

# NOTIFICATION OF INTENT TO DEVELOP

FOR A RESIDENTIAL TOWNSHIP ON PORTION 437 AND PORTION  
502 OF THE FARM ROOSBOOM 1102GS, ALFRED DUMA LOCAL  
MUNICIPALITY, KWAZULU-NATAL PROVINCE.

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Project Reference:

21915

Report date:

March 2019

**DOCUMENT PROGRESS**

**Notification of Intent to Develop**

**Document status**

<b>Document Version</b>	<b>v1.0</b>
<b>Report Purpose</b>	<b>Notification of Intent to Develop</b>
<b>Report Ref. No.</b>	<b>21915</b>

**Distribution List**

<b>Date</b>	<b>Report Reference number</b>	<b>Document Distribution</b>	<b>Number of Copies</b>
2019/03/18	21915	Eco Assessments	Electronic copy

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### 1. Introduction

Heritage Contracts and Archaeological Consulting (hereafter **HCAC**) was requested by Eco Assessments to submit a Notice of intention to develop (NID) to AMAFA as part of the environmental authorization process for the proposed Roosboom Township Development on Portion 437 and Portion 502 of the farm Roosboom 1102GS, KwaZulu-Natal Province. The subject site is located approximately 10km south of Ladysmith. The site lies 750m west of the R103 (Ladysmith/Colenso) Road and immediately south and adjacent of the existing township of Roosboom and comprises 85 hectares.

### 2. Project Location

<b>Province</b>	KwaZulu-Natal Province
<b>Municipality</b>	Alfred Duma Local Municipality
<b>Nearest Town</b>	Ladysmith
<b>Property Name and Number</b>	Portion 437 and Portion 502 of the farm Roosboom 1102GS
<b>1:50 000 Map Sheet</b>	2829 DA
<b>GPS Co-ordinates (Relative center point of study area)</b>	-28.476632° 31.892753°

Figure 1. Locality map indicating the study area in red

### 3. Project Details

The proposed development is envisaged to comprise the following land uses:

- ± 1000 residential units;
- Subsidiary land uses that include creches, primary school, religious centres and business;
- Public Open Space areas;
- Public Roads

The Township will be developed according to architectural guidelines and will provide for an aesthetically pleasing development.

### 3.1 Receiving Environment

The proposed township development is bisected by a rocky ridge line, a nonperennial watercourse and a river. The site has a zoning of Agriculture and lies vacant. Several formal dwellings lie on the eastern extent of the site. The surrounding areas include agricultural holdings used largely for subsistence purposes.

### 4. Legislative Framework

For this project the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) is of importance and the following sites and features are protected:

- a. Archaeological artefacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

Section 34 (1) of the Act deals with structures that are older than 60 years. Section 35(4) of this Act deals with archaeology, palaeontology and meteorites. Section 36(3) of the Act, deals with human remains older than 60 years. Unidentified/unknown graves are also handled as older than 60 years until proven otherwise.

The Notification of Intent to Develop (NID) is submitted to AMAFA in terms of Sections 38(1) and 38(8) of the NHRA. This NID is submitted to outline what (if any) heritage resources are likely to be affected, how the character of the site will change and what processes need to be followed.

#### 4.1 Heritage Site Significance and Mitigation Measures

The presence and distribution of heritage resources define a Heritage Landscape. In this landscape, every site is relevant. In addition, because heritage resources are non-renewable, heritage surveys need to investigate an entire project area. In all initial investigations, however, the specialists are responsible only for the identification of resources visible on the surface.

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. National and Provincial Monuments are recognised for conservation purposes. The following interrelated criteria were used to establish site significance:

- » The unique nature of a site;
- » The integrity of the archaeological/cultural heritage deposit;
- » The wider historic, archaeological and geographic context of the site;
- » The location of the site in relation to other similar sites or features;
- » The depth of the archaeological deposit (when it can be determined or is known);
- » The preservation condition of the site; and
- » Potential to answer present research questions.

The criteria above will be used to place identified sites within the South African Heritage Resources Agency's (SAHRA's) (2006) system of grading of places and objects that form part of the national estate. This system is approved by the Association of South African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region.

**Table 1. Heritage Field ratings**

<b>FIELD RATING</b>	<b>GRADE</b>	<b>SIGNIFICANCE</b>	<b>RECOMMENDED MITIGATION</b>
National Significance (NS)	Grade 1	-	Conservation; national site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; provincial site nomination
Local Significance (LS)	Grade 3A	High significance	Conservation; mitigation not advised
Local Significance (LS)	Grade 3B	High significance	Mitigation (part of site should be retained)
Generally Protected A (GP. A)	-	High/medium significance	Mitigation before destruction
Generally Protected B (GP. B)	-	Medium significance	Recording before destruction
Generally Protected C (GP.C)	-	Low significance	Destruction

#### 4.2. NHRA Section 38 Triggers

The following aspects of Section 38 of the NHRA may be triggered by the proposed project.

**Table 2. NHRA Triggers**

		<b>NHRA Section 38 (1) Activities / Triggers</b>	<b>Summary description (e.g. 500 m road, etc.)</b>
	A	Any linear development or barrier >300 m	Access Roads
	b	Any bridge or similar structure >50 m	No bridges will be constructed
<b>X</b>	c	Any development or activity that will change the character of a site:	TBC
	i	≥5 000m <sup>2</sup> in extent	Applicable
	ii	Involving ≥3 existing erven/ Subdivisions	Not applicable
	iii	Involving ≥3 or more erven/ divisions consolidated within past 5 years.	Not applicable
	d	Rezoning of a site ≥10 000m <sup>2</sup> in extent.	Applicable
<b>X</b>	e	Other triggers, e.g.: in terms of other legislation, (i.e.: National Environment Management Act, etc.)	NEMA, NWA

### **5. Limitations and assumptions**

The study area was not subjected to a field survey at this stage in the process. It is assumed that information obtained for the wider area is applicable to the study area. Additional information could become available in future that could change the results of this report.

### **6. Heritage Resources**

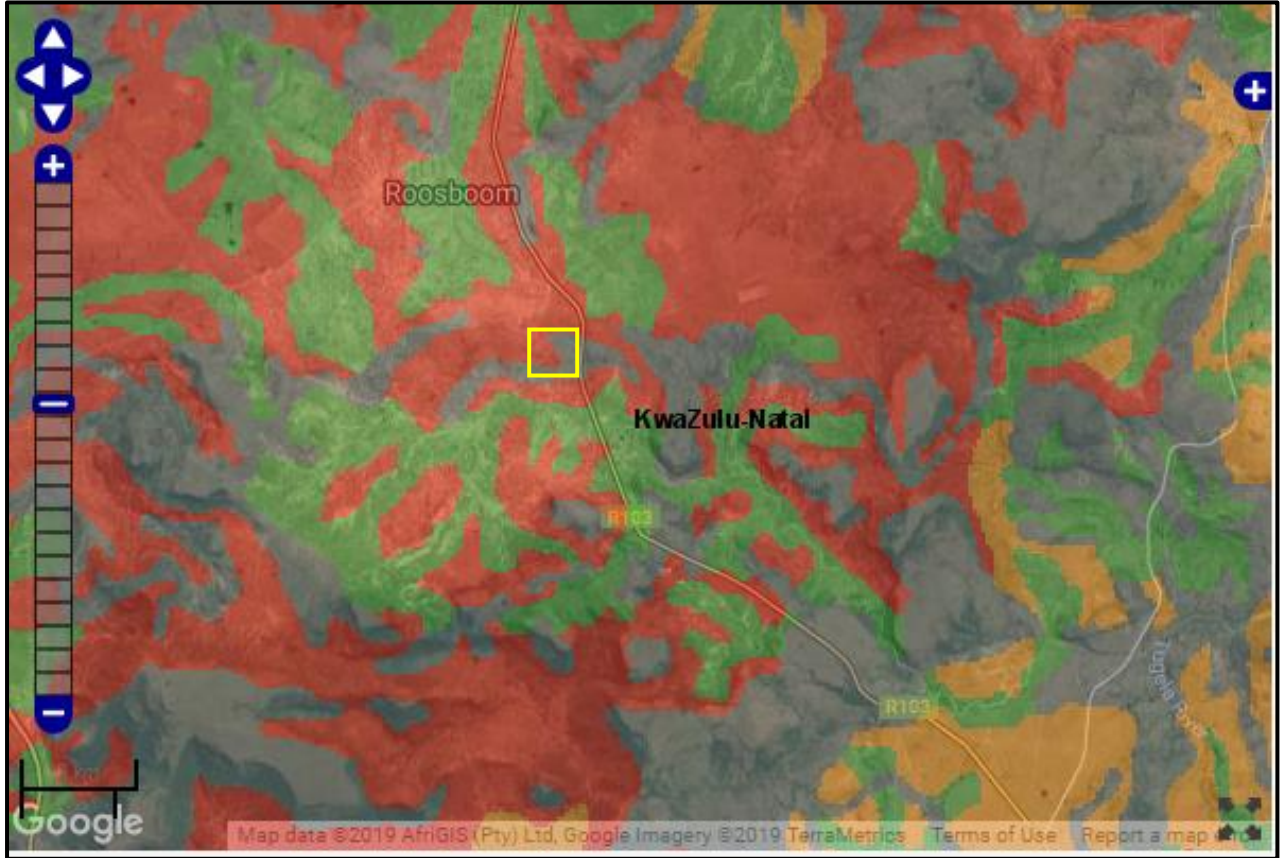
Heritage resources are defined in Section 2 of the NHRA as “any place or object of cultural significance”, where cultural significance can be understood as meaning “aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance”. Heritage resources together constitute the National Estate, as defined in Section 3 of the NHRA, and each resource is recognized and protected under the Act.

A variety of heritage resources contribute to the heritage character of the area, and these are briefly dealt with below. Each category of heritage resource was assessed to derive the heritage character of the area. This was done by consultation of heritage reports captured into SAHRIS as well as other archaeological databases.



### 6.1. Paleontological resources

According to the SAHRA Paleontological map further studies are required and this will be conducted independently.



Colour	Sensitivity	Required Action
RED	VERY HIGH	Field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	Desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	Desktop study is required
BLUE	LOW	No palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	No palaeontological studies are required
WHITE/CLEAR	UNKNOWN	These areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map

Figure 2. The approximate study area as indicated on the SAHRA paleontological sensitivity map.

## **6.2. Archaeological background**

The archaeology of KwaZulu-Natal can be divided in three main periods namely the Stone Age, Iron Age and Historical period.

### **6.2.1. Stone Age**

South Africa has a long and complex Stone Age sequence of more than 2 million years. The broad sequence includes the Later Stone Age, the Middle Stone Age and the Earlier Stone Age. Each of these phases contains sub-phases or industrial complexes, and within these we can expect regional variation regarding characteristics and time ranges. For Cultural Resources Management (CRM) purposes it is often only expected/ possible to identify the presence of the three main phases.

Yet sometimes the recognition of cultural groups, affinities or trends in technology and/or subsistence practices, as represented by the sub-phases or industrial complexes, is achievable (Lombard 2011). The three main phases can be divided as follows;

- » Later Stone Age; associated with Khoi and San societies and their immediate predecessors. - Recently to ~30 thousand years ago.
- » Middle Stone Age; associated with Homo sapiens and archaic modern human - . 30-300 thousand years ago.
- » Earlier Stone Age; associated with early Homo groups such as Homo habilis and Homo erectus. - 400 000-> 2 million years ago.

The LSA is well represented in KwaZulu-Natal with an abundance of rock art, like the rock paintings at Giants Castle and Kamberg in the Drakensburg Mountains (Vinnicombe, 1976). Rock art sites have been also been documented in the areas around Estcourt, Mooi River and Dundee. Several caves in KZN contain significant archaeological deposits like the well-known MSA site of Sibudu Cave on the coast of KwaZulu-Natal, which shows evidence for early forms of cognitive human behavioural patterns (Wadley, 2005). Another well-known cave called Border Cave is situated some 40 kilometres to the north east of the study area at the Ingodini Border Cave Museum Complex. The site was first investigated by Raymond Dart in 1934; here excavations exposed a thick deposit of archaeological material dating from the Iron Age overlaying MSA artefacts. Later excavations, by Beaumont in the early 1970's, revealed a complete MSA sequence succeeded by Early and Later Iron Age deposits (Klein 1977).

### **6.2.2. Iron Age and historical period**

Bantu-speaking people moved into Eastern and Southern Africa about 2,000 years ago (Mitchell, 2002). These people cultivated sorghum and millets, herded cattle and small stock and manufactured iron tools and copper ornaments. Because metalworking represents a new technology, archaeologists call this period the Iron Age. Characteristic ceramic styles help archaeologists to separate the sites into different groups and time periods. The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic periods. It can be divided into three distinct periods:

- » The Early Iron Age: Most of the first millennium AD.
- » The Middle Iron Age: 10th to 13th centuries AD.
- » The Late Iron Age: 14th century to colonial period.

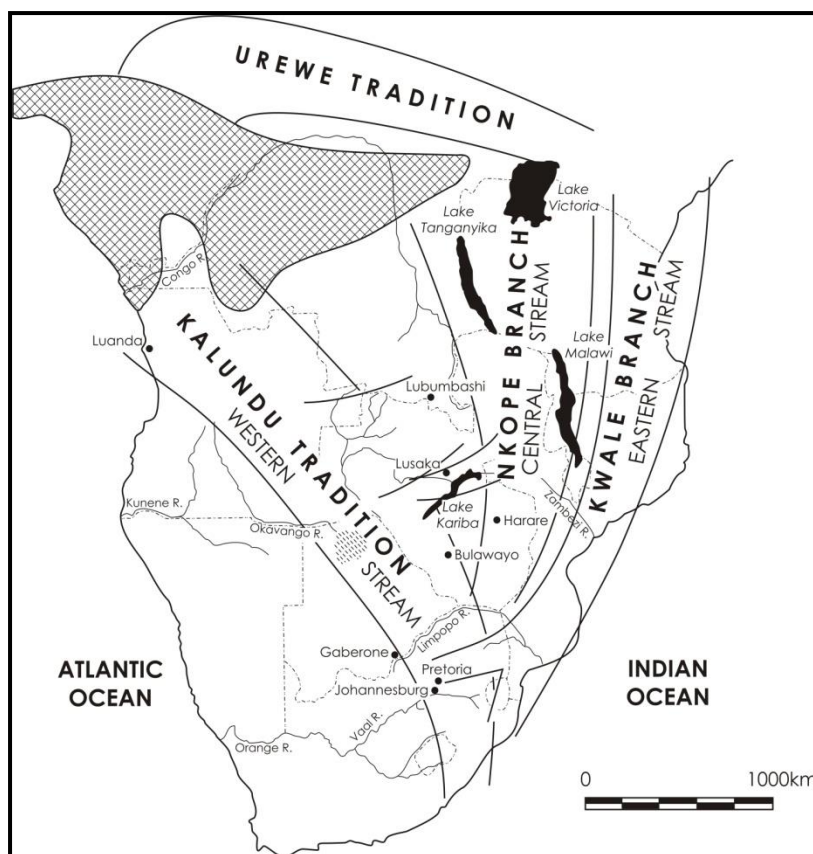


Figure 3: Movement of Bantu speaking farmers (Huffman 2007).

The first 1,000 years is called the Early Iron Age. Early Iron Age people made a living by mixed farming. They had the technology to work metals like iron. Existing evidence dates the Iron Age in southern Africa to the first millennium AD (Huffman, 2007). The site of Mzonjani, 15 km from Durban, is the oldest known Iron Age site in KwaZulu-Natal, dating to the 3rd Millennium AD (Huffman, 2007).

The area that was occupied by the Nguni speaking group of the Eastern Bantu language stream is characterised by settlement patterns defined as the Central Cattle Pattern (CCP) (Huffman, 2007). The Nguni ceramic sequence consists of the *Blackburn* (AD 1050-1500), *Moor Park* (AD 1350-1700) and, *Nqabeni* (AD 1700-1850), although excavated pottery is seldom decorated and therefore complicates archaeological interpretation (Huffman 2007: 441, 443).

*Blackburn* pottery is on record along the north and south coasts of KwaZulu-Natal, often in shell middens (Huffman 2007: 443). The available radiocarbon dates place *Blackburn* between about AD 1100 and perhaps 1500.

The earliest known type of stonewalling that characterises this settlement pattern (CCP) in the region is the Moor Park site, which dates from the 14th to 16th Centuries AD (Huffman, 2007). This type of stonewalling can be found in defensive positions on hilltops in the Midlands of KZN (Huffman, 2007). Archaeologists have concluded that the function of these structures was to serve mainly as defensive purposes (Huffman, 2007). Archaeologically, the Natal area was occupied by the Zulu people by AD 1050 (Huffman, 2007).

In the late 1400's, a Nguni group under the leadership of Dlamini settled in the Delagoa Bay area. By the late 1700's, the Dlamini clan moved into land settling on the banks of the Pongola River where it cuts through the Lebombo Mountains. An attempt was also made to occupy the area between the Pongola River and Magudu Hills (at that stage the area was under Ndwandwe rule), but they had to retreat back across the Pongola River (Bonner 2002; Fourie 2013).

Serious rivalry between the Ndwandwe under Zwide and the Ngwane (Swazi) under Sobhuza created a period of unrest and confrontation in the early 1800's. An attempt from Zwide to annex the grain fields on the south side of the Pongola River almost destroyed the Ngwane. These successive Ndwandwe attacks lead to the fleeing of the Ngwane to the far north (Bonner, 2002).

The Late Iron Age economy was based on agriculture and livestock. Both components were inextricably linked to cultural practices and even contributed to the evolution of other institutions. In the Nguni groups, economic activities were divided along gender lines; men were closely associated with cattle and women with farming. It is believed that maize was introduced to northern KwaZulu-Natal via the Delagoa Bay trade network and the crop soon became widely cultivated. According to oral tradition, the Mthethwa first produced maize in the late 18th century (Huffman 2007: 453, 457).

Along with cattle and trade beads, (both used as currency for bride wealth); metal objects also became markers of wealth, status and power. Iron and copper ornaments (bangles, neck-and earrings) were worn to indicate social position and were also used in trade (Wylie 2006: 58, 59). Other metal artefacts which may appear in the archaeological record are iron spear points and hoes used for agriculture (very few have been found in context). It is interesting that the deliberate burial of numerous metal objects (mostly spearheads and hoes) seems to have been a common practice in Late Iron Age KwaZulu-Natal (Maggs 1991). This phenomenon is probably connected to the period of instability leading up to the Mfecane.

The Difaqane (Sotho), or Mfekane/Imfecane ("the crushing" in Nguni) was a time of bloody upheavals in Natal and on the Highveld, which occurred around the early 1820's until the late 1830's (Berg 1999: 109-115). It came about in response to heightened competition for land and trade, and caused population groups like gun-carrying Griquas and Shaka's Zulus to attack other tribes (Berg 1999: 14; 116-119). In KwaZulu-Natal, this commenced in the early 1800's when the amaZulu were still under Senzangakona (Omer-Cooper, 1993).

The Mthethwa confederacy also arose in the 18th century as a consolidation of clans that formed part of the greater northern Nguni-speaking cultural group in southern Africa. Their ruling lineage (the Nyambose) originally settled between the Mfolozi and Mhlatuse rivers (Wylie 2006: 49).

Indian Ocean trade contributed to changes in the socio-political structures of many groups, including that of the Mthethwa: imported beads became part of bride-wealth/lobola currency, increased demand for meat and grain from east coast ships necessitated more control of agricultural labour, cattle-raids etc., and even influenced the evolution of the amabutho (age-set regiments) system. Ivory, hides, slaves, grain, and metal hoes were exchanged for incoming commodities such as beads and cloth (Mitchell & Whitelaw 2005: 228; Huffman 2007: 77-80). It was amid the ensuing power struggles between politically complex chiefdoms that the Mthethwa, Ndwandwe in the north and the Qwabe in the south emerged as prominent role-players.

Interestingly both Colenso and Ladysmith were home to important battle sites during the Anglo Boer War (1899 – 1902). Numerous battle s

### 6.3. Identified / Known Heritage Resources

Few CRM studies have been conducted in the area, the following reports have been consulted in this report:

**Table 3. CRM studies consulted for this project.**

Author	Year	Project	Findings
Anderson, G.	2015	HIA Ladysmith Bulkwater Pipeline: Spionkop To Ladysmith	Stone Age, Iron Age and Anglo Boer War Sites as well as Graves
Anderson, G.	2015	HIA Lombard's Kop Bulk Water Pipeline, Kwazulu-Natal	Graves, Historical Sites and Anglo Boer War Sites.

Information obtained from several archaeological databases show a high occurrence of heritage sites in the larger area (Figure 4).

As the study area itself has not been subjected to a physical assessment, it is expected that sites similar to finds in the greater area can be found in the impact area, including heritage resources such as:

- Middle and Late Stone Age sites;
- Rock art sites
- Iron Age stone walled sites related to the rich Zulu heritage of the area
- Places associated with oral traditions and living heritage;
- Grave sites.

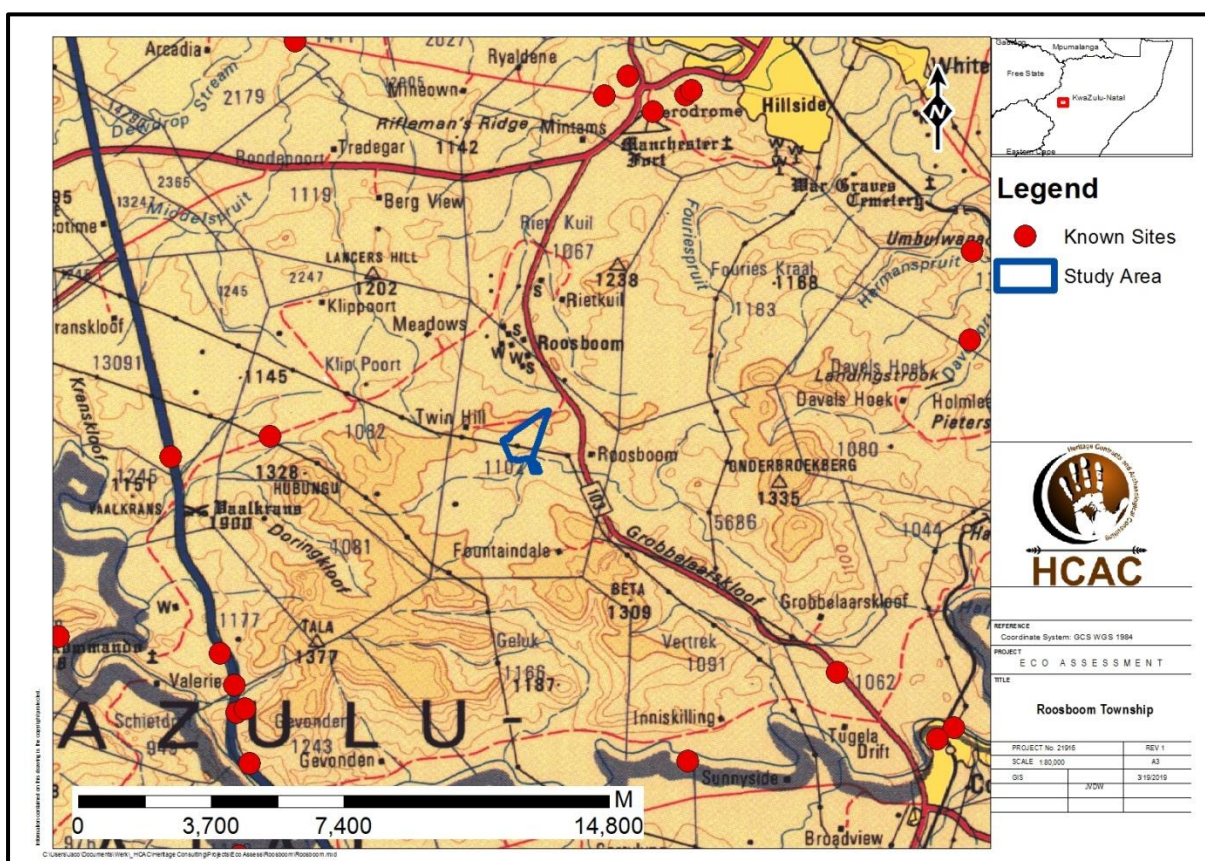


Figure 4. Known sites in the region

## 7. Potential Impact Assessment

The following categories of heritage resources as defined in Section 3 of the NHRA are protected by the Act and could occur within the study area. Although all heritage resources are relevant to the Heritage Landscape and are non-renewable, it is anticipated that few sites in the study area could have conservation value. As the presence and location of resources in the impact areas still need to be confirmed by a physical survey, at this level, the potential impacts will be assessed based on a worst-case scenario without mitigation measures in place to avoid direct impacts to heritage resources as outlined in Table 4.

**Table 4. Heritage resources in the study area**

		<b>Places, buildings, structures and equipment of cultural significance</b>
	<b>3(2)(a)</b>	Description of resource: None
		Potential impact: None
		<b>Places to which oral traditions are attached or which are associated with living heritage</b>
	<b>3(2)(b)</b>	Description of resource: Places associated with oral traditions and living heritage. This should be confirmed prior to development during the social consultation/
		Potential impact: Degradation of indigenous knowledge systems, intrinsic cultural significance and alteration to the sense-of-place.
		<b>Historical settlements and townscapes</b>
	<b>3(2)(c)</b>	Description of resource: Zulu and Anglo Boer war background and settlements
		Potential impact: Alteration to the cultural landscape and sense-of-place. The surrounding area is characterized by informal settlements that would have impacted on viewscales.
		<b>Landscapes and natural features of cultural significance</b>
	<b>3(2)(d)</b>	Description of resource: Landscapes and natural features can be impacted on by development in the area.
		Potential impact: Degradation of indigenous knowledge systems, intrinsic cultural significance and alteration to the sense-of-place. The surrounding area is characterized by informal settlements that would have impacted on
		<b>Geological resources of scientific or cultural importance</b>
X	<b>3(2)(e)</b>	Description of resource: The area is of paleontological significance.
		Potential impact: Destruction of paleontological resources. An independent study will be conducted.
		<b>Archaeology and/or paleontology (Including archaeological sites and material, fossils, rock art, battlefields &amp; wrecks)</b>
X	<b>3(2)(f)</b>	Description of resource: Numerous sites are indicated in the surrounding area on the KZN Database and on SAHRIS including Stone age sites and rock art.
		Potential impact: Damage to and/or destruction of non-renewable archaeological resources.
		<b>Graves and burial grounds (e.g.: ancestral graves, graves of victims of conflict, historical graves &amp; cemeteries)</b>
X	<b>3(2)(g)</b>	Description of resource: Burial sites can be expected anywhere on the landscape.
		Potential impact: Damage to and/or destruction of burial grounds.
		<b>Other human remains</b>
X	<b>3(2)(a)</b>	Description of resource: Unmarked graves.
		Potential impact: Unmarked graves can be accidentally exposed
		<b>Sites of significance relating to the history of slavery in South Africa</b>

	<b>3(2)(h)</b>	Description of resource: None
		Potential impact: None
	<b>3(2)(i)</b>	<b>Movable objects</b>
		Description of resource: None
		Potential impact: None

## 8. Recommendation

This NID notes that the greater study area is rich in heritage resources and although the area of impact has not been subjected to a physical assessment, similar resources could occur in the impact area. Without a heritage assessment of the area the proposed project could have a negative impact on non-renewable heritage resources. It is therefore recommended that a Phase 1 Heritage Impact assessment is conducted for the project.