

**A PHASE 1 ARCHAEOLOGICAL AND HERITAGE IMPACT
ASSESSMENT: Proposed clearance of vegetation for the purpose of
Macadamia farming adjacent to Nkomazi Game Reserve, near
Tjakastad, MPUMALANGA PROVINCE**

**REPORT COMPILED FOR
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EXECUTIVE SUMMARY

A Phase 1 Heritage Impact Assessment (AIA & HIA) was conducted on the Nkomazi Game Reserve for a proposed development of the clearance of approximately 2000ha of indigenous vegetation, as well as the construction of three de-husking plants. The proposed development is located along the R541 near Badplaas (eManzana) and Tjakastad on the following farms:

Section Inyoni: *Portions 2 & 4 of the farm Vergelegen 728JT;*

Portions 6 & 7 of the farm Batavia 151JT;

Section Sterkspruit: *Remainder of portion 1 of the farm Sterkspruit 709JT;*

Portions 3, 4 & 5 of the farm Sterkspruit 709JT.

The study area is situated on topographical map 1:50 000, 2530DC (BADPLAAS), which is in the Mpumalanga Province. This area falls within the Badplaas region under the jurisdictions of the Gert Sibande District Municipality, and Albert Luthuli 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 aims of this study were to do a surface investigation for possible graves, archaeological and / or historical remains on the locations which were identified for the proposed development, and to recommend mitigation measures if necessary. The survey focused on proposed project areas at Inyoni, and project site G (on the farms Vergelegen & Batavia) and the farm Sterkspruit, project sites A – F & H. Large sections on the proposed study areas were historically disturbed with agricultural activities. The Nkomazi River (Komati) forms the southern boundary of the farm Sterkspruit, and is roughly situated in the middle of the entire study area. The farms Vergelegen and Batavia, is situated to the south of the River.

The survey revealed a number of Late Iron Age stonewalls within the study area and mitigation measures are recommended. A number of structures associated with recent farming activities were also observed, but are of no significance. No graves were identified within the study area.

It is recommended that the development may continue with the following mitigating conditions as specified below:

Inyoni: A number of recent features and structures which are associated with previous farming activities were identified in the southern section of **Inyoni (farms Vergelegen & Batavia)**. A quarry and an airstrip

are also visible in this section. None of these features have any historical significance, and the development may continue in this section.

Inyoni & Sterkspruit: Some Late Iron Age (LIA) stone walls are located in the northern section of Inyoni (within the study area on the northern boundary as well as outside of the study area). LIA stone walls were also observed in **Section G (farm Vergelegen)**, and **Sterkspruit sections D & F**. These stone walls should be preserved in situ. Should the Client wish to incorporate these as a tourist attraction or if any activities will take place in these sections, mitigation measures will be required, such as:

- a full documentation of the site (to determine the layout pattern and possible age), as well as a management plan with guidelines to preserve it;

Alternatively, if the Client wishes to develop on these sites, the following process needs to be followed:

- a Phase 2 investigation - excavations and / or shovel test pits (STP) should be done at the sites to determine the scientific value before a destruction permit may be applied for (from SAHRA).

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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Christine (Van Wyk) Rowe
DECEMBER 2020

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A PHASE 1 ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSMENT: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, MPUMALANGA PROVINCE

A. BACKGROUND INFORMATION TO THE PROJECT

Adansonia Heritage Consultants were appointed by CORE Environmental Services to undertake a Phase 1 Archaeological and Heritage Impact Assessment for the proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad and Badplaas (eManzana) in the Mpumalanga Province. The project site falls within the wider Baberton Makhonjwa Mountains World Heritage site, although it is not listed as a proclaimed protected area.¹ This site is accessed from the R541 provincial road. The Client is Nkomazi Game Reserve (Pty) Ltd. 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 maps 3 & 4: Topographical Map: 2530DC (BADPLAAS)).

The proposed development is for the clearance of approximately 2000ha of vegetation as well as the construction of three de-husking plants on the following farms:

Section Inyoni: *Portions 2 & 4 of the farm Vergelegen 728JT;*

Portions 6 & 7 of the farm Batavia 151JT;

Section Sterkspruit: *Remainder of portion 1 of the farm Sterkspruit 709JT;*

*Portions 3, 4 & 5 of the farm Sterkspruit 709JT.*²

The aims of this report are to source all relevant information on archaeological and heritage resources in the study areas, 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 areas are indicated in Maps 3 - 12, and Appendix 1 & 2.

- This study forms part of an EIA, Consultant: Ms. Anne-Mari White, *CORE ENVIRONMENTAL SERVICES*, Nelspruit, 1206, Cell: 0608781591 / e-mail: info@coreenviro.co.za. The EIA is in the Planning & Scoping phase.

¹ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 17.

² Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 5.

- Type of development: Clearance of vegetation for the purpose of Macadamia Farming as well as the construction of three de-husking plants. ³
- Large sections of the proposed study area are situated on historically disturbed agricultural areas. The sections are zoned as agriculture and no re-zoning will take place. ⁴
- Location of Province, Magisterial district / Local Authority and Property (farms): The study areas are located on the farms *Vergelegen 728JT*, *Batavia 151JT* and *Sterkspruit 709JT*. This area falls within the Badplaas (eManzana) region under the jurisdictions of the Gert Sibande District Municipality, and Albert Luthuli Local Municipality, Mpumalanga Province.
- Land owner: Nkomazi Game Reserve (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:

- **Section 38 of the NHRA**

This report constitutes an archaeological and heritage impact assessment investigation. The clearance of approximately 2000ha of vegetation and the construction of three de-husking plants are listed activities 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). The Client has requested this study to comply with legal requirements within the Nkomazi Game Reserve.

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.

³ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 5.

⁴ Personal communication: Ms. A-M White, CORE Env. Services, 2020-0-12-04.

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 accordance with the national Environmental Management Act (107 of 1998), GNR 983 of 2014 (as amended in 2017), and Environmental Authorisation (EA) is required before any clearance activities can take place. Nkomazi Game Reserve (Pty) Ltd appointed CORE Environmental Services to apply for the EA by means of conducting a Scoping and Environmental Impact Assessment process as regulated within General Notice Regulation 982, 2014 (as amended in 2017).⁵ This act also determines that any environmental report will include cultural (heritage) issues.

The purpose of this report is to alert the client about existing heritage resources that will be affected by the proposed development, to identify areas which are worth preserving and to recommend mitigation measures aimed at reducing the risks of any adverse impacts on these heritage resources and to set guidelines in place for future management. 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 specialist heritage scoping report, the heritage resources authority will decide on the status of the resources on the study area. SAHRA will also decide whether the mitigation measures as proposed are acceptable, and

⁵ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 5.

whether the heritage resources 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.⁶

The World Heritage Convention Act, 49 of 1999 defines Cultural Heritage as “monuments, architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science, groups of buildings, groups of separate or connected buildings, which because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science, sites, works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.”⁷

- **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.” Late Iron Age stone walls were observed in the proposed development sections and mitigation measures are proposed (maps 7 – 12).

- **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 activities”. No grave sites were observed within or near the study areas.

⁶ National Heritage Resources Act, no. 25 of 1999.

⁷ MTPA: Songimvelo Integrated Management Plan 2014-2019, p. vi.

- **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 structures or foundations which may be older than 60 years were identified during the investigation.

- **Section 37 of the NHRA**

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

- **NEMA**

Regulations in terms of Chapter 5 of the National Environmental Management Act, (107/1998) as amended (2017), 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**

Very little contemporary research has been done on prehistoric African settlements in the study area. Myburgh, in the 1949 publication of *Tribes of the Barberton District*,⁸ states that practically nothing is known about the pre-historic inhabitants, and that the present Swazi and Tsonga populations are more recent immigrants. A recent publication by Delius, Maggs and Schoeman, revealed that the stone-walled settlements which stretch from Ohrigstad to Carolina, and extending eastwards down the major river valleys of the Crocodile and Komati (Nkomazi) rivers, belonged to the Koni.⁹ A discussion follows further in the text.

History in the wider vicinity is connected to the study area and is briefly outlined below. In order to place the areas around **Nkomazi Game Reserve** 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. Other historic and academic sources were also consulted (such as by Küsel, Meyer, Voight, Bergh, De Jongh, Evers, Myburgh, Thackeray, Van der Ryst, Makhura and Webb).

⁸ A.C. Myburgh, *The Tribes of the Barberton District*, p. 10-11.

⁹ P. Delius, T. Maggs & A. Schoeman, *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, p. 61.

Primary sources were consulted from the Pilgrim's Rest Museum Archives for a background on the pre-history and history of the wider area. Several circular stone-walled complexes and terraces as well as graves have been recorded in the vicinities of Hazyview¹⁰, Bushbuckridge, Graskop, Sabie, Komatipoort and Malelane, clay potsherds and upper as well as lower grinders, were scattered at most of the sites.¹¹ Many of these occur in caves as a result of the Swazi attacks (1900's), on the smaller groups.

Archaeological time frames:

- **Stone Age:**

The Stone Age is the period in human history when people produced stone tools. The Stone Age in South Africa can be divided in three periods:

- Early Stone Age (ESA): +- 2 million – 150 000 years ago;
- Middle Stone Age (MSA): +- 150 000 – 30 000 years ago;
- Later Stone Age (LSA): +- 40 000 – 1850AD.

The study area has originally been inhabited by the San or Bushman people as Stone Age tools and occasionally rock art sites are found from the escarpment to the *Lowveld*.¹²

- **Iron Age:**

The Iron Age is the period in time when humans manufactured metal artifacts. According to Van der Ryst & Meyer,¹³ it can be divided in two separate phases, namely:

- Early Iron Age (EIA) +- 200 – 1000 AD;
- Late Iron Age (LIA) +- 1000 – 1850 AD.

The SAHRA database for archaeological and historical impact assessments was consulted but revealed no other recent Archaeological Impact Assessment Reports in the direct vicinity of Badplaas (eManzana) and Tjakastad.

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

- *Study for the Proposed Eskom Powerlines, Hazyview – Dwarsloop* (2008);

¹⁰ PRMA: Information file 9/2.

¹¹ D. Ziervogel, *The Eastern Sotho, A Tribal, Historical and Linguistic Survey*, p. 3.

¹² M. De Jongh, *Swatini*, p. 9.

¹³ Van der Ryst, M.M, & Meyer, A, Die Ystertydperk in *Geskiedenis Atlas van Suid-Afrika Die Vier Noordelike Provinsies*, pp. 96 – 98.

- Phase 1 HIA *portion 64 of the farm The Rest 454JT*, Nelspruit (2009): Undecorated potsherds and recent stone walls, one Early Stone Age hand axe.
- Phase 1 HIA *portion 62 of the farm The Rest 454JT*, Nelspruit (2009): Late Iron age stone walls, undecorated potsherds;
- *Inspection of Umbhaba Stone-walled settlement, Hazyview*, (2001): LIA stone walls;
- *A Phase 1 Archaeological and Heritage Impact Assessment for 132Kv Powerlines from Kiepersol substation (Hazyview), to the Nwarele substation Dwarsloop (2002)*: Recent graveyards;
- *Phase 1 Archaeological Impact assessment, survey and Management guidelines for two Rock art sites: Roburnia Plantation, Mpumalanga Province, (2008) – KOMATILAND*; Rock art site.
- *Phase 1 Archaeological Impact assessment, survey and Management guidelines for Rock art site: Jessievale Plantation, Mpumalanga Province, (2009) - KOMATILAND*; Rock art site.
- *Heritage Inspection and evaluation report (second visit) – Lochiel 1 & 2; Syde 1 & 2; Rinkink 1a and 1b – Lochiel, Warberton and Amsterdam, Mpumalanga Province, (2012 & 2015) - KOMATILAND*;
- *Phase 1 Archaeological Impact assessment, survey and Management guidelines for two Rock art sites, Lochiel 1 & Lochiel 2, Redhill Plantation, Lochiel, Mpumalanga, (2011 & 2015) - KOMATILAND*.
- *Phase 1 Archaeological Impact assessment, survey and Management guidelines for Rock art site: Jessievale Plantation, Mpumalanga Province, (2009 & 2015) - KOMATILAND*;
- *A Phase 1 Archaeological and Heritage Impact Assessment for a proposed traffic training academy, Calcutta, Mkhuhlu, Bushbuckridge (2013)*; Possible graves.
- *Phase 1 Archaeological and Heritage Impact Assessment for the proposed Nkambeni cemetery in Numbi, Hazyview (2013)*;
- *Phase 1 Archaeological and Heritage Impact Assessment for proposed agricultural development 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 Archaeological and Heritage Impact Assessment for proposed debushing of natural land for agricultural use: portion 10 of the farm Thankerton 175 JU, Hectorspruit*

area, (2014) revealed a few Later Stone Age tools and Iron Age potsherds and upper grinders;

- *Phase 1 Archaeological impact assessment, survey & management guidelines for Majuba 1, Rock Art site: Berlin Plantation, Kaapsehoop (2012) - KOMATILAND. Rock art site.*
- *Letter of recommendation for the exemption from a Phase 1 AIA & HIA investigation: Proposed footbridge at AVONTUUR, crossing the Nkomazi River on the farm Avontuur 721JT, near Tjakastad, May 2015. No archaeological remains were observed.*
- *A Phase 1 AIA & HIA of the stone walled settlements on Taurus Plantation, Barberton District, Mpumalanga April 2015. Many stone walled sites were documented on the Taurus Plantation associated with Swazi settlement.*
- *A Phase 1 AIA & HIA: Development of two tented camps at Songimvelo Nature Reserve, Eerstehoek, on the farms Laaggenoeg 158IT and Onverwacht 733IT, Mpumalanga April 2018. - LIA stone walled sites were observed.*

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, Mpumalanga Province (2013) – revealed historic remains of low significance and a cemetery.

- P. Birkholz: *HIA for the proposed development of the Karino Interchange located east of Mbombela, Mpumalanga Province (2017)* – Historical buildings and structures were revealed by no archaeological sites or features were identified.
- A. Van Vollenhoven: HIA for Aurecon, 15 June 2012, *Basic Assessment for the Environmental Impact Assessment for the Friedenheim Office Complex, Nelspruit, Mpumalanga*. – revealed no graves or archaeological sites. Recent buildings were observed.

The first evidence of ancient mining in the area occurred between 46 000 and 28 500 years ago during the Middle Stone Age. Hematite or red ochre was mined at Dumaneni (towards the east near Malelane), and is regarded as one of the oldest mines in the world. Iron ore was also mined in the area during the Later Iron Age (LIA), and a furnace as well as iron slag was documented.¹⁴ Mr. John Roux (a contractor on the Taurus Plantation), made mention of three known locations of iron smelting sites on the farm Three Sisters 254JU, near Louws Creek.¹⁵ Myburgh mentioned in his ethnological publication that tuyères (clay pipes used in the smelting of iron), belonging to ancient “explorers” of the De Kaap Valley, were unearthed by gold prospectors before the turn of the century, near D.M. Wilson’s office at Kaapse Hoop.¹⁶ Later Stone Age (LSA) sites in the Kruger National Park date to the last 2500 years and are associated with pottery and microlith stone tools.¹⁷ Fragments of LSA tools were found by the author on the nearby Taurus Plantation and the Songimvelo Nature Reserve, during Phase 1 Heritage Impact investigations.^{18 19}

Bushman rock paintings which have been recorded in the wider area are mostly connected to the Later Stone Age, probably during the last millennium. Mention of the last surviving bushman in the Chrissiesmeer area, was made during the 1870’s by a transport rider, Jacob Filter.²⁰

¹⁴ Bornman, H., *The Pioneers of the Lowveld*, p. 1.

¹⁵ Personal Communication: John Roux 2014-12-15 & 2014-12-26.

¹⁶ A.C. Myburgh, *The Tribes of the Barberton District*, p. 12.

¹⁷ J.S. Bergh (red), *Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*, p. 95.

¹⁸ C. van Wyk Rowe: *A Phase 1 AIA & HIA: Development of two tented camps at Songimvelo Nature Reserve, Eerstehoek, on the farms Laaggenoeg 158IT and Onverwacht 733IT, Mpumalanga, April 2018*.

¹⁹ C. van Wyk Rowe: *A Phase 1 AIA & HIA of the stone walled settlements on Taurus Plantation, Barberton District, Mpumalanga, April 2015*.

²⁰ E. von Fintel (Red.), *Die Nachkommen van Johann Heinrich Jakob Filter 1858 – 1908: Die Geschiede*

Bushman (or San) presence is evident in the area as research by rock art enthusiasts revealed 109 sites in the Kruger National Park,²¹ and over 100 rock art sites at Bongani Mountain Lodge and its immediate surrounds²² (north of Barberton), as well as many sites in the Nelspruit, Rocky's Drift and White River areas. Thirty-one rock art sites were recorded on the Mpumalanga Drakensberg Escarpment,²³ and two sites are known on the nearby Songimvelo Nature Reserve.²⁴ One rock art site is recorded by Bergh between Barberton and Nelspruit.²⁵

The author documented a rock art site north of Kaapse Hoop (on Berlin plantation) as well as several sites on the Roburnia, Jessievale and Redhill Plantations between Lothair and Lochiel.²⁶ Bushman painting sites were also recorded to the south east of the **Nkomazi Game Reserve** at Theespruit (recorded by Anna Steyn), and rock art sites in Swaziland (mentioned by Masson).^{27 28} The Bushman painters most probably obtained the ochre which was used as a pigment in the paintings, from the Dumaneni ochre mine near Malelane.^{29 30}

Late Iron Age stone walling is abundant in the Lydenburg – Machadodorp – Carolina / Badplaas areas. A large stone walled settlement was documented by C. Rowe at Roodraai, south of Lydenburg, which is associated with rock engravings by Bantu speaking agriculturalists.³¹ A stone walled settlement with terracing was recorded close to Hazyview (Rowe),³² as well as several which were documented in the southern parts of the Kruger National Park.³³ The

einer Pionierfamilie in Nordnatal, p. 405.

²¹ English, M. Die Rotskuns van die Boesmans in die NKW, in *De Vos Pienaar, U., Neem uit die Verlede*, p. 18-24. 1998,

²² Hampson, et al., The rock art of Bongani Mountain Lodge, *SA Archaeological Bulletin* 57: p. 15.

²³ Rowe C., 2009: *Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve*, MA dissertation. Pretoria: UP.

²⁴ Personal communication: Mr. Wessel Roodt, Manager at Songimvelo Nature Reserve 2017-10-17.

²⁵ J.S. Bergh (red). *Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*, p. 5.

²⁶ Rowe, C. *Phase 1 Archaeological impact assessment, survey & management guidelines for Majuba Rock Art site: Berlin Plantation, Kaapsehoop* (2012); *Heritage Inspection and evaluation report (second visit) – Lochiel 1 & 2; Syde 1 & 2; Rinkink 1a and 1b – Lochiel, Warberton and Amsterdam*, Mpumalanga Province, (2012 & 2015).

²⁷ Rowe, C. 2009. *Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve*, MA dissertation. Pretoria: UP.

²⁸ Masson, J. 2008. Views from a Swaziland Cave. *The Digging Stick*, Vol. 25 no 1: 1-3.

²⁹ Bornman, H. *The Pioneers of the Lowveld*, p. 1.

³⁰ Masson, J. 2008. Views from a Swaziland Cave. *The Digging Stick*, Vol. 25 no 1: 1-3.

³¹ Rowe, C., 2013: *Documentation report for 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 34 JT*, Lydenburg.

³² C. Van Wyk, *Inspection of Umbhaba Stone-walled settlement, Hazyview*, pp. 1-2.

³³ Eloff J.F., *Verslag oor Argeologiese Navorsing in die Krugerwildtuin*, June / July, 1982.

recent work by Delius, Maggs and Schoeman,³⁴ revealed that the early stone walled settlements of the Mpumalanga Escarpment (Ohrigstad, Carolina to Komati River south of Barberton), were the work of the Koni people (some examples are on the Taurus Plantation east of the study area).³⁵

Exotic explanations which were previously given to these stone-walled settlements, from ancient settlers from India or visitors from outer space, share an assumption that Africans were too primitive to have created these structures. These explanations are based on speculation rather than credible evidence.³⁶ Nkomazi Game Reserve also has an abundance of stone walled settlements (see maps 8 – 12).

Early researchers made intensive aerial photographic surveys of the Mpumalanga ruins and concluded that the complex enclosures found at sites were cattle enclosures at the centres of homesteads, and that the simple stone ruins, which are randomly located in settlements, were used for small stock. The stone ridges (sometimes marked by metal hoe sharpening or wear patterns on some of the rocks), indicated that they were terraces used for agricultural purposes. These researchers agreed that the settlement layout and ceramics indicated a close cultural affinity with modern Pedi patterns, who controlled the Lydenburg area in the 18th and 19th centuries – but scientific evidence proved that it was the Koni who once dominated the escarpment.³⁷

There is general consensus that the Maroteng, who established the Pedi (Northern Sotho) kingdom, settled in the Transvaal in approximately 1650. The earliest collected Pedi tradition recalls that as they moved into the area from the south west, one party crossed the Crocodile River where they encountered Koni groups. This suggests that Koni communities had been living in the area since (at least) the 17th century. A range of sources suggest that Koni lived throughout the area before the arrival of the Maroteng (Pedi). By the end of the 18th century, the Pedi ruled the entire region, and benefitted from access to iron goods and trade.³⁸

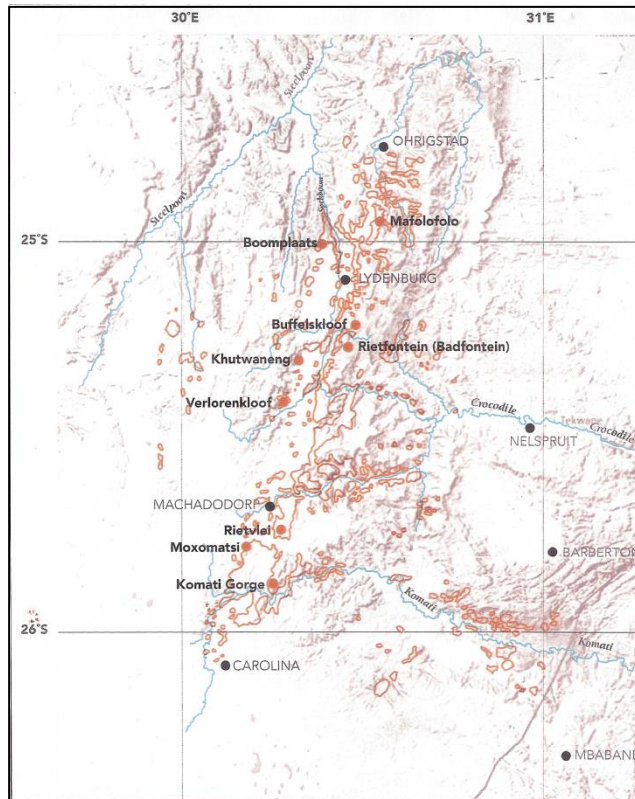
³⁴ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*.

³⁵ Rowe, C., 2015. *A Phase 1 AIA & HIA of the stone walled settlements on Taurus Plantation, Barberton District, Mpumalanga*.

³⁶ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, p. 3.

³⁷ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, pp. 4-6.

³⁸ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, p. 45.



MAP 1: Distribution of Bokoni settlements (brown / orange) in Mpumalanga.

The Bokoni stone walled settlements are evidence of a long history of farming. Most of the sites are located in the valleys, close to rivers. The stone walled settlements and terraced sites developed over a number of years. The term Bokoni indicates an area rather than an identity and the term Koni is used to refer to the early people living within the region.³⁹ Recorded Koni traditions do not recall the occupations along the Komati River in the southernmost part of Bokoni, but these sites probably date to the earliest phase of the development of Bokoni. Traditions recorded by C.W. Prinsloo suggest that the area south of Machadodorp (including the Komati/Nkomazi River sites), was abandoned in the 1700s, when the region came under mounting pressure (from the Swazi). It is not clear whether the sites located in the south were part of a much larger area of settlement, or whether they were the earliest heartland of Bokoni.⁴⁰

The sites to the south (Komati River sites), comprise a range of residential locations ranging from clustered stonewalled and terraced villages to scattered homesteads on the slopes of hills.

³⁹ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, p. 52.

⁴⁰ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, p. 52.

All the sites were located within walking distance of rivers and in open and easily accessible valleys that were well suited for farming. These sites were usually large villages clustered on small hills in the centre of a valley, and smaller clusters scattered on the surrounding hillsides. In the Komati valley sites, terraced homesteads are often built on the middle slopes of the surrounding quartzite mountains.⁴¹

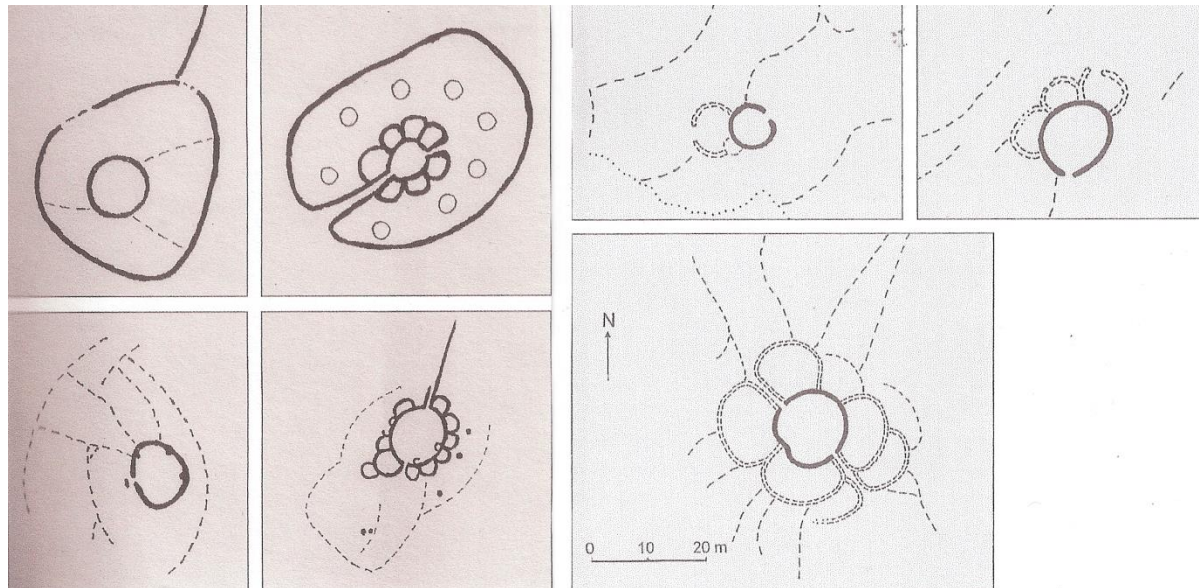


Fig. A: Various layout patterns of LIA homesteads in Bokoni areas.

The layout of the homesteads reflects the builders' basic needs in terms of the structures they needed, and in what pattern they arranged them to provide a typical home for the family unit. A pre-colonial farming community would have included one or more enclosures for cattle and smaller livestock and a domestic space for each adult woman in the family. Each domestic space might have been enclosed by a wall and would have included a house for indoor activities and sleeping, a courtyard area for outdoor activities and a granary for storing the harvest. The central area of the home was reserved for livestock and men's activities, and the outer surrounding area for the women's domestic sphere. Delius and others were able to draw several conclusions about the layout of the homesteads. The houses were made of soft materials such as clay, poles and thatch which have disappeared. House floors were normally excavated in the outer ring of the homestead. Some homesteads have no surrounding walls and are partly outlined with low terrace-type walls such as a single or double row of stones. Some homesteads have a simple layout pattern and others are more complicated.⁴²

⁴¹ *Ibid.*, p. 68.

⁴² P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the*

An artist's reconstruction (Fig. B), gives an idea of what a homestead during occupation looked like, although there is considerable variation among homesteads.

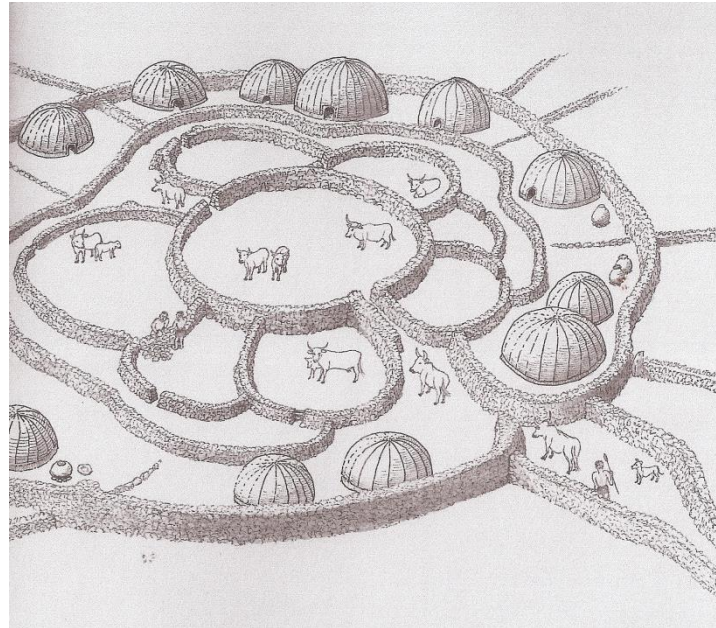


Fig. B: Artists reconstruction of a LIA homestead.

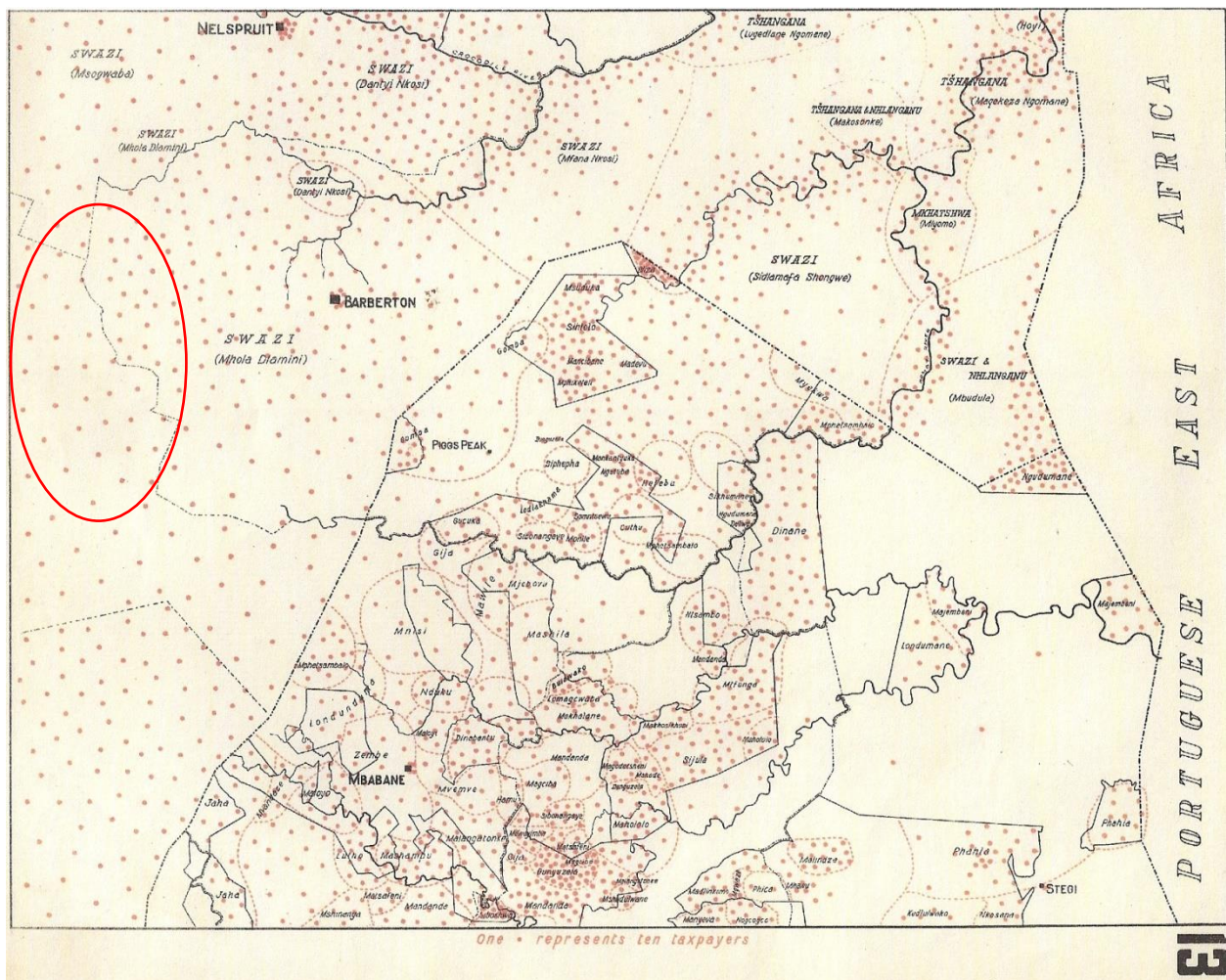
The inner ring allows for a controlled movement of cattle. A track leads the animals from the pastures and rivers to the enclosure and kept the animals away from the cultivated lands.⁴³

Oral history suggests that through the 1700s and 1800s the land was sparsely occupied by the Swazi and other local pastoral people, together with their livestock. The steep and rocky landscape does not provide ideal areas for human livelihoods. Human occupation fluctuated both seasonally and according to the ebb and flow of local conflicts. Substantial settlement was rare, being limited mainly to the larger river valleys.⁴⁴

Mpumalanga escarpment, pp. 70-72.

⁴³ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, p. 111.

⁴⁴ The Barberton Mountain land: <http://whc.unesco.org/en/tentativelists/5456> Access: 2014-08-09.



MAP 2: 1935 Map of Van Warmelo: The study area south and west of Barberton during 1935, is indicated with sparse habitation of various Swazi groups of Mpola Dlamini decent.

Early ethnographical and linguistic studies by early researchers such as D. Ziervogel and N.J. Van Warmelo, revealed that the immediate study area was mainly inhabited by the Swazi of the Mhola Dlamini *clan*, from around the 18th century^{45 46} (see Map 2). Van Warmelo based his 1935 survey of *Bantu Tribes of South Africa* on the number of taxpayers in an area. The survey does not include the extended households of each taxpayer, so it was impossible to accurately indicate how many people were living in one area.⁴⁷

⁴⁵ N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*. pp. 90-92 & 111.
⁴⁶ H. S. Webb, *The Native Inhabitants of the Southern Lowveld, in Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. p.16.
⁴⁷ N.J. van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p.9.

The low country of Barberton lay within the fly-infected area and was not suitable for the keeping of livestock, before the rinderpest came in 1897. Until the tsetse had disappeared, a large part of Barberton district was uninhabitable to pastoralists, and therefore unattractive to any but the poorest of the natives then occupying these parts.⁴⁸ As soon as the fly disappeared it changed, and the natives settled in areas which were previously avoided.

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. Delius stated that the settlements shifted from the southern part of Bokoni to the north during the second half of the second millennium as a result of pressures emanating from the south.⁴⁹ It is not clear what role the Swazi played in the early settlements on the Nkomazi Game Reserve, but evidence provided by the 1935 map of Van Warmelo, suggests that the stone walled units were inhabited by descendants of the Swazi during the 20th century.

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.⁵⁰ During their northern expansion they forced the local inhabitants out of Swaziland, or absorbed them.⁵¹ There is evidence of resistance, but the Eastern Sotho groups who lived in the northern parts of Swaziland, moved mainly northwards.⁵² This appears to have taken place towards the end of the 18th century,⁵³ when these groups fled from Swaziland to areas such as Nelspruit, Bushbuckridge, Klaserie, Blyde River and Komatipoort.⁵⁴ Mswati II built a line of military outposts from west to east of the upper Komati River and the Mlambongwane (Kaaop River). At each outpost he stationed regiments to watch and stop the BaPedi returning to their old haunts.⁵⁵

⁴⁸ A.C. Myburgh, *The Tribes of the Barberton District*, p. 14-15.

⁴⁹ P. Delius, T. Maggs & A. Schoeman, 2014. *Forgotten World – the stone-walled settlements of the Mpumalanga escarpment*, p. 64.

⁵⁰ Bornman H., *The Pioneers of the Lowveld* p 11.

⁵¹ A.C. Myburgh, *The Tribes of Barberton District*, p. 10.

⁵² N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*. p. 111.

⁵³ H. S. Webb, *The Native Inhabitants of the Southern Lowveld*, in *Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. p. 14.

⁵⁴ *Ibid.*, p. 16.

⁵⁵ Bornman H., *The Pioneers of the Lowveld* p. 12.

Swazi

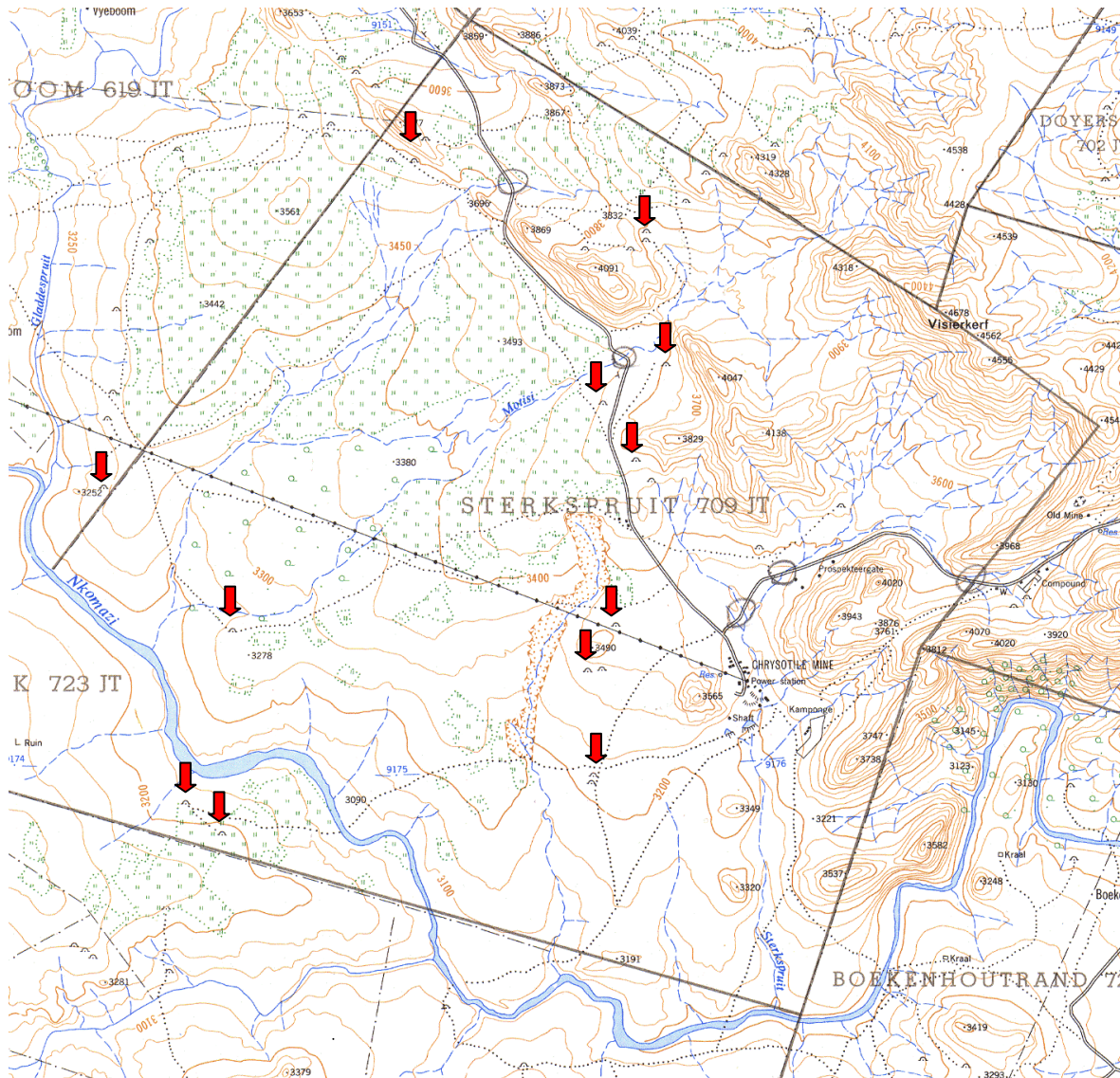
The Swazi people descended from the southern Bantu (Nguni) who migrated from central Africa in the 15th and 16th centuries.⁵⁶ The differences between the Swazi and the Natal Nguni were probably never great. Their culture as far as is known from the comparatively little research being carried out, does 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.⁵⁷

The 1968 topographical map for the study area, indicates several Bantu kraals ('hut complexes') on the Nkomazi Game Reserve and adjacent properties (see maps 3 & 4). The fact that all the kraals which were indicated, are linked with footpaths, show that they were probably inhabited during that time (1968). Specific mention is also made of "kraals" (cattle enclosures), ruins, prospecting pits, water furrows, old compounds, a power station and a Chrysotile Mine towards the eastern section.

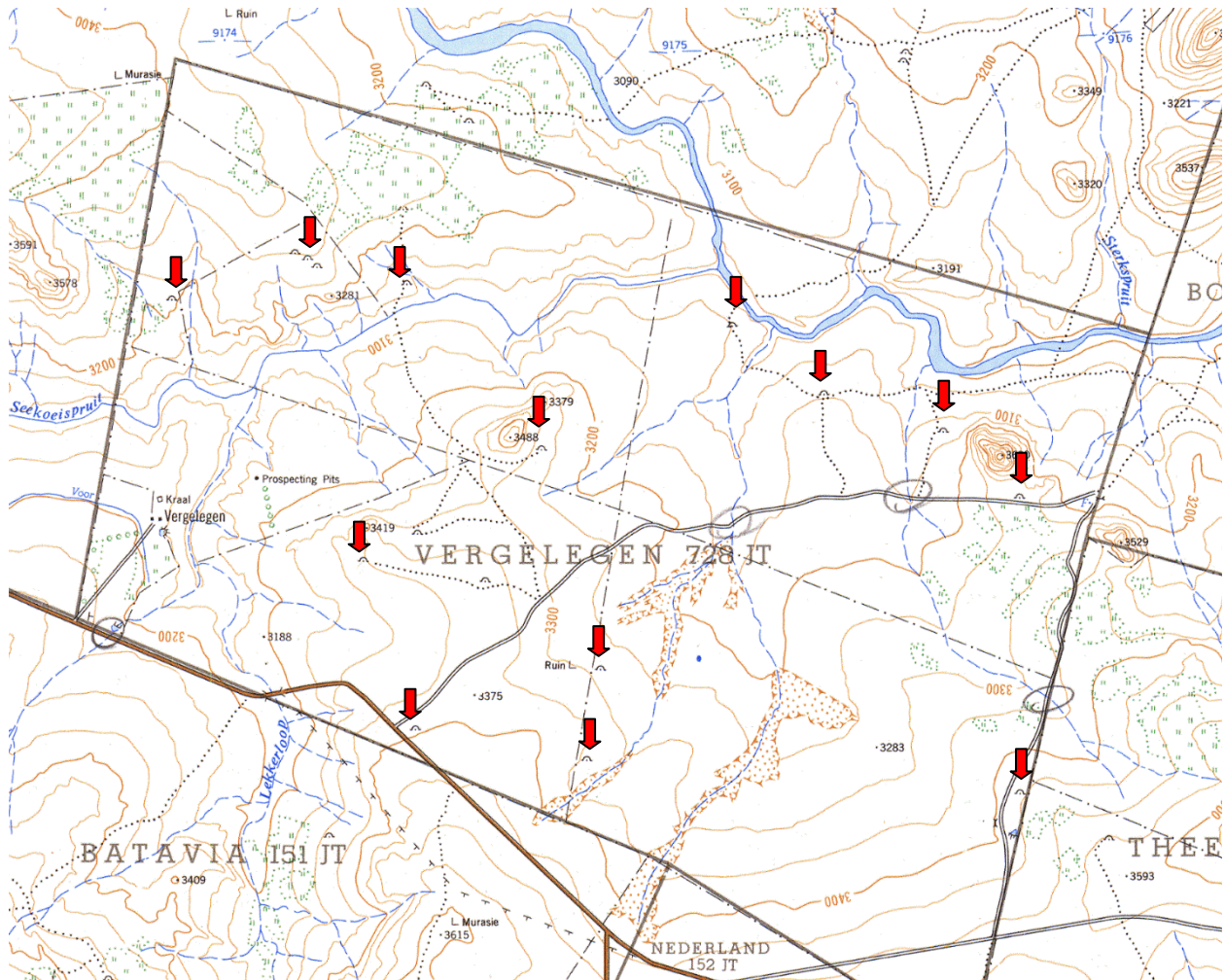
At least twenty-four (24) hut complexes are indicated on the Farm *Sterkspruit 709JT* (map 3), and seventeen (17) on the farm *Vergelegen 728JT* (map 4) which are all linked with footpaths and which also lead to the gold- and other mines further north and east.

⁵⁶ Swaziland: <http://en.wikipedia.org/wiki/Swaziland> p.1.

⁵⁷ N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 83.

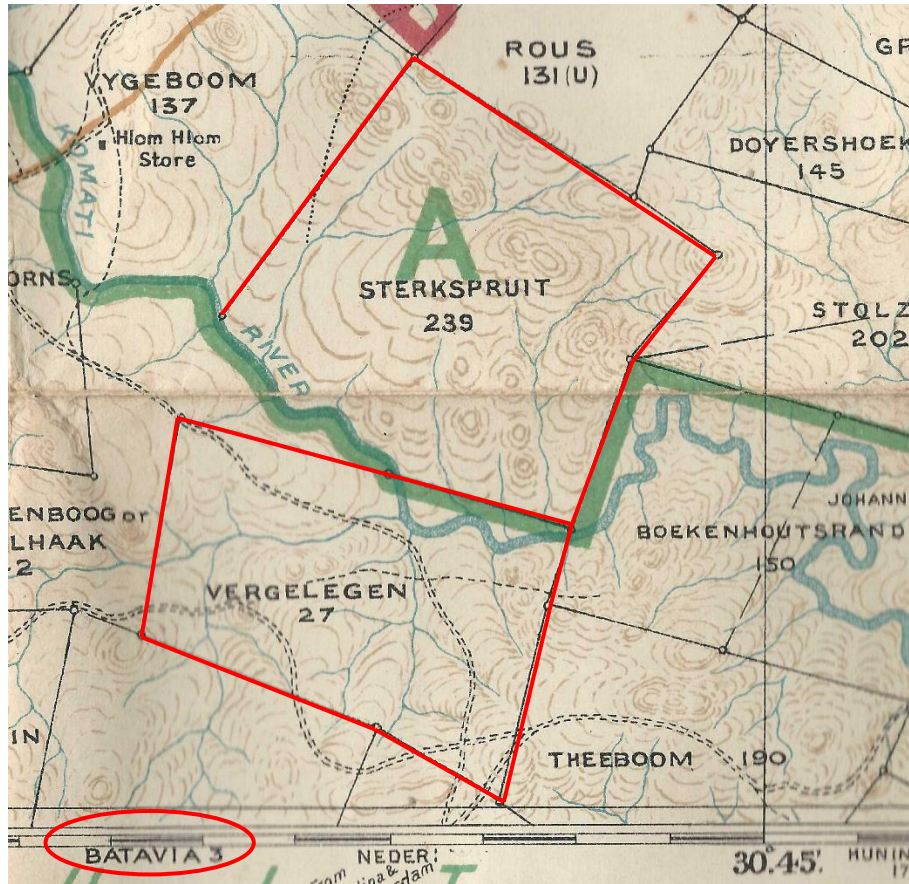


MAP 3: Sterkspruit: 1968 Topographical map: 2530DC. Several hut settlements (at least twenty-four), are indicated by the red arrows in this section, with a network of footpaths which were in use during that time. Some prospecting pits, an old compound and a power station are associated with the Chrysotile Mine which is indicated in the eastern mountainous section. The latter are all outside of the study area.



MAP 4: Vergelegen (& Batavia in the south): 1968 Topographical map: 2530DC. Several hut settlements are indicated by the red arrows in this section, with a network of footpaths which were in use during that time. Prospecting pits, ruins and terraces are also indicated on the map for the Vergelegen farm.

No hut complexes are shown for the farms *Sterkspruit* and *Vegelegen* on the 1920's topographical map (MACHADODORP: map 5). It does however show several old tracks and footpaths south of the Nkomazi River.



MAP 5: Topographical map MACHADODORP 1920, showing the farms Sterkspruit, Vergelegen & Batavia. No early hut settlements were indicated on this map.

History of Nkomazi Game Reserve

The Nkomazi Game Reserve is characterised by a long and diverse history of land use. Nkomazi means “place of water.”⁵⁸ Archaeological artefacts have been found on slopes adjacent to the main rivers, especially along the banks of the Komati River (Nkomazi River).

The Songimvelo Nature Reserve is further east of the Nkomazi Game Reserve, and the Songimvelo Integrated Management Plan make mention of Early Stone Age implements, dating to at least 1 million years ago. Middle stone age artefacts dating back 30 000 to 50 000 years, were also found. Stone walled complexes of the Later Iron Age are common in this area.

⁵⁸ Nkomazi Game Reserve: www.mpumalanga.com/plan-your-trip/mkomazi-game-reserve-MTACC36217, access: 2020-12-05.

Bushman painting sites (San paintings), are also found on the Songimvelo farms *Doornhoek and Grootboom*.⁵⁹

The eNcakeni area (mostly the area known today as Songimvelo) was settled by the bakaNgwane (people of Swaziland) under the eMjindini authority during the reign of King Mswati II (1840 – 1868).

The significance of the area became known to the world when alluvial gold was found at Kaapsehoop in 1875. This was followed by the Moodies and Barber's reef discoveries (Barberton), and a subsequent 'gold rush' into the hills above the Suid Kaap River.⁶⁰ The Sheba mine is today one of the oldest and richest working gold mines in the world, having been in production for more than a century. It is estimated that production will continue for several decades to come.⁶¹

Stibnite and stibiconite (antimony) were mined on Songimvelo from 1906 to 1917 in the Mali mine on the farm *Schoonoord*. Gold was mined at *Onverwacht* and Komati Lily mines. Mining of gold at the Von Brandis mine was recently discontinued. Asbestos was actively mined at the Msauli mine on the serpentines along the south-eastern Swaziland border since the early 1950's.⁶² A Chrysotile Mine is indicated on the Nkomazi Game Reserve, *Sterkspruit* farm (1968 topographical map 2530DC).

C. DESCRIPTION OF THE AREA

According to the Mpumalanga Biodiversity Sector Plan of 2014, the proposed project area falls within an Informal Protected Area. According to the farm and portion numbers proclaimed as a Protected Area, in the Mpumalanga provincial Gazette no 819, 817 and 750. The areas proposed for the agricultural development does not form part of the nationally proclaimed Protected areas. However, the proposed project sites currently form part of the Nkomazi Game Reserve. The project site also forms part of the Barberton Makhonjwa Mountains World Heritage site.⁶³

⁵⁹ MTPA: Songimvelo Integrated Management Plan 2014-2019, p. 19.

⁶⁰ The Barberton Mountain land: <http://whc.unesco.org/en/tentativelists/5456> Access: 2014-08-09.

⁶¹ Barberton: http://search.wikipedia.org/wiki/barberton_mpumalanga Access: 2014-08-09.

⁶² MTPA: Songimvelo Integrated Management Plan 2014-2019, p. 11.

⁶³ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 17.

Nkomazi Game Reserve encompasses an extremely diverse and important part of the Barberton Mountainland, which represents an early Precambrian greenstone belt. The mountains within the Nkomazi Game Reserve lie on the eastern edge of the Kaapvaal Craton. The unformed nature and state of preservation of the geological phenomena account for the international acclaim which the area enjoys amongst earth scientists. Some of the oldest rocks on Earth, dated between 3.2 to 3.5 billion years old, are exposed in the area (and outcrops have been noticed on the farm *Sterkspruit* adjacent to the Nkomazi Game Reserve).⁶⁴ The range is also known for its gold deposits and a number of komatites, an unusual type of volcanic rock named after the Komati River. The major soil types present within the project area are shallow soils with minimal development, which include Mispah, Dresden and Glenrosa, which are less than 25cm deep before hitting an impervious layer that prevents further root growth.⁶⁵

The proposed agricultural activities are situated on the most south-western corner of the World Heritage Site with the lowest altitude compared to the remainder of the area. The topography of the proposed project areas, vary between approximately 1068m – 937m. A slightly elevated ridge line is located on the northern- and southern corners of the site. The project area slopes slightly from the north-western side of the properties to the south-eastern side, but the sections for the proposed development, are mostly flat,⁶⁶ and have historically been disturbed with agricultural activities (see maps 4 & 5).⁶⁷

The site is located within the Savannah Biome, which is the largest Biome in southern Africa, occupying 46% of its area, and over one-third of South Africa. It is well developed over the lowveld and Kalahari region of South Africa, and it characterized by a grassy ground layer and a distinct upper layer of woody vegetation. The vegetation type is classified as the Swaziland Sour Bushveld.⁶⁸

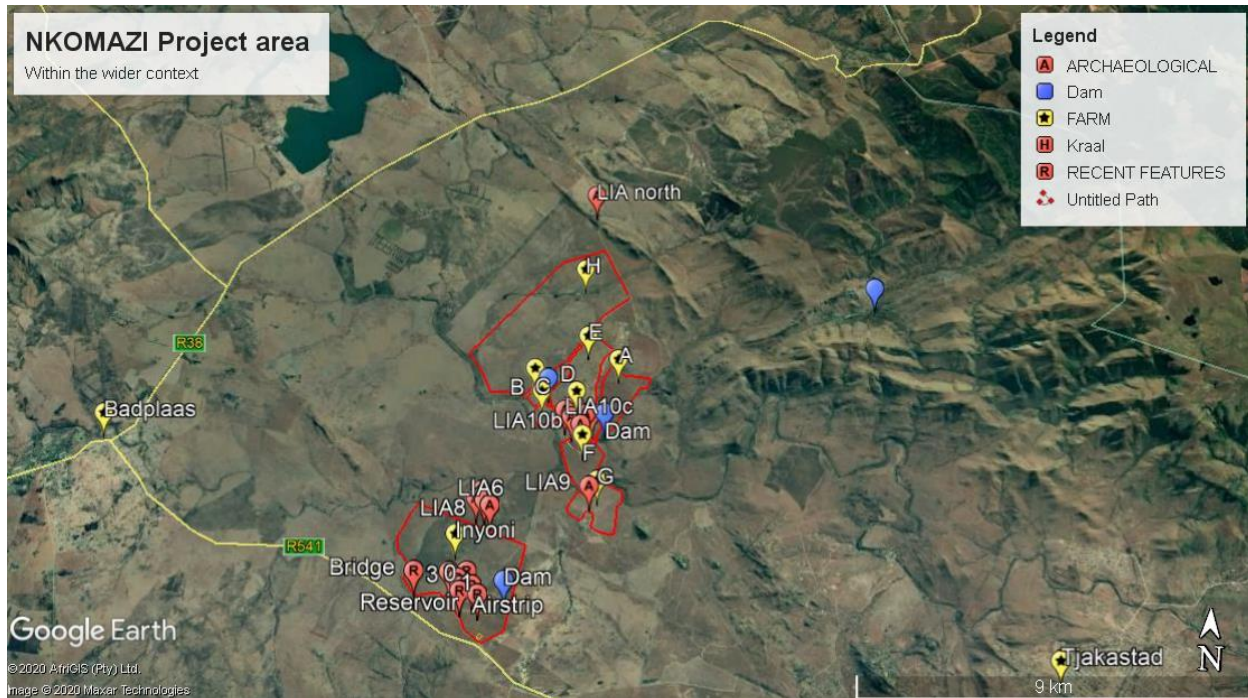
⁶⁴ MTPA: Songimvelo Integrated Management Plan 2014-2019, p. 14.

⁶⁵ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 17.

⁶⁶ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 16.

⁶⁷ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 17.

⁶⁸ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 16.



MAP 6: Nkomazi project area adjacent the Nkomazi Game Reserve - Google image of the wider area with Badplaas (eManzana) to the west, and Tjakastad to the east.

D. LOCALITY

The Nkomazi Game Reserve is located east of the small town of Badplaas (eManzana), in the south-eastern part of the Mpumalanga Province and close to the South African-Swaziland border (see map 6). Tjakastad is situated to the east of the project site. The reserve covers some 15000ha which is game fenced.⁶⁹

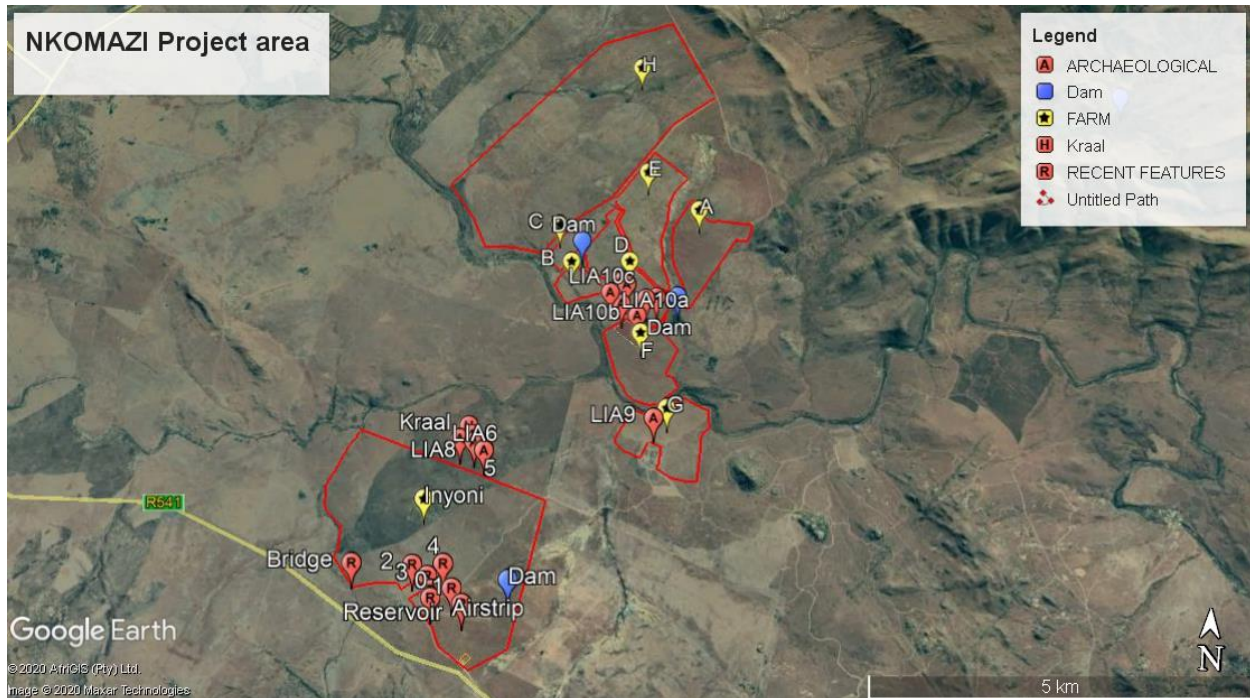
This site is accessed approximately 10km from Badplaas (eManzana) on the R541 provincial road. The proposed development is for the clearance of approximately 2000ha of vegetation as well as the construction of three de-husking plants on the following farms:

Section Inyoni: *Portions 2 & 4 of the farm Vergelegen 728JT;*
 Portions 6 & 7 of the farm Batavia 151JT;

Section Sterkspruit: *Remainder of portion 1 of the farm Sterkspruit 709JT;*
 *Portions 3, 4 & 5 of the farm Sterkspruit 709JT.*⁷⁰

⁶⁹ Nkomazi Game Reserve, www.nature-reserve.co.za Access: 2020-12-05.

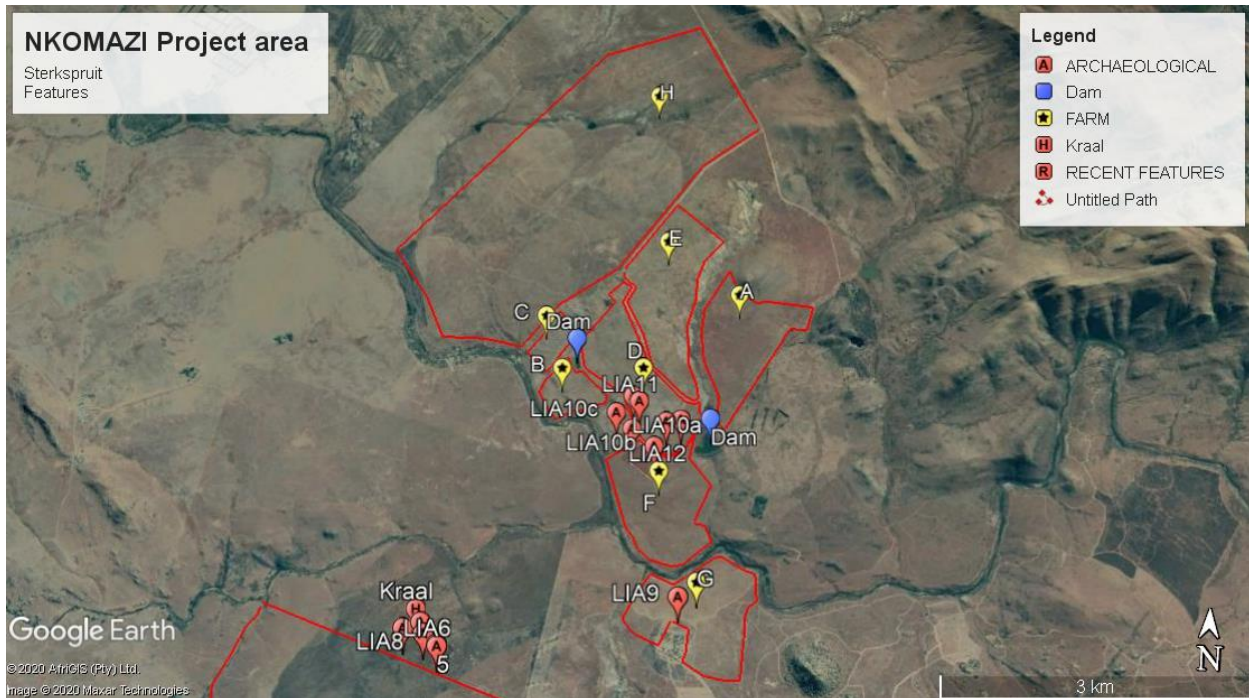
⁷⁰ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 5.



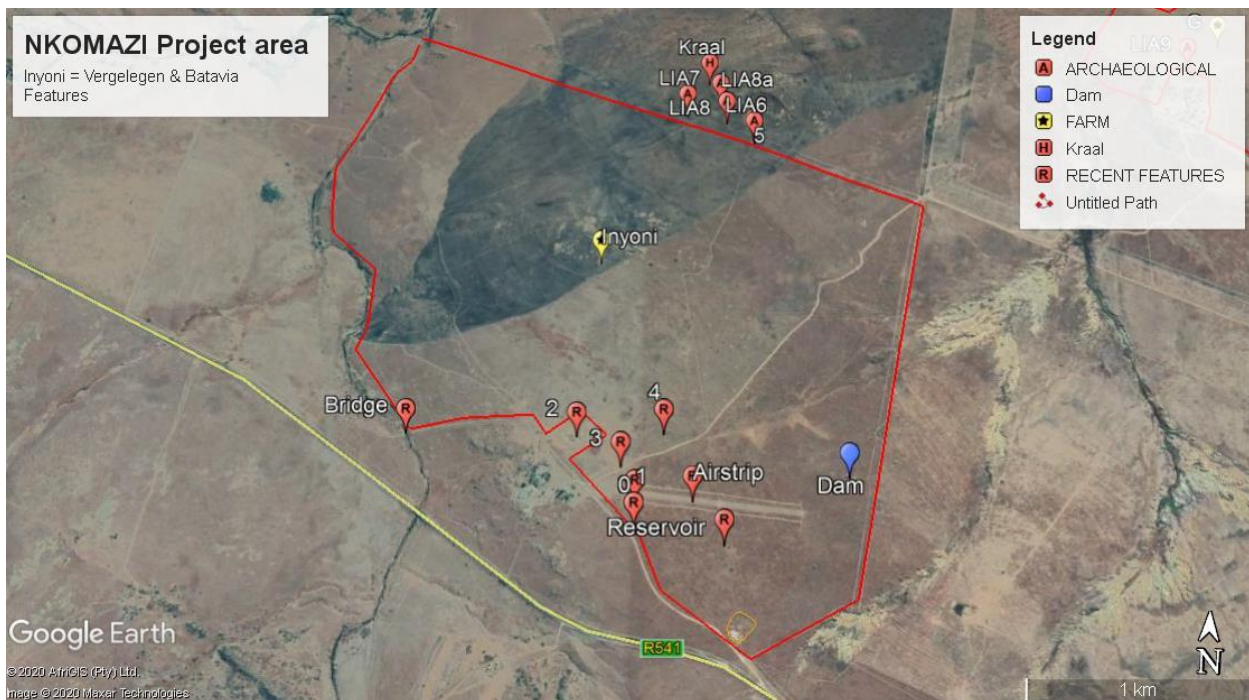
MAP 7: Google image of the project area: The northern section is located on the farm *Sterkspruit* and consist of sections A – F & H. The southern section is located south of the Nkomazi River, on the farm *Vergelegen*, and consists of section G, as well as the “Inyoni” section (directly north of the R541 provincial road).

The Nkomazi Game Reserve is situated over several farms. The proposed study areas fall within the farms *Sterkspruit*, *Vergelegen* and a very small section of *Batavia*.

The study areas “A – F” & “H” are situated on the *remainder of portion 1, portions 3, 4 & 5 of the farm Sterkspruit 709JT*; and study areas “G” and “Inyoni” are situated on *portions 2 & 4 of the farm Vergelegen 728JT and portions 6 & 7 of the farm Batavia 151JT*.



MAP 8: The project area on the farm Sterkspruit (A – F & H). Section G (which is on the farm Vergelegen) is also visible in this map.



MAP 8: The project area on the farm Vergelegen (Inyoni section).

- **Description of methodology:**

Google images and maps indicate the study area. These were intensively studied to assess the current and historically disturbed areas and infrastructure. To reach a comprehensive conclusion regarding the cultural heritage resources in the study area, the following methods were used:

- The desktop study consists mainly of archival sources studied on distribution patterns of early African groups who settled in the area since the 18th century, and which have been observed in past and present ethnographical research and studies.
- Literary sources, books, government publications and maps, which were available on the subject, have been consulted, to establish relevant information.

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

-The archaeological databases 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 proposed sites for the agricultural development (A – G & Inyoni, on *Sterkspruit, Vergelegen & Batavia*) has historically been disturbed by agricultural activities as can be seen in the Google images (maps 10 - 12). The study areas were covered with short new grass growth after recent burning and the visibility in most of the sections were excellent.
- The proposed study areas were investigated to identify any visible archaeological or historical surface material.
- Topographical maps of various dates were studied for a possible indication of historic sequence in settlement.
- The fieldwork and surface investigation were conducted extensively on foot and per vehicle. Tracks and paths criss-cross the farm and were used to access the areas (See Appendix 1).
- Disturbed sections on the study areas were scrutinized for any archaeological material.
- 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 have been impacted upon by the footprint, was done within the framework provided by the National Heritage Resources Act, no. 25 (1999);
- Personal communication with relevant stakeholders on the specific study area, were held, such as Environmental practitioner, Ms. Anne-Mari White (CORE Environmental

Services).⁷¹

- GPS co-ordinates were used to locate the perimeters and any heritage features within the study area.

The proposed study areas are indicated by the GPS co-ordinates (See maps 7 - 9):

| GPS CO-ORDINATES | | | |
|-------------------------|------------------|------------------|------------------|
| FARM STERKSPRUIT | | | |
| Location | South | East | Elevation |
| Sterkspruit A | S 25° 56' 02.60" | E 30° 41' 55.31" | 999m |
| Sterkspruit B | S 25° 56' 23.85" | E 30° 40' 51.37" | 952m |
| Sterkspruit C | S 25° 56' 08.04" | E 30° 40' 44.16" | 963m |
| Sterkspruit D | S 25° 56' 24.00" | E 30° 41' 19.47" | 979m |
| Sterkspruit E | S 25° 55' 37.75" | E 30° 41' 27.26" | 1020m |
| Sterkspruit F | S 25° 56' 56.55" | E 30° 41' 24.45" | 951m |
| Sterkspruit H | S 25° 55' 01.72" | E 30° 40' 58.64" | 1031m |
| FARM VERGELEGEN | | | |
| Vergelegen G | S 25° 57' 32.56" | E 30° 41' 43.18" | 955m |
| Inyoni (Vergelegen) | S 25° 58' 27.11" | E 30° 39' 50.93" | 1020m |

E. DESCRIPTION OF IDENTIFIED SITES

The aims of this study were to do a surface investigation for possible graves, archaeological and or historical remains on the two locations which were identified for the proposed agricultural development, and to recommend mitigation measures if necessary. The survey focused on the proposed sites named STERKSPRUIT sections A – F & G (on the *remainder of portion 1 and portions 3, 4 & 5 of the farm Sterkspruit 709JT*) and VERGELEGEN section G & Inyoni (on *portions 2 & 4 of the farm Vergelegen 728JT and portions 6 & 7 of the farm Batavia 151JT*) (See layout plans in maps 7 - 9).

STERKSPRUIT sections A – F & H:

The proposed area for the cultivation of Macadamia farming on **sections A, B, C, D, E, F & H** on the farm Sterkspruit, are mostly situated on historically disturbed agricultural lands, north of the Nkomazi River (figs. 1 - 28) (see map 3, 1968). The only sections which were not previously

⁷¹ Personal information: Ms. A-M White, CORE Environmental Services, 2020-11-17.

cultivated are the rocky sections and some of the areas where Late Iron Age stone walls were observed. The perimeters of the footprint are indicated in map 7.

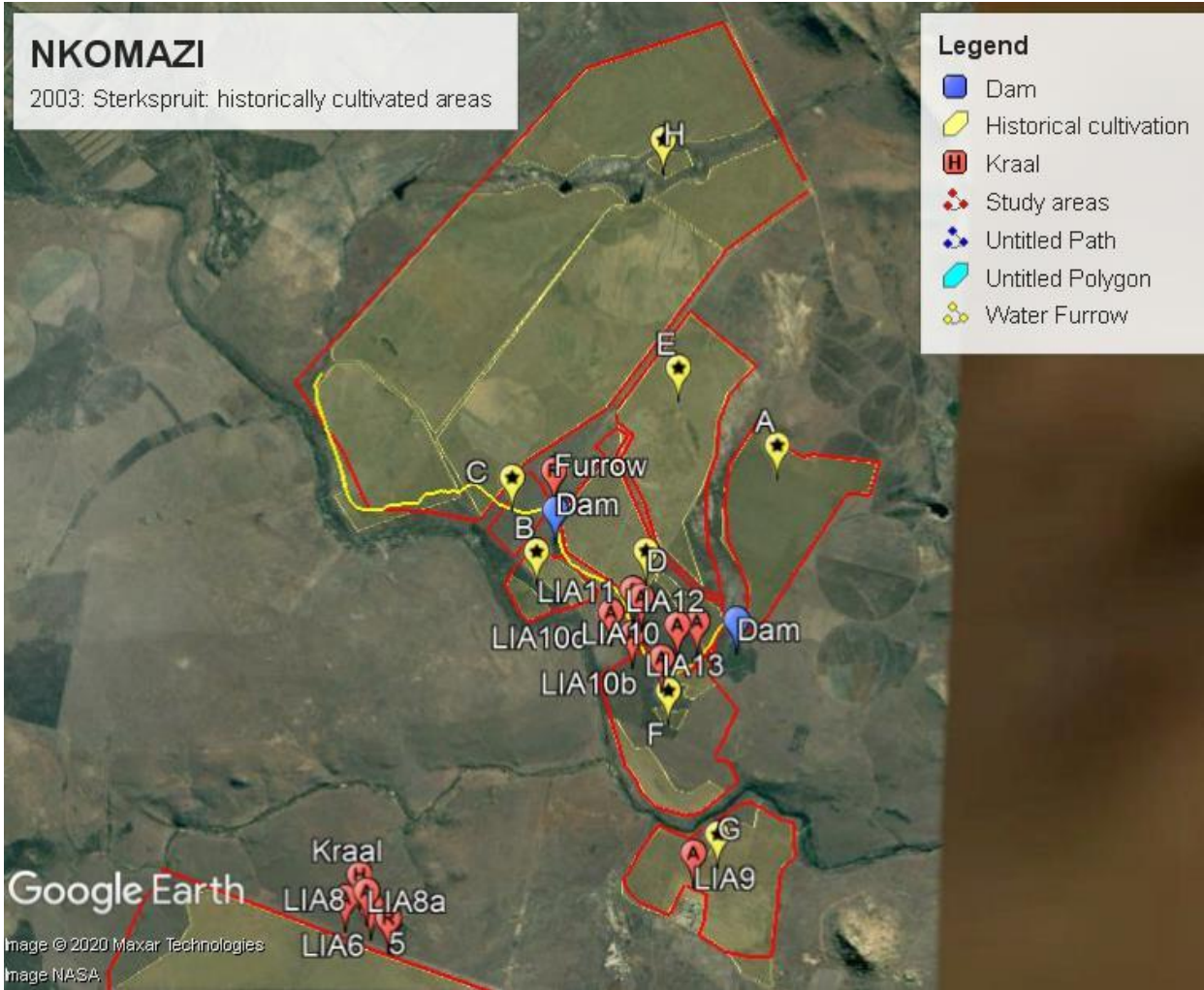
HERITAGE (**Sterkspruit:** Maps 7 & 8)

| STERKSPRUIT | | | |
|----------------------------------|--|---|---|
| Feature | Description | Co-ordinate | Significance |
| Section D | | | |
| LIA10 | LIA The remains of a LIA stonewalled settlement which have been impacted upon by road infrastructure. Roaming game (animals) have impacted upon the walls (fig 14). | S 25° 56' 33.02" E 30° 41' 16.33" Elev. 968 | Significance: Low Mitigation measures are proposed |
| LIA11 & Upper grinder | LIA The distinct remains of a LIA stonewalled settlement which have been impacted upon by road activities. Roaming game (animals) have impacted upon the walls (figs. 15 – 17) | S 25° 56' 34.65" E 30° 41' 18.88" Elev. 970 | Significance: Low Mitigation measures are proposed |
| LIA12 | LIA The remains of a LIA stonewalled settlement which have been impacted upon by road and agricultural activities. Roaming game (animals) have impacted upon the walls (fig. 18). | S 25° 56' 41.61" E 30° 41' 29.00" Elev. 966 | Significance: Low Mitigation measures are proposed |
| LIA13 | LIA The remains of a LIA stonewalled settlement which have been impacted upon by road and agricultural activities. It is situated in the middle where two roads meet and the earth | S 25° 56' 40.35" E 30° 41' 34.18" Elev. 966 | Significance: Low Mitigation measures are proposed |

| | | | |
|-------------------------------|--|---|---|
| | water furrow. Roaming game (animals) have impacted upon the walls (figs. 19 – 20). | | |
| Section F | | | |
| R Water furrow | Recent A recent earth water furrow which runs from the west (from a drainage line) to the east (dam). The furrow is no longer in use. It is visible to the south of the access road between section D & F (figs. 26 & 28). | S 25° 57' 51.20" E 30° 40' 00.55" Elev. 995 | |
| LIA10a | LIA The remains of a distinct LIA stonewalled settlement which is still in a fairly good condition (although roaming game (animals) have impacted upon the walls. Terrace walls are visible between LIA10 & LIA10b, as well as smaller stone circles (fig. 27 & map 10). | S 25° 56' 44.05" E 30° 41' 16.61" Elev. 954 | Significance: Low Mitigation measures are proposed |
| LIA10b | LIA The remains of a distinct LIA stonewalled settlement which is still in a fairly good condition (although roaming game (animals) have impacted upon the walls. Terrace walls are visible between LIA10 & LIA10b, as well as smaller stone circles (map 10). | S 25° 56' 49.60" E 30° 41' 25.02" Elev. 958 | Significance: Low Mitigation measures are proposed |
| LIA10c | LIA The remains of a distinct LIA stonewalled settlement to the west of LIA10a. This stone circle is on the | S 25° 56' 38.74" E 30° 41' 10.58" Elev. 955 | Outside study area Low: Mitigation measures are proposed |

| | | | |
|--|--|--|--|
| | <p>side of a low hill section, outside of the study area, but must also be preserved. Roaming game (animals) has impacted upon the walls (map 10).</p> | | |
|--|--|--|--|

No archaeological or historical features were observed in **sections A, B, C, E & H** (which were previously cultivated lands). An earth water furrow (fig. 28), was observed on the southern perimeter of **section H**, and cuts through **section C**. It continues parallel with the access roads between **sections B, D & F** towards a dam. This earth water furrow is recent and of no significance (see map 10).



MAP 10: The shaded areas indicate the historically disturbed agricultural areas. Sections A –F & H are all north of the Nkomazi River.

Some distinct and indistinct Late Iron Age stonewalls (LIA10, LIA10a & b, LIA11, LIA12 & LIA13), were identified in **sections D & F**, see figs. 10 – 20 & 27). One upper grinder which is associated with LIA11, was also observed (fig. 17). Most of the LIA stone walls have been impacted upon by road infrastructure and historical agricultural activities. The LIA stone walls in **section F**, are fairly intact although the walls are not in a good condition. The area forms part of the Nkomazi Game Reserve where game (animals) has free access to the sites (see fig. 35). Mitigation measures are recommended (see discussion further in text). No graves were identified in this area (See Appendix 1: Tracks & Paths).

VERGELEGEN (Inyoni) Section G:

The proposed area for the cultivation of Macadamia farming on **section G** on the farm Vergelegen is situated on historically disturbed agricultural lands, south of the Nkomazi River (figs. 34 - 37) (see topo map 11, 1968). The perimeters of the footprint are indicated in map 11.

HERITAGE FEATURES: **Vergelegen Section G:** (map 11)

| VERGELEGEN Section G | | | |
|-----------------------------|--|---|---|
| Feature | Description | Co-ordinate | Significance |
| LIA9 | LIA The indistinct and disturbed remains of a LIA stonewalled settlement was identified. It is possible that a more recent hut settlement was established on the original LIA site, as has been seen in the southern section (Fig 38). | S 25° 57' 37.03" E 30° 41' 35.54" Elev. 961 | Significance: Low Mitigation measures are proposed |

An indistinct Late Iron Age stonewall (LIA9), (fig. 38) was identified, but no graves were observed in this section. The stonewall has severely been impacted upon by historical cultivation and road infrastructure activities. This is also in the same area the topographical map of 1968 identified a recent hut settlement. It is possible that the stone wall may be more recent and belongs to the settlement, OR the hut settlement was later built on top of the LIA site.



MAP 11: Section G is south of the Nkomazi River. The shaded area indicates the historically disturbed cultivated area in section G.

VERGELEGEN & BATAVIA – Inyoni:

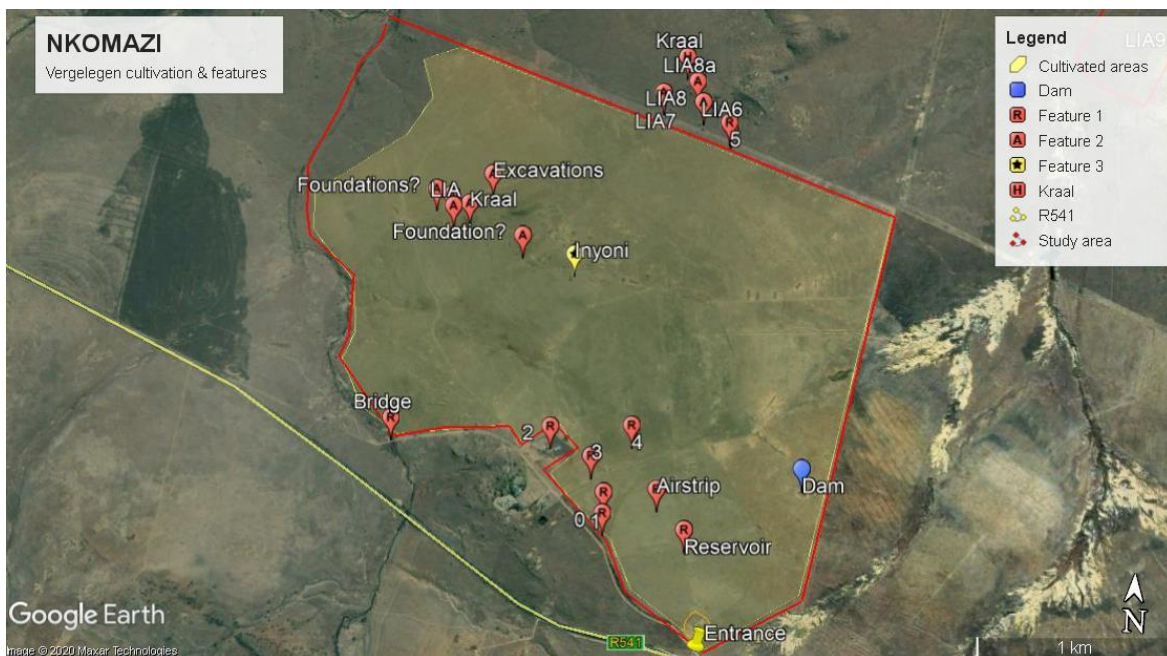
The proposed area for the cultivation of Macadamia farming on the study area named **INYONI** on the farm Vergelegen, and a small section of the farm Batavia along the R541, is situated on historically disturbed agricultural lands, south of the Nkomazi River (figs. 39 - 56) (see topo map 1968, map 4). The perimeters of the footprint are indicated in map 12.

HERITAGE FEATURES: Vergelegen & Batavia (See map 12):

| VERGELEGEN & BATAVIA | | | |
|---------------------------------|---|--|------------------------|
| Feature | Description | Co-ordinate | Significance |
| R0 | Recent Demolished structure – only rubble left (Fig 43). | S 25° 59' 00.61" E 30° 39' 54.15" Elev. 1046 | No significance |
| R1 | Recent Demolished structure next to the airfield – only concrete slab and rubble left (Fig 44). | S 25° 58' 57.2" E 30° 39' 53.03" Elev. 1043 | No significance |

| | | | |
|--|--|--|------------------------------|
| R2 | Recent Recent infrastructure for cattle farming as well as a silo is visible. No longer in use (Fig 45). | S 25° 58' 47.10" E 30° 39' 43.76" Elev. 1021 | No significance |
| R3 | Recent A recently demolished structure. Only a concrete slab and rubble is left (Fig 46). | S 25° 58' 51.60" E 30° 39' 51.47" Elev. 1032 | No significance |
| R4 | Recent The remains of a derelict pump house are visible (Fig 47). | S 25° 58' 46.70" E 30° 39' 58.51" Elev. 1028 | No significance |
| R5 | Recent A fenced weather station. (map 12) | S 25° 57' 56.02" E 30° 40' 13.9" Elev. 1014 | No significance |
| Bridge | Recent A bridge over the “Lekkerloop” stream. (Fig 48). | S 25° 58' 47.44" E 30° 39' 14.33" Elev. 975 | Outside of study area |
| Excavations | Recent Four rectangular excavations (map 12) | S 25° 58' 06.41" E 30° 39' 29.89" Elev. 995 | Outside of study area |
| Foundations | Recent Foundations of hut settlements (map 12) | S 25° 58' 09.58" E 30° 39' 20.42" Elev. 988 | Outside of study area |
| Kraal | Recent A square cattle enclosure (map 12) | S 25° 58' 10.24" E 30° 39' 23.04" Elev. 994 | Outside of study area |
| LIA stonewalls & square kraal | LIA & Recent A LIA stonewalled settlement (map 12) | S 25° 58' 12.37" E 30° 39' 23.24" Elev. 997 | Outside of study area |
| Foundations | Recent Foundations of hut settlements (map 12) | S 25° 58' 16.24" E 30° 39' 36.60" Elev. 1022 | Outside of study area |
| LIA6 | LIA | S 25° 57' 56.04" | Significance: Low |

| | | | |
|---------------------------|--|--|---|
| 2 x Upper grinders | The remains of a LIA stonewalled settlement (Fig 51 - 53). | E 30° 40' 13.7" Elev. 1013 | Mitigation measures proposed |
| LIA7 | LIA Indistinct remains of a LIA stonewalled settlement. Disturbed by previous road and agricultural activities (Fig 54). | S 25° 57' 51.20" E 30° 40' 00.55" Elev. 995 | Significance: Low Mitigation measures are proposed |
| LIA8 | LIA The remains of a LIA stonewalled settlement – still in good condition (Fig 55 – 56) | S 25° 57' 52.52" E 30° 40' 07.94" Elev. 1011 | Outside of study area – mitigation proposed |
| LIA8a & b | LIA The remains of a LIA stonewalled settlement – still in good condition (Fig. 55 – 56) | S 25° 57' 49.18" E 30° 40' 06.69" Elev. 1008 | Outside of study area – mitigation proposed |
| Kraal | Recent A square stone enclosure (Fig 43). | S 25° 57' 45.51" E 30° 40' 04.56" Elev. 1001 | Outside of study area |



MAP 12: Inyoni is situated south of the Nkomazi River, and directly north of the R541 provincial road. The shaded area indicates the historically disturbed cultivated section.

The southern section of the study area (Inyoni), was previously used for cultivation as well as cattle farming. Current infrastructure in this section consist of the access gate, a managers' house, an airstrip, infrastructure for cattle farming (R2, fig. 45), a reservoir, a derelict pump house (R4, fig. 47), a bridge (fig. 48), as well as recent structures which were demolished (R0, R1, & R3, figs 43, 44 & 46).

The 1968 topographical map indicates areas where old hut settlements were situated, but these were all destroyed by the historical agricultural activities. A few square foundations, stone kraals and a Late Iron Age stonewall were observed in the hills to the west, but they are not within the proposed development area. It is evident that some of the hut settlements were established at / on the Late Iron Age sites (see map 12).

The northern section of the study area was also previously used for cultivation and later also for cattle farming. There is a fenced-in weather station close to an indistinct Late Iron Age stonewall (LIA6), (fig. 51). Two upper grinders were observed in this section which are associated with LIA6 (figs. 52 & 53).

A very indistinct LIA stonewall (LIA7, fig. 54), is situated just south of the access road and falls within the study area. This stonewall is severely compromised by the road infrastructure and historical agricultural activities.

A Late Iron age settlement was observed just north of the access road on the northern border of the study area (LIA8 & LIA8a & b). This settlement falls outside of the proposed development, but it is still in a fairly good condition, and must be preserved (see mitigation measures further in text) (figs 55 – 56). There is also a recent stone kraal in the hills, but this falls outside of the study area (see map 12).

The study areas were surveyed per vehicle and on foot. All the sections which were investigated were open, flat and accessible. The area has burnt with new growth on most of the sections, which made visibility excellent. No graves were observed in any of these areas.

All comments should be studied in conjunction with the maps, figures and appendices, which indicate the study areas, and which corresponds with the summary below. Photographs in the report show general views of the study areas (Appendix 2).

F. DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT

| <i>ACT</i> | <i>COMPO- NENT</i> | <i>IMPLICATION</i> | <i>RELEVANCE</i> | <i>COMPLIANCE</i> |
|------------|------------------------|--|---|--|
| NHRA | S 34 | Impact on buildings and structures older than 60 years | LIA structures identified | Mitigation recommended as part of the NHRA S 34 |
| NHRA | S35 | Impacts on archaeological heritage resources | LIA stone walls and upper grinders associated with LIA settlement | Mitigation is recommended as part of the NHRA S 35 |
| NHRA | S36 | Impact on graves | No graves were identified on the study areas | None |
| NHRA | S37 | Impact on public monuments | None present | None |
| NHRA | S38 | Developments requiring an HIA | Development is a listed activity | HIA done |

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

| <i>Context</i> | | |
|---|-----|---|
| Urban environmental context | No | NA |
| Rural environmental context | No | NA |
| Natural environmental context | Yes | Sections were disturbed by historical agricultural activities |
| <i>Formal protection (NHRA)</i> | | |
| (S. 28) Is the property part of a protected area? | Yes | Nkomazi Game Reserve |

| Context | | |
|--|-----|--|
| (S. 31) Is the property part of a heritage area? | Yes | Natural Heritage area |
| Other | | |
| Is the property near to or visible from any protected heritage sites | Yes | Within the Nkomazi Game Reserve |
| 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 |
| 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? | Yes | In vicinity of Barberton Makonjwa Mountain land |
| Is the property within or adjacent to any other area which has special environmental or heritage protection? | Yes | Barberton Makonjwa Mountain land –; In vicinity |
| Does the general context or any adjoining properties have cultural significance? | No | NA |

| <i>Property features and characteristics</i> | | |
|---|-----|---|
| Have there been any previous development impacts on the property? | Yes | Large sections have been compromised by historically cultivated lands. |
| Are there any significant landscape features on the property? | No | NA |
| Are there any sites or features of geological significance on the property? | Yes | Near the Barberton Makonjwa Mountain land |
| Does the property have any rocky outcrops on it? | Yes | Small outcrops |
| Does the property have any fresh water sources (springs, streams, rivers) on or alongside it? | Yes | Nkomazi river in middle of study area, smaller streams and drainage lines occur |

| <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) | Yes | Private Game Nature Reserve |
| Place listed in heritage register (S. 30) | No | NA |
| <i>General protection (NHRA)</i> | | |
| Structures older than 60 years (S. 34) | Yes | LIA |

| Heritage resources on the property | | |
|---|-----|---|
| Archaeological site or material (S. 35) | Yes | Archaeological material associated with LIA and historic settlement were identified |
| Graves or burial grounds (S. 36) | No | No graves were identified |
| 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 |
|---|-----------------|--|----------|--------------------|-------------|----------------------------|-------------------|-----------------------------------|--------------|-----------------------------------|--------------------------------|---|-------------|
| | | Hist orica l | Rar e | Scie ntifi c | Typi cal | Tech - nolo gical | Aes theti c | Pers on / com muni ty | Land mark | Mate rial con ditio n | Sus t aina bilit y | | |
| Buildings / structures of cultural significance | Yes | Yes | No | Yes | Yes | No | No | Yes | No | No | No | LIA – mitigation measures are recommended | |

| 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 | Not in the study areas | - | - | - | - | - | - | - | - | - | - | - | - |
| Archaeological sites | Yes | Yes | - | - | - | - | - | Yes | - | - | - | - | Archaeological material associated with the LIA |
| Grave / burial grounds | No | No | - | - | - | - | - | - | - | - | - | - | No grave sites were identified; |
| Areas of significance related to labour history | No | - | - | - | - | - | - | - | - | - | - | - | - |

| NHRA | ELE- | INDICATORS OF HERITAGE SIGNIFICANCE | | | | | | | | | | RISK | |
|-----------------|-------------|--|---|---|---|---|---|---|---|---|---|-------------|---|
| Movable objects | No | - | - | - | - | - | - | - | - | - | - | - | - |

- **Summarised recommended impact management interventions**

| NHRA S (3)2 Heritage resource category | SITE | IMPACT SIGNIFICANCE Cultural significance rating | | Impact management | Motivation |
|---|-------------|---|----------------------------|--------------------------|---------------------------------|
| | | Cultural significance | Impact significance | | |
| Buildings / structures of cultural significance | Yes | No | Low | Management plan required | Mitigation measures recommended |
| Areas attached to oral traditions / intangible heritage | No | None | None | - | - |
| Historical settlement/ townscape | No | None | None | - | - |
| Landscape of cultural significance | No | None | None | - | - |
| Geological site of scientific/ cultural importance | No | None | None | - | - |

| NHRA S (3)2 Heritage | SITE | IMPACT SIGNIFICANCE Cultural significance rating | | Impact management | Motivation |
|---|-------------|---|------|------------------------------|----------------------------------|
| Archaeological sites | Yes | None | Low | - | Mitigation measures are proposed |
| Grave / burial grounds | 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 | Impact on buildings and structures older than 60 years | LIA and historic structures | Mitigation measures recommended as per NHRA S34 |
| NHRA | S35 | Impacts on archaeological heritage resources | Archaeological material associated with LIA and historic structures | Mitigation measures recommended as per NHRA S35 |
| NHRA | S36 | Impact on graves | None identified | None |
| NHRA | S37 | Impact on public monuments | None present | None |

| ACT | COMPO- NENT | IMPLICATION | RELEVANCE | COMPLIANCE |
|------------|------------------------|------------------------------|----------------------------------|-------------------|
| NHRA | S38 | Development requiring an HIA | Development is a listed activity | Full HIA done |

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 are 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.⁷² It promotes previously neglected research areas.

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

- (a) its importance in the community, or pattern of South Africa's history;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.⁷³

⁷²National Heritage Resources Act, no. 25 of 1999. p. 2.

⁷³National Heritage Resources Act, no. 25 of 1999. pp. 12-14

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

HERITAGE significance (**Sterkspruit: maps 8 & 10**)

| Feature | Description | Significance |
|----------------------------------|---|---|
| SECTION D | | |
| LIA10 | LIA The remains of a LIA stonewalled settlement which have been impacted upon by road infrastructure. Roaming game (animals) have impacted upon the walls (fig 14). | Significance: Low Mitigation measures are proposed |
| LIA11 & Upper grinder | LIA The distinct remains of a LIA stonewalled settlement which have been impacted upon by road activities. Roaming game (animals) have impacted upon the walls (figs. 15 – 17) | Significance: Low Mitigation measures are proposed |
| LIA12 | LIA The remains of a LIA stonewalled settlement which have been impacted upon by road and agricultural activities. Roaming game (animals) have impacted upon the walls (fig. 18). | Significance: Low Mitigation measures are proposed |
| LIA13 | LIA The remains of a LIA stonewalled settlement which have been impacted upon by road and agricultural activities. It is situated in the middle where two roads meet and the earth water furrow. Roaming game (animals) have impacted upon the walls (figs. 19 – 20). | Significance: Low Mitigation measures are proposed |
| SECTION F | | |
| R Water furrow | Recent A recent earth water furrow which runs from the west (from a drainage line) to the east (dam). The furrow is no longer in use. It is visible to the south | Not significant |

| | | |
|---------------|--|---|
| | of the access road between section D & F (figs. 26 & 28). | |
| LIA10a | LIA The remains of a distinct LIA stonewalled settlement which is still in a fairly good condition (although roaming game (animals) have impacted upon the walls. Terrace walls are visible between LIA10 & LIA10b, as well as smaller stone circles (fig. 27 & map 10). | Significance: Low Mitigation measures are proposed |
| LIA10b | LIA The remains of a distinct LIA stonewalled settlement which is still in a fairly good condition (although roaming game (animals) have impacted upon the walls. Terrace walls are visible between LIA10 & LIA10b, as well as smaller stone circles (Map 10). | Significance: Low Mitigation measures are proposed |
| LIA10c | LIA The remains of a distinct LIA stonewalled settlement to the west of LIA10a. This stone circle is on the side of a low hill section, outside of the study area, but must also be preserved. Roaming game (animals) have impacted upon the walls (Map 10). | Outside study area Low: Mitigation measures are proposed |

HERITAGE FEATURES: Vergelegen Section G: (map 11)

| Feature | Description | Significance |
|----------------|--|---|
| LIA9 | LIA The indistinct and disturbed remains of a LIA stonewalled settlement was identified. It is possible that a more recent hut settlement was established on the original LIA site, as has been seen in the southern section (Fig 38). | Significance: Low Mitigation measures are proposed |

HERITAGE FEATURES: **Vergelegen & Batavia (see maps 9 & 12):**

| Feature | Description | Significance |
|--|--|---|
| R0 | Recent Demolished structure – only rubble left (Fig 43). | No significance |
| R1 | Recent Demolished structure next to the airfield – only concrete slab and rubble left (Fig 44). | No significance |
| R2 | Recent Recent infrastructure for cattle farming as well as a silo is visible. No longer in use (Fig 45). | No significance |
| R3 | Recent A recently demolished structure. Only a concrete slab and rubble is left (Fig 46). | No significance |
| R4 | Recent The remains of a derelict pump house are visible (Fig 47). | No significance |
| R5 | Recent Fenced weather station. (Map 12) | No significance |
| LIA6 2 x Upper grinders | LIA The remains of a LIA stonewalled settlement (Fig 51 - 53). | Significance: Low Mitigation measures proposed |
| LIA7 | LIA Indistinct remains of a LIA stonewalled settlement. Disturbed by previous road and agricultural activities (Fig 54). | Significance: Low Mitigation measures are proposed |
| LIA8 | LIA The remains of a LIA stonewalled settlement – still in good condition (Fig 55 – 56) | Outside of study area – mitigation proposed |
| LIA8a & b | LIA The remains of a LIA stonewalled settlement – still in good condition (Fig. 55 – 56) | Outside of study area – mitigation proposed |

The Nkomazi Game Reserve (Pty) Ltd in association with CORE Environmental Services are proposing the clearance of vegetation for the purpose of Macadamia farming and the establishment of three de-husking plants, on the Nkomazi Game Reserve, (near Tjakastad and Badplaas - eManzana). The Phase 1 Heritage Impact assessment investigation revealed that most of the sites for the proposed development are situated on historically cultivated lands. The proposed development is for the clearance of approximately 2000ha of vegetation as well as the construction of three de-husking plants on the following farms:

Section Inyoni: *Portions 2 & 4 of the farm Vergelegen 728JT;*

Portions 6 & 7 of the farm Batavia 151JT;

Section Sterkspruit: *Remainder of portion 1 of the farm Sterkspruit 709JT;*

*Portions 3, 4 & 5 of the farm Sterkspruit 709JT.*⁷⁴

The mitigation measures which are recommended for archaeological and other cultural heritage resources on the farms *Sterkspruit & Vergelegen* (including a small portion of the farm *Batavia*), were evaluated according to the NHRA section 3(3) as part of the specifications in section 34 &

- 35:
- 3(3)(a) its importance in the community, or pattern of South Africa's history;
 - 3(3)(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
 - 3(3)(g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;

Mitigation measures are proposed for the following archaeological and cultural heritage resources will be affected:

Sterkspruit: Sites D & F, map 10 (please refer to the tables above):

Late Iron Age stone walls which will negatively be impacted upon by the proposed development include LIA10, LIA10a & LIA10b, LIA11, LIA12 & LIA13. Although LIA10c is outside of the study area, it forms part of the archaeological context of this settlement, and is included in the recommendations (see below):

Vergelegen Section G: (map 11) (please refer to the tables above):

Late Iron Age stone wall LIA9 was severely impacted by previous cultivation and road infrastructure activities.

⁷⁴ Final Scoping Report: CORE Env. Services: Proposed clearance of vegetation for the purpose of Macadamia farming adjacent to Nkomazi Game Reserve, near Tjakastad, Mpumalanga province, p. 5.

Vergelegen & Batavia (Inyoni – the southern section) (See Maps 12): (please refer to the tables above):

Features R0 – R5 are of a recent nature and of no significance. Late Iron Age stone wall in the northern section will negatively be impacted upon by the proposed development (i.e LIA 6 & LIA7). Although LIA8, LIA8a and LIA8b are outside of the study area, it forms part of the archaeological context of this settlement, and is also included in the recommendations (see below):

Apart from the archaeological sites above, no other features of significance or graves were identified during the survey.

H. RECOMMENDATIONS & CONCLUSION

No archaeological, cultural heritage features or graves were identified in sections A, B, C, E & H, and the development may continue in these sections.

The survey revealed a number of Late Iron Age stonewalled sites (see above) within the study area and mitigation measures are recommended below. These features which were identified during the survey are rated as of “Low significance” which means that they have local value or significance as specified by the NHRA.

Inyoni: A number of recent features and structures (R0 – R4) which are associated with previous farming activities were identified in the southern section of **Inyoni (farms Vergelegen & Batavia)**. A quarry and an airstrip are also visible in this section. None of these features have any historical significance, and the development may continue in these sections.

Inyoni & Sterkspruit: Several Late Iron Age (LIA) stone walls are located in the northern section of **Inyoni** (within the study area on the northern boundary, as well as outside of the study area), and on **Sterkspruit sections D & F**. LIA stone walls were also observed on **Section G (farm Vergelegen)**. These stone walls should be preserved in situ. Should the Client wish to incorporate these as a tourist attraction or if any activities will take place in these sections, mitigation measures will be required, such as:

- a full documentation of the sites (to determine the layout pattern and possible age), as well as a management plan with guidelines to preserve it;

Should the Client wish to develop these sites, the following process needs to be followed:

- a Phase 2 investigation - excavations and / or shovel test pits (STP) should be done at the sites to determine the scientific value before a destruction permit may be applied for (from SAHRA).

Should the developer adhere to the mitigation as set out above, the development may continue in the areas as indicated in the report.

Archaeological material or graves are not always visible during a field survey and therefore new sites may still be identified, during the development phase. In such a case, a qualified archaeologist should be contacted, and 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.

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PERSONAL INFORMATION

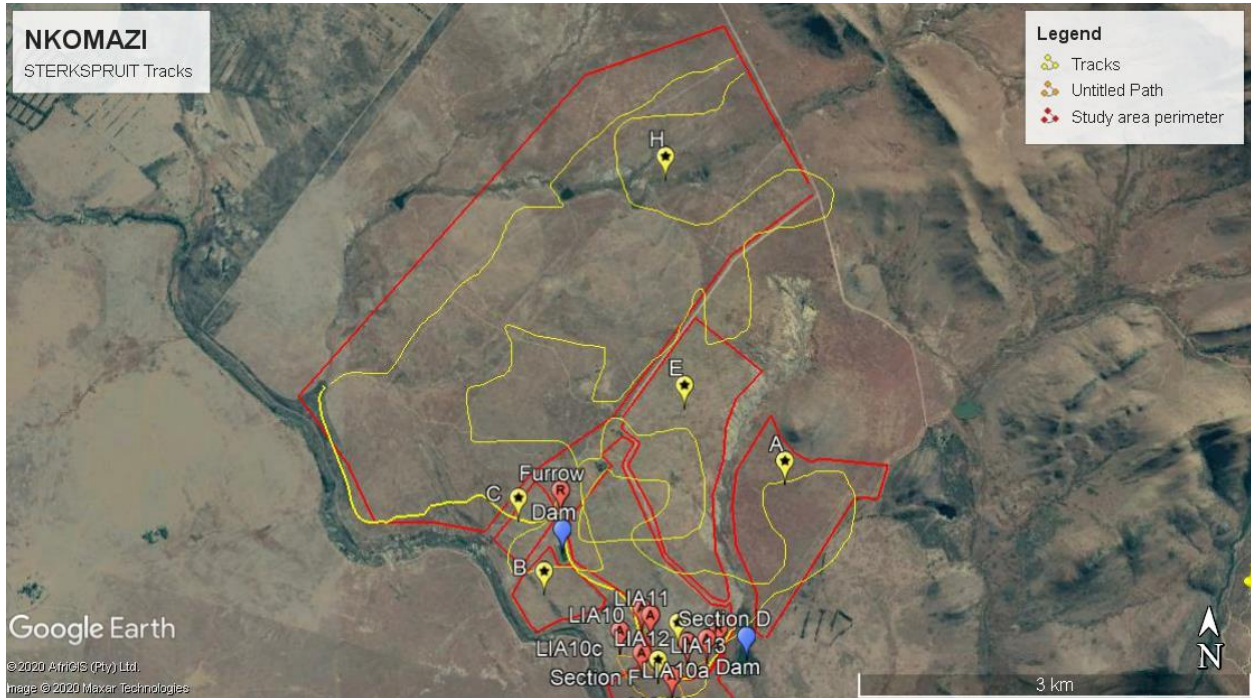
- Personal communication: Ms Anne-Mari White, CORE Env. Services, Cell: 0608781591; 2020-12-04.
- Personal communication: Mr. John Roux 2014-12-15 & 2014-12-26.
- Personal communication: Mr. Wessel Roodt, Manager at Songimvelo Nature Reserve 2017-10-17.

MISCELLANEOUS

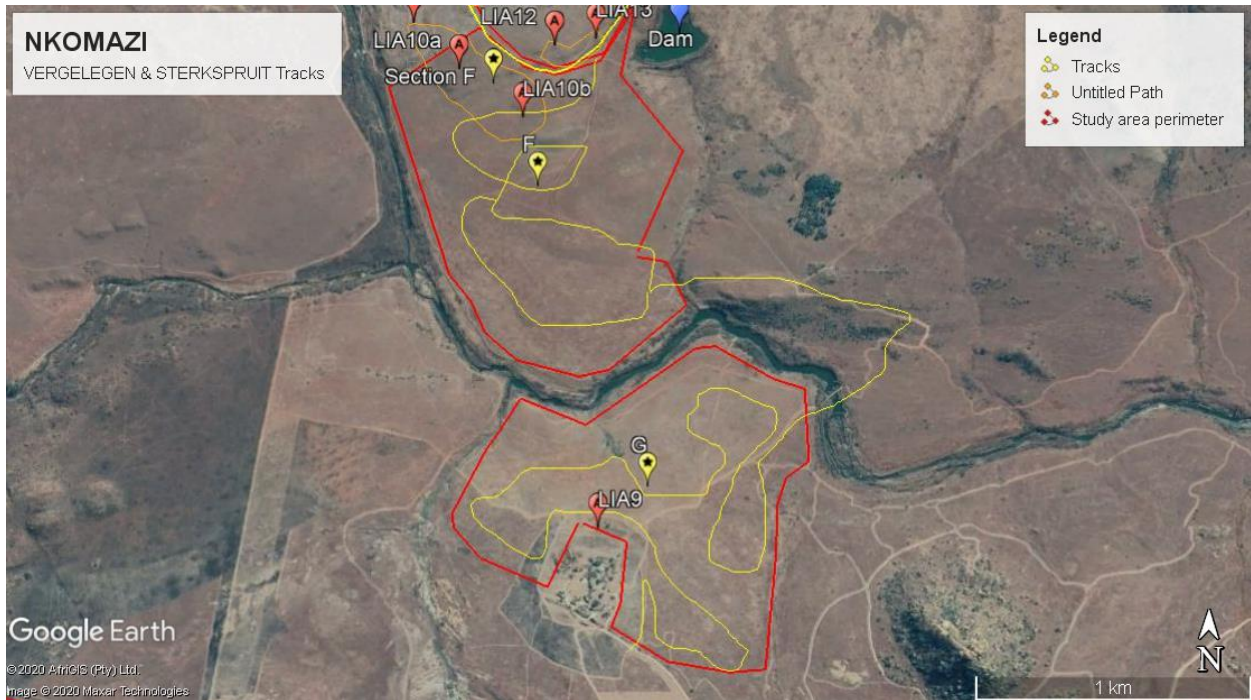
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APPENDIX 1

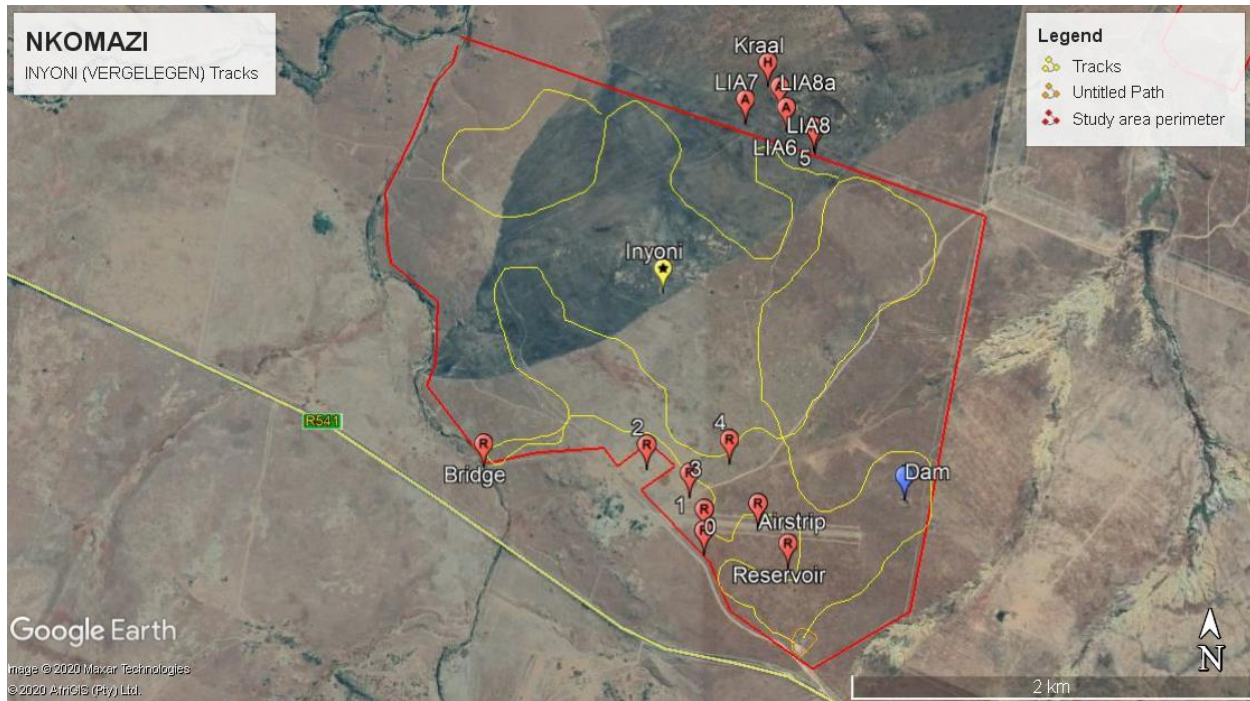
TRACKS AND PATHS



Tracks for Sterkspruit sections A, B C, D E & H.



Tracks for Sterkspruit section F & Vergelegen section G.



Tracks for Vergelegen, section Inyoni.