

SPECIALIST REPORT: 2
**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR A
TOWNSHIP DEVELOPMENT
PORTION 36 (a subdivision & consolidation of portions of portions 1, 4, & 5) OF
THE FARM VLAKLAAGTE 221JR, VLAKLAAGTE, MPUMALANGA PROVINCE**

**REPORT COMPILED FOR
ENPACT ENVIRONMENTAL CONSULTANTS cc
Mr. H. Kammeyer
205 Metropolitan House, 15 Russell street, Nelspruit, 1200
Cell: 0828017803 / Office: 013 7526766
e-mail: heinrich@enpact.co.za**

MAY 2014

**ADANSONIA HERITAGE CONSULTANTS
ASSOCIATION OF SOUTHERN AFRICAN PROFESSIONAL ARCHAEOLOGISTS
C. VAN WYK ROWE
e-mail: christinevwr@gmail.com
Tel: 0828719553 / Fax: 0867151639
P.O. BOX 75, PILGRIM'S REST, 1290**

EXECUTIVE SUMMARY

A Phase 1 Heritage Impact Assessment (HIA) regarding archaeological and other cultural heritage resources was conducted on a 65ha section on *portion 36 (a subdivision and consolidation of portions of portions 1, 4 & 5) of the farm Vlaklaagte 221JR*, Thembisile Hani Local Municipality, which will be developed as a residential township. This area is directly adjacent to a 70ha section on *portion 1, 4, & 5 of the farm Vlaklaagte 221JR*, for which a Phase 1 HIA was conducted in February 2014 (see report for Afrika Enviro and Biology in April 2014).

The study area is situated on topographical map 1:50 000, 2528BD, which is in the Mpumalanga Province. This area falls under the jurisdiction of the Thembisile Hani Local Municipality and the Nkangala District Municipality.

The National Heritage Resources Act, no 25 (1999)(NHRA), protects all heritage resources, which are classified as national estate. The NHRA stipulates that any person who intends to undertake a development, is subjected to the provisions of the Act.

National and Provincial governments (the current owners of the site), are requesting a proposed township establishment, to provide more low cost housing. The proposed site is approximately 65 ha in size.

The area for the proposed township development (65 ha), is currently vacant, and situated mainly in natural rocky terrain which slopes towards and overlooks the Klipspruit river in the west. Visibility in some areas was restricted with small to medium sized shrubs. The section towards the north-east which borders the Klipspruit river, was more even and flat, and was historically used for agricultural purposes on fertile land and grazing on areas of low potential. It is currently zoned as agricultural. Accessibility and visibility in this section was excellent.

The proposed development is adjacent to numerous formal and informal settlements in all compass directions (Tweefontein, Phumula and Vlaklaagte). The local people currently use the area mainly for grazing their livestock (cattle) and the collecting of medicinal plants. Mr Isaac Mahlangu and Marcos Mahlangu who were grazing their cattle in the study area, have lived there since 1984. They provided additional information during the survey and confirmed that there were no graves, cultural heritage features or settlements on the study area. The survey revealed no archaeological or historical remains in the study area.

Based on the survey and the findings in this report, Adansonia Heritage Consultants states that there are no compelling reasons which may prevent the proposed development to continue.

Disclaimer: *Although all possible care is taken to identify all sites of cultural significance during the investigation, it is possible that hidden or sub-surface sites could be overlooked during the study, Christine Rowe trading as Adansonia Heritage Consultants will not be held liable for such oversights or for costs incurred by the client as a result.*

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 Christine Rowe trading as Adansonia Heritage Consultants. 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 the above. The Client, on acceptance of any submission by Christine Rowe, trading as Adansonia Heritage Consultants and on condition that the Client pays the full price for the work as agreed, shall be entitled to use for its own benefit and for the specified project only:*

- 1) The results of the project;*
- 2) The technology described in any report;*
- 3) Recommendations delivered to the Client.*

May 2014

Christine Van Wyk Rowe

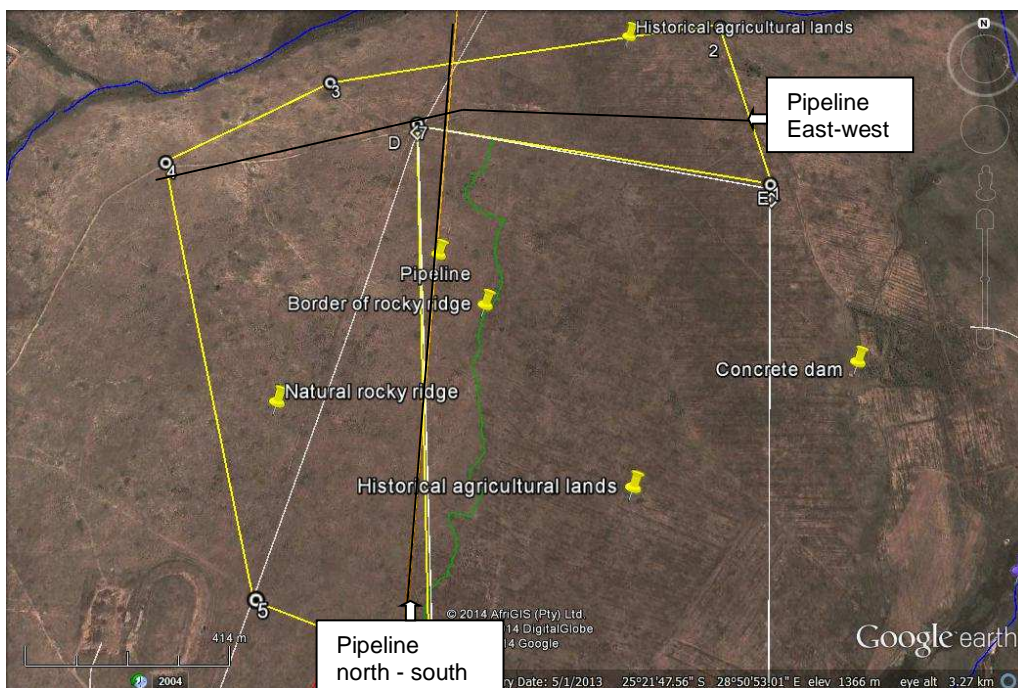
CONTENTS

EXECUTIVE SUMMARY	2
DISCLAIMER	3
A. BACKGROUND INFORMATION TO THE PROJECT	5
• Terms of Reference	6
• Legal requirements	7
B. BACKGROUND TO ARCHAEOLOGY AND HISTORY OF THE STUDY AREA	9
• Literature review, museum databases & previous relevant impact assessments	9
C. DESCRIPTION OF AREA TO BE AFFECTED BY DEVELOPMENT	13
D. LOCALITY	13
• Description of methodology	13
• GPS Co-ordinates of perimeters	15
E. DESCRIPTION OF IDENTIFIED SITES	16
F. DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT	17
• Summarised identification & cultural significance assessment of affected Heritage resources: General issues of site and context	17
• Summarised recommended impact management interventions	
G. STATEMENT OF SIGNIFICANCE & EVALUATION OF HERITAGE RESOURCES IN THE STUDY AREA	23
• Evaluation methods	23
• NHRA	23
• The significance and evaluation of the archaeological and cultural heritage features in the study area	24
• Field rating	24
H. RECOMMENDATION	24
I. CONCLUSION	25
J. REFERENCES	26
Map 1: Google image showing study area with pipelines	5
Map 2: Van Warmelo, 1935	12
Appendix 1: Photographs of the study area (Fig. 1 – 15)	27
Appendix 2: Topographical map: 2528 BD	35
Appendix 3: Google Earth image: The study area in relation to the wider area	36
Appendix 4: Google Earth image: Perimeters of the study area	37
Appendix 5: Layout plan of the proposed Vlaklaagte 36, development	38
Appendix 6: Google image of tracks and paths	39

**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR A
TOWNSHIP DEVELOPMENT, PORTION 36 (a subdivision & consolidation of portions of
portions 1, 4, & 5) OF THE FARM VLAKLAAGTE 221JR, VLAKLAAGTE, MPUMALANGA
PROVINCE**

A. BACKGROUND INFORMATION TO THE PROJECT

The landowners (National government, Department of Rural development and Land Reform – portion 1 & 4; and Provincial government, Department of Agriculture and Land administration - portion 5; of *the farm Vlaklaagte 221JR*), is requesting the township establishment for a residential development with roads and municipal services (**Appendix 5**). This section is approximately 65 ha in extent. The central section of the site is located in rocky terrain which is sloping and overlooks the Klipspruit river in the west and borders the Klipspruit river in the north of the study area. A pipeline is on the eastern border of the central section, running south to north (**Map 1, Fig. 4**). The north-eastern section is mainly even flat grassland. Fertile areas in the north-eastern section were historically used for agricultural purposes and grazing on areas of low potential. A pipeline is running from east to west on the southern border of this section (**Map 1, Appendix 4, Fig. 5 & 6**). Numerous formal and informal settlements are located in all compass directions in the larger study area such as Vlaklaagte, Tweefontein and Phumula (**Appendix 3**). A large formal cemetery is situated to the south of the study area (**Fig. 15**).



Map 1: Google image of study area (yellow line) showing pipelines.

Adansonia Heritage Consultants were appointed by Enpact Environmental Consultants cc to conduct a Phase 1 heritage impact assessment (HIA) on archaeological and other heritage resources of the study area.

A phase 1 HIA was conducted in February (report April 2014, Afrika Enviro & Biology) for a 70ha section on *portion 1, 4, & 5 of the farm Vlaklaagte 221JR*, directly adjacent to the current study area, and information from this report is used in the current report. A literature study, relevant to the study area was done, to determine that no archaeological or heritage resources will be impacted upon (**Appendix 2**: Topographical Map: 2528 BD).

The aims for this report are to source all relevant information on archaeological and heritage resources in the study area, and to advise the client on sensitive heritage features as well as where it is viable for the development to take place in terms of the specifications as set out in the National Heritage Resources Act no., 25 of 1999 (NHRA). Recommendations for maximum conservation measures for any heritage resource will also be made. (The study area is indicated in **Appendix 1** Photographic evidence and in **Appendix 2, 3, & 4**).

- This study forms part of an EIA, Consultant: Enpact Environmental Consultants cc, 205 Metropolitan House, 15 Russell street, Nelspruit, 1200, Cell: 0828017803 / Office Tel: 013 7526766 / e-mail: heinrich@enpact.co.za. The environmental process is at the registration phase.¹
- Type of development: 65ha, are earmarked for township development, *portion 36 (a subdivision and consolidation of portions of portions 1, 4 & 5 of the farm Vlaklaagte 221JR*, Vlaklaagte, Mpumalanga Province.
- Rezoning for the proposed development will take place, as it is currently zoned as agricultural.
- Location of Province, Magisterial district / Local Authority and Property (farms): The area falls within the Mpumalanga Province under the jurisdiction of the Thembisile Hani Local Municipality, and the Nkangala District Municipality.
- Land owners: *Portion 1 & 4 of the farm Vlaklaagte 221JR*: National Government – Department of Rural Development and Land Reform;
Portion 5 of the farm Vlaklaagte 221JR: Provincial Government – Department of Agricultural and Land administration.

¹ Enpact Environmental Consultants cc, e-mail access: 2014-05-27.

- **Terms of reference:** As specified by section 38 (3) of the NHRA, the following information is provided in this report.
 - a) The identification and mapping of heritage resources where applicable;
 - b) Assessment of the significance of the resources;
 - c) Alternatives given to affected heritage resources by the development;
 - d) Plans for measures of mitigation.

- **Legal requirements:**

The legal context of the report is grounded in the National Heritage Resources Act no. 25, 1999, as well as the National Environmental Management Act (1998) (NEMA):

- **Section 38 of the NHRA**

This report constitutes a heritage impact assessment investigation linked to the environmental impact assessment required for the development. The proposed development is a listed activity in terms of Section 38 (1) of the NHRA. Section 38 (2) of the NHRA requires the submission of a HIA report for authorisation purposes to the responsible heritage resources agency, (SAHRA).

Heritage conservation and management in South Africa is governed by the NHRA and falls under the overall jurisdiction of the South African Heritage Resources Agency (SAHRA) and its provincial offices and counterparts.

Section 38 of the NHRA requires a Heritage Impact Assessment (HIA) to be conducted by an independent heritage management consultant, for the following development categories:

- Any development or other activity which will change the character of a site:
 - exceeding 5000m² in extent;
 - the rezoning of a site exceeding 10 000m² in extent

In addition, the new EIA regulation promulgated in terms of NEMA, determine that any environmental report will include cultural (heritage) issues.

The end purpose of this report is to alert Enpact Environmental Consultants cc (the client), and interested and affected parties about existing heritage resources which may be affected by the proposed development, and to recommend mitigation measures aimed at reducing the risks of any adverse impacts on these heritage resources. Such measures could include the recording of any heritage buildings or structures older than 60 years prior to demolition, in terms of section

34 of the NHRA and also other sections of this act dealing with archaeological sites, buildings and graves.

The NHRA section 2 (xvi) states that a “heritage resource” means any place or object of cultural significance, and in section 2 (vi) that “cultural significance” means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

Apart from a heritage report assisting a client to make informed development decisions, it also serves to provide the relevant heritage resources authority with the necessary data to perform their statutory duties under the NHRA. After evaluating the heritage scoping report, the heritage resources authority will decide on the status of the resource, whether the development may proceed as proposed or whether mitigation is acceptable, and whether the heritage resource require formal protection such as a Grade I, II or III resource, with relevant parties having to comply with all aspects pertaining to such grading.

- **Section 35 of the NHRA**

Section 35 (4) of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object. This section may apply to any significant archaeological sites that may be discovered. In the case of such chance finds, the heritage practitioner will assist in investigating the extent and significance of the finds and consult with an archaeologist about further action. This may entail removal of material after documenting the find or mapping of larger sections before destruction. This section does not apply, since no archaeological material was found which might be impacted upon by the proposed development.

- **Section 36 of the NHRA**

Section 36 of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, alter, exhume or 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. It is possible that chance burials might be discovered during construction work. This section does not apply since no graves were identified during the survey. This was also confirmed by Isaac Mahlangu and Marcos Mahlangu who lived in the area since 1984 and grazed their cattle in this section.

- **Section 34 of the NHRA**

Section 34 of the NHRA stipulates that no person may alter, damage, destroy, relocate etc, any building or structure older than 60 years, without a permit issued by SAHRA or a provincial heritage resources authority. This section does not apply since no structures or foundations were observed in the study area.

- **Section 37 of the NHRA**

This section deals with public monuments and memorials but does not apply in this report.

- **NEMA**

The regulations in terms of Chapter 5 of the National Environmental Management Act, (107/1998), provide for an assessment of development impacts on the cultural (heritage) and social environment and for specialist studies in this regard.

B. BACKGROUND TO ARCHAEOLOGY AND HISTORY OF THE STUDY AREA

- **Literature review, museum databases & previous relevant impact assessments**

In order to place the study area and Vlaklaagte in an archaeological context, primary and secondary sources were consulted. Ethnographical and linguistic studies by early researchers such as Ziervogel, Theal and Van Warmelo shed light on the cultural groups living in the area since ca 1600. Historic and academic sources by Küsel and Bergh, were consulted, as well as historic sources by Makhura and Webb.

There are no museums in the Vlaklaagte / KwaMhlanga area which could be consulted, and no historical information was available at the municipality. A cultural village near KwaMhlanga only deals with the Ndebele culture with an objects display, but no historical information was available. The topographical map 2528BD revealed that no disturbance has taken place on the site (**Appendix 2**). The entire section of the study area is currently utilized by the local people to collect medicinal plants and for livestock grazing (**Appendix 1, 3 & 4**).

Very little contemporary research has been done on prehistoric African settlements in the study area. According to Bergh, there are no recorded sites that date from the Stone Age, (including Rock paintings or engravings), or Iron Age (Early or Late) settlements. It can be confirmed that

none of the above mentioned sites were encountered during the survey.²

The author was also involved in desktop studies and surveys in the area, such as:

- 2012: Phase 1 Archaeological / HIA for the proposed residential Township (Moripe Garden): Remaining extent of portion 7 of the farm Kameelrivier 160JR, Siyabuswa, Mpumalanga – **foundations of recent date were identified;**
- 2014: Letter of recommendation for the exemption from a Phase 1 Archaeological and heritage investigation for the proposed township establishment on portion 3, Riekerts Laager 165JR, Siyabuswa, Mpumalanga – **no archaeological material was identified;**
- **2014: Phase 1** Archaeological / HIA for the proposed township development: Portions 1, 4 & 5 of the farm Vlaklaagte 221JR, Vlaklaagte, Mpumalanga - **no archaeological material was identified.**

The SAHRA database for archaeological and historical impact assessments was consulted and revealed Archaeological Impact assessment reports in the areas of KwaMhlanga & further in Bronkhorstspuit:

- BHP Billiton (2013); Status Quo and pre-mitigation HIA report for burials identified during a Phase 1 Impact assessment study for BHP Billiton energy coal SA, Wolvekrans colliery expansion project, Mpumalanga – **burial sites were identified;**
- J. Pistorius (2011): A phase 1 HIA study for Eskom's proposed Nokeng Fluorspar project: The construction of a proposed new 132 Kv power line, Limpopo Province – **revealed 2 graveyards and 3 historical houses;**
- A. Pelsler (2014): Phase 1 AIA – Eagles Pride Hatchery, Nooitgedacht 525JR, Mpumalanga Province, **revealed 2 grave sites, historical farmhouse and 2 possible LIA features;**
- JP Celliers (2013): Phase 1 Archaeological Impact assessment in respect of the proposed Funda Poultry Abbatior on the farm Gemsbokfontein 231 JP, Gauteng – **no sites of archaeological or heritage value were identified during the survey.**

Previous archaeological surveys by heritage practitioners in the immediate and wider area revealed mostly burial sites and historic features. Two possible LIA features were identified near Bronkhorstspuit.

² J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika Die Vier Noordelike Provinsies*, pp. 4-7

The Vlaklaagte / KwaMhlanga area was very sparsely populated during the 19th century (See **Map 2**, Van Warmelo). Bergh³ does not indicate any cultural groups specific to the Vlaklaagte / KwaMhlanga area, and no disruptions took place in this section during the *difaqane*. The surrounding areas from Middelburg, Pretoria, Warmbaths (Bela Bela), and Nylstroom were inhabited by the Ndebele, and small groups of KôPa (baSotho) and Kgatla. Ethnographical and linguistic studies by early researchers such as D. Ziervogel and N.J. Van Warmelo, does not include this area. It is however accepted that the *Ndzundza* Ndebele, Manala Ndebele and Hawduba Ndebele were the dominant groups as they do occur extensively in the surrounding areas since the 18th century,⁴ and the current local inhabitants consist of various groups including mainly Ndebele, and Sotho and Pedi.⁵

The extensive formal graveyard to the south and bordering the study area revealed mainly Ndebele surnames of local people who were buried there.

- **AmaNDEBELE**

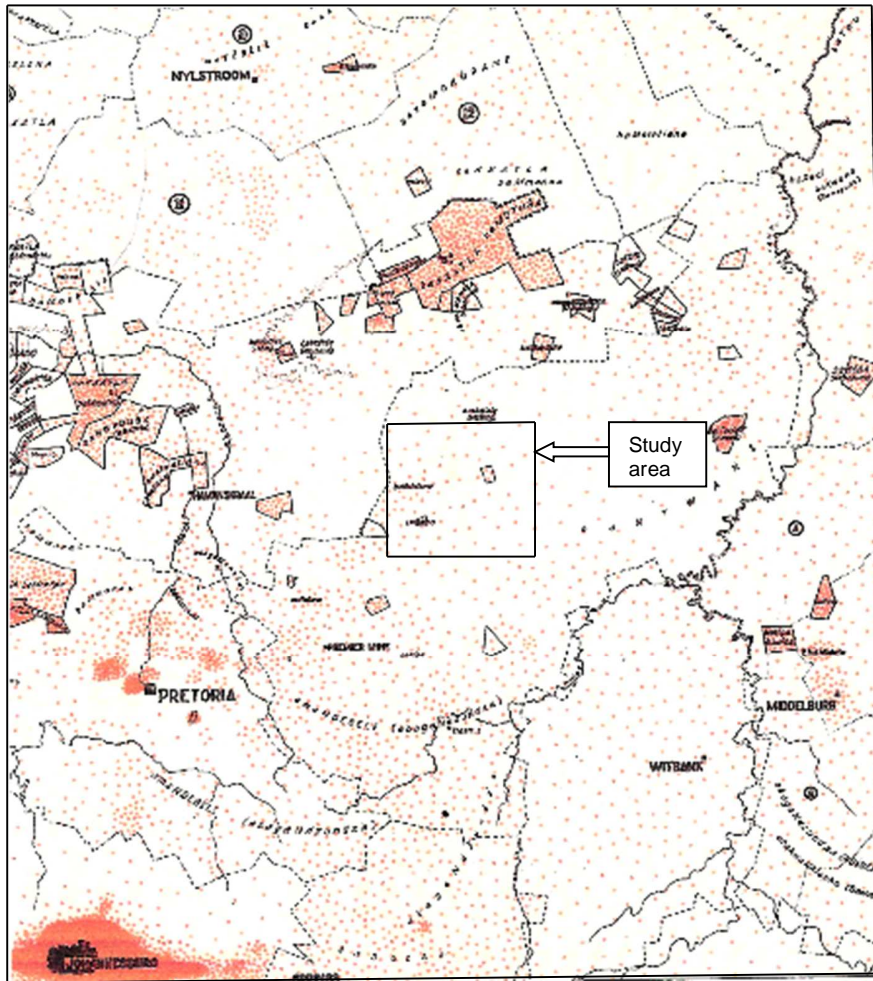
According to Van Warmelo, the *amaNdebele* are the earliest known offshoot of the *Nguni* group. The Ndebele is divided into two groups, the Southern and the Northern, and they are separated from one another. A certain legendary chief *Msi* or *Musi* heads a list of about twenty-five successive chiefs who lived just north of where Pretoria now stands. His two sons were *Manala* and *Ndzundza* and form the most important tribes of the Southern group. The *abagaNdzundza* moved eastwards and settled near Roos Senekal, and it is said that some of *Manala*'s followers, the *abagaManala*, settled in the Witbank district. The tribes slowly broke up after the days of the Republic.⁶

³ *Ibid.*, p. 10.

⁴ N.J. Van Warmelo, *A preliminary Survey of the Bantu Tribes of South Africa*, p. 18.

⁵ Siyabuswa Mpumalanga, http://en.wikipedia.org/wiki/Siyabuswa_Mpumalanga

⁶ N.J. Van Warmelo, *A preliminary Survey of the Bantu Tribes of South Africa*, p. 87.



Map 2: Van Warmelo: The study area of Vlaklaagte, was historically sparsely populated.

- **CENTRAL SOTHO**

The tribes in this group were at one time largely under the rule of the baPedi, who's last independent king was *Sekhukhune*, who's stronghold was to the east of Siyabuswa (Steelpoort area), although his domain was extremely large.⁷ Great numbers of *baSotho* who belong to the above group, who still speak *sePedi* but which became detribalized, live in the districts of Middelburg, Lydenburg, Witbank and Springs. They mingled freely with other groups such as the Zulu, Swazi and Tonga.

- **HISTORY OF KWAMHLANGA / VLAKLAAGTE**

During the apartheid era, Siyabuswa was the capital of the KwaNdebele Bantustan.⁸ It served

⁷ N.J. Van Warmelo, *A preliminary Survey of the Bantu Tribes of South Africa*, p.108.

⁸ Siyabuswa Mpumalanga, http://en.wikipedia.org/wiki/Siyabuswa_Mpumalanga

as a capital from 1981 to 1986 when KwaMhlanga replaced it. Most of its inhabitants are members of the Ndebele ethnic group. KwaMhlanga which is approximately 18km south of Vlaklaagte, is the spiritual home of the Ndebele who settled here in the 18th century. Some of the Ndebele Royal Kraals are situated near KwaMhlanga.⁹ Apart from the Ndebele language, Sotho and Zulu are also spoken in the area.

C. DESCRIPTION OF AREA TO BE AFFECTED BY THE PROPOSED DEVELOPMENT

The proposed project will involve the following: Approximately 65ha, are earmarked for residential township development, to also be known as Vlaklaagte, similar to the surrounding formal and informal areas. The area is currently vacant and the central section to the west is situated in a natural rocky terrain which is sloping and overlooks the Klipspruit river. The north-eastern section is even and also borders the Klipspruit river. A large formal graveyard forms the southern border of the western section of the study area. A 70ha section which borders the study area in the east and south was surveyed in February 2014 for Afrika Enviro & Biology.¹⁰

The majority of the north-eastern section (the flat area) has historically been transformed by agricultural activities (See google image **Appendix 3 & 4**). Grazing of cattle and the collection of medicinal plants, are the main current negative impacts in these areas. The Klipspruit river is towards the north and west of the study area (**Appendix 2 & 3**).

The proposed area for development is situated on *portion 36 (a subdivision and consolidation of portions of portions 1, 4 & 5 of the farm Vlaklaagte 221JR*, and is currently vacant land. The north-eastern section has been transformed by historic agricultural activities. The section along the western border is still naturally vegetated rocky terrain. A water pipeline runs parallel to the eastern border from south to north in the rocky terrain (**Map 1, Appendix 3 & 4**). Vegetation consists of low shrubs and grassland. The land is zoned as agricultural.¹¹

D. LOCALITY

The property is located 18km to the north of KwaMhlanga, in an area named Vlaklaagte, to the west of the R573 road, in the Thembisile Hani Local Municipality. This is within the Nkangala District Municipality, Mpumalanga Province. Approximately 65ha will be used for a low-medium

⁹ KwaMhlanga, Mpumalanga, <http://www.za-places.co.za/mpumalanga/kwamhlanga.html>, Access 2014-05-03.

¹⁰ C. van Wyk Rowe: Phase 1 AIA & HIA on *portion 1, 4, & 5 of the farm Vlaklaagte 221JR*, Mpumalanga, April 2014.

¹¹ Danie van der Walt: Specialist Biodiversity Report, Vlaklaagte, p. 1-8.

cost residential development with roads, and municipal services. The Klipspruit river is towards the north of the study area (**Appendix 1- 5**).

The proposed area which is currently vacant land is situated on *portion 36 (a subdivision and consolidation of portions of portions 1, 4 & 5) of the farm Vlaklaagte 221JR* .

The site is characterized by the following features:

- Numerous formal and informal settlements are located in all compass directions in the larger study area;
- The Klipspruit river is situated towards the north and west of this section;
- Nationally, and in broad classification, the site is situated within the Mixed Bushveld (A18) veld type according to Alcocks (1988) and Mixed Bushveld according to Low & Rebelo (1998). It is also classified as Central Sandy Bushveld in Mucina & Rutherford (2006).¹²
- The southern and eastern sections of the study area, are underlain by granite of the Lebowa Granite Suite. In the north, sedimentary rocks of the Waterberg Group are most important. Rock formations are dominated by sandstone, conglomerate, siltstone and shale. Soils vary from deep Hutton to Clovelly and shallow Glenrosa soil types.¹³

- **Description of methodology:**

The topographical Map, (**Appendix 2**), and Google images of the site (**Appendix 3 & 4**), indicate the study area of the proposed development. These were intensively studied to assess the current and historic disturbed areas and infrastructure. In order to reach a comprehensive conclusion regarding the cultural heritage resources in the study area, the following methods were used:

- The desktop study consists mainly of archival sources studied on distribution patterns of early African groups who settled in the area since the 17th century, and which have been observed in past and present ethnographical research and studies.
- Literary sources, books and government publications, which were available on the subject, have been consulted, in order to establish relevant information.
- Specialists currently working in the field of anthropology and archaeology have also been consulted on the subject.

¹² Danie van der Walt: Specialist Biodiversity Report, Vlaklaagte, p. 1-8

¹³ Danie van der Walt: Specialist Biodiversity Report, Vlaklaagte, p. 9.

-Literary sources: A number of books and government publications about prehistory and history of the area were consulted, and revealed sparse information;

-The SAHRA database for archaeological sites, were consulted.

- Voight's *Guide to Archaeological sites in the Northern and Eastern Transvaal* was also consulted.¹⁴

- The fieldwork and survey was conducted extensively on foot and in a vehicle, with two people.
- The section in the north was previously transformed by agricultural activities and the section in the west is mainly a natural rocky section which overlooks and slopes towards the Klipspruit river. The Klipspruit runs towards the north and west. The study area is used for livestock grazing, and collecting of medicinal plants.
- The terrain was mostly even and accessible. Low shrubs which covered the natural rocky section restricted visibility at ground level. It was found that visibility was better by viewing the area from an elevated level from the back of a vehicle. Therefore visibility ranged from good to fair. The rocky terrain in the central section consisted mainly of granite, sandstone, conglomerate, siltstone and shale. (**Appendix 3 & 4**).
- The relevant data was located with a GPS instrument (Garmin Etrex) datum WGS 84, and plotted. Co-ordinates were within 4-6 meters of identified sites.
- The area surveyed, was extensively tracked with a GPS instrument (Garmin Etrex) (Appendix 6).
- Evaluation of the resources which might be impacted upon by the footprint, was done within the framework provided by the National Heritage Resources Act, no. 25 (1999);
- Personal communication with relevant stakeholders on the specific study area, were held, such as the ecologist, Mr. Danie van der Walt, Mr. Heinrich Kammeyer and local inhabitants Mr. Isaac Mahlangu and Marcos Mahlangu who lived in the area for at least twenty years.

- **GPS: Co-ordinates of the perimeters of the study area:**

Co-ordinates were plotted on the Google images from the Layout plan provided by Enpact Environmental Consultants cc: The elevation is between 1334m and 1380m.

¹⁴ E. Voigt: *Guide to Archaeological sites in the Northern and Eastern Transvaal*.

North-eastern section is indicated in 1, 2, 3 & 7;
 Central (or western) section is indicated in 3, 4, 5, 6 & 7.

CO-ORDINATES		
STUDY AREA	SOUTH	EAST
1	S25°21'34.30"	E28°51'15.37"
2	S25°21'19.38"	E28°51'12.59"
3	S25°21'24.24"	E28°50'37.08"
4	S25°21'31.07"	E28°50'23.08"
5	S25°22'04.34"	E28°50'33.18"
6	S25°22'09.19"	E28°50'45.87"
7	S25°21'28.89"	E28°50'44.87"

E. DESCRIPTION OF IDENTIFIED SITES

All comments should be studied in conjunction with the appendices, which indicate the areas, and corresponds with the summary below. Photographs in **Appendix 1**, show the general view of the study area. The visibility ranged from restricted to excellent and good.

The feature listed below is outside the study area:

Site	Description / Comments	Co-ordinate
Formal Cemetery	This formal cemetery is fenced in with a concrete fence which is broken in places. It falls outside of the study area. Fig. 15.	S25° 22' 42.7" E28° 51' 00.3" Elev: 1354m

Study area: Portion 36 (*a subdivision and consolidation of portions of portions 1, 4 & 5*) of the farm *Vlaklaagte 221JR*:

The study area was extensively surveyed on foot and per vehicle for any remains of archaeological or historical nature. Visibility ranged from restricted, excellent and fair. Most of the area was historically used for agricultural purposes as seen on the google images (**Appendix 3 & 4, Fig. 1- 4 & 8**). The central section is situated in a rocky terrain which is a natural section on the study area as the soil was not transformed by plowing activities (**Appendix 4; Fig. 9 - 14**). A pipeline runs from south to north on the eastern border, and another pipeline from east to west (**Map 1**).

The study area is surrounded by formal and informal settlements known as Vlaklaagte, Tweefontein and Phumula townships. The land is currently vacant grassland with low shrubs in the rocky section (**Appendix 4, Fig. 9 - 14**).

The local inhabitants utilize the area for livestock grazing, harvesting of firewood where possible, and collecting medicinal plants. The area belongs to the National and Provincial governments (Department of Rural Development and Land Reform and Department of Agricultural and Land administration). Mr. Isaac Mahlangu who grew up in the area and Marcos Mahlangu who lived here since 1984, were interviewed and confirmed that there were no known graves in the study area.¹⁵

The area revealed no visible archaeological or historical features. The formal cemetery (**Fig. 15**), which was identified, falls outside of the study area.

F. DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT

<i>ACT</i>	<i>COMPONENT</i>	<i>IMPLICATION</i>	<i>RELEVANCE</i>	<i>COMPLIANCE</i>
NHRA	S 34	Impact on buildings and structures older than 60 years	None present	None
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	None present	None
NHRA	S36	Impact on graves	None present	None
NHRA	S37	Impact on public monuments	None present	None
NHRA	S38	Developments requiring an HIA	Development is a listed activity	HIA done
NEMA	EIA regulations	Activities requiring an EIA	Development is subject to an EIA	HIA is part of EIA

- **Summarised identification and cultural significance assessment of affected heritage resources: General issues of site and context:**

¹⁵ Personal communication: Mr. I Mahlangu & M Mahlangu, 2014-04-29.

Context		
Urban environmental context	No	NA
Rural environmental context	No	Vacant land
Natural environmental context	No	Partly natural, but mostly transformed by historical agricultural activities
Formal protection (NHRA)		
(S. 28) Is the property part of a protected area?	No	NA
(S. 31) Is the property part of a heritage area?	No	NA
Other		
Is the property near to or visible from any protected heritage sites	No	NA
Is the property part of a conservation area of special area in terms of the Zoning scheme?	No	NA
Does the site form part of a historical settlement or townscape?	No	NA
Does the site form part of a rural cultural landscape?	No	NA
Does the site form part of a natural landscape of cultural significance?	No	NA
Is the site adjacent to a scenic route?	No	NA
Is the property within or adjacent to any other area which has special environmental or heritage protection?	No	NA
Does the general context or any adjoining properties have cultural significance?	No	NA

Property features and characteristics		
Have there been any previous development impacts on the property?	Yes	Most of the north-eastern section was historically transformed by agricultural activities
Are there any significant landscape features on the property?	No	NA
Are there any sites or features of geological significance on the property?	No	NA
Does the property have any rocky outcrops on it?	Yes	The central section of the study area is situated on top of a rocky ridge
Does the property have any fresh water sources (springs, streams, rivers) on or alongside it?	Yes	The Klipspruit is situated towards the north of the study area.

Heritage resources on the property		
Formal protection (NHRA)		
National heritage sites (S. 27)	No	NA
Provincial heritage sites (S. 27)	No	NA
Provincial protection (S. 29)	No	NA
Place listed in heritage register (S. 30)	No	NA
General protection (NHRA)		
Structures older than 60 years (S. 34)	No	NA
Archaeological site or material (S. 35)	No	NA
Palaeontological site or material (S. 35)	No	NA
Graves or burial grounds (S. 36)	No	None were identified.

Heritage resources on the property		
Public monuments or memorials (S. 37)	No	NA
Other		
Any heritage resource identified in a heritage survey (author / date / grading)	No	NA
Any other heritage resources (describe)	No	NA

NHRA S (3)2 Heritage resource category	ELE-MENTS	INDICATORS OF HERITAGE SIGNIFICANCE										RISK	
		Historical	Rare	Scientific	Typical	Technological	Aesthetic	Person / community	Landmark	Material condition	Sustainability		
Buildings / structures of cultural significance	No	No	No	No	No	No	No	No	No	No	No	No	NA
Areas attached to oral traditions / intangible heritage	No	No	No	No	No	No	No	No	No	No	No	No	-
Historical settlement/ townscapes	No	-	-	-	-	-	-	-	-	-	-	-	-

NHRA	ELE-	INDICATORS OF HERITAGE SIGNIFICANCE										RISK	
Landscape of cultural significance	No	-	-	-	-	-	-	-	-	-	-	-	-
Geological site of scientific/cultural importance	No	-	-	-	-	-	-	-	-	-	-	-	-
Archaeological / palaeontological sites	No	-	-	-	-	-	-	-	-	-	-	-	-
Grave / burial grounds	No	-	-	-	-	-	-	-	-	-	-	-	-
Areas of significance related to labour history	No	-	-	-	-	-	-	-	-	-	-	-	-
Movable objects	No	-	-	-	-	-	-	-	-	-	-	-	-

- **Summarised recommended impact management interventions**

NHRA S (3)2 Heritage resource category	SITE	IMPACT SIGNIFICANCE		Impact management	Motivation
		Cultural significance rating			
		Cultural significance	Impact significance		
Buildings / structures of cultural significance	No	No	None	-	-

NHRA S (3)2 Heritage	SITE	IMPACT SIGNIFICANCE Cultural significance rating		Impact management	Motivation
Areas attached to oral traditions / intangible heritage	No	None	None	-	-
Historical settlement/ townscape	No	None	None	-	-
Landscape of cultural significance	No	None	None	-	-
Geological site of scientific/ cultural importance	No	None	None	-	-
Archaeological / palaeontological sites	No	None	None	-	-
Grave / burial grounds	No	No	None	-	-
Areas of significance related to labour history	No	None	None	-	-
Movable objects	No	None	None	-	-

ACT	COMPO- NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impact on buildings and structures older than 60 years	No foundations present	None
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	None present	None
NHRA	S36	Impact on graves	None present	None
NHRA	S37	Impact on public monuments	None present	None
NHRA	S38	Developments requiring an HIA	Development is a listed activity	Full HIA
NEMA	EIA regulations	Activities requiring an EIA	Development is subject to an EIA	HIA is part of EIA

G. STATEMENT OF SIGNIFICANCE & EVALUATION OF HERITAGE RESOURCES IN THE STUDY AREA

Section 38 of the NHRA, rates all heritage resources into National, Provincial or Local significance, and proposals in terms of the above is made for all identified heritage features.

• Evaluation methods

Site significance is important to establish the measure of mitigation and / or management of the resources. Sites are evaluated as *HIGH (National importance)*, *MEDIUM (Provincial importance)* or *LOW, (local importance)*, as specified in the NHRA. It is explained as follows:

• National Heritage Resources Act

The National Heritage Resources Act no. 25, 1999 (NHRA) aims to promote good management of the national estate, and to enable and encourage communities to conserve their legacy so that it may be bequeathed to future generations. Heritage is unique and it cannot be renewed, and contributes to redressing past inequities.¹⁶ It promotes previously neglected research areas.

¹⁶National Heritage Resources Act, no. 25 of 1999. p. 2.

All archaeological and other cultural heritage resources are evaluated according to the NHRA, section 3(3). A place or object is considered to be part of the national estate if it has cultural significance or other special value in terms of:

- (a) its importance in the community, or pattern of South Africa's history;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (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.¹⁷

- **The significance and evaluation of the archaeological and cultural heritage features in the study area, can be summarised as follows:**

Field rating:

No archaeological or historical features were observed in the study area. Most of the north-eastern section was historically transformed by agricultural activities (**Appendix 4**). No archaeological or historical features were observed in the central natural rocky ridge. A formal cemetery to the south, falls outside of the study area.

The SAHRA database was consulted for information on archaeological and heritage impact assessments in the immediate vicinity. No previous research was done in the immediate study area and the HIA to the north, at Siyabuswa revealed no archaeological features. A few impact assessments were done in the Bronkhorstspuit area approximately 60km south of Vlaklaagte, but none of these reports revealed any significant archaeological or historical material.

H. RECOMMENDATIONS

Presently most of the north-eastern section has already been transformed and degraded as a result of historic agricultural activities. No archaeological or historical material was identified in the central rocky section. The assessment on the study area revealed no archaeological or heritage features which will be impacted upon by the proposed development. The report done in April on the adjacent section (C. van Wyk Rowe, April 2014: Phase 1 Archaeological / HIA for the proposed township development: Portions 1, 4 & 5 of the farm Vlaklaagte 221JR, Vlaklaagte, Mpumalanga) also revealed no archaeological features. Based on the findings in

¹⁷National Heritage Resources Act, no. 25 of 1999. pp. 12-14

this report, Adansonia Heritage Consultants cc, have no compelling reasons which may prevent the proposed residential township development of the remaining extent on *portion 36 (a subdivision and consolidation of portions of portions 1, 4 & 5) of the farm Vlaklaagte 221JR*, to continue.

I. CONCLUSION

Archaeological material or graves are not always visible during a field survey and therefore some significant material may only be revealed during construction activities of the proposed development. It is therefore recommended that the developers be made aware of this possibility and when human remains, clay or ceramic pottery etc. are observed, a qualified archaeologist must be notified and an assessment be done. Further research might then be necessary in this regard for which the developer will be responsible.

Adansonia Heritage Consultants cannot be held responsible for any archaeological material or graves which were not located during the survey.

J. REFERENCES

NATIONAL LEGISLATION

- Republic of South Africa, *National Heritage Resources Act*, (Act No. 25 of 1999).

LITERARY SOURCES

- BERGH J.S., Swart gemeenskappe voor die koms van die blankes, in *J.S. Bergh (red)., Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*. J.L. van Schaik, 1999.
- DELIUS P, & M. HAY, *Mpumalanga, an illustrated history*, Highveld Press, 2009.
- KÜSEL, U.S., *Survey of Heritage sites in the Olifants Catchment area*, 2009.
- MAKHURA, T., Early Inhabitants, in Delius, P. (ed)., *Mpumalanga: History and Heritage*. Natal University Press, 2007.
- VAN WARMELO, N.J., *A Preliminary Survey of the Bantu Tribes of South Africa*, Pretoria, 1935.
- VOIGHT, E., *Guide to the Archaeological sites in the Northern and Eastern Transvaal*. Transvaal Museum, 1981.
- WEBB, H. S., The Native Inhabitants of the Southern Lowveld, in *Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. Cape Times Limited. 1954.
- ZIERVOGEL, D. *The Eastern Sotho: A Tribal, Historical and Linguistic Survey with Ethnographical notes on the Pai, Kutswe and Pulana Bantu Tribes*. Pretoria, 1953.

ELECTRONIC INFORMATION SOURCES

- Siyabuswa Mpumalanga, http://en.wikipedia.org/wiki/Siyabuswa_Mpumalanga
- Kwamhlanga, <http://www.za.places.co.za/mpumalanga/kwamhlanga.html>. Access 2014-05-03.

PERSONAL INFORMATION

- JP Cilliers, Archaeologist, Lydenburg Museum, 2014-04-23.
- Mr. Isaac Mahlangu, 2014-04-29.
- A. Pelsler, Archaeologist and Principal Investigator, 2014-03-11.
- Danie van der Walt: Biologist, White River, 0726231845, 2014-02-13.
- Heinrich Kammeyer: Enpact Environmental Consultants cc, 0828017803, 2014-05-16.

MISCELLANEOUS

- Afrika Enviro & Biology, EIA Draft Scoping Report, Township establishment on Portions 1, 4 and 5, Vlaklaagte 221JR, Thembisile Hani Local Municipality, January 2014.