report must be compiled at the developer's cost. Thus developers will be able to proceed without uncertainty about whether work will have to be stopped if a heritage resource is discovered.

According to the National Heritage Act (Act 25 of 1999 section 32) it is stated that:

An object or collection of objects, or a type of object or a list of objects, whether specific or generic, that is part of the national estate and the export of which SAHRA deems it necessary to control, may be declared a heritage object, including –

- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- visual art objects;
- military objects;
- numismatic objects;
- objects of cultural and historical significance;
- objects to which oral traditions are attached and which are associated with living heritage;
- objects of scientific or technological interest;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996), or in a provincial law pertaining to records or archives; and
- any other prescribed category.

Under the National Heritage Resources Act (Act No. 25 of 1999), provisions are made that deal with, and offer protection, to all historic and pre-historic cultural remains, including graves and human remains.

- Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the National Department of Health

and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning, or in some cases the MEC for Housing and Welfare. Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

- Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the South African Heritage Resource Agency (SAHRA). The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation. If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws set by the cemetery authority must be adhered to.

9. ASSESSMENT AND RECOMMENDATIONS

*A locality map is provided in **Annexure A***

One highly significant Early Iron Age Site was found inside the study area **MHC-001**. The ceramics found on site resemble Mzonjani facies ceramics and date to the period around 600 AD. The finds here also correlate to another Early Iron Age Site with rich deposits found approximately 300 meters from **MHC001**. Preliminary findings from the Derdepoort site was

subsequently published in the South African Journal of Ethnology, 1997; Derdepoort: 'n Vroeë Ystertydperkterrein noord van die Magaliesberg. In this article the authors stress the importance of the site and the fact that rich deposits containing ash, bone, shell, ceramics and soap stone bowls occur more than a meter from the surface in stratified layers. There for it is possible that more sites than **MHC-001** can occur in the study area since these settlements are not isolated occurrences.

The published Derdepoort site was not excavated according to scientific methods; the builders left the Iron Age remains on the surface and these were collected by Nienaber *et al* for interpretation. The site still yielded rich finds and therefore phase two mitigation at site **MHC-001** is imperative. *In Situ* Early Iron Age sites have enormous research potential and are the focus of several research questions by academics.

It is therefore recommended that a full phase two mitigation including the following be conducted:

- To establish the extend of the site and assess the integrity of the deposit through shovel test pits
- To excavate and document features and cultural deposits
- To obtain a representative ceramic sample for analysis
- To obtain material for dating
- To obtain sufficient material culture for future research
- Watching brief be agreed upon to monitor the site during construction. If further finds are made during construction these finds will then need to be assessed and possibly mitigated
- All of the activities must be aimed at documenting, recovering and recording enough data for future research before a destruction permit is applied for this site

If these recommendations are adhered by there is from a Heritage point of view no reason why the development can not commence.

General

If during construction any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.

10. LIST OF PREPARES

Jaco van der Walt, BA (Hon) Archaeology (Wits)

11. REFERENCES

11.1 ARCHAEOLOGICAL PAPERS

Klein, R.G. 1984. Southern African Prehistory and Paleoenvironments. A.A. Balkema.

Nienaber, W. C. & Prinsloo, H.P. & Pistorius, J.C.C. 1997. *Derdepoort: n Vroe Ystertydperkterrein noord van die Magalies berg*. South African Journal of Ethnology, 1997, 20(1)

Willemse, J. 2002. Bewaar gister vir die nageslag. Rapport, 16 June 2002. S.A.

11.2 CULTURAL HERITAGE PAPERS

Australia ICOMOS. The Burra Charter (The Australian ICOMOS charter for places of cultural significance). 2002.

Standard and Guidance for Archaeological Desk-Based Assessment. 1994.

International Council of Monuments & Site Documents. Conventions, Charters and Guidelines. 2002.

Documents on Cultural Heritage Protection. 2002.

International Council of Monuments & Site Documents. Guidelines to the Burra Charter: Conservation Policy. 1985.

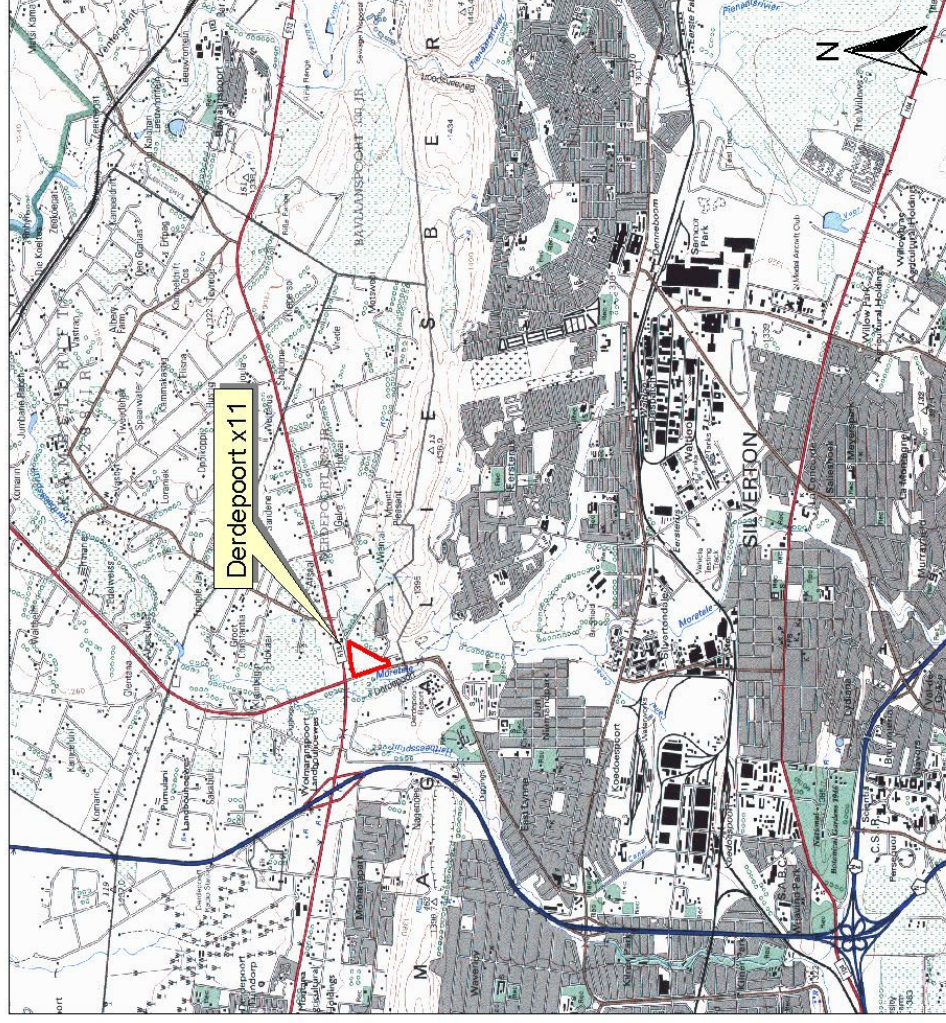
International Council of Monuments & Site Documents. Guidelines to the Burra Charter: Cultural Significance. 1984.

Australian Historic Themes. A Framework for use in Heritage Assessment and Management. Australian Heritage Commission. 2001.

ANNEXURE A:

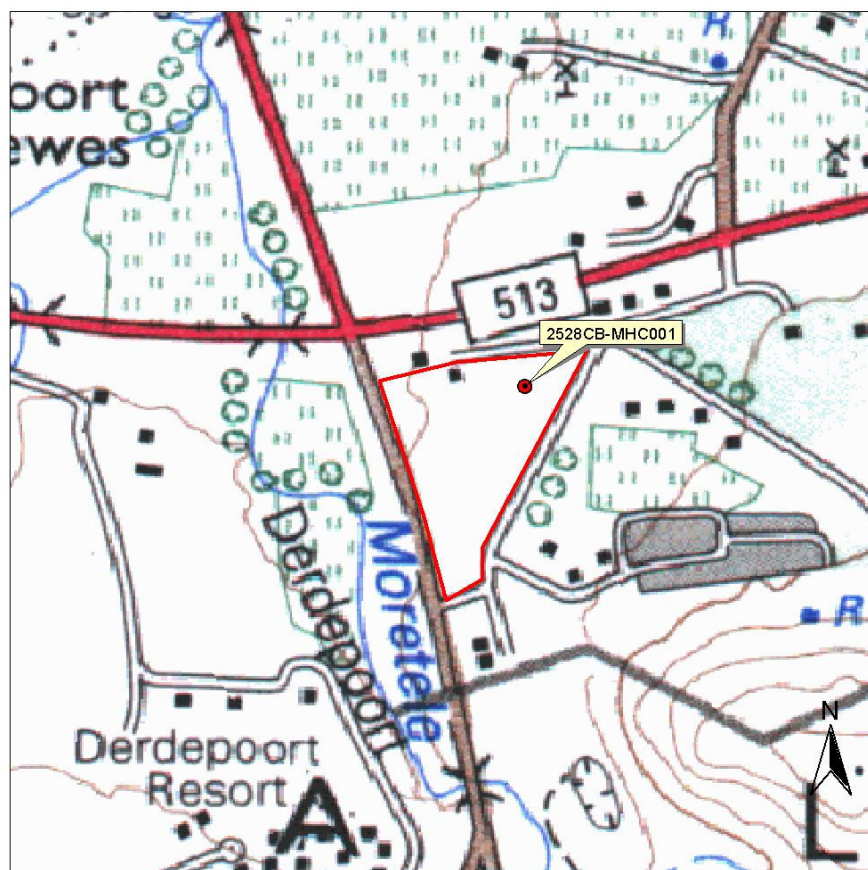
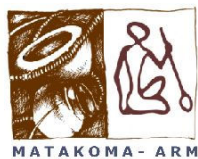
Locality Map

**Derdepoort x 11
Portion 426, 429 and 561
of the farm Derdepoort 326 JR
Locality Map**



2000 0 2000 4000 Meters

**Derdepoort x 11
Portion 426, 429 and 561
of the farm Derdpoort 326 JR
Site Map**



300 0 300 600 Meters