

SPECIALIST REPORT

**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR PROPOSED
DEBUSHING OF NATURAL LAND FOR AGRICULTURAL USE:
PORTIONS 7 AND 8 OF THE FARM BOERBOONKRAAL 353KT
BURGERSFORT
LIMPOPO PROVINCE**

**REPORT COMPILED FOR
RHENGU ENVIRONMENTAL SERVICES**

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NOVEMBER 2014

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EXECUTIVE SUMMARY

A Phase 1 Heritage Impact Assessment (HIA) regarding archaeological and other cultural heritage resources was conducted on the footprint for the proposed alteration of natural as well as historically disturbed land for agricultural use: on portions 7 and 8 of *the farm BOERBOONKRAAL 353KT, Burgersfort*.

The study area is situated on Topographical map, 1:50 000, 2430CD, BUFFELSVLEI, which is in the Limpopo Province. This area falls under the jurisdiction of the Burgersfort District Municipality, and Thaba Chweu 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.

The applicant, Mr. Cornel van der Merwe / Waterval Citrus, in co-operation with Rhengu Environmental Services, is requesting the alteration of natural as well as historically disturbed land for agricultural purposes (citrus). The application is for 3 sections of natural bush (sections A, B & C), and two disturbed areas (sections D & E) on the farm Boerboonkraal, which is surrounded by existing agricultural lands (wheat and citrus). A total of approximately 90 ha of additional farm land will be developed, to the east and west of the R37. The proposed agricultural development is situated on both sides of the R37 between Mashishing (Lydenburg) and Burgersfort. Sections A, B and C were natural land, and sections D and E were highly disturbed.

The survey revealed the following archaeological material:

Section A (76.96ha): Two grave sites were identified in this section, as well as many recent square clay and stone foundations. Several upper grinders, two lower grinders, red clay potsherds together with glass, porcelain, ceramic and rusted iron were identified throughout this section.

Section B (12.56ha): This section is situated along the Waterfall River. A distinct Late Iron Age (LIA) stone wall, as well as an indistinct circular LIA stone wall and an upper grinder were identified.

Section C (3.82ha), This section was also situated along the Waterfall River but no archaeological material was identified.

Section D (3.12ha): This section is historical agricultural lands. No archaeological, historical structures or material were identified.

Section E (3.18ha): This section is historical agricultural lands and disturbance from previous road infrastructure was also visible. Alien vegetation had infested the northern part of this section. No archaeological, historical structures or material were identified.

It is recommended that the owner be made aware that distinct archaeological material or human remains may only be revealed during the debushing / agricultural operation. Based on the survey and the findings in this report, Adansonia Heritage Consultants state that there are no reasons which may prevent the proposed development to continue in sections C, D and E. Mitigation measures for the two grave yards in section A is recommended before development may continue in this section. Mitigation measures are also recommended for section B, before any development may take place in this section. All earthmoving activities must be monitored by a qualified archaeologist and should any archaeological material be found, an assessment must be done.

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.*

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

November 2014

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LIMPOPO PROVINCE**

A. BACKGROUND INFORMATION TO THE PROJECT

The applicant, Mr. Cornell van der Merwe / Bosveld Citrus, in co-operation with Rhengu Environmental Services, is requesting the alteration of natural land for agricultural purposes (citrus) on *portions 7 and 8 of the farm Boerboonkraal 353KT*. The application is for 3 sections of natural bush (sections A, B & C), and two disturbed areas (sections D & E) which is surrounded by existing agricultural lands (wheat and citrus). A total of approximately 90 ha of additional farm land will be developed, east and west of the R37 (see Appendix 1 & Map 5).

Adansonia Heritage Consultants were appointed by *RHENGU ENVIRONMENTAL SERVICES*, to conduct a Phase 1 heritage impact assessment (HIA) on archaeological and other heritage resources on the study area. A literature study, relevant to the study area as well as a foot survey was done, to determine that no archaeological or heritage resources will be impacted upon (see Map 4: 2430CD, Buffelsvlei).

The aims of 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 resources will also be made. The study area is indicated in Maps 1 - 6, and Appendix 1 & 2.

The applicant, Mr. Cornell van der Merwe / Waterval Citrus, in co-operation with Rhengu Environmental Services, is requesting the alteration of natural land for agricultural purposes (citrus). The application is for 3 sections of natural bush (sections A, B & C), and two disturbed areas (sections D & E) on the farm Boerboonkraal. A total of approximately 90 ha of land will be developed, to the east and west of the R37 (see Appendix 1).

- This study forms part of an EIA, Consultant: *RHENGU ENVIRONMENTAL SERVICES.*, P.O. Box 1046, Malelane, 1320, Cell: 0824147088 / Fax: 0866858003 / e-mail: rhengu@mweb.co.za
- Type of development: 90ha, are earmarked for a proposed agricultural development, topographical map, 1:50 000, 2430CD, Buffelsvlei. Sections A, B and C, which are applied for, is currently natural land. Sections D and E are disturbed. All the sections are zoned as agricultural, and no rezoning will take place.
- Location of Province, Magisterial district / Local Authority and Property (farms): This area falls under the jurisdiction of the Burgersfort District Municipality, and Thaba Chweu Local Municipality in the Limpopo Province.
- Land owner: Mr. Cornel van der Merwe, Waterval Citrus.

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 heritage 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):

- In terms of **Government Notice R546**, a basic Environmental Impact Assessment is required for the following listed activities:

Activity 13: The clearance of an area of 300sqm or more of vegetation, where 75% or more of the vegetation cover constitutes indigenous vegetation;

Activity 14: The clearance of an area of 1ha or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.

- **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, determines that any environmental report will include cultural (heritage) issues.

The end purpose of this report is to alert *RHENGU ENVIRONMENTAL SERVICES*, as well as the client Mr. Cornel van der Merwe / Waterval Citrus, 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, with relevant parties having to comply with all aspects pertaining to such a 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. Upper and lower grinders and clay potsherds were found during the survey but they were associated with square clay and stone foundations of recent settlement, and therefore not significant. These objects are still widely used in rural areas today.

- **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 development of the road infrastructure or agricultural activities. Two grave sites were identified in section A, which will be impacted upon by the proposed development. Mitigation measures are recommended.

- **Section 34 of the NHRA**

Section 34 of the NHRA stipulates that no person may alter, damage, destroy, and relocate etc, any building or structure older than 60 years, without a permit issued by SAHRA or a provincial heritage resources authority. Square foundations of structures were identified on the entire property. These are badly preserved and disintegrating fast. It is believed that they are of no special significance as the settlement continued to at least 1978. Two Late Iron Age stone walls were identified in section B. Huffman group the LIA stone walls in this area with the Badfontein tradition.¹ Section 34 of the NHRA, do apply and mitigation measures are recommended.

- **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), provides for an assessment of development impacts on the cultural (heritage) and social environment and for specialist studies in this regard.

¹ Huffman, T.N., *Handbook to the Iron Age*, p. 32.

B BACKGROUND TO ARCHAEOLOGY AND HISTORY OF THE STUDY AREA

- Literature review, museum databases & previous relevant impact assessments

The study area, on both sides of the R37, which include *portions 7 and 8 of the farm Boerboonkraal 353KT*, is located approximately 40km north of Lydenburg and 15km south of Burgersfort.

Bushman (or San) presence occurs in the wider area as research by rock art enthusiasts revealed 109 sites in the Kruger National Park,² and over 100 rock art sites at Bongani Mountain Lodge and its immediate surrounds.³ Thirty one rock art sites were recorded on the Mpumalanga Drakensberg Escarpment, which is closer, and more relevant to the study area.⁴ Rock art sites were also recorded in the Ohrigstad area.⁵ Late Iron Age rock engraving sites occur in the Lydenburg area and Boomplaats, 30km south of the study area.

In order to place the areas around Burgersfort and Lydenburg (Mashishing) in an archaeological context, primary and secondary sources were consulted. Ethnographical and linguistic studies by early researchers such as Ziervogel and Van Warmelo shed light on the cultural groups living in the area since ca 1600. Historic and academic sources by Küsel, Meyer, Voight, Bergh, De Jongh, Evers, Myburgh, Thackeray and Van der Ryst were consulted, as well as other historic sources.

Primary sources were consulted from the Pilgrim's Rest Museum Archives for a background on the pre-history and history of the study area. Several circular stone-walled complexes and terraces as well as graves have been recorded in the vicinity of Hazyview⁶, Bushbuckridge, Graskop and Sabie, clay potsherds and upper as well as lower grinders, are scattered at most of the sites.⁷ Many of these occur in caves on the Escarpment, as a result of the Swazi attacks (1900's), on the smaller groups. The 1978 topographical map (2430CD BUFFELSVLEI) indicated remains of houses in the section below the mountain which is section A. Some mud and stone foundations were identified during the survey, but are badly deteriorated. Sections D and E was indicated as previous agricultural fields.

The farm Boerboonkraal is situated at the confluence of the Waterfall and Speckboom rivers. The 1911 topographical map of *Ohrigstad* revealed no historic black settlements in this section (see Map 3).⁸ Section A was located at the foot of a mountain so the area was flat in the western section, rising slightly towards the east (the hills / mountain), and was extremely rocky, in the north, north-eastern parts. Sections B and C was in the floodplain next to the Waterfall River and was flat with no rocky outcrops. Sections D & E was historically disturbed and flat.

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

- Rowe, C., August 2009, *Phase 1 Archaeological / Heritage Impact assessment: Sections 1a, 1b, 2, 3 & 4 of Leeuwvallei 297KT*, Burgersfort, Limpopo Province;

² English, M. Die Rotskuns van die Boesmans in die NKW, in *De Vos Pienaar, U., Neem uit die Verlede*, p. 18-24.

³ Hampson, et al., The rock art of Bongani Mountain Lodge, SA Archaeological Bulletin 57: p. 15.

⁴ Rowe, C. Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve, p. 22.

⁵ Bergh, J., *Geskiedenis Atlas van Suid Afrika*, p. 4.

⁶PRMA: Information file 9/2.

⁷D. Ziervogel, *The Eastern Sotho, A Tribal, Historical and Linguistic Survey*, p. 3.

⁸ Map: 1911 Topographical Map: Ohrigstad no. 14.

- Rowe, C. 2009. *Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve*, MA dissertation. Pretoria: UP;
- Rowe, C., September 2014, *Phase 2: Report on the Archaeological investigation of a poorly defined Late Iron Age stone wall located on the remainder of Portion 58 of the farm Leeuwvallei 297KT, to be impacted upon by residential development; Site LB/3;*
- Rowe, C., August 2013, *DOCUMENTATION REPORT: LIA stone walled settlements, RDR 1, 2 & 7 within the proposed development area (Morning Tide Complex), on the remainder of portion 7 of the farm Rooidraai 34JT, Mashishing, Mpumalanga;*
- Rowe, C., September 2013, Phase 1, LIA stone walled settlement (RDR 7) within the Morning Tide Complex on the remainder of portion 7 of the farm Rooidraai 34JT, Mashishing (Lydenburg);
- Rowe C., 2013, *SPECIALIST REPORT & MANAGEMENT PLAN: LIA rock engraving site within the proposed development of the Lydenburg Mall (Morning Tide Complex), on the remainder of portion 7 of the farm Rooidraai 34JT, Mashishing, Lydenburg.*
- Rowe C., April 2014: *Relocation of the Rooidraai Rock engraving RDR 8 on the remainder of portion 7 of the farm Rooidraai 34JT, Mashishing, Mpumalanga Province;*

The SAHRA database for archaeological and historical impact assessments was consulted and revealed other Archaeological Impact assessment reports in the area of Lydenburg / Burgersfort:

- Pistorius, J.C.C., February 2005, *A Phase 1 HIA study for the proposed New Burgersfort ext 30 residential and the Burgersfort ext 31 industrial development projects near Burgersfort.*
- Birkholtz, P. 2006, *Phase 1 HIA for the Morning Tide Development Complex, Morning Tide Power Line and Abrina Residential Development, 2007.*
- Pelsler, A., 2014 *Report on the first phase archaeological investigations on LIA stone walled sites located on portion 7 of the farm Rooidraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C, Lydenburg, Mpumalanga.*

Research was conducted by means of collecting primary or secondary literary sources with relevant information on the prehistory and history of the area. In order to place the study area in archaeological context, secondary sources, such as ethnographical and linguistic studies by early researchers such as Ziervogel and Van Warmelo were consulted. Other useful sources were that of Theal (pre-historic), De Jongh (ethnographic and historic information in the area), Bergh (historic), Delius, *Mpumalanga: History and Heritage*, and *The Military History Journal* on the Sekukuni Wars.

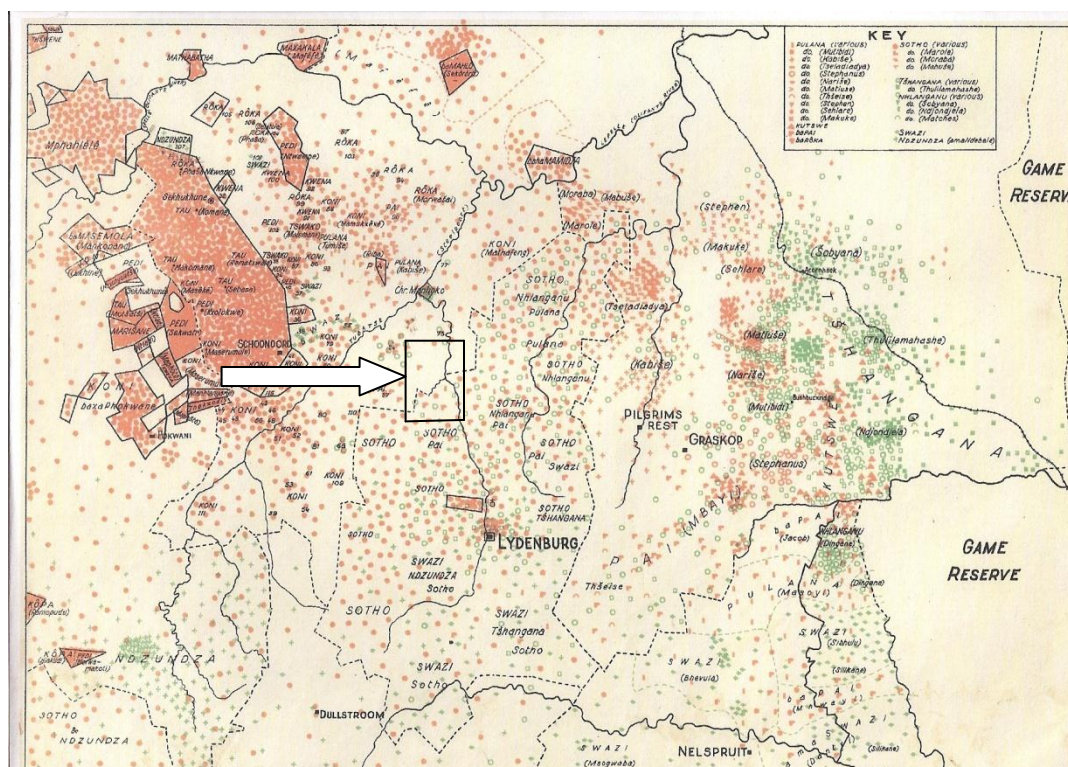
There are no museums in Burgersfort or Steelpoort, and the closest museum with relevant information on the area was the museum in Lydenburg. This museum covers information on the general history and pre-history of the surrounding area, and focuses extensively on the Early Iron Age site of the Lydenburg Heads site.

- Stone Age

Evidence from rock shelters in the Mpumalanga / Limpopo region suggest that the earliest inhabitants in the area were small groups of Stone Age hunter- gatherers. These San people led a nomadic lifestyle and rock paintings found in some of the shelters are an indication of their presence.^{9 10} Unfortunately very little

⁹ Hampson et al., 2002, The rock art of Bongani Mountain Lodge, SA Archaeological Bulletin 57: p. 15.

research in this regard has been conducted, although several rock painting sites have been recorded in the areas of Ohrigstad / Blyderivierspoort Canyon, and rock engravings in the surrounding area of Lydenburg.¹¹ Bergh,¹² did not record any Stone Age sites in the immediate areas of Lydenburg, Burgersfort and Steelpoort. The closest Middle- and Later Stone Age sites have been documented near Ohrigstad. The Bushman Rock Shelter and Heuningneskrans are the most well-known Middle Stone Age sites in the vicinity, dating back to approximately 35000 BP.¹³



MAP 1: 1935 Map of Van Warmelo: The surrounding area of Boerboonkraal, is indicated with sparse habitation of various Sotho groups (baPai or Pulana) and a small presence of Nhlanguu – Chr.Manhoko, with Koni towards the north. The area further south was mainly inhabited by Sotho and Swazi groups.

• IRON AGE

Later Bantu-speaking tribes from further north moved into southern Africa, bringing with them a new way of life based on agriculture, pastoralism and metal working. This period is broadly referred to as the Iron Age, starting around AD 200. Cattle played a crucial role in the world-view and social organization of these societies, which is reflected in the layout of their homesteads – referred to as the Central Cattle Pattern. This type of settlement may be recognized archaeologically from centrally located cattle pens associated with high-status burials, grain storage pits, men's assembly areas and evidence of iron-forging.^{14 15}

¹⁰ Rowe C., 2009, Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve, p. 22.

¹¹ *Ibid*, p.22.

¹² Bergh 2009 *Geskiedenis Atlas van Suid Afrika*, p.4.

¹³ Voight, E., 1981, *Guide to the Archaeological sites in the Northern and Eastern Transvaal*, p. 115.

¹⁴ Huffman T.N., 2007, *Handbook to the Iron Age*, p.331.

¹⁵ Pelsler A., 2014, *A Report on the first phase archaeological investigations on LIA stone walled sites located on portion 7 of the farm Rooidraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C*, p. 8.

- **Early Iron Age (EIA)**

Secondary source evidence of Early Iron Age sites is lacking, with only one well known site indicated, the Lydenburg Heads site.¹⁶ The Lydenburg Heads site at Sterkspruit, Lydenburg dated to approximately AD 600. Excavations at the Klingbeil Nature Reserve also revealed direct archaeological evidence that the Early Iron Age people in the area introduced cattle and sheep/goat as well as crop plants. Based on pottery identification, Klingbeil is dated to about AD 1000.¹⁷

- **Late Iron Age (LIA)**

The Late Iron Age spans a period between AD 1300-1840, and is associated with groups like the Ndebele, Bakoni and BaPedi in the study area (see Map 1). Sites in the area are characterized by widespread stone walling such as the Badfontein type that were used to define homestead areas, agricultural land (terracing) and cattle tracks. Maize was introduced into southern Africa by the Portuguese during the Late Iron Age contributing to an increase in population. Its cultivation is linked archaeologically to special grindstones.^{18 19} Huffman,²⁰ place the stone walling in the Burgersfort area into the Badfontein tradition (see Map 2).

The Pedi is the most famous group to have inhabited the Lydenburg / Steelpoort / Burgersfort areas in historic times. The area in which these people settled is historically known as Bopedi but other groups resided here before the Pedi came onto the scene. Among the first of these were the Kwena or Mongatane, who came from the north and were probably of Sotho origin. A second tribe to settle in Bopedi, before the arrival of the Pedi was the Roka, followed by the Koni.²¹

Some Koni entered the area from the east and others from the north-west. According to historians, most Koni trace their origin to Swaziland and therefore claim that they are related to the Nguni. After the first Koni settled in the southern part of Bopedi, the area became known as Bokoni. Many people who were previously known as Roka also adopted the name Koni as the name "Roka" was not always held in esteem by other groups.

Historically the Pedi was a relatively small group who by various means built up a considerable empire. The Pedi are of Sotho origin. They migrated southwards from the Great Lakes in Central Africa some five centuries ago. The names of their chiefs can be traced to a maximum of fifteen generations. Historical events can be deduced reasonably well for the last two centuries, while sporadic events can be described during the preceding centuries.²²

According to oral tradition the BaKoni were already in the area of the escarpment before the arrival of the Pedi (a northern Sotho group), which would indicate a date of before AD 1650 for some of the settlements. Therefore the BaKoni clans were some of the earliest people to settle in what are today the Mpumalanga / Limpopo Provinces. They most likely followed a central route of migration out of northern KwaZulu-Natal, becoming "Sotho-ized" along the way.²³

¹⁶ Bergh J., 2009. *Geskiedenis Atlas van Suid Afrika*, p.8.

¹⁷ Pelsler A., 2014, *A Report on the first phase archaeological investigations on LIA stone walled sites located on portion 7 of the farm Rooidraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C*, p. 8.

¹⁸ Huffman T.N., 2007, *Handbook to the Iron Age*.

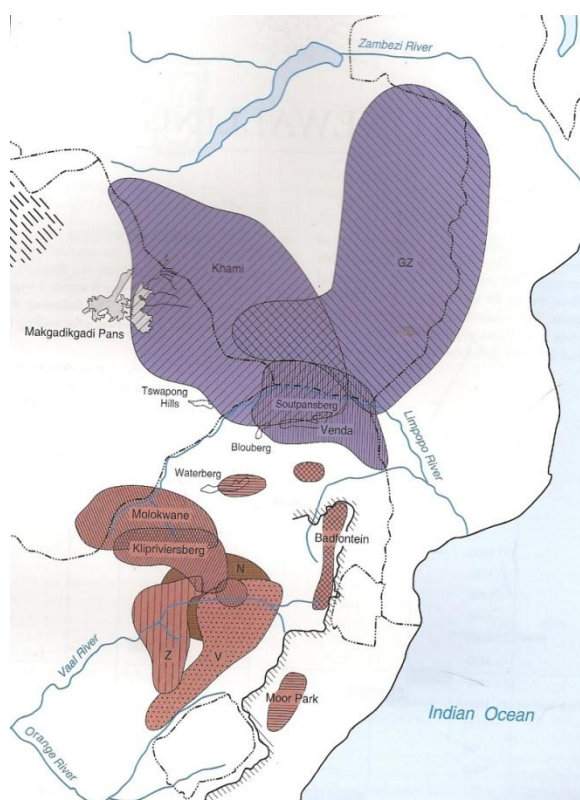
¹⁹ Pelsler A., 2014, *A Report on the first phase archaeological investigations on LIA stone walled sites located on portion 7 of the farm Rooidraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C*, p. 8.

²⁰ Huffman T.N., 2007, *Handbook to the Iron Age*, p. 32.

²¹ E-mail reply: JP Cilliers 2009-06-18

²² E-mail reply: JP Cilliers 2009-06-18

²³ Pelsler A., 2014, *A Report on the first phase archaeological investigations on LIA stone walled sites*



Map 2: Distribution of LIA stone walled complexes (Huffman 2007: 32).

Later on the Badfontein Koni became allied to the Pedi. This is reflected in the archaeological evidence, which shows that ceramics associated with the Badfontein walling are historic Pedi pottery of the Marateng facies. By the late 18th and 19th century the Pedi ruled an extensive area that included areas surrounding Lydenburg / Burgersfort, although Swazi and Ndebele groups also occupied some parts of the region – mainly in caves referred to as refuge sites. They were shortly followed by the first European settlers in the area.²⁴

Recent research has linked the LIA stone walled settlements in the Mpumalanga escarpment more specifically to the Bakoni. During the 16th and 17th centuries the Bakoni built a vast complex of stonewalled settlements in this area. These cities were carefully planned around terraced farms and roads that were built to lead cattle to pasture while keeping the cows out of the gardens. In the late 1700's the sites had populations of between 30 000 to 50 000 people.²⁵

During the Difaqane (a period of great instability and migration in the interior of South Africa) the various groups living in the area were ruthlessly conquered by Mzilikazi, around 1826. At that time the BaKoni were under the chieftainship of Makopole. He was a son of the Pedi chief Thulare. After first warding off an attack led by his brother, Makopole was then faced by the full onslaught of Mzilikazi's Ndebele. The invaders were responsible for destroying the Lydenburg-Ohrigstad settlements of the BaKoni people.²⁶

located on portion 7 of the farm Roodraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C, p. 10.

²⁴ *Ibid.*, p. 10.

²⁵ Rowe, C., August 2013, *DOCUMENTATION REPORT: LIA stone walled settlements, RDR 1, 2 & 7 within the proposed development area (Morning Tide Complex), on the remainder of portion 7 of the farm Roodraai 34JT, Mashishing, Mpumalanga.* P. 10

²⁶ Pelsler A., 2014, *A Report on the first phase archaeological investigations on LIA stone walled sites*

Stone walled ruins are a common feature found across the region and have been extensively mapped and researched, both through archaeological excavations and aerial photography. As a result of these various studies, three settlement types can be identified in the area:

- Simple enclosures – consisting of two concentric circles. The inner one was probably the cattle kraal and the huts were built in the space between the circles;
- Complex enclosures – includes several enclosures generally consisting of a large central one with two opposed entrances and a number of smaller circles around part of, or the whole of, the perimeter. Huts were built between the area of this complex and the outer ring wall;
- The third type of settlement in an agglomeration of small circles. It does not seem to conform to the basic pattern of the first two.

Settlements are characterized by terrace walls, cattle lanes and circular enclosures and are generally referred to as Badfontein walling. The cattle lane (track) would normally lead to a central enclosure (an area for milking and slaughter). On the opposite side an exit provided access to cattle kraals, which were attached to the central wall. Stone walling were used to define homestead areas, agricultural land (terracing) and cattle tracks. Crops were cultivated along the terraces where lines of stones were laid out parallel to the contour of the landscape. In cases of very steep ground proper walls were built. Stone-walled cattle tracks protected crops from being trampled by livestock.²⁷

Two settlement traits from the Badfontein type point to people with Nguni origins. Firstly the circular homestead arrangement emphasized the centre/side axis associated with the Central Cattle Pattern, a characteristic of Nguni people from northern KwaZulu-Natal. Secondly, the Badfontein cattle track leading to a central enclosure with an exit on the opposite side corresponds to the Nguni left-hand / right hand division.²⁸

Pottery types which are associated with the Lydenburg / Burgersfort area settlements, are named Mzonjani (EIA), Doornkop (EIA), Klingbeil (Middle Iron Age and Marateng for the Late Iron Age).²⁹

The LIA Marateng facies pottery, from the Moloko branch of the Urewe tradition, dates most likely from AD 1650-1840. This pottery has incised arcades on the upper shoulder separating black and red colour.³⁰

Metal and iron in particular was an important commodity during the Iron Age. Several metal artifacts have been found in association with the settlements. Collett's excavations at Badfontein revealed metal wire rings, an iron razor, an adze and a spear head. Iron slag was also discovered, pointing to possible metal working in the area. Many stones among the terraces show evidence of metal tools being sharpened on them.³¹

Upper and lower grindstones are commonly associated with Iron Age settlement and several were found during Collett's excavations at the Badfontein site. These are regarded as indirect evidence for agriculture and the two different types may indicate which crops were cultivated.³²

located on portion 7 of the farm Rooidraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C, p. 10.

²⁷ *Ibid.*, p. 10.

²⁸ *Ibid.*, p. 11.

²⁹ Huffman T.N., 2007, *Handbook to the Iron Age* pp 127-207.

³⁰ Pelsaert A., 2014, *A Report on the first phase archaeological investigations on LIA stone walled sites located on portion 7 of the farm Rooidraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C, p. 12.*

³¹ *Ibid.*, p 13.

³² *Ibid.*, p 13.

Beads were a trade commodity and were obtained via long distance trade routes in exchange for metal, ivory and animal skins. The most common types are royal blue hexagonal and round glass beads. Badfontein excavations revealed beads in yellow, blue, white, pink and red with white eyes, a translucent green bead, one made of soapstone as well as a large black wire-wound bead with white spots.³³

Bones of cattle and sheep / goats, found in association with cattle tracks and kraals, underline the pastoral lifestyle of the inhabitants. It also indicated that Iron Age people were responsible for introducing domesticated animals into the area.³⁴

Some 150 years before the *Voortrekkers* entered the area, some battles took place between the Koni (Zulu under Makopole) and Swazi (under Moselekatse). At that time the BaPedi resided in the Steelpoort area. The Bakoni (Koni) were attacked and defeated by the Matabele and their chief, Makopole, was killed. The Matabele, not yet satisfied with their victory, moved further north towards the BaPedi headquarters. At Olifantspoortjie the whole BaPedi regiment was wiped out as well as the sons of Thulare, the BaPedi chief (except for Sekwati who managed to escape).³⁵

After four years, Sekwati together with a few followers who had also managed to escape the Matabele, now slowly started to rise. In 1830 Sekwati invaded some of the smaller groups and eventually the Koni (under Marangrang) were ambushed and defeated. Now the empire of Maruteng (Bapedi) ruled the Koni.

At the beginning of the 19th century, groups such as the Pedi, Roka, Koni and Tau densely populated the immediate areas of Lydenburg, Steelpoort & Burgersfort. This was confirmed by ethnographical and linguistic studies by early researchers such as D. Ziervogel and N.J. Van Warmelo.³⁶ The 1935 map of Van Warmelo, indicated the presence of various Sotho groups (baPai and Pulana) as well as Koni in the area surrounding the town of Burgersfort (including the study area). Van Warmelo also indicated a small presence of Nhlanganu groups (see Map 1).

The Pedi of chief Sekwati (ca 1860) lived at Phiring (near Polokwane). Sekwati lived in constant fear of the Zulus. The country was unsafe and in an attempt to survive, some of the Koni turned to cannibalism.³⁷

This area was heavily under attack during the *Difaqane*. The Ndebele attacked this area in ca 1822, and Zwide (Swazi) attacked the Pedi in ca 1825.³⁸

• European settlement

The *Voortrekkers* passed the northern boundary of the Leolo mountains (Pedi area) in 1837 when Trichardt looked for a route to Delagoa Bay (currently Maputo).³⁹ Trichardt met the Pedi chief Sekwati.⁴⁰ When more Europeans settled in the area from 1845, conflict was inevitable.

The *Voortrekkers* under Andries Hendrik Potgieter, settled at Ohrigstad in 1845. Soon conflicts arose between them and the Pedi leader, Sekwati. The smaller black groups also turned to Sekwati for help against the *Voortrekkers*. Sekwati moved his capital to the Leolo mountains at *Mosego hill*. Eventually they

³³ *Ibid.*, p.13.

³⁴ *Ibid.*, p.13.

³⁵ E-mail reply: JP Cilliers 2009-06-18

³⁶ Van Warmelo, N.J., 1935, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 111.

³⁷ Van Warmelo, N.J., 1944. *A genealogy of the house of Sekhukhune*, p.47.

³⁸ Bergh J., 2009. *Geskiedenis Atlas van Suid Afrika*, pp.10-28.

³⁹ *Ibid.*, p. 14.

⁴⁰ Theal, G.M., *History of South Africa from 1873 – 1884*, Cape Town, p. 257.

signed a treaty and it was decided that the Steelpoort or Tubatse River, would form the border between the Pedi and the *Voortrekkers*, and peace followed for a while.⁴¹

The conflict in the eastern parts of the country between white and black was of a more forceful nature than in the central areas of the country. The Kopa, Ndzundza-Ndebeles and Pedi were more able to resist European onslaught.

The stressful relationship between the Pedi and Europeans since 1850, continued throughout the 1860's and 70's which lead to war. Sekukune, who took the reign after Sekwati in 1861, played an important role in this. After the Swazi attack on Sekukune in 1869, he moved his capital from *Thaba Mosego* to *Tshate*.⁴²

The relationship between the Pedi and the Afrikaners stayed stressful. In 1876 the Afrikaners attacked the Pedi. A huge part of the Pedi capital was burnt down. In December 1876, the Pedi submitted to the Republic, as it was time to plant their crops and they could not afford to lose this valuable time.⁴³

A plan had to be constructed to secure the borders of Sekukuni's country, by placing volunteer mercenaries at the Steelpoort River. A fort was built within the junction of the Steelpoort and Spekboom Rivers – Fort Burgers, named after President Burgers. The fort was manned by the Lydenburg Volunteer Corps who were placed under the command of Captain von Schlickmann.⁴⁴

On 29 September 1876, Sekukuni attacked Fort Burgers with the object of recovering cattle supposedly looted from the Bapedi. They killed two of the volunteers.⁴⁵ A monument currently at the site, marks graves of the *Voortrekker* era, and the location of the historic site of Fort Burgers is directly towards the west of this monument.⁴⁶

The British under Shepstone took over the Transvaal on 12 April 1877. At first Sekukune pretended to welcome them, but soon started raiding their cattle and other domesticated animals. In November, the British, with the help of the Swazi, attacked the Pedi, and Sekukune's son and heirs were killed. Sekukune fled to a cave in the Leolo mountains, but was later captured and taken prisoner. He was succeeded by Mampuru (Middelburg district) and Ramoroko (Sekukuneland). Sekukune was killed in 1882 by Mampuru, after his release.⁴⁷

Several forts were erected to protect the Europeans during this time. Fort Burgers was only one of these. The area around Fort Burgers, eventually became known as the town of "Burgersfort".⁴⁸

⁴¹ De Jongh, M, (ed)., 1987. Swatini. p.29.

⁴² Bergh J., 2009. *Geskiedenis Atlas van Suid Afrika*, p.31.

⁴³ De Jongh, M, (ed)., 1987. Swatini. p.30.

⁴⁴ <http://samilitaryhistory.org/vol1025hk.html> :3

⁴⁵ <http://samilitaryhistory.org/vol1025hk.html> :3

⁴⁶ Rowe, C., August 2009, *Phase 1 Archaeological / Heritage Impact assessment: Sections 1a, 1b, 2, 3 & 4 of Leeuwvallei 297KT*, Burgersfort, Limpopo Province;

⁴⁷ De Jongh, M, (ed)., 1987. Swatini. p.30.

⁴⁸ Bergh J., 2009. *Geskiedenis Atlas van Suid Afrika*, p. 31.

Very little contemporary research has been done on prehistoric African settlements in the study area, although one Middle Stone Age site (Bushman Rock Shelter, Ohrigstad dating ca 35000 BP)⁴⁹ and one Early Iron Age site (the Lydenburg Heads site at Sterkspruit dating to ca 900 AD), was professionally excavated.⁵⁰ Pelser, Cilliers and Rowe have conducted archaeological excavations close to the study area, which concentrated mainly on the Late Iron Age or historic periods.

Several early ethnographical and linguistic studies by early researchers such as D. Ziervogel and N.J. Van Warmelo, revealed that the study area was mainly inhabited by the Sotho groups, and later Tsonga and Swazi, from before the 18th century.^{51 52 53} (See Map 1: 1935: Map of Van Warmelo). When concentrating on ethnographical history, it is important to include a slightly wider geographical area in order for it to make sense. Van Warmelo based his 1935 survey of *Bantu Tribes of South Africa* on the amount of taxpayers in an area. The survey does not include the extended households of each taxpayer, so it was impossible to actually indicate how many people were living in one area.⁵⁴

The Swazi under Mswati II (1845), commenced large scale raids on the prosperous tribal lands to the north of Swaziland. During their northern expansion they forced the local inhabitants out of Swaziland, or absorbed them.⁵⁵ There is evidence of resistance, but the Eastern Sotho groups who lived in the northern parts of Swaziland, moved mainly northwards.⁵⁶ This appears to have taken place towards the end of the 18th century.⁵⁷

Northern Sotho:

The Pedi (who had their roots in the baKgatla, near the current Pretoria) moved under Thobele (who was banished from the Kgatla) to Sekukuneland in ca 1650, where they settled alongside the baKoni. There was initially peace, but soon the Koni had to submit to the Pedi. In time, the Pedi also ruled over the baRoka, baTau, Matlala, baMohlala, and others. They ruled over the whole of Lydenburg, Pilgrim's Rest, Middelburg and Polokwane (Pietersburg) districts.⁵⁸ Van Warmelo mentioned that the south-eastern sector of the Northern Sotho groups had other tribes that belong to them from ancient times such as the baKoni.⁵⁹

Swazi

The Swazi people descend from the southern Bantu (Nguni) who migrated from central Africa in the 15th and 16th centuries.⁶⁰ The differences between the Swazi and the Natal Nguni were probably never great, their culture as far as is known from the comparatively little research being carried out, does not show striking

⁴⁹ Voight, E., 1981, *Guide to the Archaeological sites in the Northern and Eastern Transvaal*, p 115.

⁵⁰ M.M. Van der Ryst., Die Ystertydperk, in J.S. Bergh (red.), *Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*. p. 97.

⁵¹ Rowe, C., 2014, Excavations report Leeuwvallei, LB/3.

⁵² N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*. pp. 90-92 & 111.

⁵³ H. S. Webb, The Native Inhabitants of the Southern Lowveld, in *Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. p.16.

⁵⁴ N.J. van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p.9.

⁵⁵ A.C. Myburgh, *The Tribes of Barberton District*, p. 10.

⁵⁶ N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*. p. 111.

⁵⁷ H. S. Webb, The Native Inhabitants of the Southern Lowveld, in *Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. p. 14

⁵⁸ De Jongh, M, (ed)., 1987. Swatini. p.28

⁵⁹ Van Warmelo, N.J., 1935, *A Preliminary Survey of the Bantu Tribes of South Africa*. p.114.

⁶⁰ <http://en.wikipedia.org/wiki/Swaziland> p.1.

differences. Their language is a 'Tekeza' variation of Zulu, but through having escaped being drawn into the mainstream of the Zulus of the *Shaka* period, they became independent and their claim to be grouped apart as a culture is now well founded.⁶¹

Tsonga groups: The Nhlanganu and Tšhangana

The Nhlanganu and Tšhangana (also generally known as the Shangaan-Tsonga)⁶² form part of the larger Tsonga group of which the original group occupied the whole of Mozambique (Portuguese East Africa), and it has been recorded that by 1554, they were already living around the Delagoa Bay area (Maputo).⁶³ They fled from the onslaughts of the Zulu (Nguni) nation from the Natal area, and great numbers of emigrants sought safety in the "Transvaal" as recently as the 19th century, especially in the greater Pilgrim's Rest district (including the study area that we are concerned with). The Tsonga also moved west from Mozambique into the "Transvaal". They have never formed large powerful tribes but were mostly always subdivided into loosely-knit units, and absorbed under the protection of whichever chief would give them land.⁶⁴ They were originally of Nguni origin.⁶⁵ The term "Shangaan" is commonly employed to refer to all members of the Tsonga division.⁶⁶

- **History of Burgersfort**

The closest town to the farm Boerboonkraal, is Burgersfort which is located in the Spekboom River valley at the edge of the Bushveld Complex. The town was established around a hexagonal fort that was built in 1876 during the second war against the baPedi, Chief Sekhukune, the British and the Boers. The town was named after the South African President T.F. Burgers. Today, Burgersfort is an important contributor in terms of platinum mining.⁶⁷

⁶¹ N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 83.

⁶² M. De Jongh (ed.), *Swatini*, p. 24.

⁶³ N.J. Van Warmelo, Grouping and Ethnic History, in *Schapera I., The Bantu-Speaking Tribes of South Africa. An Ethnographical survey*, p. 55.

⁶⁴ N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, pp. 90-91.

⁶⁵ N.J. Van Warmelo, Grouping and Ethnic History, in *Schapera I., The Bantu-Speaking Tribes of South Africa. An Ethnographical survey*, p. 55.

⁶⁶ N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 92

⁶⁷ <http://www.sa-venues.com/attractionsmpl/burgersfort.pnf>.

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

The proposed project will involve the following:

- Approximately 90ha are earmarked for the proposed agricultural development, including a farm road network to access the various fields.
- The five sections which are proposed for the agricultural development, is indicated in Appendix 1.

Sections A, B and C is currently natural land, and sections D and E, is highly disturbed. Sections A (12.56ha) and B (3.82ha) is situated along the Waterfall river and is covered by riverine vegetation. Visibility in these two areas was restricted. Section C (76.96ha) is situated east of the R37 and visibility was mostly excellent from the entrance gate to the south. The section from the entrance gate to the north was denser and visibility was restricted. The area was mostly flat and accessible, with a network of paths and roads. Section A is at the foot of a mountain and goes slightly uphill especially in the northern section. There are two prominent drainage lines in section A which enters the section from the east (see map 5). Large sections surrounding the property are commercial citrus farms (see map 7).

The farm Boerboonkraal is situated in the Ohrigstad Mountain Bushveld vegetation type, positioned in the steep valley and mountain slopes south of Burgersfort. The vegetation type is classified as sourish mixed Bushveld and mixed Bushveld – North-eastern mountain grassland. It is primary on quartzite and shale, weathering to shallow rocky soils.

The area next to the Waterfall River (B, C, D, & E), represents elements of the subtropical freshwater wetlands vegetation type. Vegetation and landscape features consist of flat topography supporting low beds dominated by reeds, sedges and rushes as well as waterlogged meadows dominated by grasses. *Ficus sycomorus* was also observed.⁶⁸

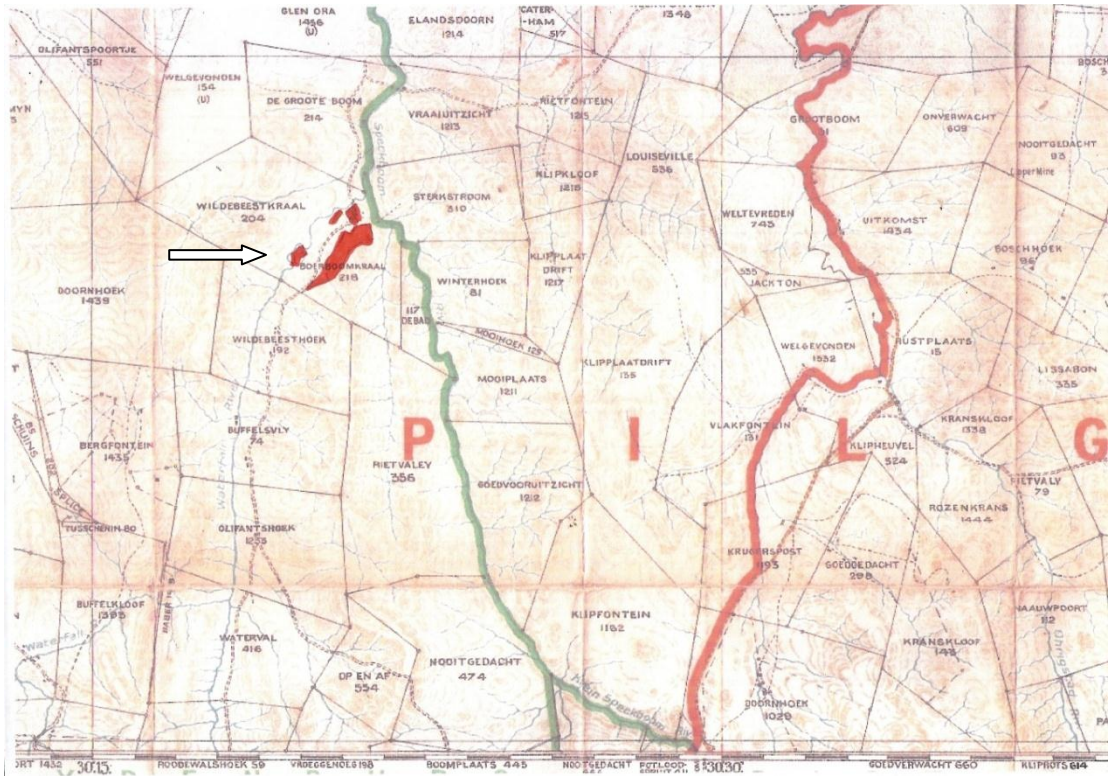
Section A (south) consists of woodland on a flat slope with low rock and tree cover. The vegetation is dominated by *Acacia tortillis* and *Dichrostachys cinerea*. Section A (north) is woodland on a flat slope with rock cover as well as high tree and grass cover. The vegetation type is dominated by *Acacia tortillis*, *Aloe* species and *Grewia* species. Towards the mountain it is described as woodland on a steep slope with high rock and tree cover, and the vegetation is dominated by *Acacia nigrescens*, *Commiphora mollis*, *Commiphora pyracanthoides*, *Euphorbia ingens*, *Grewia* species and *Dichrostachys cinerea*.^{69 70}

The 1911 topographical map *Ohrigstad* (Map 3), does not indicate any historic black settlements in the study area as well as along the two rivers (Waterfall and Speckboom), which join just towards the north of the farm *Boerboonkraal*.

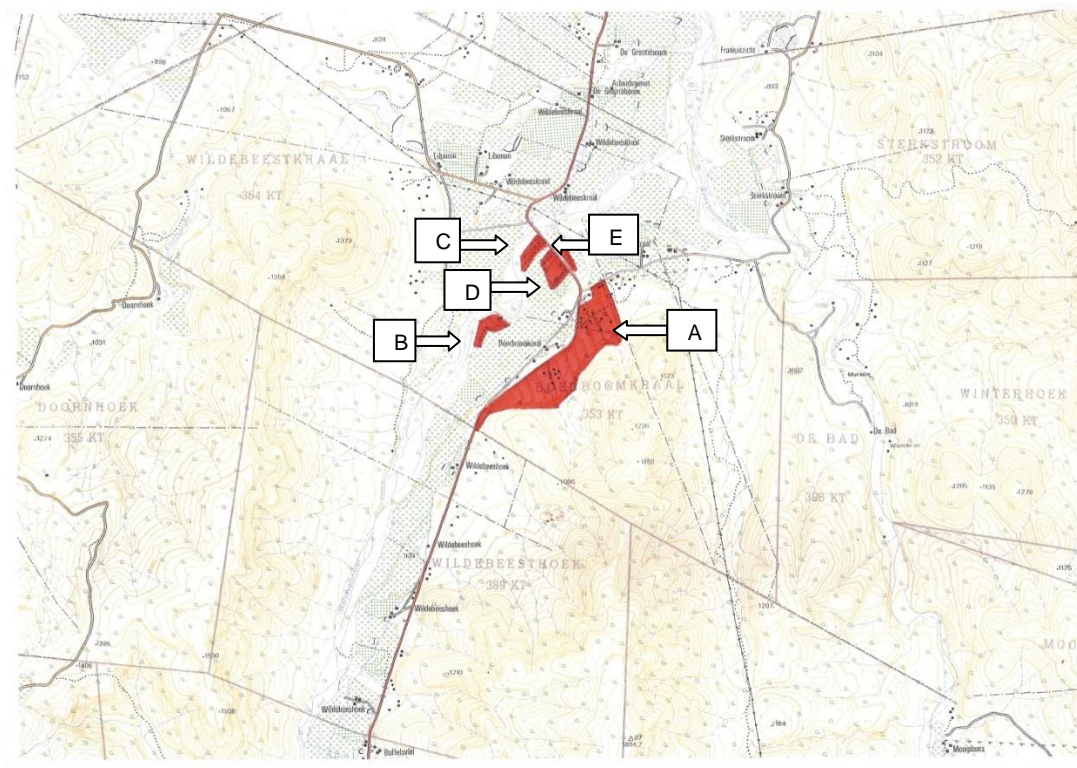
⁶⁸ Deacon, A.R., 2014. Ecological Assessment: Alteration of virgin natural land for agricultural use – portion 7 and 8 of the farm Boerboonkraal 353KT, Burgersfort area. p. 1-3.

⁶⁹ *Ibid*, p. 1-3.

⁷⁰ Van Wyk, B., & Van Wyk P., Field Guide to Trees of Southern Africa, 1997.



MAP 3: 1911 map. The study area is indicated in red (see arrow).



MAP 4: 1976 Topographical Map: 2430CD, BUFFELSVLEI, indicates the study area. Note the historic / recent settlements in section A.

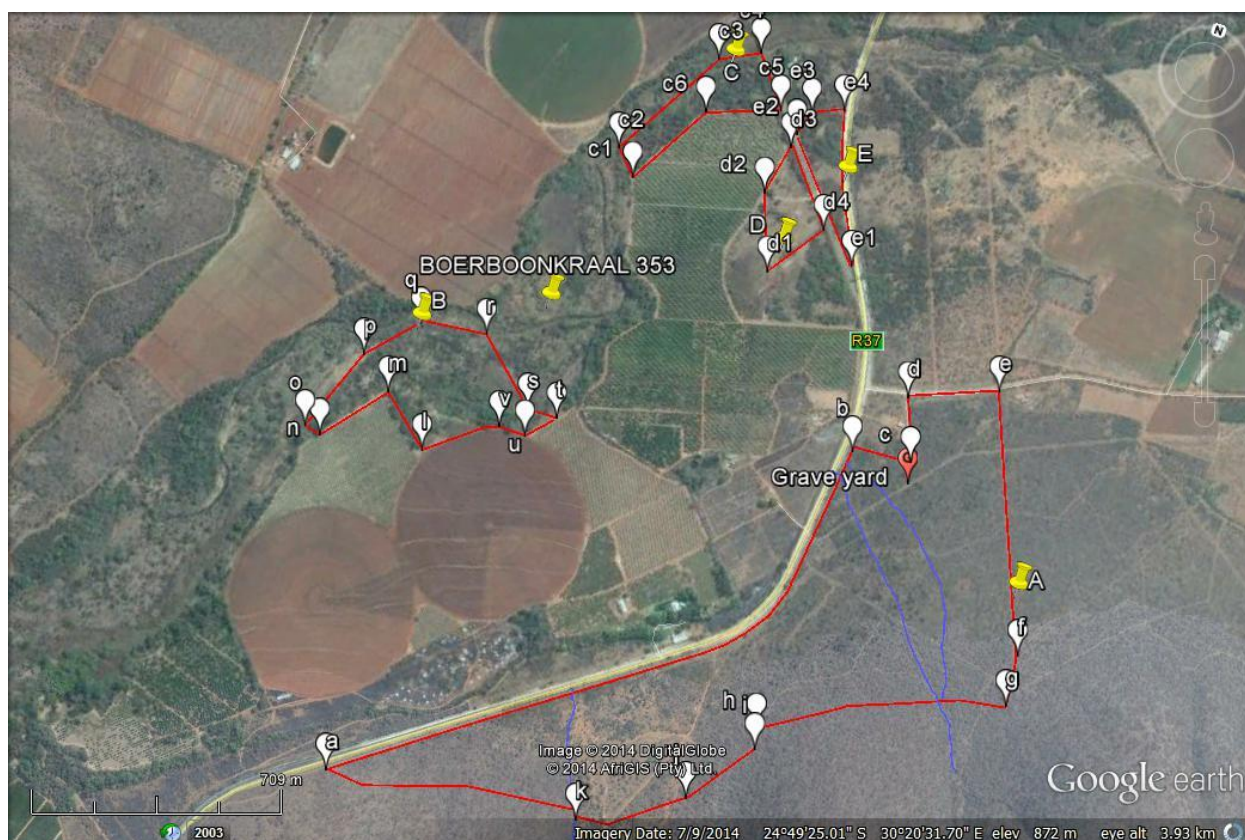
D. LOCALITY

The proposed project site is located on the farm *BOERBOONKRAAL 353 KT*. It is located on the R37 between Mashishing (Lydenburg) and Burgersfort. Sections A, B and C are currently natural land, and sections D and E are highly disturbed.

- Section A (76.96ha), is situated east of the R37 and visibility was excellent from the entrance gate

to the south. The area from the entrance gate to the north was dense and visibility was restricted. Section A is at the foot of a mountain which rises slightly uphill especially in the northern part.

- Sections B (12.56ha) and C (3.82ha) are situated along the Waterfall river and is covered by mostly natural but also alien vegetation. Visibility in these two areas was restricted.
- Section D (3.12ha) was historically disturbed agricultural lands (see Map 4), and visibility was excellent.
- Section E (3.18ha) was also historically disturbed agricultural lands (see Map 4), and alien vegetation had infested the northern half of the section, where visibility was restricted. Visibility in the south was however excellent. The entire property is zoned as agricultural, and no rezoning will take place. The area was mostly flat and accessible, with a network of paths and roads.



Map. 5: The study area is situated on both sides of the R37, between Lydenburg and Burgersfort.

The study area is situated on Topographical map, 1:50 000, 2430CD, BUFFELSVLEI, which is in the Limpopo Province. This area falls under the jurisdiction of the Burgersfort District Municipality, and Thaba Chweu Local Municipality.

- **Description of methodology:**

The 1976 topographical map, 2430CD, BUFFELSVLEI), as well as a 1911 map (Map 3), and Google images of the site (Map 5, 6 & 7), indicate the study area of the proposed development. These were intensively studied to assess the current and historically 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.
- Several specialists currently working in the field of anthropology and archaeology have also been consulted on the subject.

-Literary sources: A list of books and government publications about prehistory and history of the area were cited, and revealed some information;

-The archaeological database of SAHRA as well as the National Cultural History Museum was consulted. Heritage Impact Assessment reports of specialists who worked in the area were studied and are quoted in section B.

- The five sections (total of 90ha), which are applied for, is natural land as well as disturbed land, which belongs to Mr. Cornel van der Merwe (Waterval Citrus). Section A is game fenced.
- A site visit with the environmental practitioner and the ecologist was held and features of interest were pointed out during the visit, such as the grave sites.
- The fieldwork and survey was conducted extensively with two people on foot and with a vehicle. Tracks and paths criss-cross the farm and were mainly used to access areas (See Appendix 3).
- The terrain was mostly flat, even and accessible and visibility was good, except for the northern part in section A which was rocky, and vegetation was dense. Visibility was more restricted in this section.
- 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, such as the farm manager, Mr. Albert Winterbach⁷¹, ecologist Dr. A. Deacon⁷² and environmental practitioner Mr. R. Kalwa.⁷³
- GPS co-ordinates were used to locate the perimeters and any heritage features within the study area (Co-ordinates provided by RHENGU Environmental Services): (see Map 5).

GPS CO-ORDINATES		
Section A	South	East
a Elev 923m	S 24° 50' 02.39"	E 30° 20' 14.16"
b Elev 874m	S 24° 49' 19.87"	E 30° 20' 53.32"
c Elev 878m	S 24° 49' 19.44"	E 30° 20' 59.41"
d Elev 868m	S 24° 49' 13.82"	E 30° 20' 56.98"
e Elev 868m	S 24° 49' 10.72"	E 30° 21' 05.43"
f Elev 916m	S 24° 49' 33.15"	E 30° 21' 14.90"
g Elev 937m	S 24° 49' 37.62"	E 30° 21' 15.07"

⁷¹ Personal information: Mr. A. Winterbach, 2014-11-03.

⁷² Personal information: Dr. A. Deacon, 2014-11-03.

⁷³ Personal information: Mr. R. Kalwa, 2014-11-03.

h Elev. 919m	S 24° 49' 46.48"	E 30° 20' 52.99"
i Elev. 925m	S 24° 49' 48.55"	E 30° 20' 53.03"
j Elev. 924m	S 24° 49' 54.48"	E 30° 20' 48.35"
k Elev. 925m	S 24° 49' 59.57"	E 30° 20' 38.77"

GPS CO-ORDINATES		
Section B	South	East
l Elev. 873m	S 24° 49' 32.97"	E 30° 20' 12.34"
m Elev. 875m	S 24° 49' 29.01"	E 30° 20' 07.21"
n Elev. 878m	S 24° 49' 34.68"	E 30° 20' 02.05"
o Elev 876m	S 24° 49' 34.38"	E 30° 20' 00.33"
p Elev 872m	S 24° 49' 26.46"	E 30° 20' 03.55"
q Elev 870m	S 24° 49' 21.98"	E 30° 20' 08.07"
r Elev 867m	S 24° 49' 21.16"	E 30° 20' 14.61"
s Elev. 869m	S 24° 49' 26.42"	E 30° 20' 21.01"
t Elev. 871m	S 24° 49' 26.11"	E 30° 20' 24.05"
u Elev. 871m	S 24° 49' 28.66"	E 30° 20' 21.62"
v Elev. 870m	S 24° 49' 28.66"	E 30° 20' 18.90"

GPS CO-ORDINATES		
Section C	South	East
C1 Elev. 858m	S 24° 49' 02.93"	E 30° 20' 23.41"
C2 Elev. 860m	S 24° 49' 00.78"	E 30° 20' 21.16"
C3 Elev. 856m	S 24° 48' 50.03"	E 30° 20' 27.87"
C4 Elev 853m	S 24° 48' 48.25"	E 30° 20' 31.65"
C5 Elev 855m	S 24° 48' 52.59"	E 30° 20' 35.41"
C6 Elev 856m	S 24° 48' 55.03"	E 30° 20' 28.34"

Section D	South	East
D1 Elev. 857m	S 24° 49' 07.14"	E 30° 20' 39.46"
D2 Elev. 854m	S 24° 49' 00.35"	E 30° 20' 36.61"
D3 Elev. 854m	S 24° 48' 55.55"	E 30° 20' 37.67"
D4 Elev. 857m	S 24° 49' 01.83"	E 30° 20' 43.46"

Section E	South	East
E1 Elev. 857m	S 24° 49' 04.11"	E 30° 20' 47.37"
E2 Elev. 854m	S 24° 48' 54.21"	E 30° 20' 37.89"
E3 Elev. 853m	S 24° 48' 51.82"	E 30° 20' 38.58"
E4 Elev. 853m	S 24° 48' 50.60"	E 30° 20' 41.54"

E. DESCRIPTION OF IDENTIFIED SITES

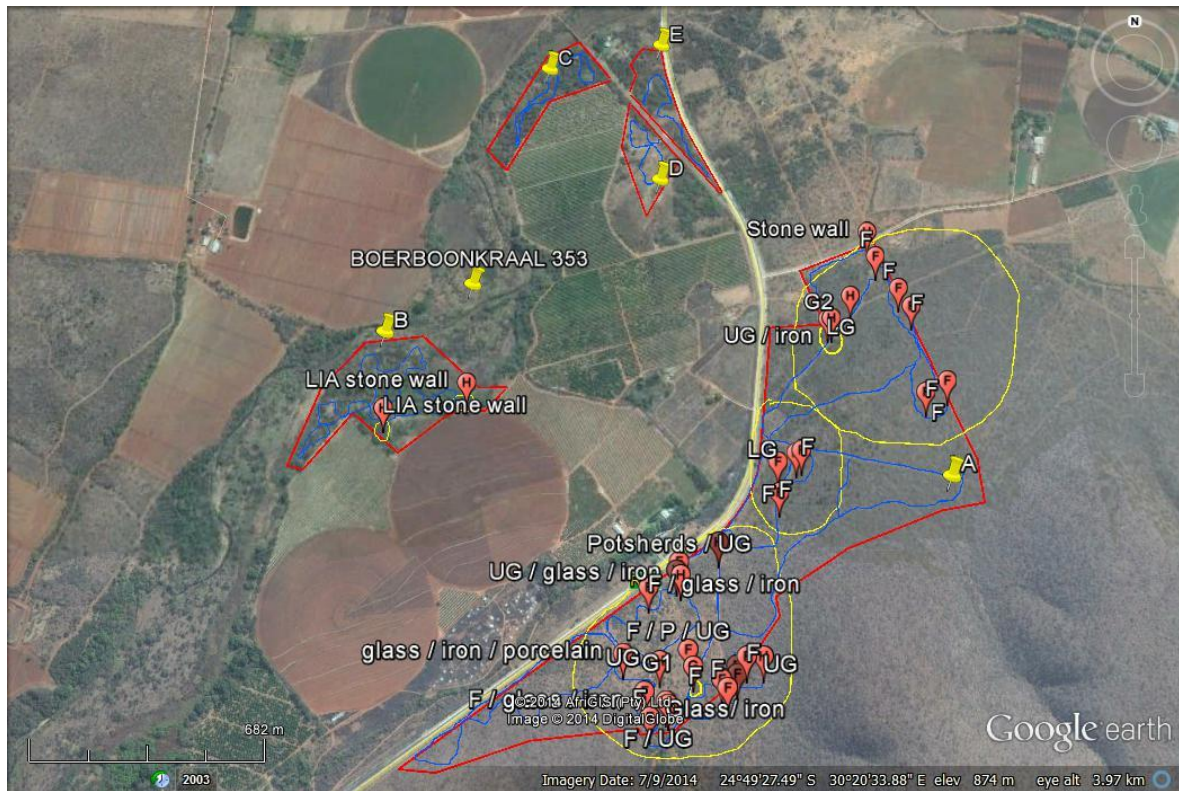
The alteration of natural land for agricultural purposes (citrus), is requested by the applicant. An area of 90ha is proposed to be developed for agriculture (citrus) with a farm road network, to access the various fields (see Appendix 1 for the suitable areas to be developed).

The study area is between Lydenburg and Burgersfort, between the Waterfall and Speckboom rivers, which are well-known for agricultural farming (see Map 7 Google image of wider area). Modern topographical maps also clearly show extensive farming activities in the surrounding area (see Map 4). The 1911 topographical map (see Map 3) does not indicate any historic settlements directly in the study area. The 1935 map by Van Warmelo indicated the groups living in the area as mainly Sotho (see Map 1).

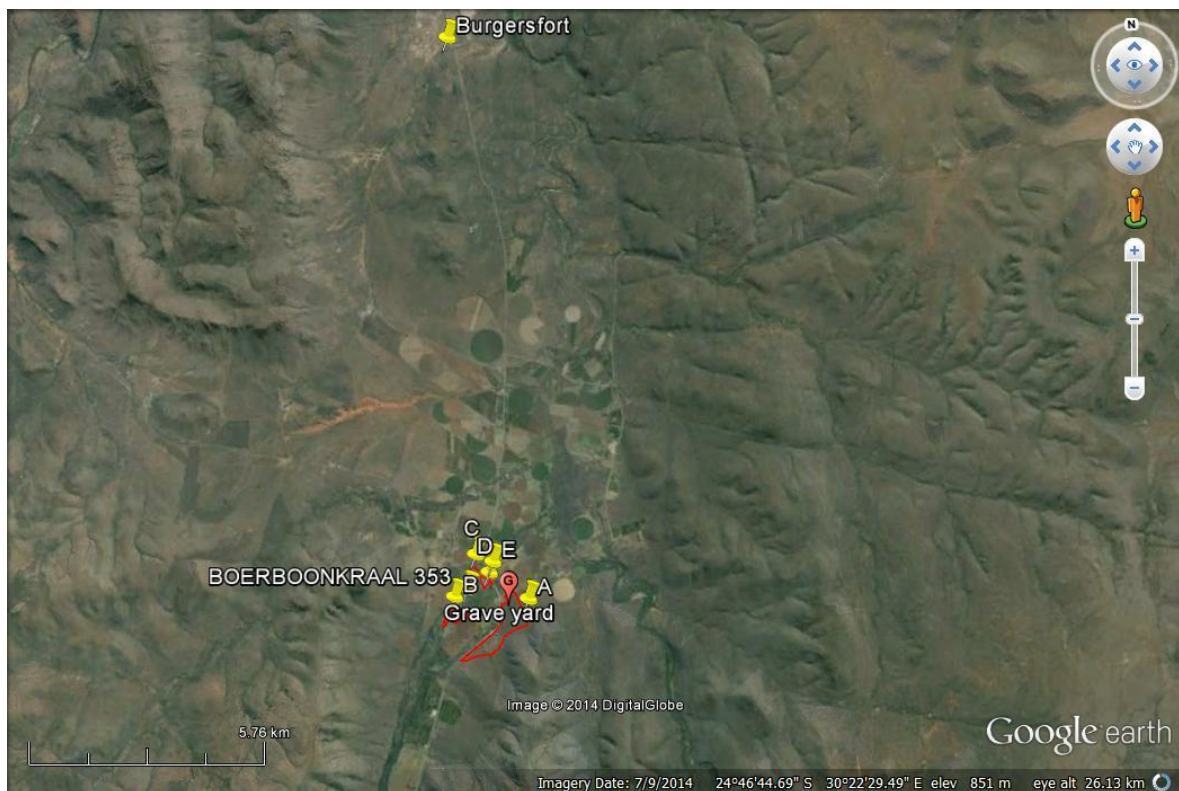
The study area is indicated in Maps 4 & 5. The terrain was mostly even and visibility good apart from the northern parts of section A, which was rocky with dense vegetation and visibility more restricted (see fig. 5, 6, 7, 8 & 48). The sections were however accessible by many existing paths and roads, and was surveyed on foot and per vehicle.

In terms of archaeological material, Later Iron Age (LIA) walls were identified in section B (Fig. 56 - 60). Section A revealed recent settlements (square) which were still inhabited during the 1970's (Fig. 20 - 53). Some clay potsherds, upper and lower grinders, fragments of glass, porcelain, ceramics and iron were identified at the recent settlements (Fig. 31 - 34). Two large, neglected grave sites are also present on the site. (Fig. 9 - 19), and mitigation measures are recommended. The LIA stone walls are disturbed but still have significance and mitigation measures are recommended. The recent square settlements and potsherds, upper and lower grinders and fragments of glass etc. which were associated with the settlements, do not have any historic or cultural value which will be impacted upon by the proposed development (See Map 6: Heritage features).

According to the manager, Mr. Albert Winterbach, the graves are visited by family members. Some of the graves have headstones with dates, but most are unmarked (Fig. 9, 18 & 19).



Map 6: Heritage and other features on the study area.



Map 7: Google image: Boerboonkraal in the wider area.

A quarry in section C, next to the Waterfall River (Fig. 63), was also investigated but revealed no archaeological material. All comments should be studied in conjunction with the maps, figures and appendices, which indicate the study area, and which corresponds with the summary below. Photographs in Appendix 2 show the general view of the study area. The only sites of significance, were the stone walls which were identified in section B, as well as the grave sites. The recent square structures and associated material, were of no archaeological significance.

Heritage features (See Map 6):

Section A (72ha) Heritage Feature	Description / Comments	Site Location
Upper grinder	Found in disturbed section in road	Elev. 878m S24° 49' 44.0" E30° 20' 47.1" Fig. 21
Grave site (southern section) (G1)	Neglected grave site with approximately 40 graves of which some have marble head stones. Some head stones of rock, were painted. <ul style="list-style-type: none"> • Prince Mkhonto (stone headstone) • M. Hendrek Mokwena, 15-12-1959; • M. Josaya Mokwena, 18-08-1947; • Moses Mancanza Mbuyane – no date. 	Elev. 904m S24° 49' 55.4" E30° 20' 44.5" Fig. 9, 10, 11, 12, 13 & 14.
Recent square mud and stone house foundations	Badly deteriorated foundations of recent settlement. Outside of proposed development area.	Elev. 921m S24° 49' 57.3" E30° 20' 47.6" Fig. 20
Recent square mud and stone house foundations	Badly deteriorated and eroded foundations of recent settlement. Outside of proposed development area.	Elev. 920m S24° 49' 56.5" E30° 20' 47.1"
Recent square mud and stone house foundations; Upper grinder within walls; Bottle top.	Badly deteriorated and eroded foundations of recent settlement. Outside of proposed development area.	Elev. 923m S24° 49' 56.1" E30° 20' 48.6"
Recent square mud and stone house foundations; Upper grinder within walls; Bottle top.	Badly deteriorated and eroded foundations of recent settlement. Outside of proposed development area.	Elev. 923m S24° 49' 56.1" E30° 20' 48.6"
Upper grinder near above house foundations	Small oval upper grinder near the above house foundations; Outside of proposed development area.	Elev. 927m S24° 49' 54.4" E30° 20' 51.4"
Recent square mud and stone house foundations; Metal pegs / barbed wire and drums	Badly deteriorated and eroded foundations of recent settlement. Outside of proposed development area.	Elev. 924m S24° 49' 54.4" E30° 20' 49.6"
Upper grinder	Upper grinder in open section associated with recent settlements	Elev 916m S24° 49' 54.9" E30° 20' 40.7" Fig. 22
Recent square foundations Clay Potsherds Upper grinder	Indistinct stone foundations of a recent square house. Potsherds (red) and an upper grinder were identified.	Elev. 868m S24° 49' 53.9" E30° 20' 43.6" Fig. 24, 25 & 26.

Recent square foundation (below dam)	Very indistinct square stone foundations	Elev 918m S24° 50' 00.2" E30° 20' 39.6" Fig. 27
Recent square mud foundations; 2 x Upper grinders; Bottles, iron, tins.	Several recent square mud and stone foundations – very deteriorated and indistinct, with 2x upper grinders. Several pieces of glass, bottle fragments, rusted iron and tins.	Elev 918m S24° 49' 58.8" E30° 20' 41.6" Fig. 29, 30, 31 & 32.
Recent square house foundations (middle section). Clay Potsherds; Glass and porcelain.	Square house foundations of stone and clay as well as cement and clay bricks. Iron basket, fragments of glass, gramophone, bottles and porcelain.	Elev 907m S24° 49' 48.2" E30° 20' 39.5" Fig. 37, 38, 39.
Clay Potsherds; Upper grinder; 1 x potsherd lip (bowl)	Potsherds (red) and upper grinder in vicinity of square house foundations. One potsherd lip represents a bowl.	Elev 903m S24° 49' 45.6" E30° 20' 42.9" Fig. 40, 41.
Upper grinder; Bottles; Iron; Tins.	Upper grinder together with bottles, glass, rusted iron and tins.	Elev 903m S24° 49' 46.6" E30° 20' 43.1" Fig. 35, 36.
Clay potsherds; Glass; Tins.	Clay potsherds (red) and slightly thicker than average; Glass and tins are scattered in area.	Elev 904m S24° 49' 46.5" E30° 20' 42.4"
Grave site (G2)	Access road cuts through this grave yard. Impossible to determine extent because of dense vegetation cover. Power line along road. Estimate 40 – 60 graves. Marble grave stone indicated: <ul style="list-style-type: none"> Aporiane Jephris Maphanga 1958 – 1978. 	Elev 884m S24° 49' 21.3" E30° 20' 59.6" Fig. 15, 16, 17, 18 & 19.
Lower grinder (broken)	Lower grinder (broken) on side of road – (disturbed area).	Elev 884m S24° 49' 19.0" E30° 21' 02.4" Fig. 43.
Recent square house foundations.	Recent square house foundations in a large open area – very indistinct.	Elev 879m S24° 49' 14.4" E30° 21' 05.5" Fig. 44.
Stone wall – possible kraal.	Stone wall built with large stones - disturbed. Dense vegetation cover restricted visibility – but it is most probably associated with recent settlements.	Elev 874m S24° 49' 11.6" E30° 21' 05.4" Fig. 45.
Recent square stone foundations	Recent square foundations with terrace walls – difficult to identify a layout – extensive area and consistent towards next GPS point.	Elev 887m S24° 49' 18.0" E30° 21' 07.6" Fig. 46.
Recent square stone foundations	Extensive area – very indistinct – consistent towards next GPS point	Elev 891m S24° 49' 20.1" E30° 21' 09.2"

		Fig. 47.
Recent square stone foundations	This entire area forms part of the settlement. Indistinct square stone foundations in entire section.	Elev 903m S24° 49' 28.3" E30° 21' 12.7" Fig. 48.
Recent square stone foundations	This entire area forms part of the settlement. Indistinct square stone foundations in entire section.	Elev 911m S24° 49' 28.9" E30° 21' 09.8"
Lower grinder; Recent square foundations; Broken upper grinder	Lower grinder found in disturbed section but the indistinct remains of square foundations are still visible closely; Broken upper grinder.	Elev 904m S24° 49' 35.0" E30° 20' 55.4" Fig. 49, 50.
Recent square stone and mud foundations	Recent house foundations, badly deteriorated.	Elev 908m S24° 49' 38.8" E30° 20' 53.5" Fig. 52.
Recent square stone and mud foundations	Recent house foundations, badly deteriorated.	Elev 905m S24° 49' 35.6" E30° 20' 53.7" Fig. 53.

Section B (12ha) Heritage Feature	Description / Comments	Site Location
LIA circular stone walls; Upper grinder.	Badly damaged LIA circular stone walls, from the Badfontein tradition. Alien and indigenous vegetation grow through it.	Elev 816m S24° 49' 30.98" E30° 20' 10.8" Fig. 56, 57, 58.
LIA stone walls.	Late Iron age stone wall (approximately 40m), from the Badfontein tradition. Badly damaged by vegetation and the extent is not clear. Approximately 1m wide	Elev 827m S24° 49' 28.57" E30° 20' 19.70" Fig. 59, 60.

The study area was surveyed on foot and per vehicle for any remains of archaeological or historical nature. The terrain was mostly even but the vegetation cover was dense in sections. Paths and roads made the sections accessible for the survey. A quarry in Section C was investigated for any visible archaeological remains (see fig. 63). The area was mostly flat with scattered trees and dense scrub. The northern part of section A is rocky and forms the foot of a mountain. The soil types are dominantly Clovelly and Hutton.⁷⁴

Section A was almost entirely covered with recent square clay and stone houses which is currently badly deteriorated and indistinct. These settlements were indicated on the 1976 topographical map (Map 4). Artifacts such as upper and lower grinders, red clay potsherds, glass, bottles, porcelain, ceramics, rusted iron and tin as well as leather were found in association with the settlements. The use of upper and lower grinders as well as clay pots together with glass, porcelain and plastic ware, is still common practise in rural areas. Two large grave yards were identified on the property, and some dates were recognizable. The dates indicated that people lived on this section from at least 1948 to 1978.

⁷⁴ Booyens H.B (et al)., 2014, Voorlopige grondkarteringsverslag vir die plaas Boerboonkraal, p. 4.

F. DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT

<i>ACT</i>	<i>COMPO- NENT</i>	<i>IMPLICATION</i>	<i>RELEVANCE</i>	<i>COMPLIANCE</i>
NHRA	S 34	Impact on buildings and structures older than 60 years	Section B: LIA stone walls	Mitigation measures are recommended.
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	Clay potsherds, upper and lower grinders were associated with recent settlement and therefore of no significance.	None
NHRA	S36	Impact on graves	Two grave sites were identified and are of high significance.	Mitigation measures are recommended
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:**

<i>Context</i>		
Urban environmental context	No	NA
Rural environmental context	No	NA
Natural environmental context	No	Section A = virgin land, game fenced. Section B & C = virgin land;
<i>Formal protection (NHRA)</i>		
(S. 28) Is the property part of a protected area?	No	NA
(S. 31) Is the property part of a heritage area?	No	NA
<i>Other</i>		
Is the property near to or visible from any protected heritage sites	No	NA

Context		
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	Sections D & E was cultivated (see 1976 topo map) and therefore highly disturbed.
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?	No	NA
Does the property have any fresh water sources (springs, streams, rivers) on or alongside it?	Yes	Sections B & C is next to the Waterfall river;

Heritage resources on the property		
Formal protection (NHRA)		
National heritage sites (S. 27)	No	NA
Provincial heritage sites (S. 27)	No	NA

NHRA	ELE-	INDICATORS OF HERITAGE SIGNIFICANCE										RISK	
Landscape of cultural significance	No	-	-	-	-	-	-	-	-	-	-	-	-
Geological site of scientific/ cultural importance	No	-	-	-	-	-	-	-	-	-	-	-	-
Archaeological / palaeontological sites	Yes	-	-	-	-	-	-	-	-	-	-	-	Clay potsherds – without decoration or shape; Upper grinders; Lower grinders Associated with recent settlement
Grave / burial grounds	Yes	-	-	-	-	-	-	-	-	-	-	-	Two grave sites are of high significance
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	Yes	Yes	Yes	LIA stone walls – Will be impacted upon	Mitigation measures are recommended
Areas attached to oral traditions / intangible heritage	No	None	None	-	-
Historical settlement/ townscape	No	None	None	-	-

NHRA S (3)2 Heritage	SITE	IMPACT SIGNIFICANCE		Impact management	Motivation
		Cultural significance rating			
Landscape of cultural significance	No	None	None	-	-
Geological site of scientific/cultural importance	No	None	None	-	-
Archaeological / palaeontological sites	Yes	Yes	No	No impact	Potsherds, upper and lower grinders associated with recent settlement and believed to be of no significance.
Grave / burial grounds	Yes	Yes	Yes	G1 & G2 Will be impacted upon by proposed development	Mitigation measures recommended
Areas of significance related to labour history	No	None	None	-	-
Movable objects	No	None	None	-	-

ACT	COMPONENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impact on buildings and structures older than 60 years	LIA stone walls	Yes – mitigation measures
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	Potsherds, upper and lower grinders – associated with recent settlement	None
NHRA	S36	Impact on graves	G1 & G2 – high significance	Yes – mitigation measures
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

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.⁷⁵ 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.⁷⁶

• Graves

SAHRA Policy on burial grounds

NHRA Sections 27 & 36: 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 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, possibly where he / she died defending (or attacking) a particular place or situation and makes it easier to understand the circumstances of his / her death.⁷⁷

• The significance and evaluation of the archaeological and cultural heritage features in the

⁷⁵National Heritage Resources Act, no. 25 of 1999. p. 2.

⁷⁶National Heritage Resources Act, no. 25 of 1999. pp. 12-14

⁷⁷SAHRA, Burial sites, <http://www.sahra.org.za/burial.htm>, Access, 2008-10-16.

study area, can be summarised as follows:

<i>Site no</i>	<i>Cultural Heritage features</i>	<i>Significance</i>	<i>Measures of mitigation</i>
Grave sites: G1 & G2	Section A: G1 (southern section) and G2 (northern section).	High	The graves must be fenced off and access must be allowed for visitation / Alternatively it may be negotiated to relocate the graves
Clay potsherds	Section A: Associated with recent settlement: No archaeological sites near or in the vicinity	No significance	They are associated with recent settlement and not believed to have any significance and will not be impacted upon by the proposed development.
Upper & Lower grinders	Section A: Associated with recent settlement: No archaeological sites near or in the vicinity	No significance	They are associated with recent settlement and not believed to have any significance and will not be impacted upon by the proposed development.
LIA stone walls (Badfontein tradition)	Section B: Visible but badly deteriorated	Low significance	Will be impacted upon by the proposed development – mitigation measures are recommended.

- **Field rating:**

The field rating is viewed in terms of the NHRA (25, 1999) sections 3 (3) a, c, g & h.

The recent square clay and stone foundations are of no significance. The archaeological material (potsherds, upper and lower grinders), which were identified during the survey, were all associated with recent settlement and not believed to have any significance which will be negatively impacted upon by the proposed agricultural development. There is no cultural value to these objects which could link them as of outstanding importance to a certain community (NHRA 3.3a); or its potential to yield social, cultural or spiritual information or to link it to a particular community which may contribute to an understanding of South Africa's cultural heritage (NHRA 3.3c & g).

The two grave sites in section A, which were identified during the survey, are rated as **High** and of outstanding significance as specified by the NHRA 3.3 (h), and need to be preserved. Mitigation measures are recommended. Mitigation measures are necessary to avoid a negative impact on these sites.

The LIA stone walls of the Badfontein tradition, which were identified in section B, are of low significance and should the planned development continue in this section, mitigation measures are necessary in terms of the NHRA 3.3 (g).

No archaeological material was identified in sections C, D and E, and from a heritage perspective, development may continue in these sections.

H. RECOMMENDATIONS & CONCLUSION

The five sections for proposed development, on portions 7 and 8 of *the farm BOERBOONKRAAL 353KT, Burgersfort*, ranged from sections of natural habitats (A, B and C), to highly disturbed agricultural land (D & E).

The archaeological material found in section A (eg. fragments of clay potsherds, upper and lower grinders) were found in association with recent clay and stone foundations (settlement possibly up to 1978 - as a date at G2 indicated), and they are not believed to have any historic or cultural value. These features are not close to or in the vicinity of any visible archaeological sites.

The two grave sites (G1 & G2) which were identified in section A, are of high significance and it is recommended that the site be cleaned, the area of the graves be fenced off and maintained and that the families of the deceased be allowed access to the site. Alternatively, the client may negotiate with the family members to relocate the graves. The relocation is however an extremely costly exercise and it is recommended that the first option be considered.

Two LIA stone walls were identified in section B. The walls are of low or local significance and it is recommended that the walls be further researched to establish the scientific value thereof. The walls should be surveyed and drawn to determine a layout plan, which will show the units with surface artifacts and features. Areas best suited for archaeological test excavations should be identified. An application should be made to SAHRA for a phase 2 excavation and destruction permit.

Archaeological material or graves are not always visible during a field survey and therefore some significant material may only be revealed during debushing and other activities of the proposed development. It is recommended that the owner be made aware that distinct archaeological material or human remains may only be revealed during the debushing / agricultural operations. Based on the survey and the findings in this report, Adansonia Heritage Consultants state that there are no reasons which may prevent the proposed development to continue in sections C, D and E. Mitigation measures for the two grave sites in section A is recommended before development may continue in this section. Mitigation measures are recommended for section B, before any development may take place in this section. All earthmoving activities must be monitored by a qualified archaeologist and should any archaeological material be found, an assessment must be done.

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

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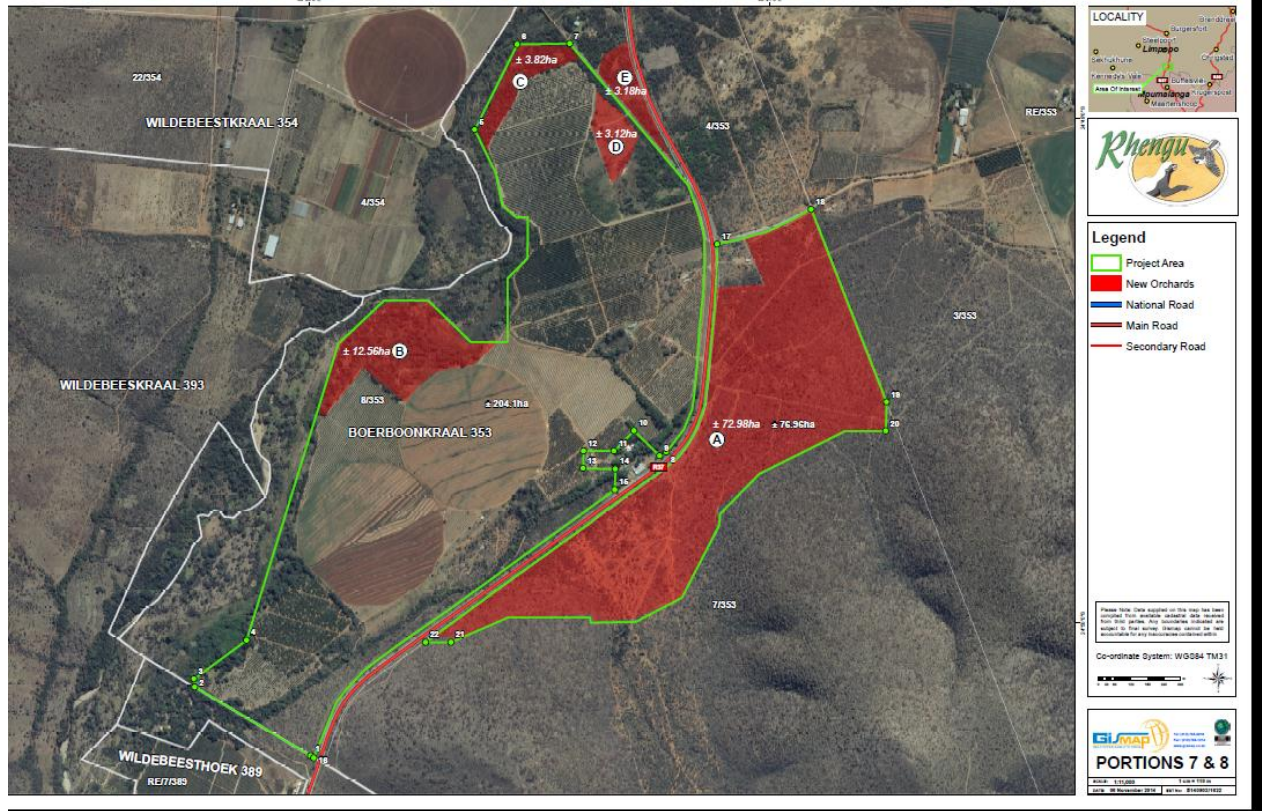
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Appendix 1:

BOERBOONKRAAL 353 KT



APPENDIX 2: BOERBOONKRAAL: PHOTOGRAPHIC DOCUMENTATION

SECTION A (76.96ha): General visibility of the southern, middle and northern sections:



Fig. 1: Visibility in the middle area of Section A was excellent as the vegetation was sparse after winter.



Fig. 2: General view of the middle area of Section A with excellent visibility.



Fig. 3: Section A: The area on the far south was denser although visibility was fair.



Fig. 4: Another view of the southern area of section A.



Fig. 5: Section A: The northern parts of this section rises slightly towards the hills in the background. The vegetation was denser and visibility was more restricted in places.



Fig. 6: Another view of the northern parts of Section A.



Fig. 7: The entire section was indicated on the topographical map as a rural settlement. Remains of stone and mud foundations can be seen, although most are indistinct.



Fig. 8: View from the eastern border towards the west (in the northern part of Section A).

Two burial sites were identified during the survey: G 1 is located in the middle section:



Fig. 9: General view of the burial site G1, in the middle part of Section A. The stones are scattered in the area. There are approximately 40 graves.



Fig. 10: One of the graves in G1 with the grave dressing and marble headstone, still visible.



Fig. 11: A stone headstone with "Prince Mkhonto", painted in yellow.



Fig. 12: A slate headstone: "Moses Mancanza Mbuyane"



Fig. 13: A concrete grave dressing with a slate headstone: "M. Hendrek Mokwena, 1959."



Fig. 14: A concrete grave dressing with a slate headstone: "M. Josaya Mokwena, 1947."

The burial site G2 is located in the northern part of Section A:



Fig. 15: This burial site in the northern part of Section A was already impacted upon by a power line. A road and power line cuts the burial site in two.



Fig. 16: One of the slate headstones: "Aporiane Jephris Maphanga 1958 – 1978."



Fig. 17: The burial site is badly neglected. Some graves have stones for headstones.



Fig. 18: A general view of the overgrown state of the burial site.



Fig. 19: Graves on the other side of the dirt road. It is estimated that there are between 40 and 60 graves, but visibility in this section is restricted.

Cultural material which was identified during the survey in Section A:



Fig. 20: Several foundations such as seen above, with cultural material such as upper grinders, iron, glass and bottles, porcelain and ceramics, were identified in the middle part of Section A, at the foot of the mountain. This settlement forms part of the historic settlement as indicated on the 1976 topographical map, but falls just outside the proposed development.



Fig. 21: Upper grinder which was found in disturbed road section.



Fig. 22: Upper grinder found in middle section in an open space opposite the dam.

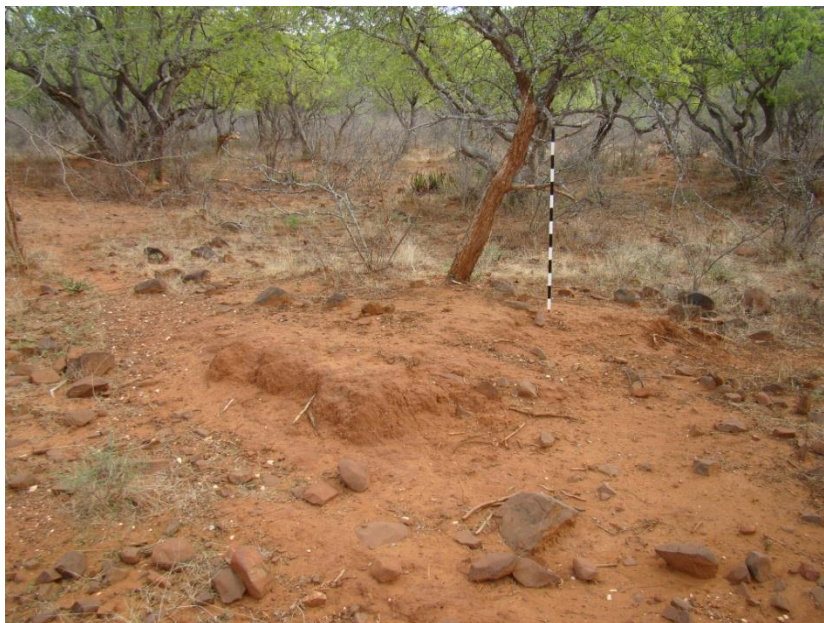


Fig. 23: The general condition of the stone and mud foundations were indistinct and severely deteriorated throughout the study area.



Fig. 24: Some foundations, such as above, are indistinct and almost unidentifiable, was it not for a few stones which remained in a straight line, or cultural material in the vicinity.



Fig. 25: Upper grinder found at the remains of the foundation, above.



Fig. 26: Red clay potsherds found at the indistinct foundation above, are evidence of previous habitation on the site.



Fig. 27: Foundations in the far south section (along drainage line) are indistinct and deteriorated.



Fig. 28: Some foundations are only possible to be identified by a remaining row of stones.



Fig. 29: Some clay foundations in the middle and southern sections are almost completely deteriorated.



Fig. 30: Upper grinder.



Fig. 31: Upper grinder.



Fig. 32: Fragments of porcelain, glass and iron are found on the entire site.



Fig. 33: Stone foundation in the southern part of Section A next to the drainage line.



Fig. 34: Many red clay potsherds are visible in the southern and middle sections.



Fig. 35: A grouping of recent cultural material such as rusted iron, chains, wire, glass, and plastic items are visible at the foundations.



Fig. 36: Upper grinders and clay potsherds are associated with recent settlement.



Fig. 37: One of the house foundations that is not completely deteriorated. A porcelain cup is visible to the left. Moulded concrete bricks were also found at this site.



Fig. 38: An upper grinder which was found near the foundation above.



Fig. 39: This rusted gramophone was found near the foundations, above (fig. 37).



Fig. 40: Numerous fragments of red clay potsherds and upper grinders were found in the middle section.



Fig. 41: One red clay potsherd (lip) represents a small bowl.

Northern section:



Fig. 42: An upper grinder was identified near the burial site (G2).



Fig. 43: A broken lower grinder was found in the disturbed dirt road area.



Fig. 44: Stone foundations are still visible in the northern section of the farm. Some are distinct while others are indistinct.



Fig. 45: A stone wall of recent date was identified near the northern border of section A.



Fig. 46: Numerous stone foundations similar to the one above, were found during the survey.



Fig. 47: Stone foundation in the northern part which is at the foot of the mountain.



Fig. 48: View of the remains of stone foundations in the northern section. Many distinct as well as indistinct foundations is found in this entire section.



Fig. 49: Lower grinder identified in the northern section.



Fig. 50: A broken upper grinder.



Fig. 51: Visibility in the northern section varied from open and clear to dense.



Fig. 52: Remains of a stone foundation.



Fig. 53: The general condition of foundations which were identified in the northern section. They were generally indistinct and only a few foundation stones were visible.

SECTION B (12.56ha):

Fig. 54: Section B is situated next to the Waterfall River. The area was dense with indigenous as well as alien vegetation. A power line runs through this section.



Fig. 55: The middle area of Section B.



Fig. 56: A poorly defined LIA stone wall was identified in the southern part near the entrance gate.



Fig. 57: An upper grinder was identified within the stone walls.



Fig. 58: The LIA stone wall is damaged by alien vegetation.



Fig. 59: Another LIA stone wall was identified in the eastern part of Section B. Dense vegetation made it impossible to determine a layout pattern.



Fig. 60: The LIA stone wall in this section is approximately 40m long.

SECTION C (3.82ha):



Fig. 61: Section C is also situated next to the Waterfall river. The vegetation was mostly dense.



Fig. 62: Visibility was fair in the northern parts of section C.



Fig. 63: A sand quarry in section C was investigated for archaeological or cultural material, but none was found.

SECTION D (3.12ha):

Fig. 64: Section D is historically disturbed land. The above photo is taken in the middle of this section facing south-west.



Fig. 65: South-eastern view of Section D. No archaeological or cultural material was found in this section.



Fig. 66: North-western view of Section D. No archaeological or cultural material was found in this section.

SECTION E (3.18ha):



Fig. 67: Section E is a narrow strip situated between two roads and was also historically disturbed land.



Fig. 68: The middle part of section E. Previous agricultural activities as well as road infrastructure disturbed this section.



Fig. 69: No archaeological or cultural material was found in Section E.

APPENDIX 3:

Google Map of Tracks and Paths

Response by SAHRA

**Debushing of natural land for agricultural use on the farm Boerboonkraal,
Burgersfort, Limpopo**
Our Ref: 7007



Enquiries: Nokukhanya Khumalo
Tel: 021 462 4502
Email: nkhumalo@sahra.org.za
CaseID: 7007

Date: Friday May 15, 2015
Page No: 1

an agency of the
Department of Arts and Culture

Final Comment

In terms of Section 38(2) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Mr Ralf Kalwa
Rhengu Environmental Services
P O Box 1046
MALELANE
1320

Phase 1 AIA / HIA for the proposed debushing of natural land for agricultural use on portions 7 and 8 of the farm Boerboonkraal 353KT , Burgersfort, Limpopo Province

The applicant proposes to clear 90 hectares of natural land for citrus trees and other agricultural activities including access road. The proposed development is located on Portions 7 and 8 of the farm Boerboomkraal 353 KT, Greater Tubatse Local Municipality, Mpumalanga Province.

A Heritage Impact Assessment was submitted with the case:

Van Wyk-Rowe, C. November 2014. Phase 1 Archaeological / Heritage Impact Assessment for Proposed Debushing of Natural Land for Agricultural Use: Portions 7 And 8 of the farm Boerboonkraal 353kt Burgersfort Limpopo Province.

Ms van Wyk-Rowe undertook a field base Heritage Impact Assessment of the proposed development with the aim of finding and documenting any heritage resources that may be located within and outside the proposed development area. Various heritage resources were found within the development location and its surrounding areas.

Section A sites and Archaeological resources:

G1: Consists of a cemetery with around 40 stone marked graves. The graves should be fenced off with a bufferzone of 30m around the cemetery.

G2: Consists of a cemetery with around 60 stone marked graves. The graves should be fenced off with a bufferzone of 30m around the cemetery.

Recent Square shaped mud houses and foundations that do not appear in the 1970's, with some upper grind stones. This site is of low significance and can be destroyed without a permit.

Section B sites and archaeological resources:



The South African Heritage Resources Agency

Street Address: 111 Harrington Street, Cape Town 8000 * Postal Address: PO Box 4637, Cape Town 8000
* Tel: +27 21 462 4502 * Fax: +27 21 462 4509 * Web: <http://www.sahra.org.za>

**Debushing of natural land for agricultural use on the farm Boerboonkraal,
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2 stonewall sites from the Badfontein tradition. Degraded and overgrown with vegetation. This site is considered of low significance, Phase 2 mitigation measures are recommended for the sites.

Final Comment

SAHRA APM Unit agrees with the recommendations made in the Heritage Scoping Report:

1. The proposed development lies in a Low to High sensitive palaeontological sensitive zone (<http://www.sahra.org.za/sahris/map/palaeo>). Thus SAHRA APM unit exempts the development from conducting a Palaeontological Assessment.
2. The LIA stonewalled sites in section B need to be mitigated. This can only be done by a professional archaeologist, who should apply for a permit for phase II mitigation by SAHRA.
3. SAHRA Archaeology, Palaeontology & Meteorites (APM) Unit has no objection to the proposed development on the condition that:

- If any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments and charcoal/ash concentrations), fossils or other categories of heritage resources are found during the proposed activities, SAHRA APM Unit (Nokukhanya Khumalo/Colette Scheermeyer 021 462 4502), and unmarked human burials contact the SAHRA BGG Unit (Mimi Seetelo 012 320 8490), must be alerted immediately, and a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contacted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance a Phase 2 rescue operation might be necessary.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Nokukhanya Khumalo
Heritage Officer
South African Heritage Resources Agency



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ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/185728>

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.



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