

SPECIALIST REPORT
**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR THE
ESTABLISHMENT OF A FILLING STATION ON PORTION 41 OF THE FARM ROOIDRAAI
34JT, LYDENBURG
MPUMALANGA PROVINCE**

**REPORT PREPARED FOR
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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 a proposed filling station and infrastructure on *portion 41 of the farm ROOIDRAAI 34JT*, Lydenburg, Mpumalanga Province. The study area is situated on the topographical map (1:50 000) 2530AB LYDENBURG.

The proposed 7.8ha development for the filling station will include infrastructure such as an underground Tank farm, Heavy vehicle diesel forecourt, Light vehicle petrol & diesel forecourt, a Main building (including convenience store, ablutions, laundry, restaurant, offices and staff accommodation), parking area, stormwater and on-site infrastructure.

The study area is mostly unimproved natural land with disturbances which include a cleared area on the northern boundary with the Townlands of Lydenburg, a distinct farm road with a clear entrance in the north-western section, small tracks to the east and a hawkers' stall on the south-eastern corner.

Although Late Iron Age settlements are abundant in the surrounding area of Lydenburg and the proposed filling station site, none were identified within the study area. No graves were observed during the survey. Based on the survey and the findings in this report, Adansonia Heritage Consultants state that there are no compelling reasons which may prevent the proposed development to continue.

Archaeological sites and human remains are not always visible during a site survey, and may only be revealed during the construction phase. It is recommended that earthmoving activities be monitored by a qualified archaeologist for any possible archaeological sub-surface finds after which an assessment will be made.

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*



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C. Rowe

JANUARY 2021

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A. BACKGROUND INFORMATION TO THE PROJECT

Adansonia Heritage Consultants were appointed by ENVIROVISION CONSULTING cc, to conduct a Phase 1 heritage impact assessment (HIA) on archaeological and other heritage resources on *portion 41 of the farm ROOIDRAAI 34JT*, Lydenburg, Mpumalanga Province. 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 6: Topographical map, 1:50 000, 2530AB LYDENBURG).

The owner and applicant, Afroflow (PTY) Ltd., intends to construct a filling station with infrastructure on 7.8ha of land, which is situated 5km south-west of Lydenburg and north-east of the intersection of the R540 road to Dullstroom, and the R577 road to Roosenekal. The study area falls under the jurisdiction of the Thaba Chweu Local Municipality and the Ehlanzeni District Municipality. ¹

The scope of work for the proposed filling station and infrastructure will include:

- Tank farm (6 x 83m³ underground tanks);
- Heavy vehicle diesel forecourt;
- Light vehicle petrol & diesel forecourt;
- Main building –
 - Convenience store;
 - Showers, ablution & toilets;
 - Laundry;
 - Restaurant;
 - Game room / TV lounge;
 - Offices;
 - Staff accommodation
- Vehicle parking (heavy & smaller vehicles)
- Stormwater and on-site infrastructure. ²

¹ Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.

² Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.

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 - 7, & Appendix 1 & 2.

- This study forms part of an EIA, Consultant: ENVIROVISION CONSULTING cc, Mr. Cappie Linde, 450 Wendy Street, Waterkloof Glen, Pretoria, 0181.
Cell: 082 444 0367 / Fax: 086 557 9447 4949 / e-mail: envirovision@lantic.net
- Type of development: The establishment of a filling station with associated infrastructure and facilities on *portion 41 of the farm ROOIDRAAI 34JT*, Lydenburg, Mpumalanga Province.
- The 7.8ha development area consists of unimproved land with no evidence of agricultural activities or previous biological degradation. The area is zoned for agriculture,³ and will be rezoned to "Transportation."⁴
- Location of Province, Magisterial district / Local Authority and Property (farms): The area falls within the Mpumalanga Province under the jurisdiction of the Ehlanzeni District Municipality and the Thaba Chweu Local Municipality.⁵
- Land owner: The project application and registered landowner is AFROFLOW (Pty) Ltd.

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 (Act No. 107 of 1998) (NEMA as amended).

³ Personal Communication, Mr. Cappie Linde, Property Report, Access: 2021-01-04 & 2021-01-26.

⁴ Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.

⁵ Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.

- **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:

- The construction of a road, wall, powerline, pipeline, canal or similar form of linear development or barrier exceeding 300m in length;
- 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 the Client, Envirovision Consulting cc., as well as the applicant, 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 building 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. No archaeological features were observed during the survey.

- **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 the development. No graves were identified within the 7.8ha property.

- **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. No remains of structures older than 60 years were 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) (as amended), provides for an assessment of development impacts on the cultural

(heritage) and social environment and for specialist studies in this regard.

B. BACKGROUND TO ARCHAEOLOGY & HISTORY OF THE REGION

• Literature review; Museum databases; & previous relevant impact assessments

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 surrounding area in an 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), and the recent publication of Delius, *Mpumalanga: History and Heritage*, as well as *The Military History Journal* on the Sekukuni Wars.

The author was 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;
- 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 Roodraai 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 Roodraai 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 Roodraai 34JT*, Mashishing, Lydenburg.
- Rowe C., April 2014: *Relocation of the Roodraai Rock engraving RDR 8 on the remainder of portion 7 of the farm Roodraai 34JT*, Mashishing, Mpumalanga Province;
- Rowe C., November 2014: *Phase 1 AIA / HIA for proposed debushing of natural land for agricultural use: Portions 7 & 8 of the farm Boerboonkraal 353KT*, Burgersfort, Limpopo.
- Rowe C., February 2015: *Phase 1 AIA / HIA for proposed residential and business development on the remainder of the farm Witgatboon 316KT*, Burgersfort, Limpopo.

- Rowe C., March 2015: *Phase 1 AIA / HIA: A portion of portion 39 of the farm Lydenburg Townlands 31JT, Mashishing, (Lydenburg).*
- Rowe C., August 2018: *Phase 1 AIA / HIA for the proposed clearing of indigenous vegetation on the remainder of portion 11 of the farm Wildebeestkraal 354KT, Burgersfort, Limpopo.*
- Rowe, C., September 2018: *Final report on the archaeological investigation of a LIA stonewalled settlement as well as historic foundations to be impacted upon by a housing development on portion 39 of the farm Lydenburg Townlands 31JT, Mashishing (Lydenburg).*

Most of these sites revealed LIA stone walled settlements with associated archaeological material. Rock engravings were identified *portion 7 of the farm Rooidraai 34JT*, close to the current study area. The SAHRA database for archaeological and historical impact assessments was consulted and revealed other Archaeological Impact assessment reports in the area of Lydenburg / Burgersfort:

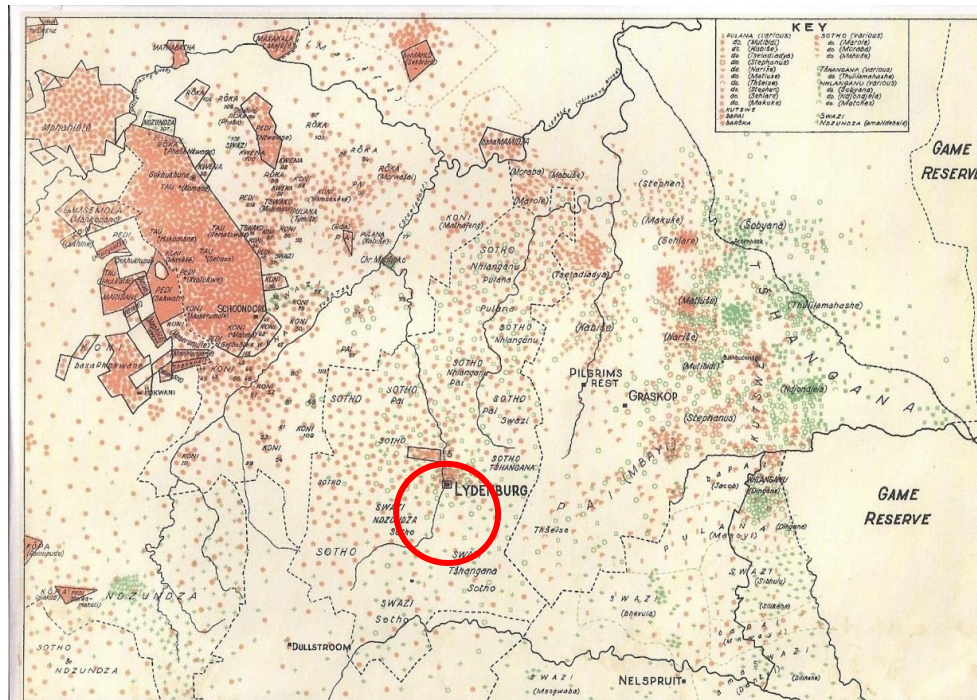
- Pistorius, J.C.C., February 2005, *A Phase 1 HIA study for the proposed New Burgersfort ext 30 residential and the Burgersfort ext 31 industrial development projects near Burgersfort.*
- Birkholtz, P. 2006, *Phase 1 HIA for the Morning Tide Development Complex, Morning Tide Power Line and Abrina Residential Development, 2007.*
- Celliers, JP., Pelser A., & Van der Walt J., *Final Report on the archaeological excavations at a Koni Stonewalled Settlement in Lydenburg, impacted on be the development for the new Lydenburg Extension 6, Lydenburg, Mpumalanga.*
- Pelser, 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.*

Displays in the Lydenburg museum cover information on the general history and pre-history of the Lydenburg area, and focuses extensively on the Early Iron Age site of the well-known Lydenburg Heads.

The following historic information was compiled from the sources above:

- **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.^{6 7} Unfortunately very little research in this regard has been conducted, although several rock art sites have been recorded in the areas of Ohrigstad / Blyderivierspoort Canyon, and rock engravings in the surrounding area of Lydenburg.⁸ Bergh,⁹ 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.¹⁰



MAP 1: 1935 Map of Van Warmelo: The area is indicated with habitation of various Sotho groups (baPai / Pulana) and a small presence of Tshangana / Nhlangu, Swazi and Ndebele. (Van Warmelo 1935: map 14).

IRON AGE

⁶ Hampson et al., 2002, The rock art of Bongani Mountain Lodge, SA Archaeological Bulletin 57: p. 15.
⁷ Rowe C., 2009, Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve, p. 22.
⁸ *Ibid*, p.22.
⁹ Bergh 2009 *Geskiedenis Atlas van Suid Afrika*, p.4.
¹⁰ Voight, E.,1981, *Guide to the Archaeological sites in the Northern and Eastern Transvaal*, p. 115.

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.^{11 12}

- **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.¹³ 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/goats as well as crop plants. Based on pottery identification, Klingbeil is dated to about AD 1000.¹⁴

- **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. 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.^{15 16} Huffman,¹⁷ placed the stone walling in the area into the Badfontein tradition (see Map 2).

¹¹ Huffman T.N., 2007, *Handbook to the Iron Age*, p.331.

¹² Pelser 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.

¹³ Bergh J., 2009. *Geskiedenis Atlas van Suid Afrika*, p.8.

¹⁴ Pelser 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.

¹⁵ Huffman T.N., 2007, *Handbook to the Iron Age*.

¹⁶ Pelser 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.

¹⁷ Huffman T.N., 2007, *Handbook to the Iron Age*, p. 32.

The Pedi (Sotho) 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.¹⁸

Some Koni entered the area from the east and others from the north-west. According to historians, most Koni traced 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.

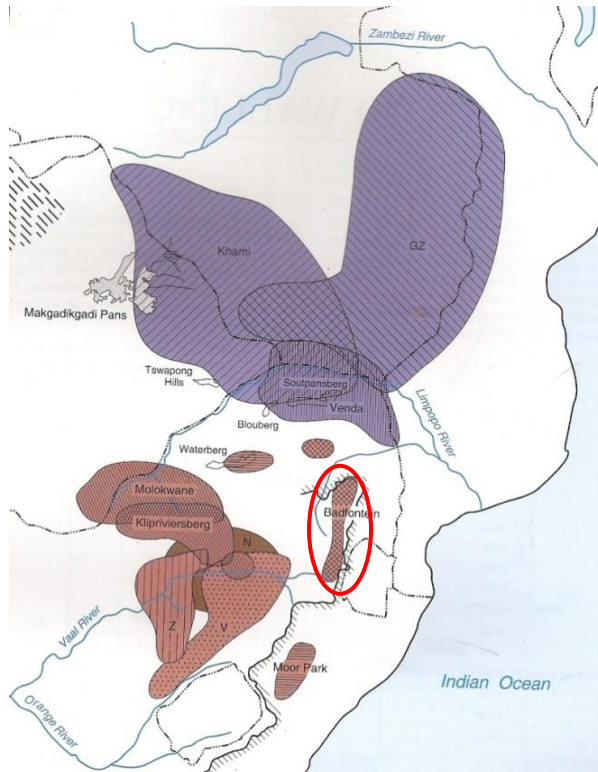
Historically the Pedi was a relatively small group who by various means built up a considerable empire. The Pedi are of Sotho origin. They migrated southwards from the Great Lakes in Central Africa some five centuries ago. The names of their chiefs can be traced to a maximum of fifteen generations. Historical events can be deduced reasonably well for the last two centuries, while sporadic events can be described during the preceding centuries.¹⁹

According to oral tradition the BaKoni were already in the area of the escarpment before the arrival of the Pedi (northern Sotho group), which would indicate a date 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.²⁰

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

¹⁹ E-mail reply: JP Cilliers 2009-06-18

²⁰ Pelser 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. 10.



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

Later 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.²¹

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 - 50 000 people.²²

²¹ Pelser 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. 10.

²² 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*. P. 10

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.²³

Stone walled ruins are a common feature found across the Lydenburg 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.²⁴

²³ Pelser 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. 10.

²⁴ Pelser 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. 10.

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.²⁵

Pottery types which are associated with the Lydenburg / Burgersfort area settlements, are named Mzonjani (Early Iron Age - EIA), Doornkop (EIA), Klingbeil (Middle Iron Age- MIA) and Marateng from the Late Iron Age (LIA).²⁶

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.²⁷

Metal and iron in particular were important commodities 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.²⁸

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.²⁹ 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.³⁰

²⁵ *Ibid.*, p. 11.

²⁶ Huffman T.N., 2007, *Handbook to the Iron Age* pp 127-207.

²⁷ Pelser 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.

²⁸ Pelser 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 13.

²⁹ *Ibid.*, p 13.

³⁰ *Ibid.*, p.13.

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.³¹

Some 150 years before the *Voortrekkers* entered the area, 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).³²

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.³³ 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. Van Warmelo also indicated a small presence of Nhlangu 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.³⁴ 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 1825.³⁵

³¹ *Ibid.*, p.13.

³² E-mail reply: JP Cilliers 2009-06-18

³³ Van Warmelo, N.J., 1935, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 111.

³⁴ Van Warmelo, N.J., 1944. *A genealogy of the house of Sekhukhune*, p.47.

³⁵ Bergh J., 2009. *Geskiedenis Atlas van Suid Afrika*, pp.10-28.

- **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*.³⁶ Trichardt met the Pedi chief Sekwati.³⁷ 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 signed a treaty and it was decided that the Steelpoort or Tubatse River (north of Lydenburg), would form the border between the Pedi and the Voortrekkers, and peace followed for a while.³⁸

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. Sekhukhune, who took the reign after Sekwati in 1861, played an important role in this. After the Swazi attack on Sekhukhune in 1869, he moved his capital from *Thaba Mosego* to *Tshate*.³⁹

Malaria and internal differences between Joubert and Potgieter resulted that Potgieter moved north to the Zoutpansberg to establish the Voortrekker settlement of Schoemansdal. The group which stayed behind decided to move to higher ground and Lydenburg (Mashishing), was founded in January 1850. It was named after the suffering which they endured at Ohrigstad ('Lyden' is the dutch word for 'suffering').⁴⁰ The relationship between the Pedi and the Afrikaner 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 valuable time.⁴¹

³⁶ J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika, Die Vier Noordelike Provinsies*, p. 14.

³⁷ G.M. Theal, *History of South Africa from 1873 – 1884*, p. 257.

³⁸ M. De Jongh, *Swatini*, p. 29.

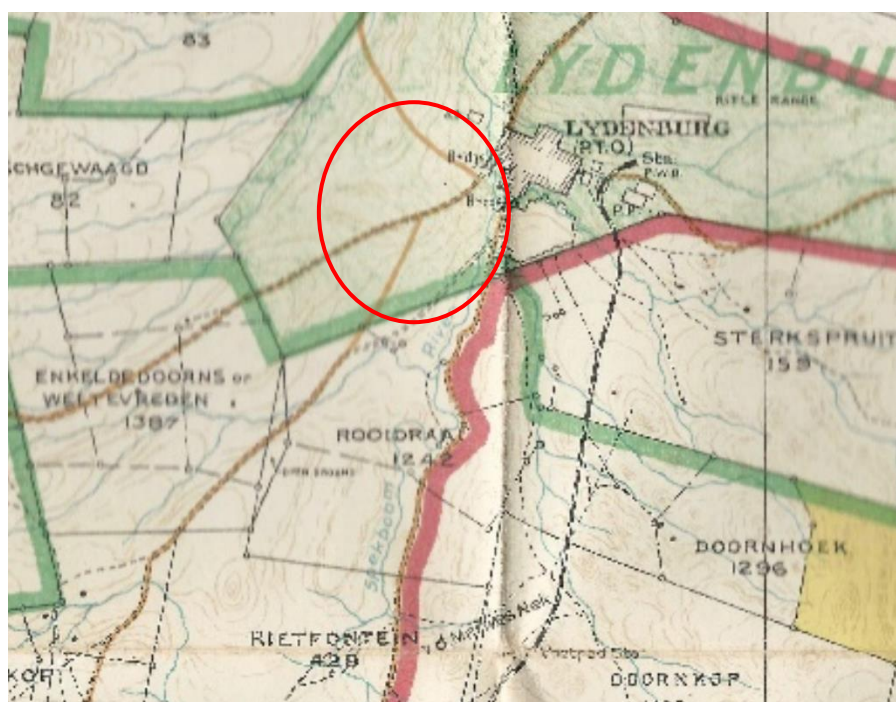
³⁹ J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika, Die Vier Noordelike Provinsies*, p. 31.

⁴⁰ J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

⁴¹ M. De Jongh, *Swatini*, p. 30.

The British under Shepstone took over the Transvaal on 12 April 1877. At first Sekhukhune 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 Sekhukhune's son and heirs were killed. Sekhukhune fled to a cave in the Leolo mountains, but was later captured and taken prisoner. He was succeeded by Mampuru (Middelburg district) and Ramoroko (Sekhukhuneland). Sekhukhune was killed in 1882 by Mampuru, after his release.⁴²

On 6 September 1900, Lydenburg surrendered to British forces under command of Sir Redvers Buller. The town was occupied by British forces throughout the duration of the war and numerous sources describe these times, such as in the diary of E.A. Mackey (as recorded in the Lydenburg News of 1948).⁴³ A map dated to 1900 (Major H.M. Jackson Series) indicated the military posts around Lydenburg, which include Fort Howard, Montreal Post, Strathcona post and Paardeplaats Post. Fort Howard and Paardeplaats Post were erected by the British Forces occupying the town.⁴⁴



MAP 3: 1920 Topographical map: Machadodorp

⁴² M. De Jongh, *Swatini*, p. 30.

⁴³ J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

⁴⁴ J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

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

The application for the proposed project is to clear vegetation for the establishment of a filling station, related infrastructure and land uses on *portion 41 of the farm ROOIDRAAI 34JT*. The 7.8ha section is unimproved land with no evidence of current agricultural activities or previous biological degradation. ⁴⁵



MAP 4: The study area is indicated by the red line.

The project applicant and landowner, AFROFLOW (Pty) Ltd, in association with Envirovision Consulting cc, is proposing the establishment of a filling station and infrastructure which will include the following:

- Tank farm (6 x 83m³ underground tanks);
- Heavy vehicle diesel forecourt;
- Light vehicle petrol & diesel forecourt;
 - Main building – (Convenience store; Showers, ablution & toilets; Laundry; Restaurant; Game room / TV lounge; Offices; Staff accommodation);
- Vehicle parking (heavy & smaller vehicles);
- Stormwater and on-site infrastructure. ⁴⁶

⁴⁵ Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.

⁴⁶ Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.

The study area consisted currently of grassland and low shrubs (natural vegetation). The survey revealed the following disturbances on the site:

The study area is mostly unimproved natural land with disturbances which include a cleared section (could possibly have been a firebreak on the northern boundary with Townlands of Lydenburg; see map 6), a distinct farm road with a clear marked entrance in the north-western section (this feature is more easily seen on the Google image, map 4, but was also noticed during the field survey, fig. 6). Hawkers stalls are situated at the intersection of the R540 & R577, in the south (fig. 7), a dirt road which cuts through the eastern section of the property, (fig. 10), is marked with the remains of two metal gate posts (just off the R540 in the south-eastern section of the study area (fig. 8). The remains of a demolished structure, were also observed next to this road (fig. 9). Another dirt road is visible in the far eastern section (fig. 11). Visibility throughout the survey was good.

D. LOCALITY

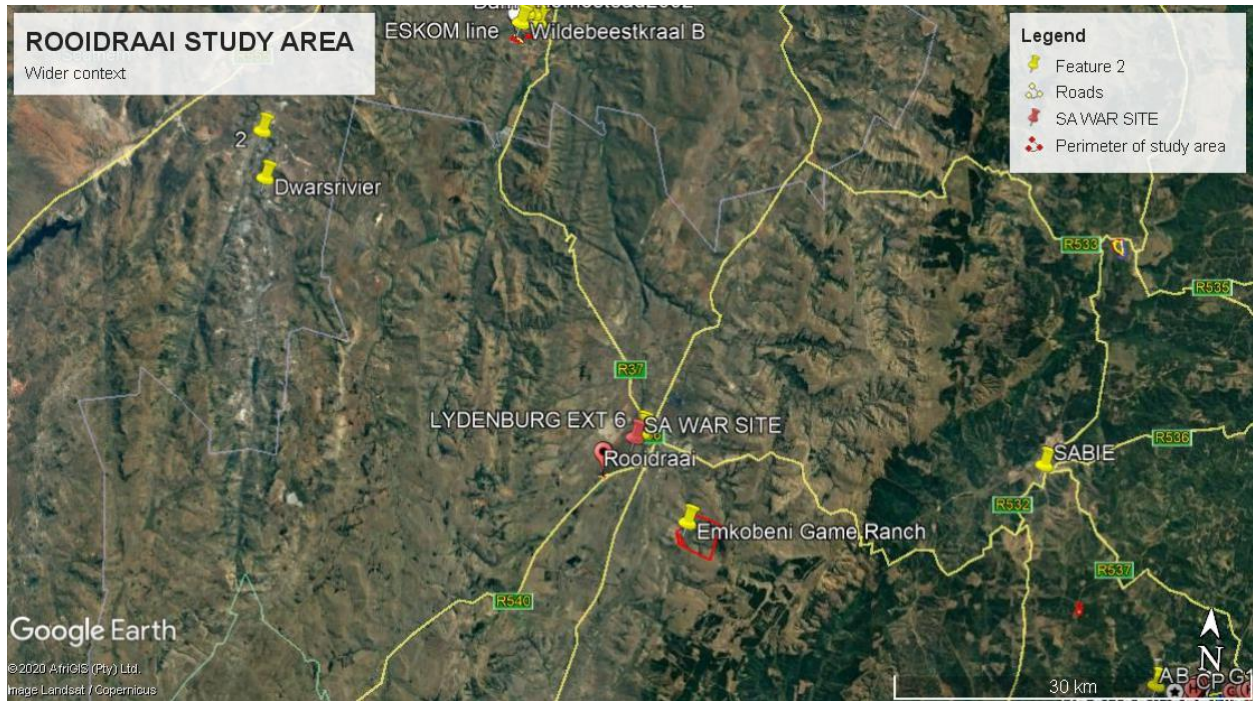
The proposed filling station development is located on *portion 41 of the farm ROOIDRAAI 34JT*, Thaba Chweu Local Municipality, Mpumalanga. The total property size is 7.8ha and is owned by AFROFLOW (Pty) Ltd. ⁴⁷

The project site is situated 5km south west of the town of Lydenburg and north east of the intersection of the R540 (Dullstroom / Lydenburg road) and the R577 (Roosenekal road). ⁴⁸ The site borders Lydenburg Townlands to the north (see map 6).

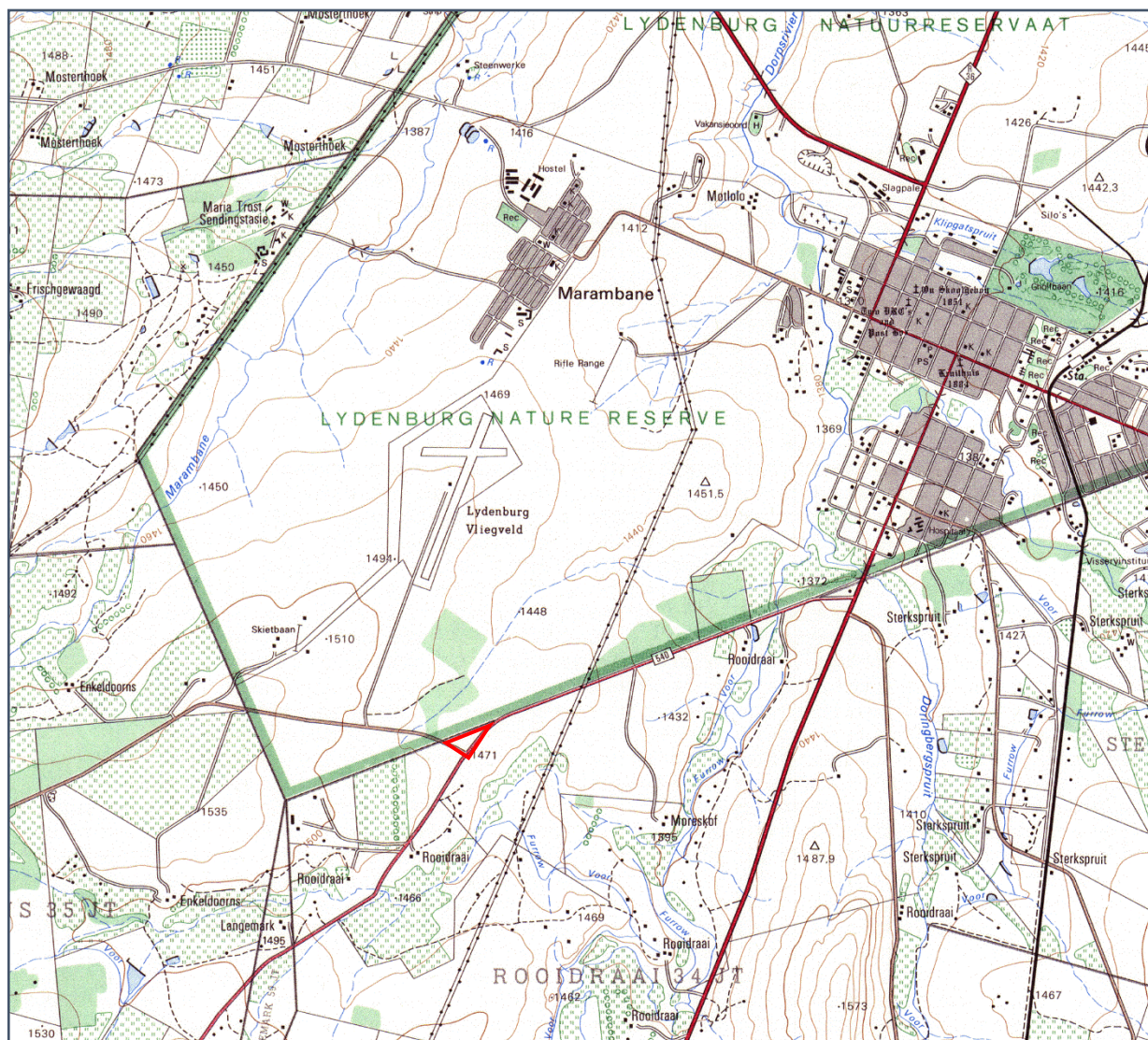
The 1988 topographical map (2530AB) was studied and revealed no archaeological or historic features of significance on the proposed site. A 1920 map (Machadodorp / map 3) was also studied but no historical or pre-historical settlements were indicated.

⁴⁷ Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.

⁴⁸ Environmental Basic Assessment, BID: Envirovision Consulting cc, October 2020.



MAP 5: The study area is located 5km to the south-west of Lydenburg (wider context).



MAP 6: Topographical Map: 2530AB LYDENBURG (1988). The project site is indicated in red.

Description of methodology:

Topographical maps (1988 & 1920) as well as Google images of the site (maps 3 - 7), indicate the study area of the proposed development. These were studied intensively 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 consisted mainly of archival sources studied on distribution patterns of early African groups who settled in the area since the 17th century, and which have been observed in past and present ethnographical research and studies.
- Literary sources, books and government publications, which were available on the

subject, have been consulted, in order to establish relevant information.

- Specialists currently working in the field of anthropology and archaeology have also been consulted on the subject, as well as the Lydenburg Museum.

-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 were consulted. Heritage Impact Assessment reports of specialists who worked in the area were studied and are quoted in section B.

- The fieldwork and survey were conducted by two people on foot and per vehicle. Tracks and paths were used to access sections (see Appendix 1).
- The grassland terrain, with low shrubs was entirely flat and accessible (figs. 1 – 4). The study areas were even and visibility was good (see Appendix 2).
- The relevant data was located with a GPS instrument (Garmin Oregon 750), 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 environmental practitioner Mr. Cappie Linde,⁴⁹ as well as the owner Mr. Eben Marais⁵⁰ were held.

GPS co-ordinates of the study area (Co-ordinates provided by Envirovision Consulting cc:

The property is in a triangular shape.

GPS CO-ORDINATES			
Location	South	East	Elevation
North-Western corner	S 25° 07' 32.33"	E 30° 24' 41.44"	1479m
South-western corner	S 25° 07' 35.81"	E 30° 24' 49.14"	1474m
Eastern corner	S 25° 07' 24.83"	E 30° 25' 03.12"	1474m

E. DESCRIPTION OF IDENTIFIED SITES

The applicant, AFROFLOW (Pty) Ltd., in co-operation with Envirovision Consulting cc, is requesting the development of a filling station with associated infrastructure, 5km south-west of

⁴⁹ Personal information: Environmental Practitioner, Mr. C. Linde, 2021-01-13.

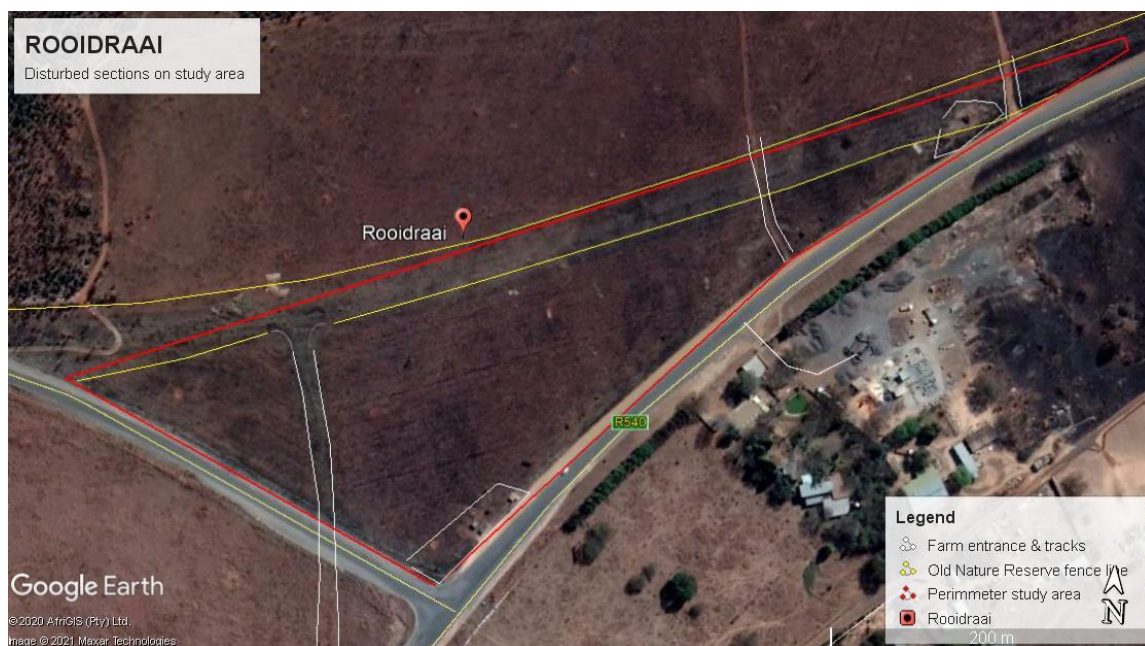
⁵⁰ Personal communication: Afroflow, Owner, Mr. E, Marais, 2021-01-13.

the town of Lydenburg, at the intersection of the R540 and the R577 provincial roads, on *portion 41 of the farm ROOIDRAAI 34JT*. Natural indigenous vegetation still covers the study area.

The study area was surveyed on foot and per vehicle for any remains of an archaeological or historical nature. Although the Lydenburg area is well-known for its Late Iron Age stone walled settlements (see section B), no archaeological, historical features or graves were observed during the field survey.

Recent disturbances are present on the property, such as an old dirt road with a distinct entrance. It is assumed that this entrance was to the previous Lydenburg Nature Reserve, which has subsequently change to Lydenburg Townlands (see map 6). The entrance is clearly visible on a Google image (map 4), and consists of low packed stones (figs. 5 & 6). This entrance is no longer in use. A few stone heaps of no significance have also been observed in the vicinity of the entrance (see fig. 6). Some hawkers' stalls are currently visible at the intersection of the R540 & R577 (fig. 7).

Two small dirt roads which are still in use, are situated towards the eastern corner of the study area. Two clear metal posts mark the entrance to the first road (fig. 8 & 10) and the rubble of a recent structure is also visible in this section (fig. 9). Another dirt road is situated further east (fig. 11).



MAP 7: A 2020 Google image of the features which were identified on the study area.

All comments should be studied in conjunction with the maps, figures and appendices, which indicate the study area, and which correspond with the summary below.

Photographs in Appendix 2 show the general view of the study area (figs: 1 – 4).

Features which were observed during the survey and significance (see map 7):

Feature / Site	Description / Comments	Site Location	Significance
Recent dirt road with stone entrance	A distinct entrance road (dirt road and no longer in use), which is marked with stone piles on both sides (see fig. 5 76).	North: S25° 07' 31.00" E30° 24' 45.91" Elev. 1476m South-west: S25° 07' 34.73" E30° 24' 46.76" Elev. 1476m	No significance
Recent metal post entrance to dirt road	Metal posts of a previous gate are evidence of dirt farm road which is still in use	S25° 07' 29.26" E30° 24' 56.20" Elev. 1473m	No significance
Recently demolished structure	Rubble of a demolished structure (recent)	S25° 07' 29.15" E30° 24' 55.51" Elev. 1474m	No significance

F. DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT

ACT	COMPO-NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impact on buildings and structures older than 60 years	No structures older than 60 years were observed	None
NHRA	S35	Impacts on archaeological heritage resources	None	None
NHRA	S36	Impact on graves	None	None

ACT	COMPO- NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S37	Impact on public monuments	None present	None
NHRA	S38	Developments requiring an HIA	Development is a listed activity	HIA done
NEMA	EIA regulation	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:**

Context		
Urban environmental context	No	NA
Rural environmental context	No	NA
Natural environmental context	No	NA
Formal protection (NHRA)		
(S. 28) Is the property part of a protected area?	No	NA
(S. 31) Is the property part of a heritage area?	No	NA
Other		
Is the property near to or visible from any protected heritage sites	No	NA
Is the property part of a conservation area of special areas in terms of the Zoning scheme?	No	NA
Does the site form part of a historical settlement or townscape?	No	NA

Context		
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?	No	NA (Only access roads and a demolished structure)
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?	No	NA

<i>Heritage resources on the property</i>		
<i>Formal protection (NHRA)</i>		
National heritage sites (S. 27)	No	NA
Provincial heritage sites (S. 27)	No	NA
Provincial protection (S. 29)	No	NA
Place listed in heritage register (S. 30)	No	NA
<i>General protection (NHRA)</i>		
Structures older than 60 years (S. 34)	No	None
Archaeological site or material (S. 35)	No	None
Graves or burial grounds (S. 36)	No	None
Public monuments or memorials (S. 37)	No	NA
<i>Other</i>		
Any heritage resource identified in a heritage survey (author / date / grading)	No	NA
Any other heritage resources (describe)	No	NA

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

NHRA S (3)2 Heritage resource category	ELE- MENT S	INDICATORS OF HERITAGE SIGNIFICANCE										RISK	
		Historical	Rare	Scientific	Typical	Technological	Aesthetic	Person / community	Landmark	Material condition	Sustainability		
Grave / burial grounds	No	-	-	-	-	-	-	-	-	-	-	-	-
Areas of significance related to labour history	No	-	-	-	-	-	-	-	-	-	-	-	-
Movable objects	No	-	-	-	-	-	-	-	-	-	-	-	-

- Summarised recommended impact management interventions

NHRA S (3)2 Heritage resource	SITE	IMPACT SIGNIFICANCE		Impact management	Motivation
		Cultural significance			
		Cultural significance	Impact significance		
Buildings / structures of cultural significance	No	No	No	-	-
Areas attached to oral traditions / intangible heritage	No	None	None	-	-

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

ACT	COMPONENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	None	None	None
NHRA	S35	Impacts on archaeological heritage resources	None	None

ACT	COMPO- NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S36	No	None	None
NHRA	S37	Impact on public monuments	None present	None
NHRA	S38	Developments requiring an HIA	Development is a listed activity	Full HIA
NEMA	EIA regulations	Activities requiring an EIA	Development is subject to an EIA	HIA is part of EIA

G. STATEMENT OF SIGNIFICANCE & EVALUATION OF HERITAGE RESOURCES

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.⁵¹ 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

⁵¹National Heritage Resources Act, no. 25 of 1999. p. 2.

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.⁵²

H. DISCUSSION

The Lydenburg area is well-known for its Late Iron Age stone walled settlements (see section B), and many occur in the wider area. No features of interest were observed within the study area.

Recent disturbances are present on the property, such as an old dirt road with a distinct stone entrance, a few stone heaps of no significance, two derelict metal posts (marking another dirt road, rubble of a recent structure. None of these features have any significance (see section E).

The survey revealed that there were no archaeological, historic features or graves which will be impacted upon by the proposed development.

I. RECOMMENDATIONS & 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 filling station development.

It is recommended that the applicant should be made aware that distinct archaeological material or human remains may only be revealed during the construction phase. Based on the survey and the findings in this report, Adansonia Heritage Consultants state that there are no compelling reasons which may prevent the proposed development on *portion 41 of the farm ROOIDRAAI 34JT* to continue. Earthmoving activities should be monitored by a qualified archaeologist and an assessment and recommendation must be done should any such material or human remains be observed.

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

⁵²National Heritage Resources Act, no. 25 of 1999. pp. 12-14

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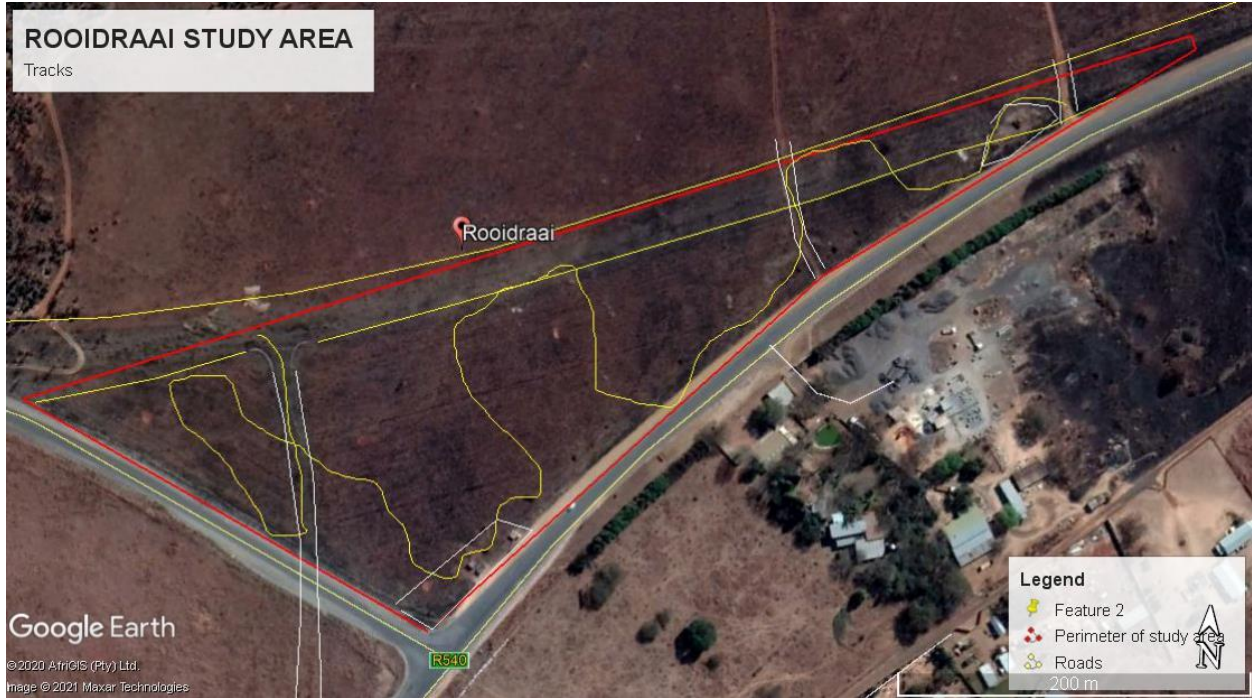
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APPENDIX 1

Tracks and Paths



Tracks and Paths used to access the study areas.