

Phase I Heritage Assessment of P22051 SANRAL Newcastle to Ncandu River.

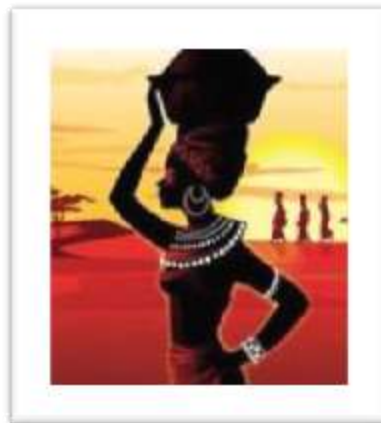
Province: KwaZulu-Natal

District Municipality: Amajuba District Municipality

Local Municipality: Newcastle Local Municipality

Implementing Agent: Delta Built Environment Consultants

For: Delta Built Environment Consultants



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List of Abbreviations and Acronyms

EIA	Early Iron Age
ESA	Early Stone Age
HIA	Heritage Impact Assessment
Historic Period	Since the arrival of White Settlers – c. AD 1820, in this part of the country.
HWC	Heritage Western Cape
Iron Age	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
KZN	KwaZulu-Natal
LIA	Later Iron Age
LSA	Later Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998) and associated regulations (2010)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
Stone Age	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

Details of Specialists

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Brief Résumé of Consultant

Sian Hall

Sian Hall is trained as a Social and Cultural Anthropologist, but with a strong Archaeological component throughout her Undergraduate and Honour's coursework. This includes Physical Anthropology/Early Man Studies; Rock Art; a mini-thesis comprising of an archaeological dig and analysis of the resulting Late Stone Age Archaeology from the Bavianskloof, Eastern Cape; and an Honour's Thesis comprising of Historical-, and Ethno-archaeology, and symbolic usage of space of a historical Methodist Mission Station in the Eastern Cape, and a modern Mfengu community in the Ciskei. Sian Hall also spent two years working towards a Master's Degree in the Department of Archaeology, Cape Town. During this period she completed a number of seasons digging at Dune Fields Archaeological site at Eland's Bay, Western Cape, and conducting an extensive Ethno-archaeological and Anthropological study among shell fish collectors at Eland's Bay.

During the years of 1991 to 1993 Sian researched the Iron Age cities of the Venda petty royalty along the northern slopes of the Soutpansberg Mountains. Here she mapped certain of these extensive Iron Age cities, and pieced together their history through the collecting of oral history from the Tshivula group of people to whom these cities had belonged.

Sian has also extensively researched the Bantu-speaking rock art of the Soutpansberg Mountains area, and this led to a co-authored academic publication on the Bantu-speaking rock art of southern and Central Africa.

Sian's greatest interest lies in the history and status of the indigenous domestic dogs of Africa, which she has researched, and spoken and published on, for a number of decades. Her book, *The Dogs of Africa*, forms the definitive work of the dog in Africa. This was published by Alpine Publishers, in the USA.

Sian is the author of a numerous of books, novels and articles, both academic and for the public. A number of these publications include subject matter relating to ethnography, archaeology, history and anthropology.

More recently, over the last seven years (Covid intervening) Sian Hall has been working towards a Master of Philosopher Degree in "Conservation of the Built Environment", in the Architecture Department, University of Cape Town. During the course of this degree, it has been necessary to compile a number of reports analysing various historic buildings and cultural landscapes, and development initiatives. The methods and theory presented in this course has been implemented in the investigation and analyses of this report.

Sian has published a book through Lambert Press (9th January, 2018) on the remarkable renovation of the Old Church at Centocow Mission Station, KwaZulu-Natal, conducted by the architect, Robert Brusse. This book is entitled *Restoration of the Old Church, Centocow Mission Station*.

Sian has also published a novel, *The Anthropologist, the Waterfall, and the Very Worried Sangoma*, set in Howick and the Drakensberg area of KZN (Reach publishers, 2021); and a cynological book on the Rhodesian Ridgeback dog breed, *The Influence of the Bull Terrier in the Rhodesian Ridgeback Breed* (Reach Publishers, March 2022).

Sian's other books, based upon southern African oral history, include: Sian Hall and Rob Marsh, *Beyond Belief: Murders and mysteries of Southern Africa* (Struik Publishers, January 1st, 1996) (oral history); *Haunted: Ghosts and Spirits of Southern Africa* (1st January, 2011) (oral history); and the cynological analysis which forms the definitive study of the dog breeds of Africa, *Dogs of Africa* (1st February, 2003). This book is now regarded as a rare book, and as "Africana".

Sian Hall's books are kept in special sections in various major University Libraries within South Africa.

Declaration of Consultants Independence

Sian Hall is an independent consultant to **Delta Built Environment Consultants**, and has no business, financial, personal or other interest in the activity, application or appeal in respect of which she was appointed, other than fair remuneration for work performed in connection with

the activity, application or appeal. There are no circumstances whatsoever that compromise the objectivity of this specialist performing such work.



Executive Summary

A First Phase Heritage Impact Assessment survey of the proposed **P22051 SANRAL Newcastle to Ncandu River**¹, Amajuba District Municipality, and Newcastle Local Municipality, KwaZulu-Natal, identified two heritage sites within the footprint, as well as several others both apparent, and possible, heritage sites within a close vicinity of the footprint. The sites within the footprint include two unmarked graves and a Later Iron Age Stone Circle. The two unmarked graves are situated within 7m from the previous *Alternative Layout 1 Bypass Route*². The Iron Age Site is situated more than 250m from the *proposed Bypass Routes*³ and will not be affected by any of the proposed developments. Given the close proximity of the two unmarked graves to *Alternative Layouts 1 and 0* it is proposed *Layout Alternatives 4a and 4b*⁴ rather be considered from a heritage perspective. The area is also not part of any known cultural landscape.

None of the above-mentioned sites will impact directly on the proposed development, on the preferred route, as planned. There is no archaeological reason why the proposed development may not proceed as planned, given that the recommendations presented in this report are adhered to.

However, attention is drawn to the South African National Heritage Resources Act, 1999 (Act No. 25 of 1999), and to the KwaZulu-Natal and Amafa Research Institute Act (Act No. 5 of 2018), which, requires that operations that expose archaeological or historical remains, fossils, or other potential grave sites, should cease immediately, pending evaluation by the provincial heritage resources authority

¹ At the co-ordinates mentioned on page 7 the text.

² These routes are no longer relevant.

³ These routes are no longer relevant, since the route presented, and discussed, in this report is now the route decided upon for implementation.

⁴ This will now be referred to in this report as the preferred route as it is route which has been decided upon for implementation.

1. Limitations to the Study

None.

2. Background Information to the Project

2.1. Background Information Introduction

Delta Built Environment Consultants have appointed Sian Hall to compile a Heritage Impact Assessment satisfying Section 38(8) of the National Heritage Resources Act (NHRA) in conjunction with a Basic Assessment process conducted under the National Environmental Management Act (NEMA) for the proposed development of P22051 SANRAL Newcastle to Ncandu River, Newcastle Local Municipality, KwaZulu-Natal. A brief synopsis of the background to this project is provided in Table 1.

The length of the preferred route is 7.2 kilometres long, and the size of the borrow pits to the west of the preferred route are 1.49 hectares each, and there are three borrow pits.

This report is intended to inform stakeholders of this project about the Heritage Significances of the proposed development footprint. Stakeholders include **Delta Built Environment Consultants, Amafa Provincial Heritage Authority, and SAHRA National Heritage Authority.**

This Phase I Heritage Impact Assessment is carried out in terms of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998), and designed to meet the requirements of the National Heritage Resources Act (NHRA), 1999 (Act No. 25 of 1999), and the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No. 05 of 2018).

2.2. Details of the Area Surveyed

The study area is located in the N11 Newcastle, KwaZulu Natal, within the Newcastle Local Municipality. The GPS coordinates for the proposed starting point of the Bypass is given as 27°45'17.15" S 29° 57' 53.39" E. The GPS coordinates for the end point of the Bypass is 27° 47'24.179" S 29° 57'12.3.2" E. However, it should be mentioned that previously three alternative routes, namely Route 0, Route 1 and Route 3 had been proposed within these spatial points. These are illustrated in Figures 10, 11 and 12.

In addition to the existing preferred footprint (Figure 13), the footprint also includes three borrow pits that will be utilised for the construction of the roads (Figures 8 and 9). These are located adjacent to the previous existing route (originally given as Alternative Route 0) opposite Albert Wessels Drive (Fig 10). The GPs coordinates of the borrow pits are given as:

Borrow Pit 1: 27° 45' 36.81" S 29° 57' 35.16" E

Borrow Pit 2: 27° 45' 29.77" S 29° 57' 41.18" E

Borrow Pit 3: 27° 45' 19.38" S 29° 57' 50.78" E

2.3. Table of Background Information

TABLE 1. DETAILS OF HIA APPOINTMENT AND DEVELOPMENT

Client Name	Triplo4 Environmental Consultants
Consultants	Sian Hall of Ancient Places Pty. Ltd, for Delta Built Environment Consultants.
Document Title	Phase I Heritage Assessment of P22051 SANRAL Newcastle to Ncandu River.
Type of Development	<p>The South African National Roads Agency Limited (SANRAL) proposes to re-align, rehabilitate and upgrade the National Route 11 (N11), Newcastle Bypass, KwaZulu-Natal.</p> <p>The project is located on N11 Section 3, which is also known as the Newcastle Bypass (Figure 13). Due to concerns over safety along this section of N11, it was deemed necessary that the existing portion be realigned to improve the current operating conditions.</p> <p>A section of the N11 will be realigned with the new road interchanges at Ladysmith Drive (Allen Street) and Albert Wessels Drive. A number of route alternatives were initially being investigated. These alternative routes are described below:</p> <ul style="list-style-type: none"> • Layout Alternative 0 – existing or current alignment of the N11 • Layout Alternative 1 – the initial layout proposed in 2012 • Layout Alternative 4a and 4b – the new layout for the proposed

	<p>alignment. This is the route that has now been decided upon.</p> <ul style="list-style-type: none"> The length of the preferred route is 7.2 kilometres long, and the size of the borrow pits to the west of the preferred route are 1.49 hectares each, and there are three borrow pits.
Rezoning or Sub-division	N/A
Terms of Reference	To carry out a Heritage Impact Assessment (HIA)
Address	Umzumbe Local Municipality, KZN.
GPS Co-ordinates	<p>The GPS coordinates for the proposed starting point of the Bypass is given as 27°45'17.15" S 29° 57' 53.39" E. The GPS coordinates for the end point of the Bypass is 27° 47'24.179" S 29° 57'12.3.2" E.</p> <p>The GPs coordinates of the borrow pits are given as: Borrow Pit 1: 27° 45' 36.81" S 29° 57' 35.16" E Borrow Pit 2: 27° 45' 29.77" S 29° 57' 41.18" E Borrow Pit 3: 27° 45' 19.38" S 29° 57' 50.78" E</p>
Local Municipality	Newcastle Local Municipality
District Municipality	Amajuba District Municipality
Legislative Requirements	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA), and of the KwaZulu-Natal and Amafa Research Institute Act (Act No. 5 of 2018).

3. Terms of Reference

A Phase I Basic Heritage Impact Assessment has been advised by Amafa Provincial Heritage Authority, KZN, relating to the proposed development. This development includes the upgrading, re-aligning, and rehabilitation of National Route 11 (N11) (Newcastle Bypass) by the

South African National Roads Agency Limited (SANRAL). There will also be borrow pits associated with the development.

As mentioned, the project is located on N11 Section 3, which is also known as the Newcastle Bypass (Figure 13). Due to concerns over safety along this section of N11, it was deemed necessary that the existing portion be realigned to improve the current operating conditions. The section of the road that is to be re-aligned includes new road changes at Ladysmith Drive (Allen Street), and Albert Wessels Drive.

This report refers to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA), Section 38 (1)(c)(i), which states that:

“...any person who intends to undertake a development categorised as—any development or other activity that will change the character of a site – exceeding 5000m² in extent...”;

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

NHRA Section 38 (1)(c)(i) is the primary clause that has triggered the request for this Phase II Built Heritage Assessment.

A Heritage Impact Assessment Report of a development site should generically cover:

1. The identification of all heritage resources within the development footprint, and in the area surrounding the site in question.
2. The mapping of these heritage resources.
3. An assessment of the heritage significance of these resources.
4. An assessment of the potential impact that the development would have on these heritage resources.
5. An appraisal of the impact such development would have on the affected heritage resources, in relation to the sustainable social and economic benefits to be derived from the development.
6. Public and Stakeholder Consultation.
7. Various options available to the clients and developers should the development adversely affect the heritage resources.

As stipulated in the NHRA Section 38 (3), which states that:

(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following

must be included:

- (a) The identification and mapping of all heritage resources in the area affected;*
- (b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;*
- (c) an assessment of the impact of the development on such heritage resources;*
- (d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;*
- (e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;*
- (f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and*
- (g) plans for mitigation of any adverse effects during and after the completion of the proposed development.*

According to Section 3 (2) of the NHRA, the heritage resources of South Africa include:

- “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 natural features of cultural significance;*
- e. geological sites of scientific or cultural importance;*
- f. archaeological and palaeontological sites;*
- g. graves and burial grounds, including.*

- ancestral graves;*
- ii. royal graves and graves of traditional leaders;*
- iii. graves of victims of conflict;*
- iv. graves of individuals designated by the Minister by notice in the Gazette;*
- v. historical graves and cemeteries; and*
- vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);*
- h. sites of significance relating to the history of slavery in South Africa;*
- i. movable objects, including objects recovered from the soil or waters of South Africa, including*
- archaeological and palaeontological objects and material, meteorites and rare geological specimens;*
- ii. objects to which oral traditions are attached or which are associated with living heritage;*
- iii. ethnographic art and objects;*
- iv. military objects;*
- v. objects of decorative or fine art;*
- vi. objects of scientific or technological interest; and*
- vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)."*

In terms of section 3 (3) of the NHRA, a place or object is to be considered part of the

national estate if it has cultural significance or other special value because of:

- “a. its importance in the community, or pattern of South Africa's history;*
- b. its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;*
- c. its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;*
- d. its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;*
- e. its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;*
- f. its importance in demonstrating a high degree of creative or technical achievement at a particular period;*
- 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; and*
- i. sites of significance relating the history of slavery in South Africa.”*

The NHRA regulations of 2000 refer for the most part to the processes allowing for permits to be issued for the alteration, destruction or modification of heritage sites and features. These include the following:

- Protected areas
- Burial grounds and graves
- Wrecks
- Exportation of heritage objects
- Reproduction of national heritage sites
- Archaeological and palaeontological sites

- National heritage sites, provincial heritage sites, provisionally protected place, structures older than 60 years

This report reflects the independent opinions of the author, and its recommendations to the legislation, as well as that of international conservation principles.

4. Location of the Study Area and Footprint

The upgrading, re-aligning, and rehabilitation of National Route 11 (N11) (Newcastle Bypass) by the South African National Roads Agency Limited (SANRAL) proposed development lies within the Newcastle city area.



Figure 1. Regional Map indicating the wider location of the study footprint within the wider South African context.

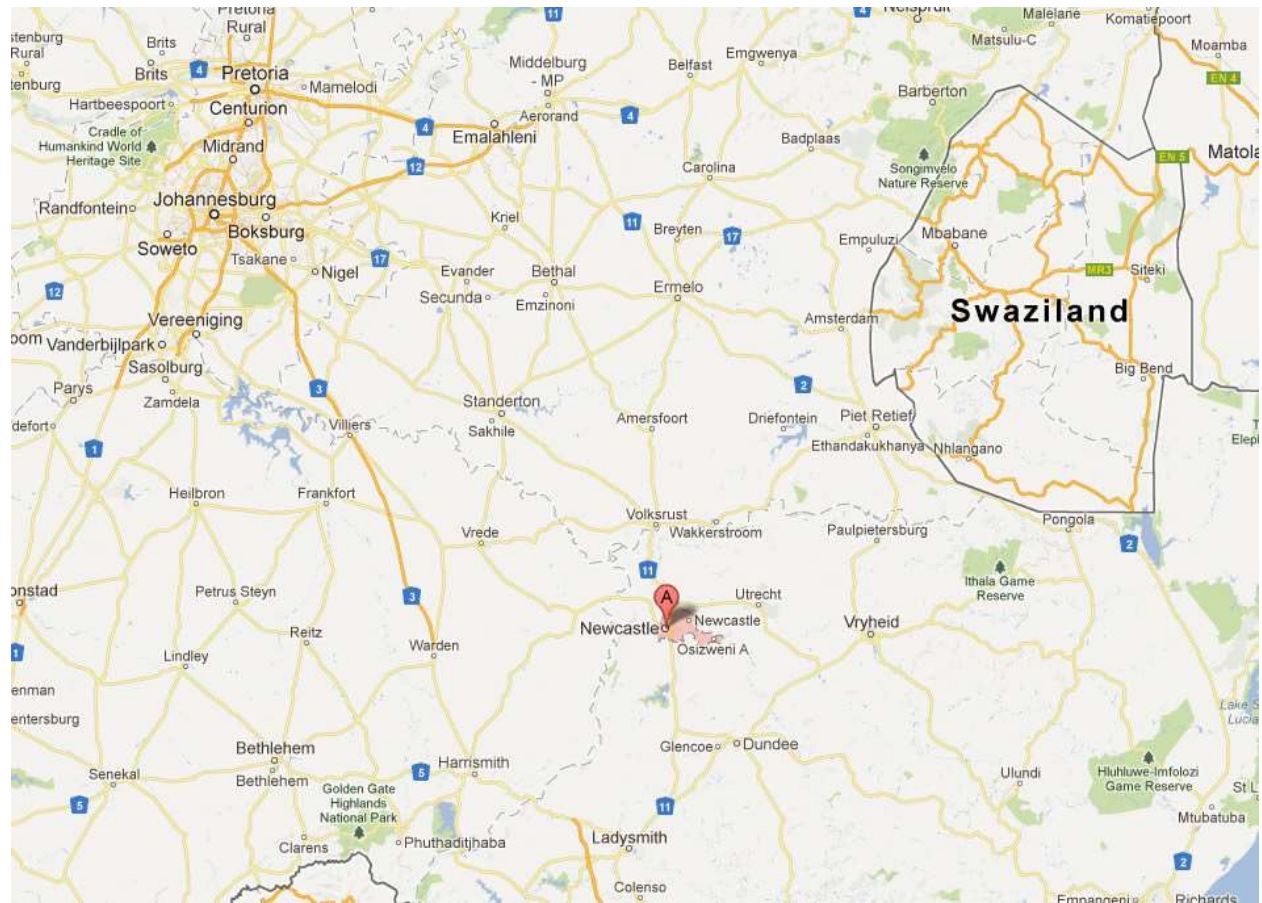


Figure 2. Newcastle is located within the heartland of KwaZulu-Natal, in an area known as the Battlefields. To the north is Volksrust, to the east is Urecht and Vryheid, to the south lies Dundee and Ladysmith, and to the west is Warden.



Figure 3. Newcastle lies within the Newcastle Local Municipality which is bordered by Emadlangeni Local Municipality to the east, and Dannhauser Municipality to the south.



Figure 4. Figure showing the boundaries of Newcastle town. The study area is indicated by the blue circle.

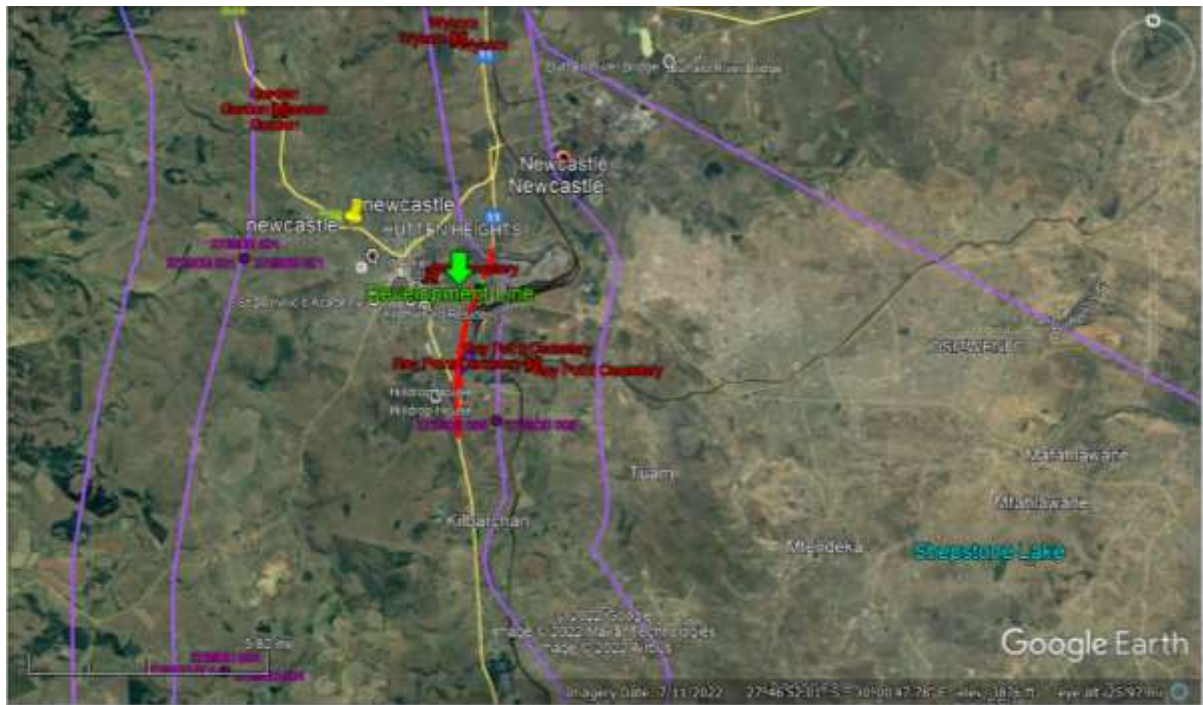


Figure 5. .A more detailed Google Earth Map indicating the proposed development area. Google Earth.

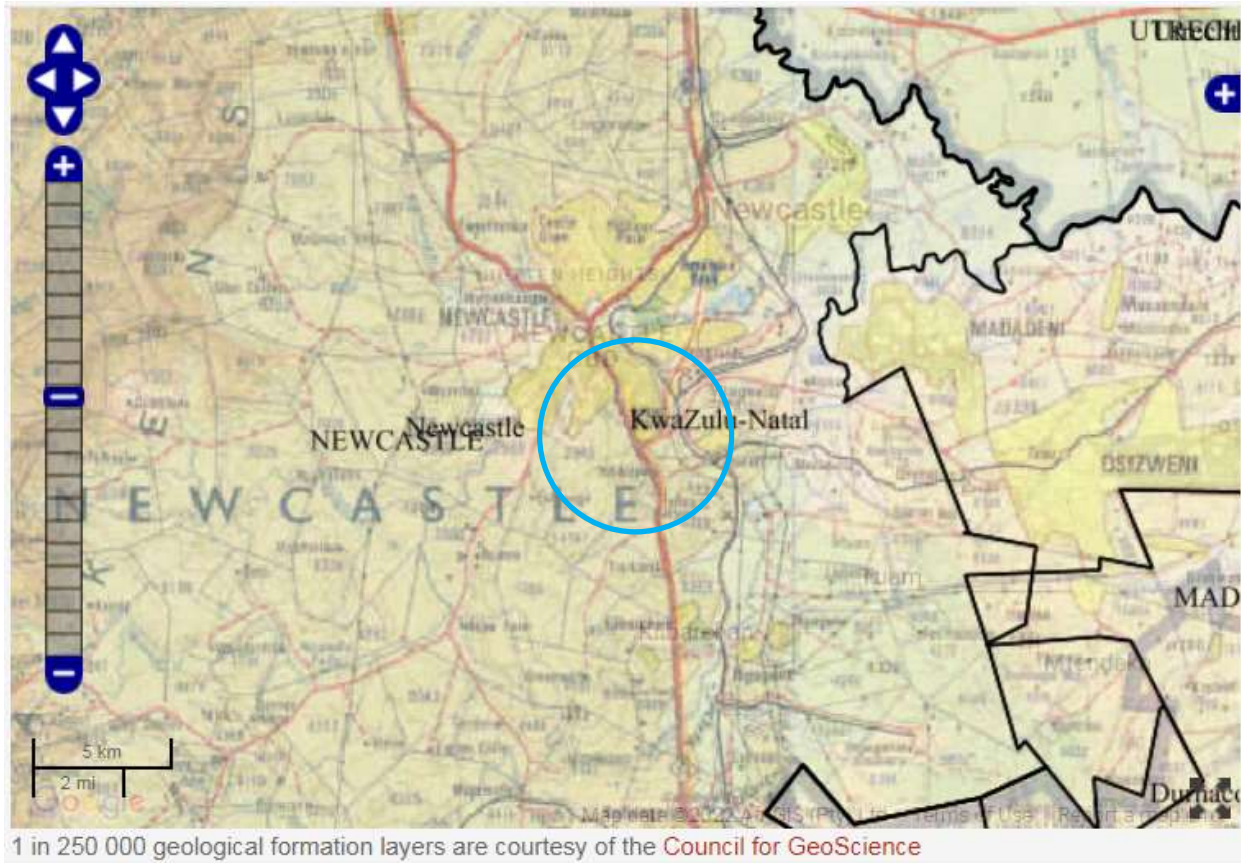


Figure 7. Topographical Map indicating the approximate study area which is marked by the blue circle. SAHRA Palaeosensitivity Map.

5. Background to Archaeological and Historical History of the Area

The greater Newcastle area has never been systematically surveyed for archaeological heritage sites. Only five sites are recorded in the data base of the KwaZulu-Natal Museum. These include two rock art sites with later Stone Age material and three Later Iron Age sites with characteristic stone walling. Oliver Davies, a pioneer archaeologist, has also recorded Middle Stone Age sites to the south of Newcastle. None of these sites occur in the close vicinity of the project area.

The San were the owners of the land for almost 30 000 years but the local demography started to change soon after 2000 years ago when the first Bantu-speaking farmers crossed the Limpopo River and arrived in South Africa. Around 800 years ago, if not earlier, Bantu-speaking

farmers also settled within the greater Newcastle area. Although some of the sites constructed by these African farmers consisted of stone walling not all of them were made from stone. Sites located elsewhere in the KwaZulu-Natal Midlands show that many settlements just consisted of wattle and daub structures. These Later Iron Age sites were most probably inhabited by Nguni-speaking groups such as the amaBhele and others (Bryant 1965). However, by 1820 the original African farmers were dispersed from this area due to the expansionistic policies of the Zulu Kingdom of King Shaka.

African refugee groups and individuals were given permission to settle in the area by the British colonial authorities. After 1845 most of these became farm labourers. After the Anglo-Zulu war of 1879, and the Bambatha Rebellion of 1911, many of the African people in the study area adopted a Zulu ethnic identity.

European settlement of the area began soon after 1838 when the first Voortrekker settlers marked out large farms in the area. However, most of these farms were abandoned in the 1840's when Natal became a British colony. Many of these initial farms were then reoccupied by British immigrants.

Newcastle started off life as Post Halt Two on the journey between Durban (then Port Natal), the Zuid-Afrikaansche Republiek, and Johannesburg. The city was strategically placed in 1854 by the Surveyor General of the Natal Colony, Dr. PC Sutherland. The city was later known as the Waterfall River Township because of the Ncandu River.

In 1864, the town of Newcastle was founded on the site, becoming the fourth settlement to be established in Natal after Durban, Weenen and Pietermaritzburg. Newcastle was named after the British Colonial Secretary, the Duke of Newcastle. In 1876 Fort Amiel was built to ward off a possible Zulu attack (Derwent 2006). In 1873 Newcastle became a separate electoral division.

To commemorate Queen Victoria's Diamond (60th) Jubilee a sandstone construction of a town hall started in 1897, being completed two years later. The town was used as a depot by the British during both the First and Second Boer War. Newcastle functioned as a major transport junction and popular stopover for wagons and post chaises during the late 19th century. British preparation work for the Pretoria Convention of 1881 was done at Newcastle.

In 1890, the first train arrived in Newcastle and in 1891, Newcastle was declared a borough. The discovery of coal brought a new era of prosperity and several ambitious building projects were planned.

6. Background Information of the Survey

6.1. Methodology

6.1.1. Desktop Study

Desktop Study: Before any site visit was made to the study footprint, a detailed desktop analysis was made of the study footprint and the impact that the proposed development may have. This desktop study comprised the following:

- The study of available aerial photographs covering the footprint.
- The study of available heritage databases.
- A search of the archaeological databases housed in the KwaZulu-Natal Museum.
- Literature survey covering the study area.
- An examination of the SAHRIS website database covering previous surveys in the area, and the listing of known heritage sites and features, was consulted for potential heritage site reports covering the area.

6.1.2. Site Visit

Site Visit: a site visit was made to the study footprint in September 2014, by Frans Prins of Active Heritage cc. The study footprint was walked and examined carefully according to accepted archaeological methodology. No obvious anthropogenic, or archaeological, features were noted.

6.1.3. Stakeholder Consultation

Stakeholder Consultation: Conversations were held with surrounding community members during the visit to the site, and questions directed regarding cultural information about the site were made.

6.1.4. Photographs

Photographs: a large number of photographs documenting the footprint were taken.

6.2. Restrictions Encountered During the Survey

6.2.1. Visibility

In general, visibility of the study footprint was good although dense grassland vegetation may have obscured heritage features in some areas.

6.2.2. Disturbance

No disturbance of any potential heritage features was noted.

6.2.3. Details of Equipment used in the Survey

- GPS Garmin Etrek.
- Digital Cameras: Canon Powershot A460.
- All readings were taken using the GPS. Accuracy was achieved to a level of 5 metres.

7. Assessment of Significance and Value of the Study Area and Footprint

7.1. Locational Data

Province: KwaZulu-Natal.

Municipality: Newcastle Local Municipality. Amajuba District Municipality.

Town: Newcastle.

7.2. Description of the General Area Surveyed

The area surveyed consisted predominantly of altered grasslands that occurs adjacent to all the alternative routes identified. A wetland occurs on the eastern section of the footprint. The routes identified run adjacent to rural land as well as to urban developments of the greater Newcastle area. The borrow pits occur opposite Wessels Drive in a near urban context. This area is highly disturbed with a low probability of any heritage features.



Figure 8. Aerial photograph showing the location of Borrow Pits 1, 2 and 3 in September 2014. Nema Consulting; Frans Prins, September 2014.



Figure 9. Aerial photograph showing the location of Borrow Pits 1, 2 and 3 in October 2022. Google Earth; Delta BEC.

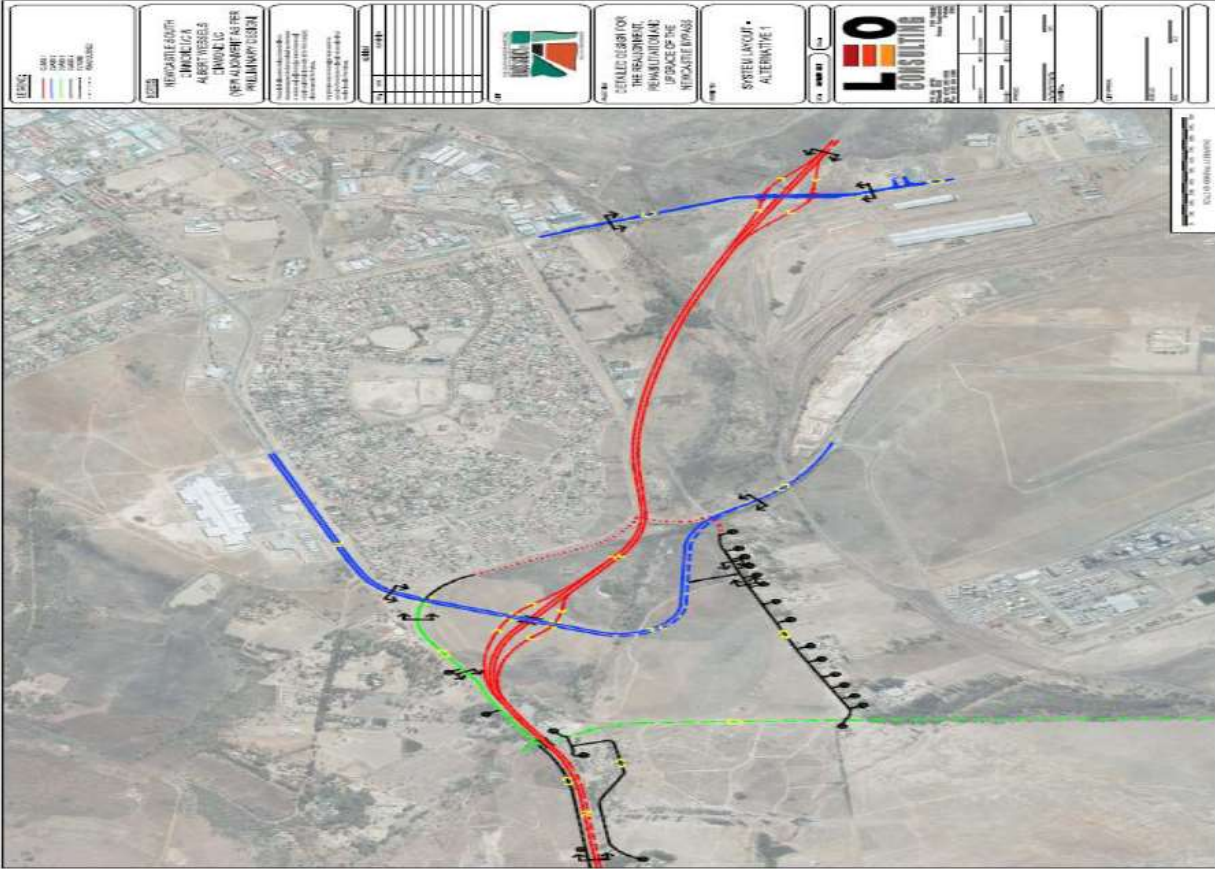


Figure 11. Map showing the locality of Bypass Alternative Layout 1 (Source: Nema Consulting).



Figure 12. Map showing the location of Bypass Alternative Layouts 3 and 4 (Source: Nema Consulting)



Figure 13. Map showing the final preferred location of Newcastle to Ncandu Bypass. (Source: Delta BEC).

7.3. Heritage Markers on the Study Footprint and on the Surrounding Area

There are a number of heritage markers/features, and possible heritage markers/features located on, or within the immediate environs of the study footprints. Some of these are, apparently, significant, while others are not, and are unlikely to impact upon the proposed development. These include:

Sites that will Impact upon the Development:

Only three heritage sites occur on the actual footprint:

- Two grave sites that have been identified in an earlier survey of the area (Mngomezulu, 2012) (see Figure 14 and 15).
- A Late Iron Age site that was located on the southern section of the footprint (see Figure 16).

The contexts of these are discussed in Tables 2, 3 and 5.

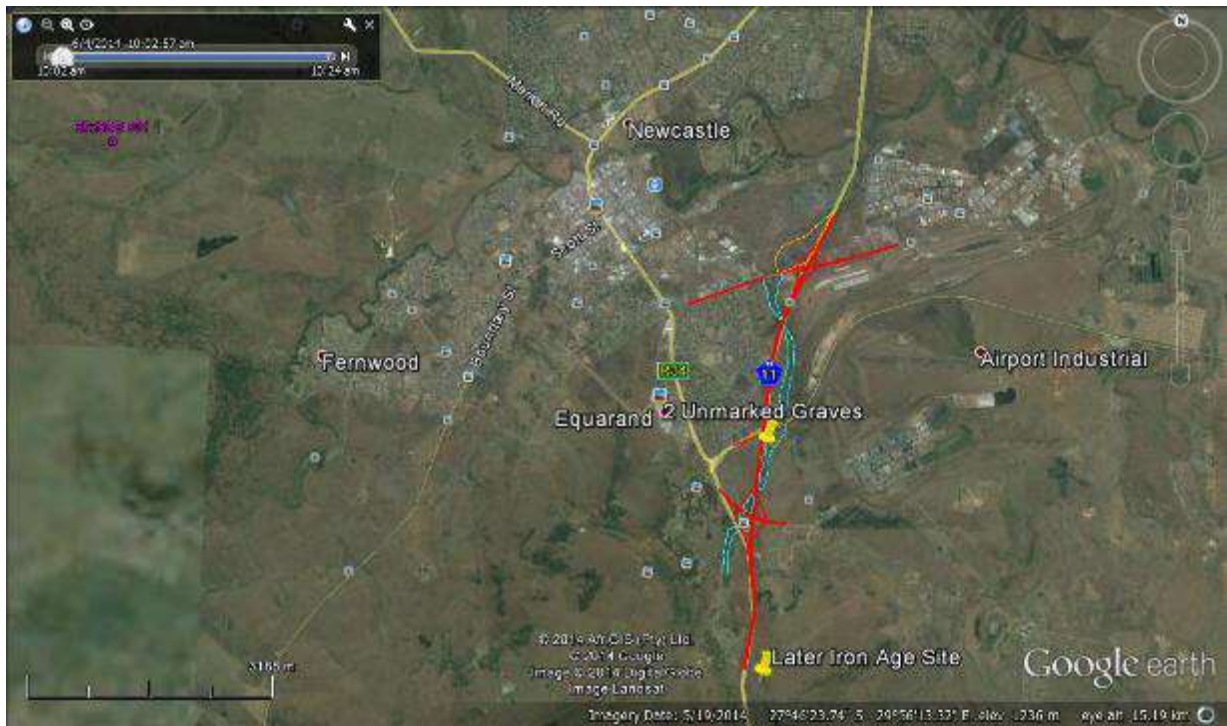


Figure 14. Google aerial photograph showing the location of the two unmarked graves, and Iron Age site, situated adjacent to the proposed Newcastle Bypass. Google Earth; Frans Prins, September 2014.

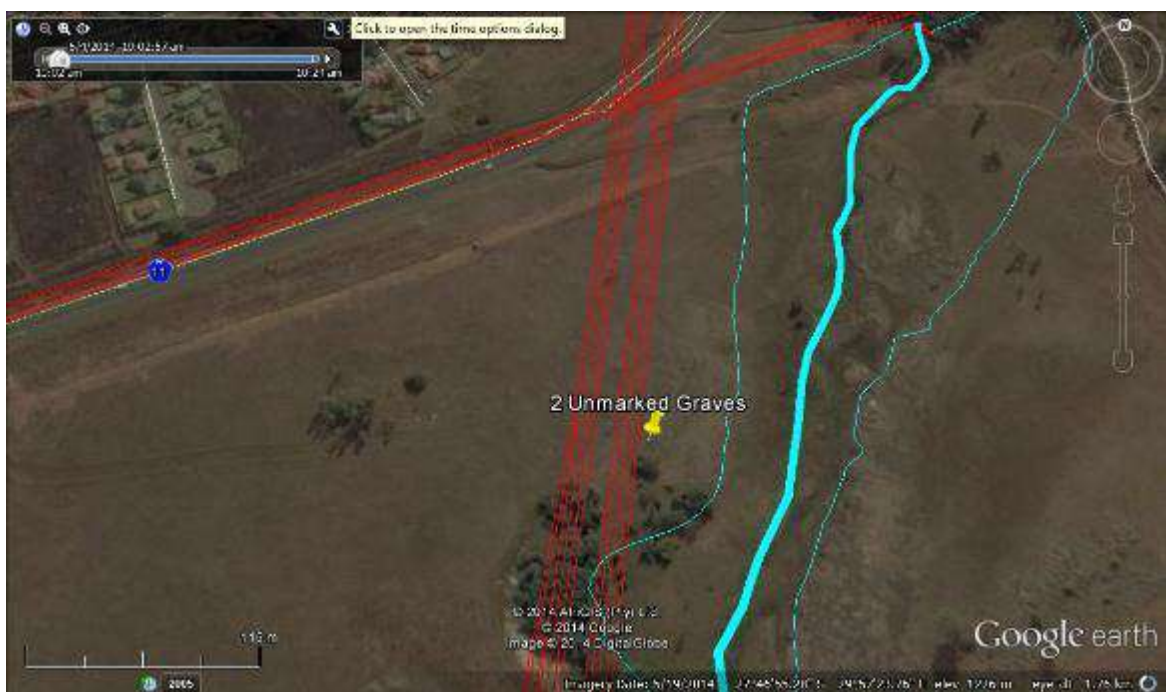


Figure 15. Google aerial photograph showing the location of the two unmarked graves situated adjacent to the proposed Newcastle Bypass. Google Earth; Frans Prins, September 2014.

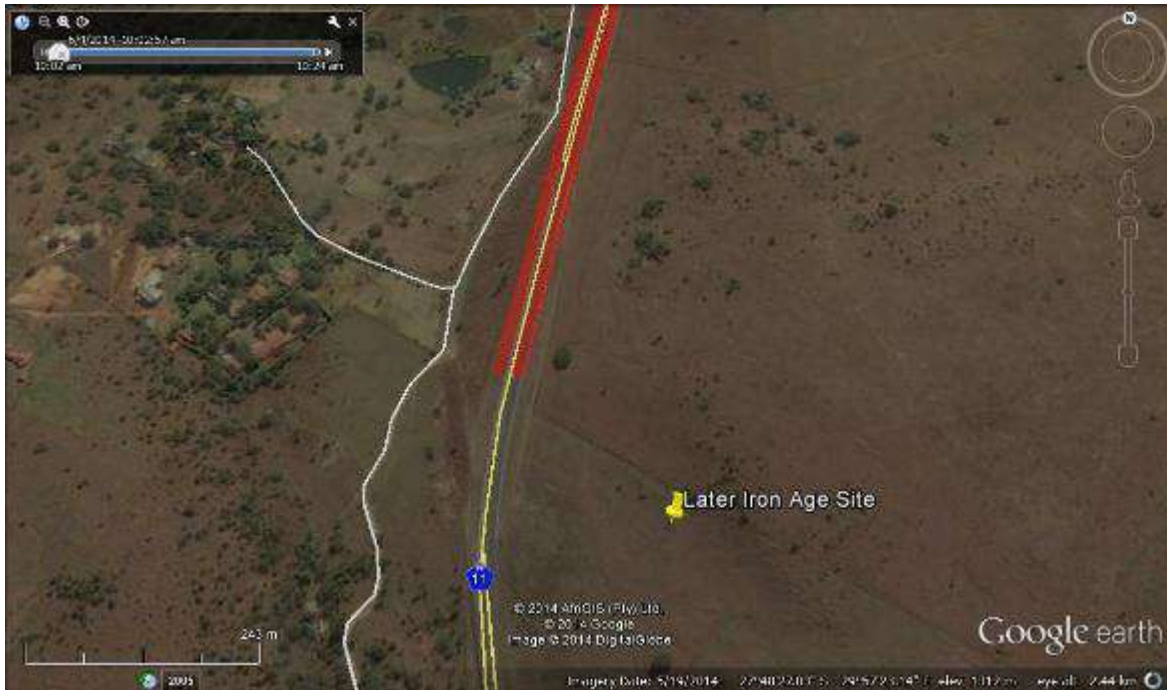


Figure 16. Google aerial photograph showing the location of the Later Iron Age Site to the immediate south east of the proposed Newcastle Bypass. Google Earth; Frans Prins, September 2014.



Photo 1. Unmarked grave 1. Frans Prins, September 2014.



Photo 2. Unmarked grave . Frans Prins, September 2014.



Photo 3. The remains of a Later Iron Age stone circle situated 250m to the south east of the proposed Newcastle Bypass. Frans Prins, September 2014.

Sites that Occur Within Close Vicinity of the Study Area:

- There is an extensive area on which distinct soil erosion has taken place. This may expose Early, Middle and Late Stone Age artefacts, engraved stones (*l'art mobilier*); Iron Age grindstones, pottery, and other forms of human activity from the past (Figure 17).
- Possible graves associated with ruined, and abandoned homesteads, located in the close vicinity of the footprint. Graves may also be present within the proximity of existing homesteads within the close vicinity of the footprint
- Possible historic structures or foundations
- Possible historic middens.
- See Figures 18, 19 and 21 .

The contexts of these are discussed in Tables 2, 3 and 5.



Figure 17 . The area encircled by the blue line denotes an area in which there appears to have been extensive erosion. This may have uncovered various forms of human activity from the past, in the form of archaeological artefacts. Google Earth.



Figure 18. Archaeological Site 2. The imprint of possible archaeological homesteads, indicated by the enclosed blue line is located 120 metres from the closest point of the development line. It may be impacted upon during the development works. A buffer of 20 metres must be kept from the delineation of this enclosed area. Any development work must clear well clear of this site. Google Earth.



Figure 19. Archaeological Site 1. The imprint of possible archaeological homesteads, indicated by the enclosed blue line is located 231 metres from the closest point of the development line. It may be impacted upon during the development works. A buffer of 20 metres must be kept from the delineation of this enclosed area. Any development work must clear well clear of this site. Google Earth.



Figure 20. The Old Cemetery is located 2.3 kilometres from the closest point of the development. It will not in any way impact upon the development. Google Earth.

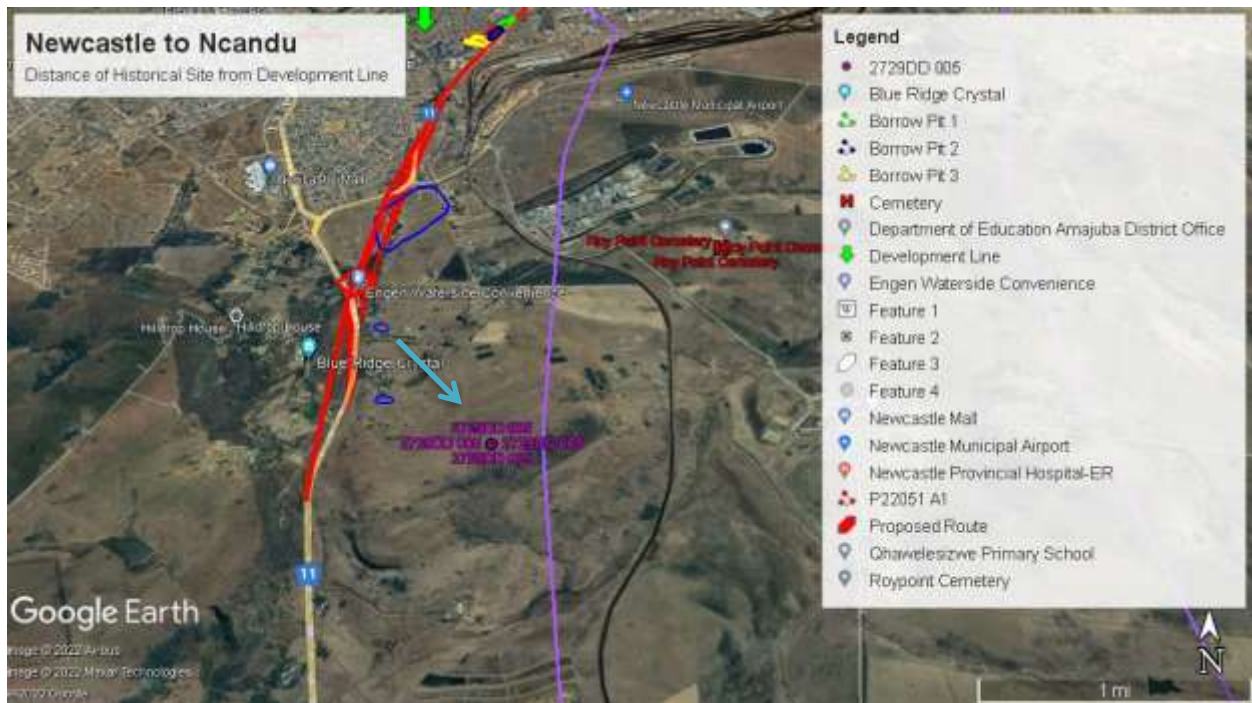


Figure 21. A Historical Period site, indicated by the blue arrow is located 1.21 kilometres from the closest point of the development line. It will not in any way impact upon the development. Any development work must clear well clear of this site. Google Earth.

7.4 Table Listing Obvious and Possible Sites within a One to Two Kilometre Radius of the Development

The following Table 2. lists these heritage features, and comments upon the likelihood of incidence, both within the study footprints, and within a one kilometre to two kilometre radius of the study footprint.

TABLE 2. PRESENTING THE PRESENCE AND LIKELY INCIDENCE OF PREHISTORIC, HISTORIC AND HERITAGE FEATURES BOTH WITHIN THE STUDY FOOTPRINTS AND WITHIN A 1 KILOMETRE OF THE STUDY FOOTPRINTS

Table 2. Heritage features and likelihood of incidence

Type of Heritage Feature	Degree of Incidence	Within Footprint, or Degree of Likelihood within Footprint	Within 1 kilometres radius of footprint
Two unmarked grave sites	Present.	Within the footprint. Located immediately adjacent to each other. Each grave covers approximately 1.8 metres. Difficult to date but they appear to be older than 60 years. The graves are situated 7 metres to the right of Bypass Layout Alternatives 0 and 1.	Within the footprint.
Later Iron Age Site	Present. Stone circle of approximately 10 metre diameter. This circle is probably the remains of an ancient cattle byre. No pottery or other artefacts were noted on the site.	Later Iron Age Site to the immediate south east of the proposed development	Within the development footprint.
Historic structures or foundations.	Possible	Not within the study	the study

Archaeological Site 2	features/graves on the eastern side of the study footprint.	footprint.	footprint. Possibility of graves or features, associated with old homesteads within close vicinity of the study footprint.
Historic structures or foundations. Archaeological Site 1.	Possible features/graves on the eastern side of the study footprint.	Not within the study footprint.	231 metres from the study footprint. Possibility of graves or features, associated with old homesteads within close vicinity of the study footprint.
Prehistoric and Historic middens	Possible Incidence associated with all Archaeological sites.	Possibility of presence.	Possible.
Oral history and mythology	Unlikely.	Not indicated	Not indicated

7.5 Table of Present Heritage Significance Gradings

The various heritage resources associated with SANRAL Newcastle to Ncandu Bypass study footprint Significance Gradings are as follows:

TABLE 3. VARIOUS HERITAGE INDICATORS PRESENT ON UMZUMBE LIBRARY STUDY FOOTPRINT

Heritage Indicator	Historic	Aesthetic	Scientific	Social	Rarity	Representivity
Two unmarked grave sites	Possible	No	Most likely low	Possible	No	N/A
Later Iron Age Site	Possible	No	No	Possible	No	N/A
Abandoned historic/prehistoric homestead,	Possible	No	Low	Possible	No	N/A

Archaeological Site 2 Abandoned historic/prehistoric homestead, Archaeological Site 1						
	Possible	No	No	Possible	No	N/A

7.6 Table of Heritage Resource Rating Guidelines by SAHRA

The following Table 4 provides the various ratings of heritage resources, following the guidelines as outlined by SAHRA. These ratings will guide the ratings of significance of the heritage resources and indicators present at the proposed SANRAL Newcastle to Ncandu Bypass development.

Table 4. Field rating and recommended grading of sites (SAHRA 2005):

TABLE 4. FIELD RATING AND RECOMMENDED GRADING TABLE OF HERITAGE INDICATORS (BASED UPON FIELD RATING AND GRADING TABLE, SAHRA, 2005).

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

The following Table 5 provides a Statement of Significance for each of the heritage indicators present, and adjacent to, the proposed SANRAL Newcastle to Ncandu Bypass Development.

Table 5. Significance of Heritage Sites Located on the Development Area

HERITAGE CATEGORY	SIGINICANCE	TYPE OF MITIGATION	GPS CO-ORDINATES
Two unmarked grave sites	Medium to high locally. All graves older than 60 years of age are Generally Protected by the NHRA.	<p>A buffer of at least 10 metres must be maintained around these graves. That would imply that the previous trajectory of the proposed Bypass (layout Alternatives 0 and 1) must shift a few metres to the west.</p> <p>Alternatively, Layout 0 and 1 should have been rejected by the developers, and one of the other alternatives should have been favoured for development.</p> <p>It may also be that the developers will decide upon a Phase II HIA, by a grave relocation expert, in order to apply for a permit and a grave relocation exercise to be implemented.</p>	<p>S 27° 46' 57.0"</p> <p>E 29° 57' 25.1"</p>

			in order to apply for a permit and a grave relocation exercise
Later Iron Age Site	Stone circle of approximately 10 metres diameter. This circle is most probably the remains of an ancient cattle byre. No pottery or other artefacts were noted on the site. Generally Protected B. Medium to high locally. This site is protected by National and KZN provincial heritage legislation.	Not applicable as this site is situated more than 250 metres to the east of the present trajectory. The site is not threatened by the proposed development. However, it is important to maintain a buffer zone of at least 30m around this site. .	S 27°48' 34.09" E 29° 57' 26.84"
Archaeological Site 2	N/A	A buffer of 20 metres must be maintained around this site.	27°47'43.77"S 29°57'27.53"E
Archaeological Site 1.	N/A	A buffer of 20 metres must be maintained around this site.	27°48'7.51"S 29°57'33.01"E

7.7 Categories of Heritage Values and Indicators Relating to SANRAL Newcastle to Ncandu Development

TABLE 6. CATEGORIES OF HERITAGE VALUES AND INDICATORS RELATING TO SANRAL NEWCASTLE TO NCANDU DEVELOPMENT (BASED UPON FIELD RATING AND GRADING TABLE, SAHRA, 2005).

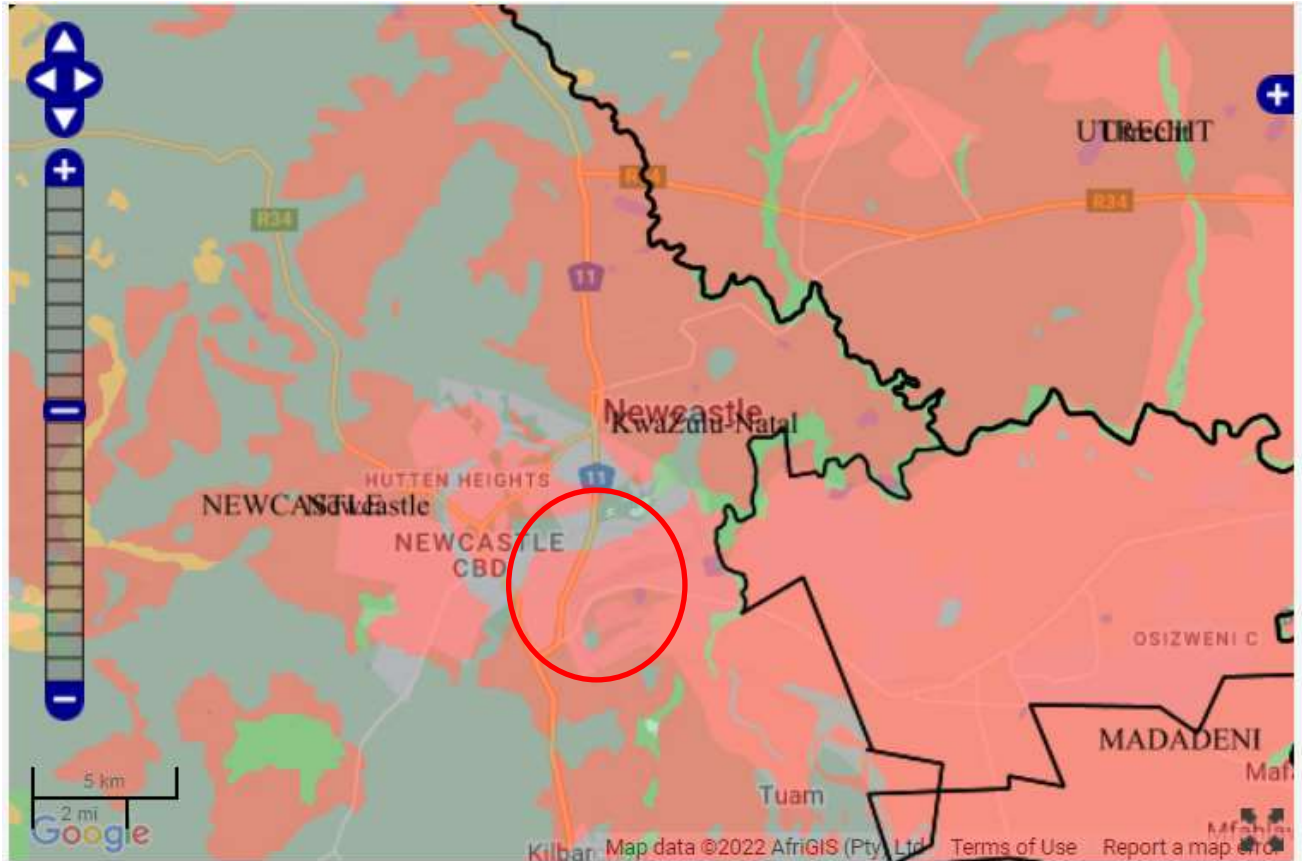
Significance criteria in terms of Section 3(3) of the NHRA	
Significance	Rating

1. Historic and political significance - The importance of the cultural heritage in the community or pattern of South Africa's history.	Two graves and one Later Iron Age Site. Generally Protected B.
2. Scientific significance – Possession of uncommon, rare or endangered aspects of South Africa's cultural heritage.	Not significant.
3. Research/scientific significance – Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage.	Not significant.
4. Scientific significance – Importance in demonstrating the principal characteristics of a particular class of South Africa's cultural places/objects.	Not significant.
5. Aesthetic significance – Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.	Not significant.
6. Scientific significance – Importance in demonstrating a high degree of creative or technical achievement at a particular period.	Not significant.
7. Social significance – Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.	Both the graves and the Later Iron Age site may hold social significance for members of the local community, or for people whose ancestors may have lived on this land in the past.
8. Historic significance – Strong or special association with the life and work of a person, group or organization of importance in the history of South Africa.	Not significant.
9. The significance of the site relating to the history of slavery in South Africa.	None.

8. Palaeontological Analysis

The Palaeo-Significance Overlay Map borrowed from SAHRIS (South African Heritage Resources Information System) official website indicates that the study footprint lies within an essentially red area. This denotes that it has a high palaeontological sensitivity, with a great likelihood of there being palaeontological deposits on the study footprint. From this perspective, further palaeontological investigation becomes necessary, and a Phase II Palaeontological Heritage Assessment will most likely have to be conducted by a registered Palaeontologist. If any

heritage features are uncovered during development, all work must immediately cease, and the provincial heritage authority, Amafa, must be notified, without delay.



1 in 250 000 geological formation layers are courtesy of the Council for GeoScience

Figure 22. Palaeo-Significance Overlay Map taken from SAHRIS official website. This map indicates that the footprint lies in an area red zone, denoting high a likelihood of palaeontological deposits. The location of the study footprint is indicated by a red circle. SAHRA website.

9. The National Heritage Resources Act as applicable to Heritage Features identified on the Study Footprints, and within a One Kilometre Radius of the Study Footprints

The National Heritage Resources Act (NHRA)(Definitions, section 2(v) the significance of heritage sites and artifacts, is determined by aesthetic, historical, scientific, social, spiritual, linguistic or technical value in relation to the uniqueness, condition of preservation, and research potential of each indicator. These significances have been discussed earlier in this

report, and the significances of these historic and heritage features and indicators assessed using various relevant heritage criteria, have been presented. These findings have contributed to the conclusions reached in this section of the report.

The primary clause of the NHRA that has triggered the request for this Basic Heritage Impact Assessment is Section 38 (1)(c)(i), which states that:

“...any person who intends to undertake a development categorised as—any development or other activity that will change the character of a site – exceeding 5000m² in extent...”.

The National Heritage Resources Act (NHRA) is very clear about the identification, recording and management of any heritage resources encountered during planned developments and heritage impact assessments. All heritage resources are afforded either Formal, or General Heritage Protection. Pertaining to this particular report are General Protections, as follows:

NHRA Part 2: General Protections,

Archaeology, palaeontology and meteorites

35. (1) *Subject to the provisions of section 8, the protection of archaeological and palaeontological sites and material and meteorites are the responsibility of a provincial heritage resources authority:*

(2) Subject to the provisions of subsection (8)(a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.

(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

(4) No person may, without a permit issued by the responsible heritage resources authority—

(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological

- or palaeontological site or any meteorite;*
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;*
- (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or*
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.*

Part 2: General Protections,

Burial grounds and graves

- 36.** *(1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.*
- (2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.*
- (3) (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—*
- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;*
- (b) destroy, damage, alter, exhume, 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 must also be noted that all archaeological, heritage, and grave features older than 60 years are protected by National Heritage Legislation, Should any such features or objects be exposed by the developers then all work must stop and a heritage consultant, or the provincial heritage authority, Amafa, be contacted for further advice. This direction is encapsulated in the following clauses extracted from the National Heritage Resources Act, under:

Part 2: General Protections,

Section 35(3), Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

And,

Part 2: General Protections,

Section 36 (6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—

(a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and

(b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

10. CONCLUSIONS AND RECOMMENDATIONS

A heritage survey of the proposed SANRAL Newcastle to Ncandu Bypass, development identified three definite heritage features on the footprint, and at least two others within 250 metres from the development. These include two unmarked graves, and a Later Iron Age site on the footprint; and two possible Iron Age sites within a 250 metre distance from the footprint. All of these appear to be older than 60 years. They are therefore protected by heritage legislation and may not be removed, or altered without permission from the provincial heritage agency, with ensuing mitigation. The borrow pits do not harbour any heritage sites or features. The area also does not form part of a cultural landscape.

It is however, possible that certain Stone Age, Iron Age, or Historical Period sites may have been overlooked, and such sites may include associated cultural artefacts and hidden graves. For this reason, attention is once again drawn to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage resources authority.

It is the opinion put forward in this report that the proposed development may go ahead as planned, if the guidelines presented within this report are adhered to.

11. Recommendations

Based on the known distribution of heritage sites on the footprint it is proposed that the developers avoid Bypass Alternative Layouts 0 and 1 (presented in a 2014 report by Frans Prins) and rather consider Alternative Layouts 4a and 4b (alternatives presented in a previous 2014 report by Frans Prins). Alternatively the developers may consider a phase two heritage impact assessment, by a grave relocation expert, in order to investigate the possibility of grave exhumation and translocation (Appendix 1).

Attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and The KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No. 05 of 2018), which requires that operations that expose archaeological or historical remains, including other potential grave sites, should cease immediately, pending evaluation by the provincial heritage agency.

12. References

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SAHRA, 2005. *Minimum Standards For The Archaeological And The Palaeontological Components Of Impact Assessment Reports, Draft version 1.4*

Prins, Frans. **Cultural Heritage Impact Assessment of the Proposed Newcastle Bypass, Mandeni Municipality, 25th September 2014**, for Nema Engineering.

Appendix 1. Relocation of Graves.

Burial grounds and graves are dealt with in Article 36 of the NHR Act, no 25 of 1999. Below follows a broad summary of how to deal with grave in the event of proposed development:

- If the graves are younger than 60 years, an undertaker can be contracted to deal with the exhumation and reburial. This will include public participation, organising cemeteries, coffins, etc. They need permits and have their own requirements that must be adhered to.
- If the graves are older than 60 years old or of undetermined age, an archaeologist must be in attendance to assist with the exhumation and documentation of the graves. This is a requirement by law.

Once it has been decided to relocate particular graves, the following steps should be taken:

- All information pertaining to the identification of the graves needs to be documented for the application of a SAHRA permit.
- Notices of the intention to relocate the graves need to be put up at the burial site for a period of 60 days. This should contain information where communities and family members can contact the developer/archaeologist/public-relations officer/undertaker.
- The notices need to be in at least 3 languages, English, and two other languages. This is a requirement by law.
- Notices of the intention needs to be placed in at least two local newspapers and have the same information as the above points. This is a requirement by law.
- Local radio stations can also be used to try contact family members. This is not required by law, but is helpful in trying to contact family members.
- During this time (60 days) a suitable cemetery need to be identified close to the development area or otherwise one specified by the family of the deceased.

- An open day for family members should be arranged after the period of 60 days so that they can gather to discuss the way forward, and to sort out any problems. The developer needs to take the families requirements into account. This is a requirement by law.
- Once the 60 days has passed and all the information from the family members have been received, a permit can be requested from SAHRA. This is a requirement by law.
- Once the permit has been received, the graves may be exhumed and relocated.
- All headstones must be relocated with the graves as well as any items found in the grave

