

SPECIALIST REPORT

**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR PROPOSED
RESIDENTIAL TOWNSHIP, TEKWANE EXTENSION 2:
PORTION 7 OF TEKWANE 537JU,
KHANYAMAZANE,
MPUMALANGA PROVINCE**

**REPORT PREPARED FOR
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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 residential township, Tekwane extension 2, on: *portion 7 of the farm TEKWANE 573JU*, Mbombela local municipality, Kanyamazane.

The study area is situated on topographical map 1:50 000, 2531AC WITRIVIER, which is in the Mpumalanga Province. This area falls under the jurisdiction of the Ehlanzeni District Municipality, and Mbombela 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, Mbombela Local Municipality in co-operation with WANDIMA Environmental Services, is requesting the establishment of a residential township, Tekwane extension 2 on former disturbed agricultural land. Approximately 92.3473ha will be developed for residential purposes, 1 x business centre, 1x bus and taxi terminus, 14 public open spaces, crèches and churches.

The proposed residential township is situated south of the road to Kanyamazane, and north of the Crocodile River running parallel to the N4 national road. It is approximately 2km east of the R583 road to White River. The entire study area has been disturbed by historic agricultural activities. There is no virgin bush left north of the 1: 100 year flood line. The area is currently zoned as agricultural, and will be rezoned to residential. The area was flat and accessible, gently sloping towards the Crocodile river. The entire area was burnt during winter and therefore visibility was excellent.

No archaeological or historical structures were observed in the study area. Only a few upper grinders were identified. These were all located in disturbed road or agricultural sections, out of context. They are of no significance.

It is recommended that the applicant be made aware that distinct archaeological material or human remains may only be revealed during the construction phase. It is recommended that earthmoving activities be monitored by a qualified archaeologist and that an assessment be done. 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.

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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**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR PROPOSED RESIDENTIAL
TOWNSHIP, TEKWANE EXTENSION 2: PORTION 7 OF TEKWANE 537JU,
KHANYAMAZANE, MPUMALANGA PROVINCE**

A. BACKGROUND INFORMATION TO THE PROJECT

Mbombela Local Municipality in co-operation with WANDIMA Environmental Services, is requesting the establishment of a residential township, Tekwane extension 2 on former disturbed agricultural land (see Map 2). Approximately 92.3473ha will be developed for residential purposes, 1 x business centre, 1x bus and taxi terminus, 14 public open spaces, crèches and churches (see Appendix 2: Layout, Fig. 1 -3).

Adansonia Heritage Consultants were appointed by *WANDIMA 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. 2: Topographical Map: 2531AC WITRIVIER).

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 - 5, and Appendix 1 - 3.

- This study forms part of an EIA, Consultant: *WANDIMA ENVIRONMENTAL SERVICES*., P.O. Box 1072, Nelspruit, 1200. Tel: 013 - 7525452 / Fax: 013 – 7526877 / e-mail: admin@wandima.co.za;
- Type of development: 92.3473ha are earmarked for a proposed residential township development, on *portion 7 of the farm TEKWANE 573JU*, Kanyamazane, Mpumalanga Province.
- The site was historically compromised by agricultural land, and is zoned as agricultural – it will be rezoned to residential.
- 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 Mbombela Local Municipality.
- Land owner: Mbombela Local Municipality.

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 in terms of 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 *WANDIMA ENVIRONMENTAL SERVICES*, as well as the applicant, 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. Three upper grinders were found during the survey but they were isolated and not in any significant context.

- **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. This section does not apply since no graves were identified.

- **Section 34 of the NHRA**

Section 34 of the NHRA stipulates that no person may alter, damage, destroy, relocate etc, any building or structure older than 60 years, without a permit issued by SAHRA or a provincial heritage resources authority. This section does not apply since no structure 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), 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 AND HISTORY OF THE STUDY AREA

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

The study area, *portion 7 of the farm TEKWANE 573JU*, (Mbombela), is located south of the road to Kanyamazane, and north of the Crocodile River running parallel to the N4 national road. It is approximately 2km east of the R583 road to White River. The Kruger National Park is approximately 40km east of the study area and Bongani Mountain Lodge (where rock art sites were documented) also approximately 15km to the north. The 1984 topographical map (2531AC WITRIVIER) was studied and revealed that the entire farm was situated on cultivated lands (see Map 2). There are also established citrus and other agricultural farms in all compass directions to the site.

The wider area is quite rich in archaeological history and the first evidence of ancient mining occurred between 46 000 and 28 500 years ago during the Middle Stone Age. Hematite or red ochre was mined at Dumaneni (near Malelane, approximately 30km east of the study area), and is regarded as one of the oldest mines in the world. Iron ore was also mined in the area and a furnace, as well as iron slag was documented.¹

Bushman (or San) presence is evident in the 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 (located to the north), and its immediate surrounds³ (north of the study area), as well as many sites in the Nelspruit, Rocky's Drift and White River. Thirty one rock art sites were recorded on the Mpumalanga Drakensberg Escarpment. Rock art sites were also recorded in Swaziland.^{4 5} The Bushman painters most probably obtained the ochre which was used as a pigment in the paintings, from the Dumaneni ochre mine.^{6 7}

History in the wider vicinity is closely connected to the study area and is briefly outlined below. The name Komati appears in historical records for the first time in 1589, in the form *Macomates*. It was recorded by a traveler on board the Portuguese ship *Sao Thome*, which sailed from Cochin, South India and ran

¹ Bornman, H., *The Pioneers of the Lowveld*, p. 1.

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. 2009. Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve, MA dissertation. Pretoria: UP.

⁵ Masson, J. 2008. Views from a Swaziland Cave. *The Digging Stick*, Vol. 25 no 1: 1-3.

⁶ Bornman, H. *The Pioneers of the Lowveld*, p. 1.

⁷ Masson, J. 2008. Views from a Swaziland Cave. *The Digging Stick*, Vol. 25 no 1: 1-3.

aground on the shores of the *Land of the Makomati*, near *Lake Sibayi*, in what became known as KwaZulu Natal. The *Land of Makomati* comprised the entire hinterland as far north as the Limpopo River, as far south as St Lucia, and as far west as the Drakensberg escarpment, therefore the study area is included. It was the trading zone of the Komati gold and ivory traders who had established themselves in Delagoa Bay (which was known up to the 17th century as *Makomati*), long before the arrival of the first Portuguese in 1498.⁸

In order to place the surrounding area 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 Meyer, Voight, Bergh, De Jongh, Evers, Myburgh, Thackeray and Van der Ryst were consulted, as well as historic sources (Makhura and Webb).

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 Hazyview⁹, Bushbuckridge, Graskop and Sabie, clay potsherds and upper as well as lower grinders, are scattered at most of the sites.¹⁰ Many of these occur in caves as a result of the Swazi attacks (1900's), on the smaller groups. The topographical map did not show any historical features of interest. The 1926 topographical map of *Komatipoort* revealed no historic black settlements in the immediate area (see Map 3).¹¹ The study area is flat with no rocky outcrops. No structures or features of significance were identified.

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

- *Study for the Proposed Eskom Powerlines, Hazyview – Dwarsloop* (2008);
- *Inspection of Umbhaba Stone-walled settlement, Hazyview*, (2001);
- *a Phase 1 Archaeological and Heritage Impact Assessment for 132Kv Powerlines from Kiepersol substation (Hazyview), to the Nwarele substation Dwarsloop* (2002);
- *a Phase 1 Archaeological and Heritage Impact Assessment for a proposed traffic training academy, Calcutta, Mkhuhlu, Bushbuckridge* (2013);
- Phase 1 Archaeological and Heritage Impact Assessment for the proposed *Nkambeni* cemetery in Numbi, Hazyview (2013);
- Phase 1 Archaeological and Heritage Impact Assessment for a *Development on the farm Agricultural Holding no 56 JU, White River* (2013) was done in the wider area;
- Phase 1 Archaeological and Heritage Impact Assessment for proposed *agricultural development*

⁸ Bornman, H., *The Pioneers of the Lowveld*, p. 9.

⁹PRMA: Information file 9/2.

¹⁰D. Ziervogel, *The Eastern Sotho, A Tribal, Historical and Linguistic Survey*, p. 3.

¹¹ Map: 1926 Topographical Map: Komati Poort no. 22.

on the farm SIERAAD, Komatipoort area, (2013) revealed one possible Late Stone Age borer which was identified in a soil sample, one meter below the surface;

- Phase 1 AIA / HIA for proposed debushing of natural land for agricultural use: Portion 10 of the farm Thankerton 175JU, Hectorspruit, Mpumalanga Province (2013); revealed some Later Stone Age artifacts which were all out of context and a burial site.

The SAHRA database for archaeological and historical impact assessments was consulted and revealed other recent Archaeological Impact assessment reports in the wider area:

- J. Van Schalkwyk: *Proposed new Lebombo Port of Entry and upgrade of Komatipoort railway station between Mpumalanga (SA) and Mozambique (2008)* – Some historic buildings were identified but no archaeological remains;
- A. Van Vollenhoven: *Report on a cultural Heritage Impact Assessment for the proposed Kangwane Antracite Mine, Komatipoort (2012)* – An archaeological site with Middle and Late Stone Age tools were identified as well as some Iron Age artifacts and decorated pottery. Mitigation measures were recommended by exclusion from the development or a Phase 2 study;
- JP Celliers: *Report on Phase 1 Archaeological Impact assessment on erven at Komatipoort 182 JU Extension 4, Komatipoort (2012)* – Revealed two pieces of undecorated sherds of pottery which was of low significance. It was recommended that any earthmoving activities be monitored by a qualified archaeologist.
- A. Van Vollenhoven: *Archaeological Impact Assessment for Border site at Komatipoort (2012)* – Revealed historic remains linked to the Steinaeker's Horse regiment during the South African War.
- A. Van Vollenhoven: *A Report on a basic assessment relating to cultural heritage resources for the proposed ESKOM Tekwane North line and substations, Mupumalanga Province (2013)* – revealed historic remains of low significance and a cemetery.

Very little contemporary research has been done on prehistoric African settlements in the study area. Later Stone Age sites in the Kruger National Park date to the last 2500 years and are associated with pottery and microlith stone tools.¹² The only professionally excavated Early Iron Age site near the area, besides those in the Kruger National Park, was the Plaston site near White River, dating ca 900 AD.¹³ No other archaeological excavations have been conducted to date within the study area, which have been confirmed by academic institutions and specialists in the field.^{14 15} A stone walled settlement with

¹² J.S. Bergh (red.), *Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*, p. 95.

¹³ M.M. Van der Ryst., *Die Ystertydperk, in J.S. Bergh (red.), Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*. p. 97.

¹⁴ Personal information: Dr. J. Pistorius, Pretoria, 2008-04-17.

¹⁵ Personal information: Dr. MS. Schoeman, University of Pretoria, 2008-03-27.

terracing was recorded by C. van Wyk (Rowe) close to Hazyview,¹⁶ as well as several which were documented in the southern parts of the Kruger National Park.¹⁷ The southern Kruger Park and Nelspruit / Bongani Nature Reserve areas have an abundance of San rock art sites,¹⁸ as mentioned above, but none were identified in the study area.

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 Swazi from before the 18th century, as well as small groups of Tsonga (Nhlangu and Tšhangana).^{19 20} (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.²¹

The whole district is divided in two, with the Drakensberg Escarpment in the west, and the Low Veld (in which the study area is situated) towards the east. Today, we found that the boundaries of groups are intersected and overlapping.²² Languages such as Zulu, Xhosa, Swazi, Nhlangu, Nkuna, sePedi, hiPau and seRôka, are commonly spoken throughout this area.²³

During the middle of the 18th century some Sotho and Swazi groups combined under a fighting chief Simkulu. The tribe so formed became known as the BakaNgomane. The principal settlement of Simkulu was in the vicinity of the confluence of the Crocodile and Komati Rivers. It is believed that the BakaNgomane chiefs were buried there.²⁴

The Swazi under Mswati II (1845), commenced on a career of large scale raids, on the prosperous tribal lands to the north of Swaziland. His regiments such as the *Nyatsi* and the *Malelane* brought terror to African homes as far afield as Mozambique.²⁵ During their northern expansion they forced the local inhabitants out of Swaziland, or absorbed them.²⁶ There is evidence of resistance, but the Eastern Sotho

¹⁶C. Van Wyk, *Inspection of Umbhaha Stone-walled settlement, Hazyview*, pp. 1-2.

¹⁷Eloff J.F., *Verslag oor Argeologiese Navorsing in die Krugerwildtuin, June / July, 1982*.

¹⁸Hampson, J., et al., *The rock art of Bongani Mountain Lodge and its environs, South African Archaeological Bulletin 57: pp. 17-28*.

¹⁹N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*. pp. 90-92 & 111.

²⁰H. S. Webb, *The Native Inhabitants of the Southern Lowveld, in Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. p.16.

²¹N.J. van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p.9.

²² N.J. van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 51.

²³M. De Jongh (ed.), *Swatini*, p. 21.

²⁴ Bornman H., *The Pioneers of the Lowveld* pp. 10-11.

²⁵ Bornman H., *The Pioneers of the Lowveld* p 11.

²⁶A.C. Myburgh, *The Tribes of Barberton District*, p. 10.

groups who lived in the northern parts of Swaziland, moved mainly northwards.²⁷ This appears to have taken place towards the end of the 18th century,²⁸ when these groups fled from Swaziland to areas such as Nelspruit, Bushbuckridge, Klaserie, Blyde River and Komatipoort.²⁹

Mswati II built a line of military outposts from west to east of the upper Komati River and the Mlambongwane (Kaal River). At each outpost he stationed regiments to watch and stop the BaPedi returning to their old haunts.³⁰

Shaka in the course of his military actions, came into conflict with Zwide Mkhathshwa (1819). Notwithstanding Zwide's numerical superiority, Shaka defeated him. The remnants of Zwide's tribe fled into the Eastern Transvaal where they settled. They ultimately found a new kingdom in Gaza land, which extended from just north of the current Maputo, up the east coast as far as the Zambezi river.³¹

Soshangane was a very powerful chief of the Gaza people, even though he was under the rule of Zwide. Soshangane decided to leave and was given full passage through Swaziland. He passed on his way through the Komati gorge, today known as Komatipoort, taking with him a great booty of cattle and women. Meanwhile more Shangane arrived and by 1896 some 2000 refugees settled between Bushbuckridge and Acornhoek where they are still living today. With the establishment of the Sabie Game Reserve (later known as the Kruger National Park), the BakaNgomane, their Shangaan protégés and Swazis who lived within its borders, were evicted in 1902, and went westward into Klaserie and Bushbuckridge areas, or south of the Crocodile River and established themselves in the Tenbosch and Coal Mine (Strijdom Block) areas, west and south of Komatipoort. The Swazi of Khandzalive moved to Mjejane or Emjejane, the current name for Hectorspruit,³² close to the study area (See also: Map 1: 1935 Map of Van Warmelo).

²⁷N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*. p. 111.

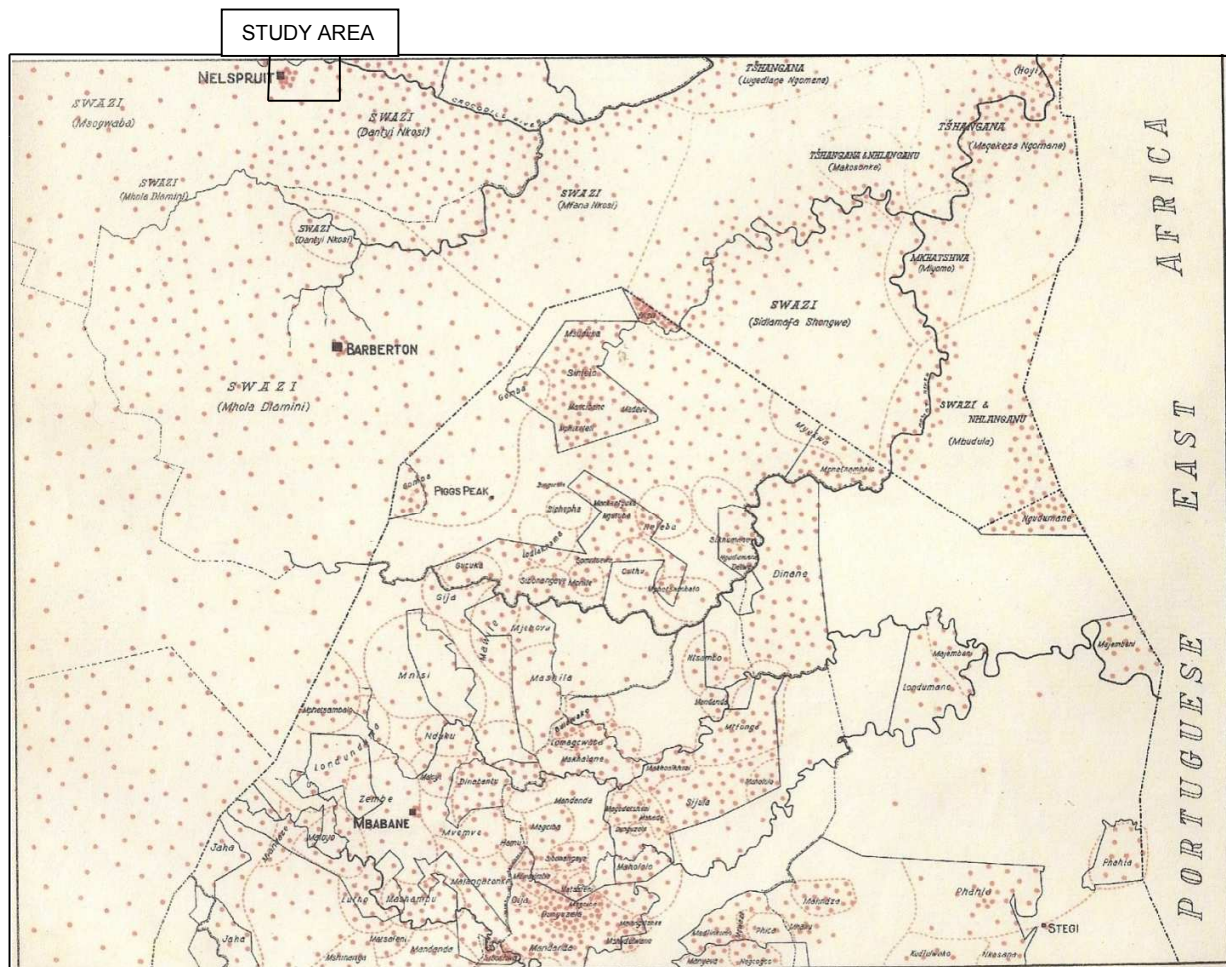
²⁸H. S. Webb, *The Native Inhabitants of the Southern Lowveld*, in *Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. p. 14

²⁹*Ibid.*, p. 16.

³⁰Bornman H., *The Pioneers of the Lowveld* p. 12.

³¹Bornman, H., *The Pioneers of the Lowveld*, p.17.

³²Bornman, H., *The Pioneers of the Lowveld*, p.19.



MAP 1: Van Warmelo: 1935: Study area is indicated.

Swazi

The Swazi people descend from the southern Bantu (Nguni) who migrated from central Africa in the 15th and 16th centuries.³³ 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 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.³⁴

Tsonga groups: The Nhlangu and Tshangana

The Nhlangu and Tshangana (also generally known as the Shangaan-Tsonga)³⁵ form part of the larger Tsonga group, who occupied the whole of Mozambique (Portuguese East Africa), and it has been

³³ <http://en.wikipedia.org/wiki/Swaziland> p. 1.

³⁴ N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 83.

³⁵ M. De Jongh (ed.), *Swatini*, p. 24.

recorded that by 1554, they were already living around the Delagoa Bay area (Maputo).³⁶ 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.³⁷ They were originally of Nguni origin.³⁸ The term “Shangaan” is commonly employed to refer to all members of the Tsonga division.³⁹

The **Nhlanganu** occupied the Low Veld area in their efforts to escape the Zulu raids during 1835-1840. They lived side by side with the Tšhangana, and the differences between the two are inconsiderable. They have mixed extensively with other tribes.⁴⁰

The **Tšhangana** are also of Nguni origin who fled in the same way as the Nhlanganu, and settled in the “Transvaal” a little later than the former. Most of the Tsonga were subjects to *Soshangane*, who came from Zululand.⁴¹ The downfall of *Ngungunyana* (son of *Soshangane*) saw his son seeking sanctuary in the “Transvaal”, and the latter became known as *Thulamahashi*,⁴² the name that is still used for the area east of Busbuckridge.

The historical background of the study area confirmed that it was occupied since the 17th century by the Tsonga groups (Nhlanganu and Tšhangana). These groups have intermarried extensively or were absorbed by other groups in time.⁴³

- **History of Kanyamazane near Nelspruit**

Kanyamazane is located 19km from Nelspruit, 7km east of Karino and 2km south of the villages of Mxogwaba, Daantjie and Pienaar. Another name for Kanyamazane is Lekazi, derived from the Legogoto Nsikazi Regional Authority that was in charge of the area when Kanyamazane was built. Kanyamazane means “wild animals or game animals.”⁴⁴

³⁶N.J. Van Warmelo, Grouping and Ethnic History, in *Schapera I., The Bantu-Speaking Tribes of South Africa. An Ethnographical survey*, p. 55.

³⁷N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, pp. 90-91.

³⁸N.J. Van Warmelo, Grouping and Ethnic History, in *Schapera I., The Bantu-Speaking Tribes of South Africa. An Ethnographical survey*, p. 55.

³⁹N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 92

⁴⁰*Ibid.*, pp. 91-92.

⁴¹N.J. Van Warmelo, Grouping and Ethnic History, in *Schapera I., The Bantu-Speaking Tribes of South Africa. An Ethnographical survey*, p. 57.

⁴²N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 92.

⁴³M. De Jongh (ed.), *Swatini*, p. 40.

⁴⁴Bornman, H., *The Pioneers of the Lowveld*, p. 145.

A black township for Nelspruit was laid out in 1923 by the Village Council and named Mbombela (meaning “people from a widespread area now being confined to an over-crowded space). The On 10 November 1950 the National Housing and Planning Commission suggested that the farm *Friedenheim* would be a suitable site for a black township near Nelspruit. The owner of *Friedenheim* objected and after many years and much deliberation and negotiations the farm Nyamazaan was bought in 1964 and the inhabitants of Mbombela were prepared to move to Nyamazaan. They accepted payment for their stands in Mbombela. The relocation was completed in 1979.⁴⁵

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

The proposed project will involve the following:

- The establishment of a residential township, Tekwane extension 2 on historical disturbed agricultural land. Approximately 92.3473ha will be developed for residential purposes, 1 x business centre, 1x bus and taxi terminus, 14 public open spaces, crèches and churches (see Map 2, 3 and Appendix 2).

The proposed area for development was historically compromised and used for agricultural purposes and citrus orchards.⁴⁶ The study area is south of the main road to Kanyamazane residential area. Large sections in all compass directions are still citrus farms (see Map 4). The area is zoned as agriculture and it will be rezoned as residential. Most of the indigenous trees were historically removed to clear the area for agricultural purposes. Some indigenous trees are visible below the 1: 100 year floodline. Technically the ecozone representing this area is referred to as *Mixed bushwillow woodland on granite* and *Sabie Crocodile thorn thickets on granite*. The vegetation is characterized by *mixed Lowveld Bushveld* with tall woodlands made up of Paper bark and other acacia species mixed in with trees such as marulas, bushwillow, apple-leafs, silver cluster-leafs, and matumi along the drainage lines (Fig. 1 - 8). The typical granite and dolerite plains have sandy soils and clayey soils in the lower areas.^{47 48 49}

The Kruger National Park and the Bongani Mountain Lodge and Nature Reserve, are situated close to the study area.

Power lines are visible along the main road from east to west, as well as another from north to south roughly in the middle of the study area. (Fig. 4, 9 & 12). There are also existing pipelines parallel to the road to Kanyamazane in the north and roughly on the 1:100 year floodline mark (Fig. 19 and Map 4).

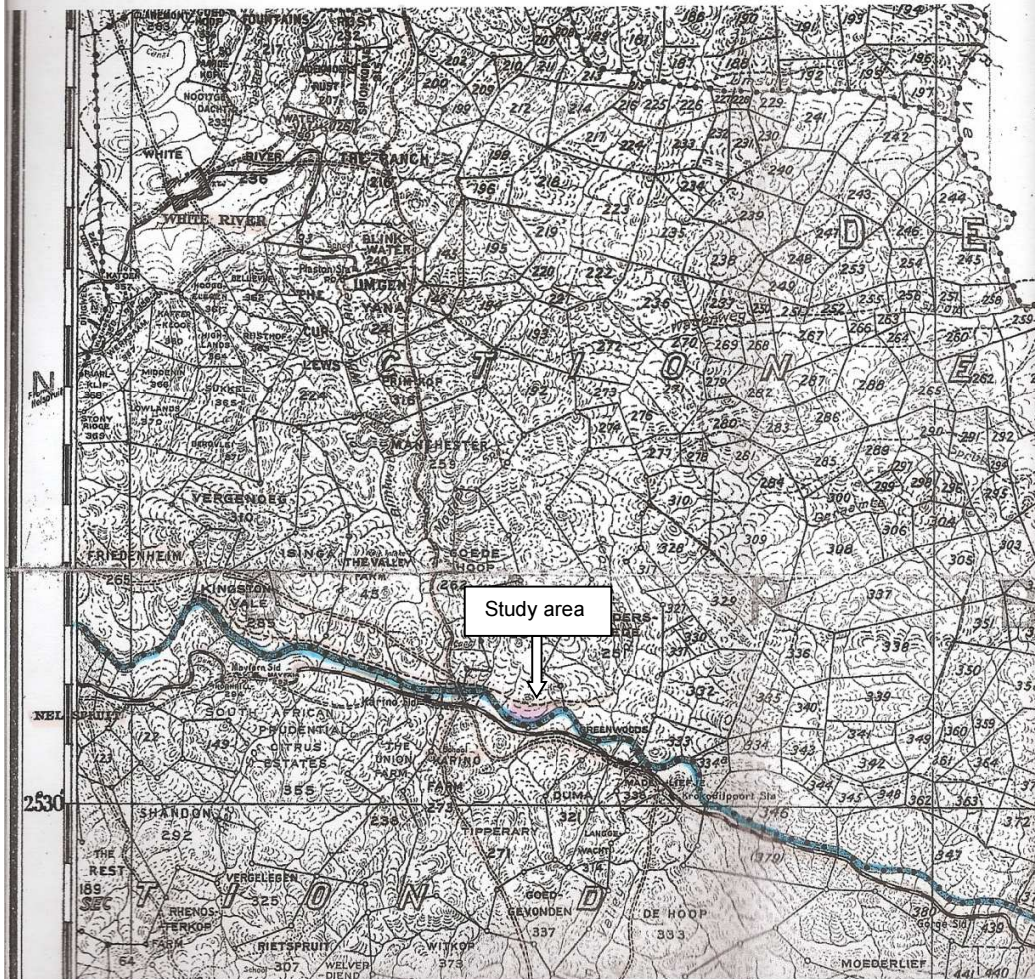
⁴⁵ Bornman, H., *The Pioneers of the Lowveld*, p. 145-146.

⁴⁶ WANDIMA Environmental Services, BID document, October 2014.

⁴⁷ SANPARKS, Visitors Guide to the Kruger National Park, p. 2.

⁴⁸ Van Wyk, B., & Van Wyk P., *Field Guide to Trees of Southern Africa*, 1997, p. 500.

⁴⁹ Deacon, A., e-mail access 26-01-14, after (Mucina & Rutherford 2007 & Alcocks 1953).



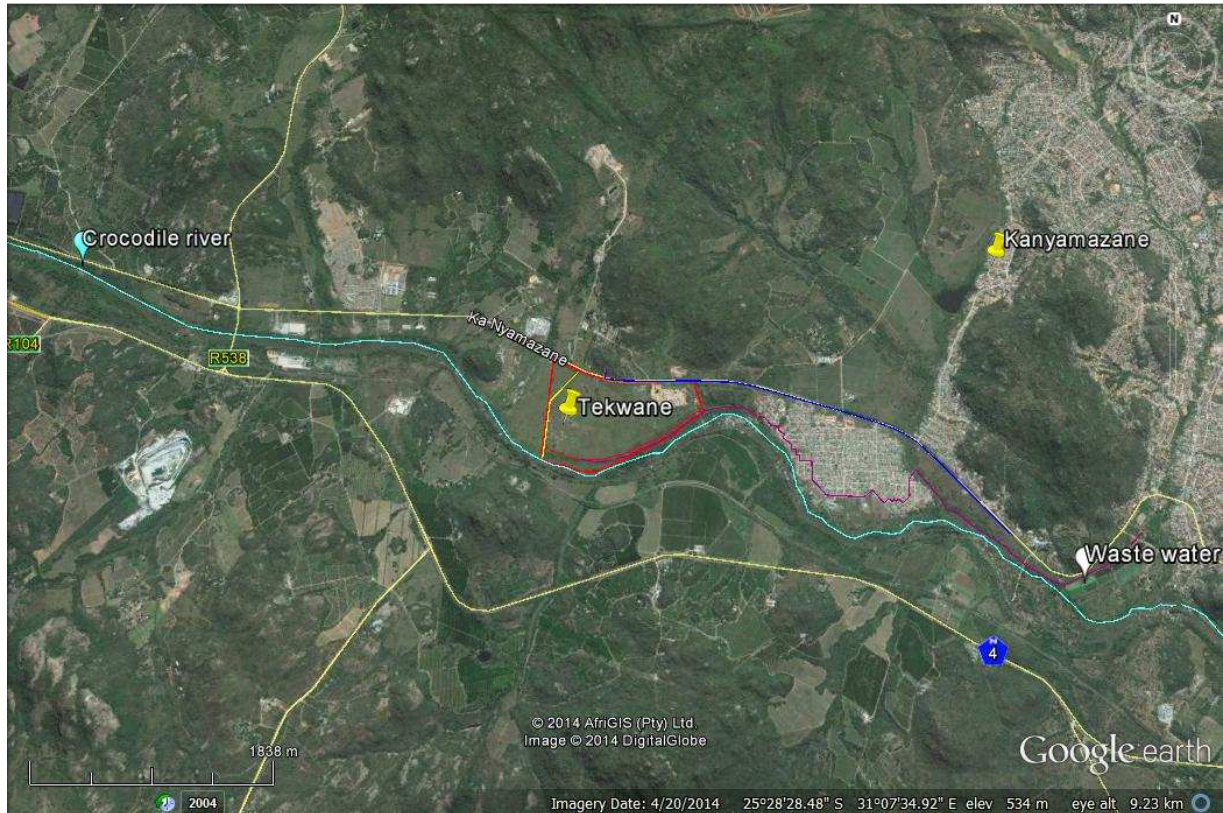
MAP 3: 1926 Topographical map: Komatipoort

D. LOCALITY

The proposed residential township is located on *portion 7 of the farm Tekwane 537JU*, south of the road to Kanyamazane, and north of the Crocodile River running parallel to the N4 national road. It is approximately 2km east of the R583 road to White River. The Kruger National Park is approximately 40km towards the east and Bongani Mountain Lodge, approximately 15km to the north.

The site falls under the Mbombela Local Municipal jurisdiction, which in turn falls within Ehlanzeni District Municipality, in the Mpumalanga Province (see Maps 2, 3, 4 & 5 & Fig. 1 – 8 for the study area). The topographical map of 1984 (2531AC WITRIVIER), shows that the study area was historically used for agricultural purposes. The area is currently zoned as agricultural, and will be rezoned to residential. The entire

area consisted of agricultural fields which were flat and accessible, gently sloping towards the Crocodile river. The area within the 1:100 flood line consisted of small agricultural fields next to the Crocodile river which is currently used by local subsistence farmers. The area was burnt during winter and visibility was excellent.



Map 4: Google image of wider area: The study area is situated north of the Crocodile River.

Description of methodology:

The 1984 topographical map, (2531AC: Map 2), as well as a 1926 map (Map 3: KOMATIPOORT), and Google images of the site (Map 4 & 5), 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 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.

-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 entire study area was historically disturbed agricultural land which belongs to the Mbombela Local Municipality.
- The fieldwork and survey was conducted extensively by 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 flat, even and accessible. Visibility was excellent.
- 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 environmental practitioner Xolani Nkosi was held.
- GPS co-ordinates were used to locate the perimeters and any heritage features within the study area (Co-ordinates provided by WANDIMA Environmental Services): (See Map 5). The elevation ranges from between 544m (north) and 510m (south, at the Crocodile River).

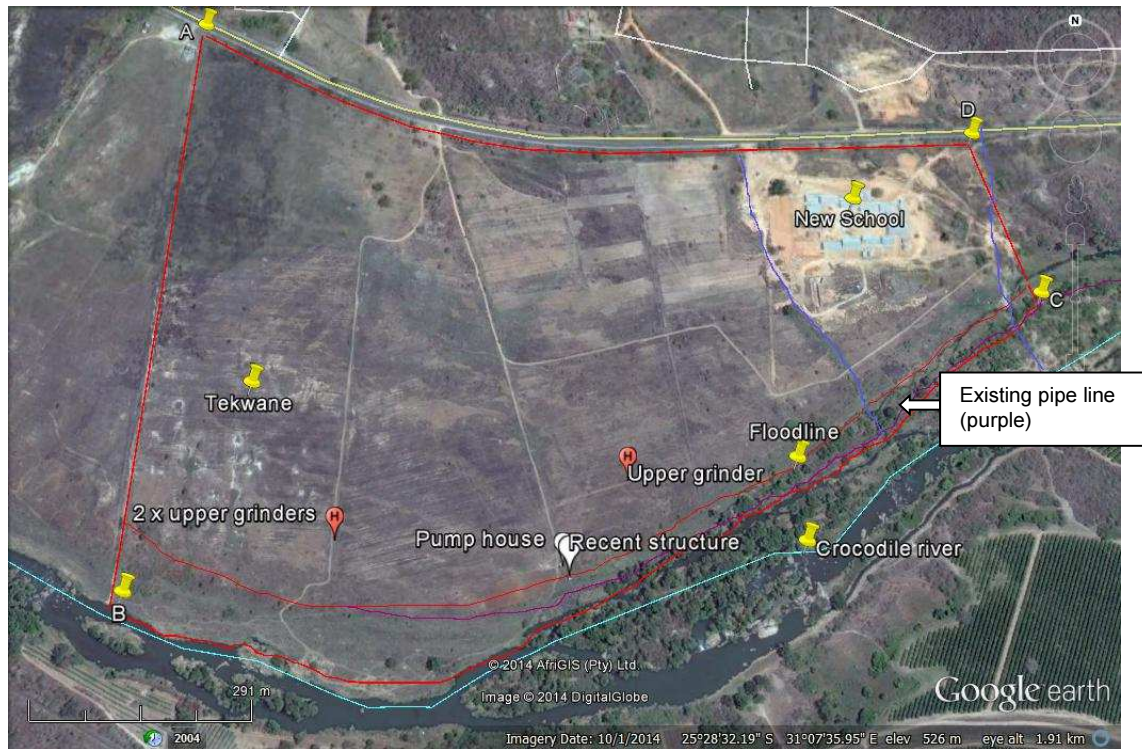
GPS CO-ORDINATES		
Location	South	East
A	S 25° 28' 14.43"	E 31° 07' 15.41"
B	S 25° 28' 42.77"	E 31° 07' 13.35"
C	S 25° 28' 28.33"	E 31° 08' 01.52"
D	S 25° 28' 20.25"	E 31° 07' 58.30"

E. DESCRIPTION OF IDENTIFIED SITES

The applicant, Mbombela Local Municipality in co-operation with WANDIMA Environmental Services, is requesting the establishment of a residential township, Tekwane extension 2 on former disturbed agricultural land (see Map 2). Approximately 92.3473ha will be developed for residential purposes, 1 x business centre, 1x bus and taxi terminus, 14 public open spaces, crèches and churches (see Appendix 2).

The study area is approximately 19km from Nelspruit and has historically been known for agricultural farming (See Map 2 & 3). Large sections in all compass directions are also cultivated with citrus and agriculture (see Map 4 & Fig. 2, 6 & 9). The disturbed agricultural lands were flat and without any rocky outcrops. The 1926 topographical map (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 Swazi and Shangaan (see Map 1).

The study area is indicated in Maps 2 & 5. The terrain was even and accessible and visibility was excellent throughout the survey (see fig. 1 - 8). The sections were further accessible by existing paths and roads, and were surveyed on foot and per vehicle (Appendix 3). Three upper grinders were identified during the survey. These were all found out of context in disturbed sections next to roads and agricultural fields (Fig. 16, 17 & 18). None of the artifacts were found in any archaeological context and are all in disturbed sections. None of these artifacts have any historic or cultural value which will be impacted upon by the proposed development (See Map 5).



Map 5: Heritage and other features 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 1 show the general view of the study area. No archaeological sites of significance, stone walls, historic structures or graves were identified.

Heritage features (See Map 5):

Heritage Feature	Description / Comments	Site Location
Upper grinder (1)	1 x Upper grinder was identified in the middle section of the property next to an existing road with agricultural fields on both sides.	Upper grinder: Elev: 518m S25° 28' 37.2" E31° 07' 39.4" Fig. 16
2 x Upper grinders	2 x Upper grinders were identified next to an existing road with agricultural fields on both sides.	Upper grinders: Elev: 521m S25° 28' 39.6" E31° 07' 24.1" Fig. 17 & 18

The study area was surveyed on foot and per vehicle for any remains of archaeological or historical nature. The terrain was flat, even and burnt. There is a slope towards the eastern drainage lines and towards the Crocodile river. A section between the 2 drainage lines is currently being developed for the New Tekwane Secondary School (see Map 5 & Fig. 14). There is a 44m difference in elevation from north (544m) to south (510m). Paths and roads made the sections accessible for the survey. Technically the ecozone representing this area is referred to as *Mixed bushwillow woodland* and *Sabie Crocodile thorn thickets* on granite. The soil type is archaean granite and gneiss which weather into sandy soils and clayey soils in lower areas.

The area is currently used by subsistence local farmers for grazing their cattle and small agricultural fields next to the Crocodile River (see Fig. 10). Two modern structures were identified within the 1:100m floodline (a pump house and another square structure made of modern concrete bricks, Fig. 9), but they are of no significance (see Map 5). A water pipeline and power lines are also situated on the property (Fig. 4 & 19).

Three upper grinders were identified during the survey. These were all present in disturbed areas next to the roads and agricultural fields. The presence of these upper grinders, indicate previous settlement on the property. They may have been used fairly recently as is a common feature in the entire rural area stretching from Klaserie / Hoedspruit in the north to Swaziland in the south.

The archaeological features which were identified in the study area, were all out of original context and have no significance which will be impacted upon by the proposed residential development. No other distinct archaeological features were identified in the study area.

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	None present	None
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	3 x Upper grinders were found out of context - no significance.	None
NHRA	S36	Impact on graves	None present	None
NHRA	S37	Impact on public monuments	None present	None

ACT	COMPO- NENT	IMPLICATION	RELEVANCE	COMPLIANCE
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:**

Context		
Urban environmental context	No	NA
Rural environmental context	No	Agricultural land
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 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

Context		
Is the property within or adjacent to any other area which has special environmental or heritage protection?	Yes	40km to the Kruger National Park; 15km to the Bongani Mountain Lodge and Nature Reserve
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	The land was used for agricultural purposes
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	There are two drainage lines in the eastern section towards the Crocodile River which forms the southern border.

Heritage resources on the property		
Formal protection (NHRA)		
National heritage sites (S. 27)	No	NA
Provincial heritage sites (S. 27)	No	NA
Provincial protection (S. 29)	No	NA
Place listed in heritage register (S. 30)	No	NA

Heritage resources on the property		
General protection (NHRA)		
Structures older than 60 years (S. 34)	No	NA
Archaeological site or material (S. 35)	Yes	3 x Upper grinders; All out of context and of no significance
Palaeontological site or material (S. 35)	No	NA
Graves or burial grounds (S. 36)	No	NA
Public monuments or memorials (S. 37)	No	NA
Other		
Any heritage resource identified in a heritage survey (author / date / grading)	No	NA
Any other heritage resources (describe)	No	NA

NHRA S (3)2 Heritage resource category	ELEMENTS	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	

NHRA	ELE-	INDICATORS OF HERITAGE SIGNIFICANCE										RISK	
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 / palaeontological sites	Yes	-	-	-	-	-	-	-	-	-	-	-	Upper grinders – out of context - believed to be of no significance.
Grave / burial grounds	No	-	-	-	-	-	-	-	-	-	-	-	-
Areas of significance related to labour history	No	-	-	-	-	-	-	-	-	-	-	-	-
Movable objects	No	-	-	-	-	-	-	-	-	-	-	-	-

- Summarised recommended impact management interventions

NHRA S (3)2 Heritage resource category	SITE	IMPACT SIGNIFICANCE		Impact management	Motivation
		Cultural significance rating			
		Cultural significanc	Impact sianificanc		
Buildings / structures of cultural significance	No	No	None	-	-
Areas attached to oral traditions / intangible heritage	No	None	None	-	-
Historical settlement/ townscape	No	None	None	-	-
Landscape of cultural significance	No	None	None	-	-
Geological site of scientific/ cultural importance	No	None	None	-	-
Archaeological / palaeontological sites	Yes	None	None	No impact	3 x Upper grinders – out of context;
Grave / burial grounds	Yes	No	None	-	-
Areas of significance related to labour history	No	None	None	-	-
Movable objects	No	None	None	-	-

ACT	COMPO- NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impact on buildings and structures older than 60 years	None present	None
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	3x upper grinders – out of context and believed to have no relevance	None
NHRA	S36	Impact on graves	None present	None
NHRA	S37	Impact on public monuments	None present	None
NHRA	S38	Developments requiring an HIA	Development is a listed activity	Full HIA
NEMA	EIA regulations	Activities requiring an EIA	Development is subject to an EIA	HIA is part of EIA

G. STATEMENT OF SIGNIFICANCE & EVALUATION OF HERITAGE RESOURCES

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.⁵⁰ 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

⁵⁰National Heritage Resources Act, no. 25 of 1999. p. 2.

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.⁵¹

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

Site no	Cultural Heritage features	Significance	Measures of mitigation
Upper grinders	No archaeological / historical sites near or in the vicinity	No significance	Out of context - It is not believed to have any significance and will not be impacted upon by the proposed development.

- **Field rating:**

The field rating is viewed in terms of the NHRA (25, 1999) sections 3 (3).

The isolated upper grinders which were found in the study area, were in disturbed sections and not in any archaeological context. It is also not situated near or in the vicinity of any visible archaeological sites.

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). It is not believed that the features which were identified during the survey have any significance in terms of historic or cultural value which might prevent the proposed agricultural development to continue. (See Map 5 & Appendix 2 – area to be developed).

H. RECOMMENDATIONS & CONCLUSION

The proposed project site consisting of 92.3473ha, are earmarked for a proposed residential township development, on *portion 7 of the farm TEKWANE 573JU*, Kanyamazane, Mpumalanga Province. The study area is situated on historically disturbed agricultural land. The artifacts (upper grinders) are situated out of any archaeological context and 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.

Archaeological material or graves are not always visible during a field survey and therefore some significant material may only be revealed during construction activities of the proposed development.

It is recommended that the owner be made aware that distinct archaeological material or human remains may only be

⁵¹National Heritage Resources Act, no. 25 of 1999. pp. 12-14

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 residential development to continue, but it is recommended that earthmoving activities be monitored by a qualified archaeologist and that an assessment be done should any archaeological material be found.

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

REFERENCES

NATIONAL LEGISLATION

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

LITERARY SOURCES

- BERGH J.S., Swart gemeenskappe voor die koms van die blankes, in J.S. Bergh (red)., *Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*. J.L. van Schaik, 1999.
- BORNMAN, H., *Pioneers of the Lowveld*, 1994.
- DE JONGH, M. (ed)., *Swatini*, 1978.
- DELIUS P, & M. HAY, *Mpumalanga, an illustrated history*, Highveld Press, 2009.
- ELOFF, J.F., Verslag oor Argeologiese Navorsing in die Krugerwildtuin, June / July, 1982
- ENGLISH, M., Die rotskuns van die Boesmans in die NKW, in *De Vos Pienaar, Neem uit die Verlede*, 1990.
- HAMPSON, et al., The rock art of Bongani Mountain Lodge, SA Archaeological Bulletin 57.
- KÜSEL, U.S., *Survey of Heritage sites in the Olifants Catchment area*, 2009.
- MAKHURA, T., Early Inhabitants, in Delius, P. (ed)., *Mpumalanga: History and Heritage*. Natal University Press, 2007.
- MASSON, J. 2008. Views from a Swaziland Cave. *The Digging Stick*, Vol. 25 no 1: 1-3.
- MYBURGH, A.C., *The Tribes of Barberton District*, 1949.
- VAN WARMELO, N.J., *A Preliminary Survey of the Bantu Tribes of South Africa*, Pretoria, 1935.
- VAN WYK, B., & VAN WYK, P., *Field Guide to Trees of Southern Africa*, 1997.
- VAN WYK (ROWE), C, *Inspection of Umbhaba Stone-walled settlement, Hazyview*, 2002.
- VOIGHT, E., *Guide to the Archaeological sites in the Northern and Eastern Transvaal*. Transvaal Museum, 1981.
- VON FINTEL, E (Red.), *Die Nachkommen van Johann Heinrich Jakob Filter 1858-2008: Die Geschichte einer Pionierfamilie in Nordnatal*.
- WEBB, H. S., The Native Inhabitants of the Southern Lowveld, in *Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. Cape Times Limited. 1954.
- ZIERVOGEL, D. *The Eastern Sotho: A Tribal, Historical and Linguistic Survey with Ethnographical notes on the Pai, Kutswe and Pulana Bantu Tribes*. Pretoria, 1953.

ELECTRONIC INFORMATION SOURCES

- Ehlanzeni District Municipality, http://www.mpumalanga.gov.za/municipality_ehlanzeni.htm#bush Access: 2013-01-13.
- <http://en.wikipedia.org/wiki/Swaziland>, Access: 2013-06-13.

PERSONAL INFORMATION

- Personal communication: WANDIMA Environmental Services, 27/10/2014.

MISCELLANEOUS

- PILGRIMS REST MUSEUM ARCHIVES: Information file 9/2.
- WANDIMA Environmental Services, BID Document, October 2014.
- Rowe, C., *Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve*, MA dissertation. Pretoria: UP. 2009.
- SANPARKS, *Visitors Guide Kruger National Park*, 2006.