SPECIALIST REPORT

# PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED BAHLANGENE RESIDENTIAL TOWNSHIP ESTABLISHMENT ON PORTION 2 OF THE FARM, LANGVERWACHT 293, ERMELO

**MPUMALANGA PROVINCE** 

# REPORT PREPARED FOR WANDIMA ENVIRONMENTAL SERVICES cc MR. MANDLA MBUYANE P.O. Box 1072, NELSPRUIT, 1200

Tel: 013 - 7525452 / Fax: 013 - 7526877 / e-mail: mduduzi@wandima.co.za

**MARCH 2014** 

# ADANSONIA HERITAGE CONSULTANTS ASSOCIATION OF SOUTHERN AFRICAN PROFESSIONAL ARCHAEOLOGISTS C. VAN WYK ROWE

E-MAIL: <u>christinevwr@gmail.com</u> 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 the footprint for the proposed Bahlangene residential township on the remaining extent of *portion 2 of the farm Langverwacht 293 IT, Ermelo*, Mpumalanga Province.

The study area is situated on topographical map 1:50 000, 2629DB, ERMELO, which is in the Mpumalanga Province. This area falls under the jurisdiction of the Gert Sebande district municipality and Msukaligwa local 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.

Ermelo is faced with a rapid growth rate of informal settlements that needs to be attended to by both the Government and Local Authorities. The objective of Vipcon Property Developers is to establish a residential township (Bahlangene extension) on the remaining extent of the farm Langverwacht, 2.5km south of the established extensions of Ermelo. The site is 205 ha in extent.

The area for the proposed development is currently vacant, and zoned as agricultural. The entire property is fallow agricultural lands and planted with Kikuyu grass. Contour walls for preventing erosion are clearly visible on the google images. A pipe line and power line run parallel to the southern border. Visibility during the survey was excellent as it is currently used for cattle grazing and cultivation. Three graves were identified during the survey, as well the ruin of a house which is older than 60 years. No other heritage or archaeological features were identified in the study area.

Mitigation measures are required for the graves as well as the ruin. The three graves are regularly visited by family members. Recommendations are made to ensure that development activities do not impact negatively on the burial site and that measures are in place to allow access to family members of the deceased, or to relocate the graves. The ruin is older than 60 years and in terms of section 34 of the NHRA, it will have to be recorded and documented before an application can be made to the relevant PHRA for a demolition permit. Based on the findings of this report, Adansonia Heritage Consultants cc, states that there are no compelling reasons which may prevent the proposed development to continue, provided that the client adheres to the mitigation measures, as specified.

**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.

#### DECLARATION OF INDEPENDENCE

I, Christine Rowe, trading as Adansonia Heritage Consultants, hereby confirm my independence as a specialist and declare that I have no interest, be it business, financial, personal or other, in any proposed activity, application or appeal, in the proposed project. I also declare that I am confident in the results of the survey that was undertaken, and in the conclusions that were reached as a result of it.

March 2014

# CONTENTS

EXECL	JTIVE SUMMARY	2
A.	BACKGROUND INFORMATION TO THE PROJECT	5
	Terms of Reference	6
	Legal requirements	6
В.	BACKGROUND TO ARCHAEOLOGY AND HISTORY OF THE STUDY AREA	8
•	Literature review, museum databases & previous relevant impact assessments	8
C.	DESCRIPTION OF AREA TO BE AFFECTED BY DEVELOPMENT	12
D.	LOCALITY	12
•	Description of methodology	13
•	GPS Co-ordinates of perimeters	14
E.	DESCRIPTION OF IDENTIFIED SITES	15
F.	DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT	16
٠	Summarised identification & cultural significance assessment of affected	
	Heritage resources: General issues of site and context	16
•	Summarised recommended impact management interventions	20
G.	STATEMENT OF SIGNIFICANCE & EVALUATION OF HERITAGE	
	RESOURCES IN THE STUDY AREA	22
•	Evaluation methods	22
•	NHRA	22
٠	Graves	22
•	SAHRA Policy on architectural heritage	23
٠	Field rating	24
Н.	RECOMMENDATION	25
I.	CONCLUSION	26
REFER	RENCES	27
Appen	dix 1: Topographical map: 2629 DB with layout of the proposed development	24
Appen	dix 2: Google Earth image: Wider area including the study area	25
Appen	dix 3: Google Earth image: Site perimeter & location of heritage features	26
Appen	dix 4: Photographs of the study area	27

# PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED BAHLANGENE RESIDENTIAL TOWNSHIP ESTABLISHMENT ON PORTION 2 OF THE FARM, LANGVERWACHT 293, ERMELO, MPUMALANGA

# A. BACKGROUND INFORMATION OF THE PROJECT

Vipcon Property Developers & Project Management is requesting the development of the proposed Bahlangene residential township, 2.5km south of Ermelo. The objective of the project is for Government and Local authorities to address the rapid growth rate of informal settlements by providing proper housing. The intention is to establish 2 residential areas with a total of 2400 erven, 2 schools, 2 business centres, 2 community facilities and one public open space.<sup>1</sup> Housing is at the forefront of the national agenda for delivery and the government is taking overall responsibility for providing houses to all. The site is approximately 205 ha in extent, of which 135ha will be developed (See **Appendix 1** Topographical map and development layout).

Adansonia Heritage Consultants were appointed by WANDIMA ENVIRONMENTAL SERVICES, to conduct a Phase 1 heritage impact assessment (AIA) on archaeological and other heritage resources on the study area.

A field survey, together with a literature study relevant to the study area was done, to determine that no archaeological or heritage resources will be impacted upon.

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 areas 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, 2 & 3**; & **Fig. 1 – 10**.

- This study forms part of an EIA, Consultant: WANDIMA ENVIRONMENTAL SERVICES, P.O. Box 1072, Nelspruit, 1200, Cell: 0784069595 / Fax: 013 752 6877 / e-mail: <u>mduduzi@wandima.co.za</u>
- Type of development: 205 ha are earmarked for residential development, on the remaining extent of portion 2 of the farm Langverwacht 293 IT, Ermelo,

<sup>&</sup>lt;sup>1</sup> WANDIMA ENVIRONMENTAL SERVICES, BID document, for the Proposed residential Township (Bahlangene extensions) on Portion 2 of the farm Langverwacht 293, Ermelo, 2013, p. 1-5.

Mpumalanga Province. Of this section, approximately 70ha are in a wetland and will remain a public open space (POS) (See **Appendix 1**).

- Rezoning for the proposed development is involved 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 Gert Sebande district municipality and Msukaligwa local municipality.
- Land owners: Mr. P. De Jager, Ermelo, oubaas@acsu.co.za.
- **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 5000m<sup>2</sup> in extent;
  - the rezoning of a site exceeding 10 000m<sup>2</sup> 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 the client, and interested and affected parties about existing heritage resources that 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 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 apply since three unmarked graves were identified in the study area.

### • 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 apply since one structure older than 60 years was identified during the survey.

## • 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 Ermelo in 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 1400.

There are currently no museums in the town of Ermelo which could be consulted, and no substantial historical information was available at the municipality or information centre. The author had to rely on the assistance of local people who worked on the farm Langverwacht in the recent past, to document relevant history. The topographical map 2629DB, ERMELO,

revealed no features of significance. Visibility during the survey was excellent as the area was planted with Kikuyu grass which is extensively used for cattle grazing purposes and the grass was short. The entire study area was used as an agricultural farm, and distinct contours to prevent erosion, is clearly visible (see **Appendix 1**: Topographical map & Appendix 2, Google images).

San rock art occurs in the wider area, of which the Welgelegen paintings are the best known.<sup>2</sup> The author has recorded several rock paintings in the Lochiel, Lothair and Amsterdam areas and visited a few in the Chrissiesmeer and Piet Retief areas.

Very little contemporary research has been done on prehistoric African settlements in the study area. The Leghoya ruins (ancient stone huts) located in the Tafelkop Mountains (south-west of Ermelo), date back to ca 1400. These ruins used to be home to the area's early inhabitants, but not much is known about the Leghoya.<sup>3</sup>

According to Bergh, there is only one recorded Later Stone Age site to the south-west of Ermelo. This was the Welgelegen shelter which was excavated in the 1970's. No Early or Later Iron Age sites were recorded.<sup>4</sup> The SAHRA database was consulted and a few Specialists AIA reports (see below) revealed no significant archaeological (Stone Age or Iron Age) sites:

- Phase 1 AIA on portion 22 of the farm Witpunt 267IT, Ermelo. JP Celliers, 2013. Mostly graves and farm workers dwellings were identified, but no Stone Age or Iron Age features were revealed;
- Phase 1 HIA for the proposed Overvaal Colliery, Ermelo (farms: Vlakfontein 266IT; Weltevreden 289IT; Mooiplaats 290IT; Adrianople 296IT; Buhrmansvallei 297IT). F. Roodt, 2012. Only features associated with historic farming activities, Boer War features and graves were identified. No archaeological sites were found;
- Phase 1 HIA, of Sheepmoor siding for the proposed Overvaal Colliery, Ermelo. F. Roodt, 2011. Graves, a cattle kraal and historical foundations of homesteads were identified, but no archaeological features;
- Phase 1 HIA for the proposed extention to the Camden Ash Disposal facilities, Ermelo.
  G&A Heritage Consultants, 2011. Burial sites were found, but no sites of cultural or

<sup>&</sup>lt;sup>2</sup> Info about Ermelo: <u>http://www.booktravel.travel/index.php?p=ermelo</u> Access: 2014/02/25.

<sup>&</sup>lt;sup>3</sup> Info about Ermelo: <u>http://www.booktravel.travel/index.php?p=ermelo</u> Access: 2014/02/25.

<sup>&</sup>lt;sup>4</sup> J.S. Bergh, Geskiedenis Atlas van Suid-Afrika Die Vier Noordelike Provinsies, pp. 4-7, & 95.

archaeological significance;

 Phase 1 HIA for the proposed Kusipongo Resource Mining Project, Ermelo, on the farms: Donkerhoek 14IT, Twyfelhoek 379IT, Kransbult 15IT, Nooitgezien 381IT, Rooikop 18IT; Digby Wells Environmental, 2013. Only stone walls of low heritage value and burial grounds were identified.

It is necessary to include background information with regards to an archaeological and historical nature of the wider area.

### STONE AGE

The Stone Age is the period in human history when people produced stone tools. The Stone Age in South Africa can be divided in three periods: Early Stone Age (ESA): +- 2 million – 150 000 years ago; Middle Stone Age (MSA): +- 150 000 – 30 000 years ago; Later Stone Age (LSA): +- 40 000 – 1850AD.

Only one LSA site (Welgelegen shelter) was indicated in the historical atlas by Bergh (see above), near Ermelo.

### **IRON AGE**

The Iron Age is the period in time when humans manufactured metal artifacts. According to Van der Ryst & Meyer, <sup>5</sup> it can be divided in two separate phases, namely: Early Iron Age (EIA) +- 200 – 1000 AD; Late Iron Age (LIA) +- 1000 – 1850 AD.

No Iron Age sites were recorded in the historical atlas by Bergh, but the Leghoya ruins near Tafelkop, are well-known and date from ca 1400. The closest occurrences in the study area, are an excavated site by the National Cultural History Museum (2003KH30), on the farm Rietfontein 101JS, close to Witbank (Emalahleni). No Iron Age features were however identified on the study area of this report.

<sup>&</sup>lt;sup>5</sup> Van der Ryst, M.M, & Meyer, A, Die Ystertydperk in Geskiedenis Atlas van Suid-Afrika Die Vier Noordelike Provinsies, pp. 96 – 98.

#### PRE COLONIAL HISTORY

The Ermelo area was sparsely populated in the 19<sup>th</sup> century, and although Bergh <sup>6</sup> indicates no black groups in the area, ethnographical and linguistic studies by early researchers such as D. Ziervogel and N.J. Van Warmelo, revealed that the study area was inhabited by mainly Zulu, Swazi and Ndebele.<sup>7</sup> Van Warmelo based his 1935 survey of *Bantu Tribes of South Africa* on the amount of taxpayers living in the area. One dot on the map represented 10 taxpayers, which were mainly male.

#### 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.<sup>8</sup>

#### **HISTORY OF ERMELO**

Ermelo is situated in a vast grass and wetlands region, and was established on the site of the Dutch Reformed Church built in 1871 by the Reverent Frans Lion Cachet. Ermelo was named after a friend of Cachet who came from a town named Ermelo situated in the Netherlands.<sup>9</sup> The town used to function as a stop-over point for wagons travelling between Lydenburg and KwaZulu-Natal. The town grew rapidly but was almost destroyed by the British during the Anglo-Boer War.<sup>10</sup>

Ermelo is known for its mixed farming and mining activities. Maize, potatoes, beans, sunflower seeds, Lucerne, sorghum, wool and cattle are the main farming endeavours, while the area is known for its coal mines.<sup>11</sup>

<sup>&</sup>lt;sup>6</sup> Van der Ryst, M.M, & Meyer, A, Die Ystertydperk in Geskiedenis Atlas van Suid-Afrika Die Vier Noordelike Provinsies, p.10.

<sup>&</sup>lt;sup>7</sup> N.J. Van Warmelo, A preliminary Survey of the Bantu Tribes of South Africa, p. 18.

<sup>&</sup>lt;sup>8</sup> N.J. Van Warmelo, A preliminary Survey of the Bantu Tribes of South Africa, p. 87.

<sup>&</sup>lt;sup>9</sup> Ermelo, Grass and Wetlands: <u>http://www.sa-venues.co./attractionsmpl/ermelo.php</u> Access: 2014/02/25.

<sup>&</sup>lt;sup>10</sup> Info about Ermelo: <u>http://www.booktravel.travel/index.php?p=ermelo</u> Access: 2014/02/25.

<sup>&</sup>lt;sup>11</sup> Info about Ermelo: <u>http://www.booktravel.travel/index.php?p=ermelo</u> Access: 2014/02/25.

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

The proposed residential development will be undertaken in two phases and will involve the following:

Approximately 135ha (of 205ha), are earmarked for residential township development,
 2.5km south of the town of Ermelo. The objective is to provide housing as a result of the rapid growth rate of informal settlements. The proposed residential township (Bahlangene extension) will consist of 2 residential areas with a total of 2400 erven, 2 schools, 2 business centres, 2 community facilities and one public open space. The public open space (POS) will consist of approximately 70ha of the 205ha which falls within the drainage line and wetland (See Appendix 1 for topographical map and development layout plan). An established wattle and bluegum plantation is situated in the central section of the farm towards the east.

The entire area of Ermelo is covered with grassland consisting of 6 vegetation types such as grasslands and wetlands, namely Amersfoort Highveld clay Grassland, Eastern Highveld Grassland, Eastern Temperate Freshwater Wetlands, KaNgwane Montane Grassland, Soweto Highveld Grassland and Wakkerstroom Montane Grassland.<sup>12</sup> The soils are mainly sandy and clayey in the wetland areas.

The topography of the site is flat with gentle sloping to the centre of the site. A natural watercourse and wetland is located centrally to the site accommodating run-off water. A natural high water table occurs in the wetland and borehole areas, two manmade dams were built to retain water during rainy seasons in the drainage line. All hydrological sensitive areas, comprising of approximately 70ha, will be earmarked as a Public Open Space (POS)<sup>13</sup> (See **Appendix 1**). A pipe line and power line run parallel with the southern border.

# D. LOCALITY

The area is situated on the Highveld of Mpumalanga, 2.5km south of Ermelo on the *remaining extent of portion 2 of the farm Langverwacht 293 IT.* It is accessed off the N11 (Ermelo / Amersfoort) National road to the west. <sup>14</sup> A gravel road to the north of the site, leading off the N11, will serve as access road to the proposed development. The proposed site is situated

<sup>&</sup>lt;sup>12</sup> WANDIMA ENVIRONMENTAL SERVICES, BID document 2013, p. 1 – 5.

<sup>&</sup>lt;sup>13</sup> WANDIMA ENVIRONMENTAL SERVICES, BID document 2013, p. 1 – 5.

<sup>&</sup>lt;sup>14</sup> WANDIMA ENVIRONMENTAL SERVICES, BID document 2013, p. 1 – 5.

close to the existing affordable housing developments, Ermelo extensions 32 and 34.<sup>15</sup> The site falls under the Msukaligwa Local Municipal jurisdiction, which in turn falls within the Gert Sebande District Municipality, in the Mpumalanga Province. (**Appendix 1:** Topographical Map & **Appendix 2**, Google image).

The proposed area for development is situated on the *Remainder extent of portion 2 of the farm Langverwacht 293 IT*, Ermelo, and is currently vacant agricultural land. The landowner is Mr. P. De Jager who owned the farm for approximately 15 years. The study area is zoned as agricultural. The entire property was prepared with distinct contour walls for agricultural lands and planted with Kikuyu grass. Visibility during the survey was excellent as it is currently used for cattle grazing and cultivation. A small wattle plantation is situated in the centre (towards the wetland) of the eastern border.

GPS co-ordinates were used to locate any heritage features within the study area (See **Appendix 3**, google image indicating the heritage features).

# • Description of methodology:

The topographical Map, (**Appendix 1**), and Google image of the site (including 205 ha of the study area, **Appendix 2 & 3**), 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 17<sup>th</sup> 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.
- Several specialist reports, currently working in the field of anthropology and archaeology have also been consulted on the subject;

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

-Archaeological databases of SAHRA as well as the National Cultural History Museum were consulted.

<sup>&</sup>lt;sup>15</sup> WANDIMA ENVIRONMENTAL SERVICES, BID document 2013, p. 1 – 5.

- The fieldwork and survey was conducted on foot and with a vehicle, with three people.
- The entire area was prepared and used for agricultural purposes and cattle grazing in the past.
- The terrain was even and accessible. Most of the area is covered with Kikuyu grass and was grazed short. Visibility was excellent.
- Existing tracks and paths were used for access to the various fields and sections.
- 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.
- 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. Principal Investigator, Dr. A. Pelser who worked in the area confirmed that he is not aware, and has not encountered any significant archaeological sites in this study area.<sup>16</sup> The owner Mr. De Jager, <sup>17</sup> and farm worker Mr. Piet Madonsela,<sup>18</sup> who worked on the farm for the last 8 years, were not aware of archaeological sites on the farm. Mr. P. Madonsela pointed out the graves. Mr. Joseph Madonsela, who lived on the farm from 1971 1988, was also consulted, as his family is buried on the farm, and he was able to provide some relevant information.<sup>19</sup>

•	GPS: Co-ordinates of the perimeters of the study area, provided by WANDIMA
	ENVIRONMENTAL SERVICES (Appendix 3 Google image):

	Co-ordinates										
Α	25° 09' 29.47" S	28° 49' 58.13" E									
В	25° 09' 35.49" S	28° 50' 10.29" E									
С	25° 09' 32.50" S	28° 50' 12.71" E									
E	25° 09' 35.82" S	28° 50' 17.34" E									
F	25° 09' 50.37" S	28° 50' 05.77" E									
G	25° 09' 55.26" S	28° 50' 06.86" E									
Н	25° 10' 00.01" S	28° 49' 46.27" E									
1	25° 09' 50.26" S	28° 49' 42.26" E									

<sup>&</sup>lt;sup>16</sup> Personal communication: A. Pelser, 2014/02/21.

<sup>&</sup>lt;sup>17</sup> Personal communication: P. de Jager (owner). 2014/02/21 & 2014/02/22.

<sup>&</sup>lt;sup>18</sup> Personal communication: Piet Madonsela, 2014/02/21, & 2014/02/24.

<sup>&</sup>lt;sup>19</sup> Personal communication: Joseph Madonsela, 2014/02/27.

## E. DESCRIPTION OF IDENTIFIED SITES

All comments should be studied in conjunction with the appendices, which indicate the areas, and which corresponds with the summary below. Figures 1 - 10, show the general view of the study area. Visibility was excellent (see **Appendix 4:** Photographic evidence).

The entire study area was utilized as an agricultural farm since at least 1971, since Mr. Joseph Madonsela lived there. The farm belonged to the brother of the current owner. Mr. Madonsela was a tractor driver who ploughed the fields for wheat, maize, sunflower and soya beans. The entire farm was used for agricultural purposes, except the wetland areas. Kikuyu grass was planted for grazing. His father (who is buried on the farm) also worked on Langverwacht as a herder for sheep.

Mr. Joseph Madonsela was able to provide the identities of the unmarked graves. He was not able to give detailed information regarding the ruin, except that the previous farmer also lived there. The original house was extended and changed over the years, to suit the needs of new owners. The graves are situated in the established wattle plantation in the central section of the farm.

Site location	Description/Comments	Heritage feature
Appendix 3: Historic stone ruin (structure)	An original historic stone structure (house) dating from at least the 1930s. This house was compromised by later additions, therefore the measurements are not clearly distinct at this stage. The structure has historic significance as it is older than 60 years.	Elevation: 1766m S26º 35' 23.1" E29º 59' 46.5" Fig. 11 & 12.
Appendix 3: 3 x Graves	Three unmarked graves are situated in the wattle plantation. According to Mr. Piet Madonsela these graves are regularly visited by family members who live in the area. Mr. Joseph Madonsela (family member) provided the following information: Grave 1: Father: Fanisa Madonsela; Buried 1978. Grave 2: Son: Sipho Madonsela, buried in 1978. Grave 3: Daughter: Nomusa Madonsela; buried in 1977.	Elevation: 1755m: S26º 35' 18.5" E29º 59' 36.4" Fig. 13.

ACT	COMPO- NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impact on buildings and structures older than 60 years	One ruin	Mitigation measures needed
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	None present	None
NHRA	S36	Impact on graves	3 x unmarked graves	mitigation measures needed
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

# F. DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT

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

Context									
Urban environmental context	Vacant land								
Rural environmental context	No	-							
Natural environmental context	No	Site compromised by agricultural activities and sheep and cattle grazing.							
Formal pro	otectio	n (NHRA)							
(S. 28) Is the property part of a protected area?	-								
(S. 31) Is the property part of a heritage area?	-								
Other									

Context										
Is the property near to or visible from any protected heritage sites	No	-								
Is the property part of a conservation area of special area in terms of the Zoning scheme?	No	-								
Does the site form part of a historical settlement or townscape?	No	-								
Does the site form part of a rural cultural landscape?	No	-								
Does the site form part of a natural landscape of cultural significance?	No	-								
Is the site adjacent to a scenic route?	No	-								
Is the property within or adjacent to any other area which has special environmental or heritage protection?	No	-								
Does the general context or any adjoining properties have cultural significance?	No	-								

Property features and characteristics										
Have there been any previous development impacts on the property?	No	The entire area (except the 70ha wetland area) was used as an agricultural farm – maize, sunflower, wheat, soya beans; A pipeline and power line runs parallel to the southern border								
Are there any significant landscape features on the property?	No	-								
Are there any sites or features of geological significance on the property?	No	-								
Does the property have any rocky outcrops on it?	No	-								

Property features and characteristics										
Does the property have any fresh water sources (springs, streams, rivers) on or alongside it?	Yes	A natural spring is in the centre of the northern boundary. Drainage line in centre of property								

Heritage resource	ces on	the property									
Formal protection (NHRA)											
National heritage sites (S. 27)	No	-									
Provincial heritage sites (S. 27)	No	-									
Provincial protection (S. 29)	No	-									
Place listed in heritage register (S. 30)	No	-									
General pro	tectior	n (NHRA)									
Structures older than 60 years (S. 34)	Yes	The ruin (historic stone house) is present on the property. Severely compromised in later years.									
Archaeological site or material (S. 35)	No	-									
Palaeontological site or material (S. 35)	No	-									
Graves or burial grounds (S. 36)	Yes	3 x unmarked graves were identified by Joseph Madonsela.									
Public monuments or memorials (S. 37)	No	-									
C	Other										
Any heritage resource identified in a heritage survey (author / date / grading)											
Any other heritage resources (describe)	No	-									

NHRA	ELE-		INI	RISK								
S (3)2 Heritage resourcec ategory	MENT S	Histo rical	Rare	Sci enti fic	Typi cal	Tech- nolog ical	Aes thetic	Pers on / com munit y	Land mark	Mate rial con dition	Sust aina bility	
Buildings / structures of cultural significance	Found ations encou ntered	Yes	No	No	No	No	No	Yes	No	No	No	Ruin of historic stone building. It will be impacted upon by the proposed development
Areas attached to oral traditions / intangible heritage	No	No	No	No	No	No	No	No	No	No	No	-
Historical settlement/ townscapes	No	-	-	-	-	-	-	-	-	-	-	-
Landscape of cultural significance	No	-	-	-	-	-	-	-	-	-	-	-
Geological site of scientific/ cultural importance	No	-	-	-	-	-	-	-	-	-	-	-
Archaeologi cal / palaeontolo gical sites	No	-	-	-	-	-	-	-	-	-	-	-
Grave / burial grounds	Yes	-	-	-	-	-	-	-	-	-	-	3 x graves will be impacted upon by the proposed development

NHRA	ELE-		INDICATORS OF HERITAGE SIGNIFICANCE									RISK
Areas of significance related to labour history	No	-	-	-	-	-	-	-	-	-	-	-
Movable objects	No	-	-	-	-	-	-	-	-	-	-	-

# Summarised recommended impact management interventions

NHRA	NHRA SITE IMPACT SIGNIFICANCE		Impact	Motivation	
S (3)2 Heritage		Cultural significance rating		management	
resource categorv		Cultural significanc	Impact significanc		
Buildings / structures of cultural significance	Yes	Yes	Yes	Documentation of the ruin before application to demolish	Historic ruin of stone house dating to the early 20th century.
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	-	-

NHRA S (3)2 Heritage	SITE	IMPACT SIGNIFICANCE Cultural significance rating		Impact management	Motivation
Archaeologic al / palaeontolog ical sites	No	None	None	-	-
Grave / burial grounds	Yes	Yes	Yes	Mitigation measures needed	Graves are of high significance
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	Historic ruin present	Yes
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	None present	None
NHRA	S36	Impact on graves	3 x unmarked graves present	Yes
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.<sup>20</sup> It promotes previously neglected research areas.

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.<sup>21</sup>

### Graves

# SAHRA Policy on burial grounds

The policy is that graves and cemeteries should be left undisturbed, no matter how inaccessible and difficult they are to maintain. It is our obligation to empower civil society to nurture and

<sup>&</sup>lt;sup>20</sup>National Heritage Resources Act, no. 25 of 1999. p. 2.

<sup>&</sup>lt;sup>21</sup>National Heritage Resources Act, no. 25 of 1999. pp. 12-14

conserve our heritage. It is only when essential developments threaten a place of burial, that human remains should be disinterred to another cemetery or burial ground.

From a historical point of view and for research purposes, it is vital that burial sites are not disturbed. The location and marking of an individual's grave tells a life story, where he / she died defending (or attacking) a particular place or situation and makes it easier to understand the circumstances of his / her death.<sup>22</sup>

Three unmarked graves were identified on the r*emaining extent of portion 2 of the farm Langverwacht 293 IT*, Ermelo. The graves were identified by a former worker Mr. Joseph Madonsela (resided on the farm from 1971 – 1988). The graves are his family (father, son and daughter).

### SAHRA Policy on architectural heritage

The SAHRA criteria for the assessment of cultural significance for the architectural heritage landscape (in this case the ruin of the original house), was used as an evaluation method (together with the NHRA – see above). This criteria is mainly used in Conservation management Plans.<sup>23</sup>

SAHRA stipulates that no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority. The criteria for assessment have been borrowed and adapted from several international charters for heritage conservation. Only criteria which may be applicable to the architectural landscape in the study area, remaining extent of *portion 2 of the farm Langverwacht 293 IT,* is discussed below:

**Historic value:** A place has historic value because it has influenced, or been influenced by a historic figure or group, event, phase or activity. The significance of a place will be greater where evidence of the association or event survives *in situ*, or where the setting is substantially intact, than where it has been changed or evidence does not survive;

**Social value:** A place has historical value because it relates to the past. The historical or social value embraces the qualities for which the place has become a focus of spiritual, educational, political, economic national or other cultural sentiment to a majority or minority group;

<sup>&</sup>lt;sup>22</sup>SAHRA, Burial sites, <u>Http://www.sahra.org.za/burial.htm</u>, Access, 2008-10-16.

 $<sup>^{\</sup>rm 23}$  L. Freedman Townsend, Conservation management plans, SAHRA, p. 4

**Aesthetic value:** This includes aspects of sensory perception, scale, form, colour, texture and material of the fabric. It could be an important example of a style or period, have fine details or workmanship, or be the work of a major architect or builder.

The ruin of a historic building was identified on the *remaining extent of portion 2 of the farm Langverwacht 293.* The ruin is however severely compromised by later additions.

Please note that no archaeological features were identified on the highly disturbed agricultural farm (cultivated lands).

Site no.	Cultural	Significance	Measures of mitigation
	Heritage		
	features		
L 1	Original	LOW –	The house is of local historic and/or social importance.
	farmhouse	historic value	It is planned to demolish this ruin, and a full
		& social	documentation is needed before a destruction permit
		value	can be obtained from the relevant PHRA (Fig. 11 & 12).
G 1	3 x Graves	HIGH	Three unmarked graves were identified on the farm.
			The graves are regularly visited by family members. Mr.
			Joseph Madonsela identified the graves of his father,
			son and daughter. They were buried on the farm during
			the time he was working on the farm (Fig. 13).

The significance and evaluation of the cultural heritage features can be summarised as follows:

# • Field rating:

The features as specified in the section above, are situated inside the study area of the proposed development. Both the features L1 & G 1, have significance. The graves are rated as high and of outstanding significance as specified by section 36 of the NHRA. The structure (ruin), is rated of low significance and generally protected under section 34 of the NHRA. Both these features are in need of mitigation measures.

According to information by the owner, Mr. De Jager, the ruin of the house on the remaining extent of *portion 2 of the farm Langverwacht 293 IT,* indicated that the house is older than 60 years. The original structure, which consists of dressed sandstone and local stone was compromised with later additions of baked brick and a sand based plaster as it was occupied by

successive owners. It is not of any outstanding value in terms of aesthetics, but has some historic or social value.

The three graves which were identified, are regularly visited by a family member, Mr. Joseph Madonsela, who lived on the farm from 1971 - 1988.<sup>24</sup> The graves belong to his father (Fanisa Madonsela, buried 1978), son (Sipho Madonsela, buried 1978) and daughter (Nomusa Madonsela, buried 1977).

### H. RECOMMENDATIONS

The entire study area on *the remaining extent of portion 2 of the farm Langverwacht 293 IT*, was transformed in the past for agricultural purposes. The farm was agriculturally prepared with distinct contours to make it suitable for cultivation. Kikuyu grass was later planted, specifically for grazing. Most of the farm is currently fallow except for the north-eastern section which is currently planted with beans. An established wattle plantation is situated in the central section of the farm towards the east (see **Appendix 3**). Apart from the graves and original farm house (ruin), there is no indication of any other archaeological features on the study area.

Mitigation measures are required for the graves as well as the ruin, to prevent development activities impacting negatively on the sites. The three graves are regularly visited by family members. After consultation with the family members, the developer may apply for a permit from SAHRA to relocate the graves by a professional grave relocater, to a site as agreed upon by the family. **Alternatively**, the developer should demarcate this area as a public open space, fence it off and exclude it from the development. Management guidelines should be established for the burial site. Visitors and family members of the deceased should be allowed to continue visits to the burial site.

The ruin is older than 60 years and in terms of section 34 of the NHRA, it will have to be recorded and documented before an application can be made to the relevant PHRA for a demolition permit. Based on the findings of this report, Adansonia Heritage Consultants cc, states that there are no compelling reasons which may prevent the proposed development to continue, provided that the client adheres to the mitigation measures, as specified above.

<sup>&</sup>lt;sup>24</sup> Personal Communication: Mr. Joseph Madonsela, 2014/02/27.

# 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 be necessary in this regard for which the developer is responsible.

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

#### REFERENCES

#### NATIONAL LEGISLATION

- Republic of South Africa, National Heritage Resources Act, (Act No. 25 of 1999).
- SAHRA, Burial sites, <u>Http://www.sahra.org.za/burial.htm</u>, Access, 2008-10-16.

#### 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.
- DIGBY WELLS ENVIRONMENTAL, Phase 1 HIA for the proposed Kusipongo Resource Mining Project, Ermelo, on the farms: Donkerhoek 14IT, Twyfelhoek 379IT, Kransbult 15IT, Nooitgezien 381IT, Rooikop 18IT; 2013.
- CELLIERS, J.P., Phase 1 AIA on portion 22 of the farm Witpunt 267IT, Ermelo. 2013.
- G&A HERITAGE CONSULTANTS, Phase 1 HIA for the proposed extention to the Camden Ash Disposal facilities, Ermelo. 2011.
- 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.
- NATIONAL CULTURAL HISTORY MUSEUM, The Archaeological investigation of an Iron Age sites on the farm Rietfontein 101 JS, Emalahleni District, Mpumalanga province, 2004.
- VAN DER RYST, M.M, & Meyer, A, Die Ystertydperk in *Geskiedenis Atlas van Suid-Afrika Die Vier* Noordelike Provinsies, 1999.
- ROODT, F. Phase 1 HIA for the proposed Overvaal Colliery, Ermelo (farms: Vlakfontein 266IT; Weltevreden 289IT; Mooiplaats 290IT; Adrianople 296IT; Buhrmansvallei 297IT). 2012.
- ROODT, F., Phase 1 HIA, of Sheepmoor siding for the proposed Overvaal Colliery, Ermelo. 2011.
- 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**

- Info about Ermelo: <u>http://www.booktravel.travel/index.php?p=ermelo</u> Access: 2014/02/25.
- Ermelo, Grass and Wetlands: <u>http://www.sa-venues.co./attractionsmpl/ermelo.php</u> Access:

2014/02/25.

- Freedman Townsend, L., Conservation management plans, SAHRA, 2008.
- WANDIMA ENVIRONMENTAL SERVICES, BID document, December 2013.

#### PERSONAL INFORMATION

- Personal communication: Owner: P. de Jager: Cell: 0825570200,
- Personal communication: Principal Investigator: Anton Pelser, Cell: 0834593091
- Personal communication: Joseph Madonsela, Cell: 0724761445.
- Personal communication: Piet Madonsela, Cell: 0793801561.