HERITAGE SURVEY OF THE PROPOSED MILKY WAY SHOPPING CENTRE, MARIANNHILL

FOR AJ PROPERTY HOLDINGS (PTY) LTD DATE: 1 AUGUST 2018

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Abbreviations

HP	Historical Period	
IIA	Indeterminate Iron Age	
LIA	Late Iron Age	
EIA	Early Iron Age	
ISA	Indeterminate Stone Age	
ESA	Early Stone Age	
MSA	Middle Stone Age	
LSA	Late Stone Age	
HIA	Heritage Impact Assessment	
PIA	Palaeontological Impact Assessment	



INTRODUCTION

AJ Property Holdings (Pty) Ltd intends to build a shopping mall at the junction of the M1, Wiltshire Road 211592, Mariannhill, eThekwini Metropolitan Municipality.

The proposed Milky Way Shopping Centre development will include buildings, parking areas and infrastructure. The project is still in the early planning phase and further details are not available.

Umlando was appointed by AJ Property Holdings (Pty) Ltd. to undertake the Heritage Impact Assessment for the project. Fig.'s 1 - 4 show the location of the development.

ENVIRONMENT

Eco-Pulse Environmental Consulting Services undertook the freshwater habitat assessment (Eco-Pulse 2015)." The project site is bisected by a river that is a right-bank tributary of the Mhlatuzana River as shown in Figure 2. The Mhlathuzana River flows in a south-eastern direction and ultimately discharges into the Durban Harbour at Bayhead. The study area is located within the midupper reaches of the Mhlatuzana River and within the DWA Quaternary Catchment U60F. The catchment falls within uMvoti-Mzimkhulu water management area (WMA). Both the larger DWA Quaternary Catchment (U60F) and the catchments of the onsite watercourses are highly transformed due to urban development.

Topographically, the river valley is the dominant defining feature with the site characterised by gentle to moderate north and south facing slopes.

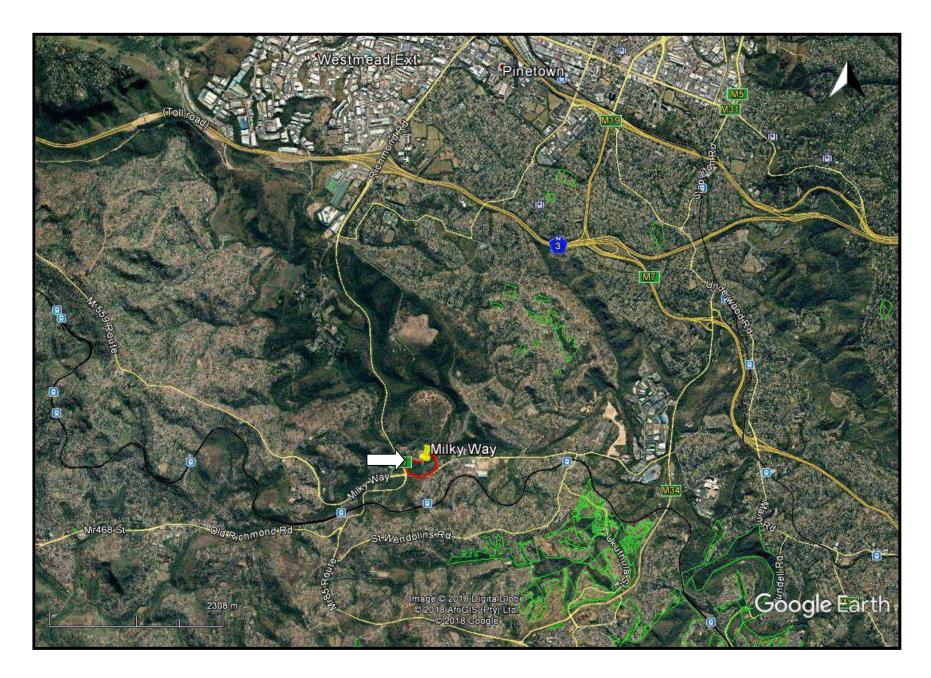
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Wetland Unit W01 is characterised by three distinct secondary vegetation communities, namely a (i) monotypic *Typha capensis* (Cape Bulrush) dominated marsh within the low lying valley bottom; (ii) woody alien bush and thicket along the edges of the wetland; and (iii) disturbed moist grassland in the upper interior..

Wetland unit W2 is characterised primarily by three vegetation communities; a (i) young pioneer *Bridelia micrantha* dominated forest (that can technically be considered as early successional temporary and seasonal swamp forest); (ii) Napier Fodder (*Pennisetum purpureum*) alien thicket; and (iii) mixed woody riparian bush and alien thicket."



FIG. 1 GENERAL LOCATION OF THE STUDY AREA



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FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA

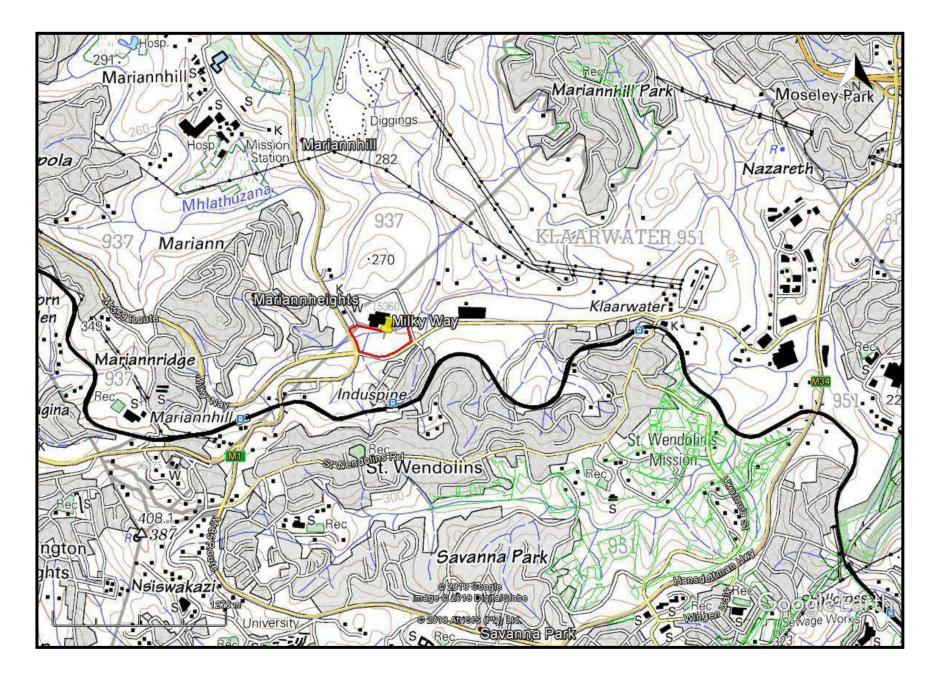


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FIG. 3: TOPOGRAPHICAL OVERVIEW OF THE STUDY AREA



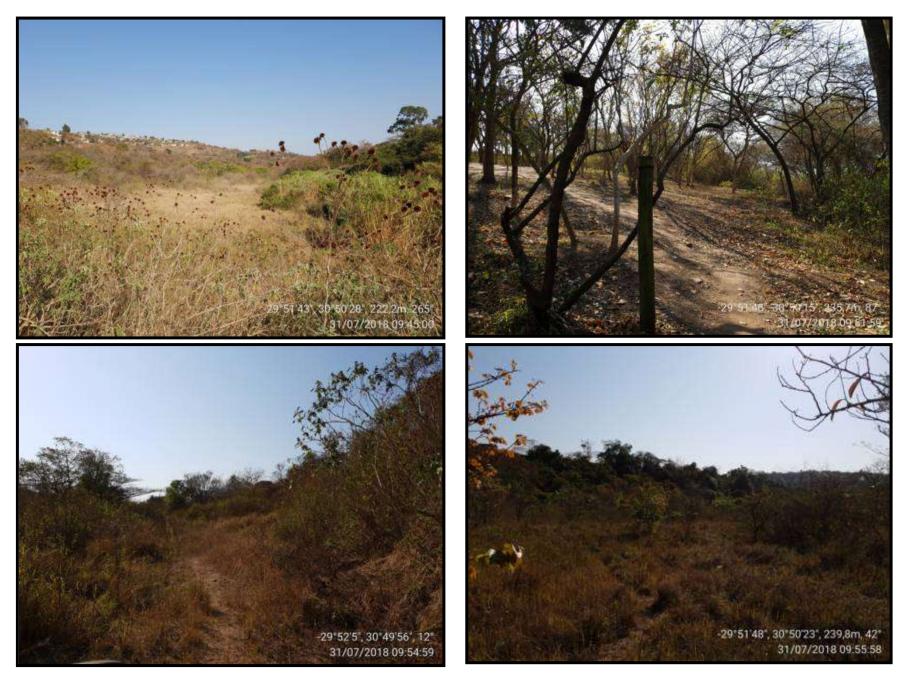
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FIG. 4: SCENIC VIEWS OF THE PIPELINE ROUTE



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KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008

"General protection: Structures.--

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
- Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- The Council may, by notice in the *Gazette*, exempt—
- A defined geographical area; or
- defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.

General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—

- the grave of a victim of conflict;
- a cemetery made up of such graves; or
- any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.—
- No grave—
- not otherwise protected by this Act; and
- not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.

The Council may only issue written approval once the Council is satisfied that-

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave.

General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—

- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must cease forthwith and a person who made the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or

use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.

 The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government." (KZN Heritage Act of 2008)

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. These databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national and provincial monuments and battlefields in Southern Africa (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries in southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

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All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
- 1.1.1. Faunal
- 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
- 1.5.1. Ash Features
- 1.5.2. Graves
- 1.5.3. Middens
- 1.5.4. Cattle byres
- 1.5.5. Bedding and ash complexes



2. Spatial arrangements:

2.1. Internal housing arrangements

2.2. Intra-site settlement patterns

2.3. Inter-site settlement patterns

3. Features of the site:

3.1. Are there any unusual, unique or rare artefacts or images at the site?

3.2. Is it a type site?

3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

4.1. Providing information on current research projects

4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?

5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

7.1. Does the site have the potential to be used as an educational instrument?

7.2. Does the site have the potential to become a tourist attraction?

7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

8.1. Palaeontological sites

8.2. Historical buildings

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- 8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites
- 8.4. Graves and/or community cemeteries
- 8.5. Living Heritage Sites

8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts. The above significance ratings allow one to grade the site according to SAHRA's grading scale. This is summarised in Table 1.

SITE	FIELD	GRADE	RECOMMENDED
SIGNIFICANCE	RATING		MITIGATION
High	National	Grade 1	Site conservation / Site
Significance	Significance		development
High	Provincial	Grade 2	Site conservation / Site
Significance	Significance		development
High	Local	Grade 3A /	
Significance	Significance	3B	
High /	Generally		Site conservation or mitigation
Medium	Protected A		prior to development / destruction
Significance			
Medium	Generally		Site conservation or mitigation /
Significance	Protected B		test excavation / systematic sampling
			/ monitoring prior to or during
			development / destruction
Low	Generally		On-site sampling monitoring or
Significance	Protected C		no archaeological mitigation required
			prior to or during development /
			destruction

TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES



RESULTS

DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. The archaeological database indicates that there are archaeological sites in the general area (fig. 5). These include all types of Stone Age Sites as well as Late Iron Age and Historical Period sites. There have been no previous HIA studies in the development footprint.

No national monuments, battlefields, or historical cemeteries are known to occur in the study area.

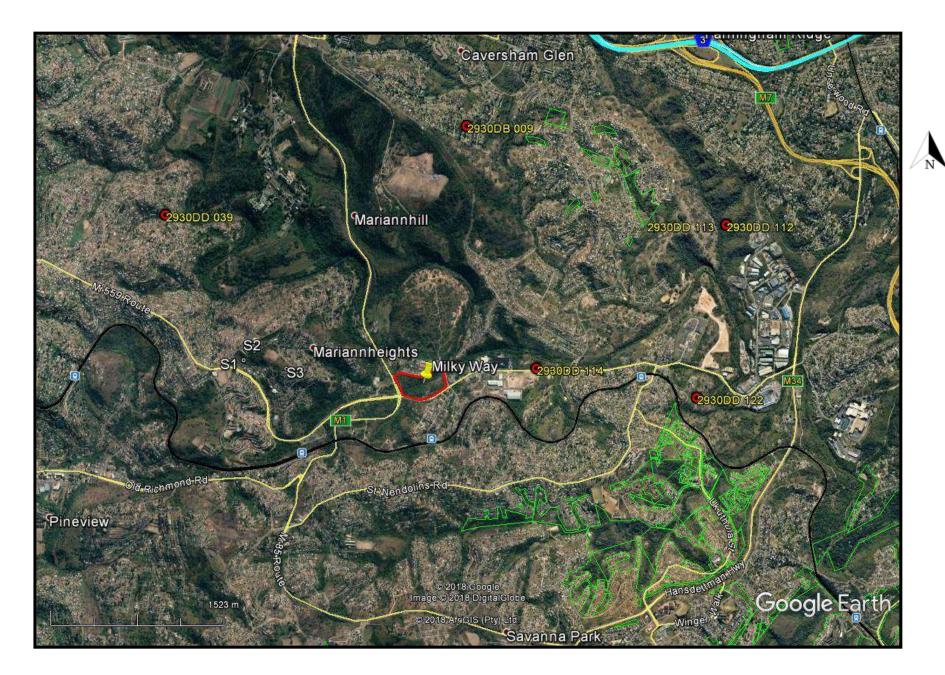
The Surveyor General Map of 1849 shows that the Farm Klaarwater 973 was first surveyed in 1849 (fig. 6). The map does indicate at least one building; however, this is not in the study area.

The 1937 aerial photographs indicate the area was mostly grasslands, with a few trees (fig. 7). The original Wiltshire Road passed through the property. There is a building to the north of the study area

The 1942 1:50 000 topographical map shows the original Wiltshire Road in the study area. The building is identified as a Mission Church.



FIG. 5: LOCATION OF KNOWN HERITAGE SITES NEAR THE STUDY AREA



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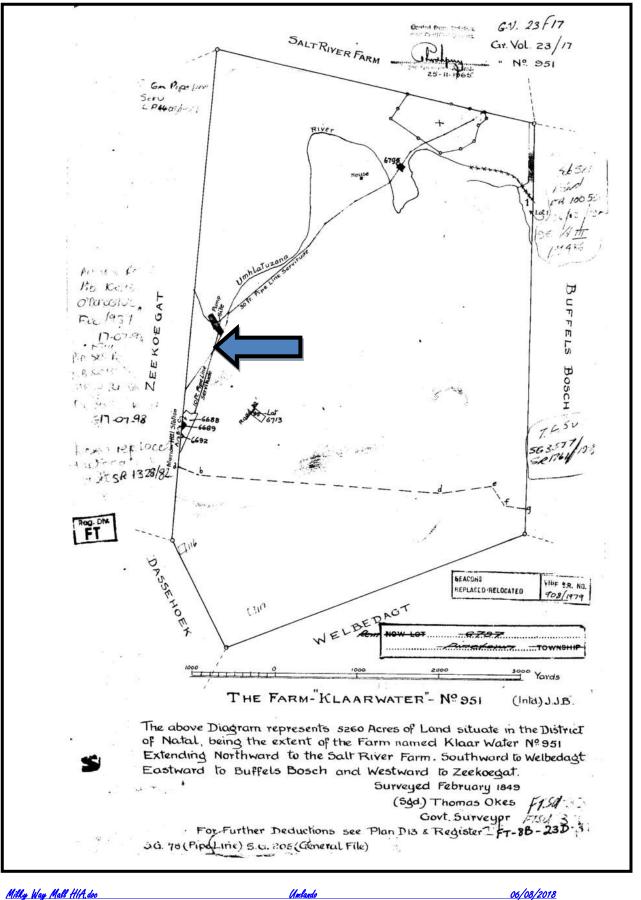


FIG. 6: ORIGINAL SURVEYOR GENERAL MAP (1849)

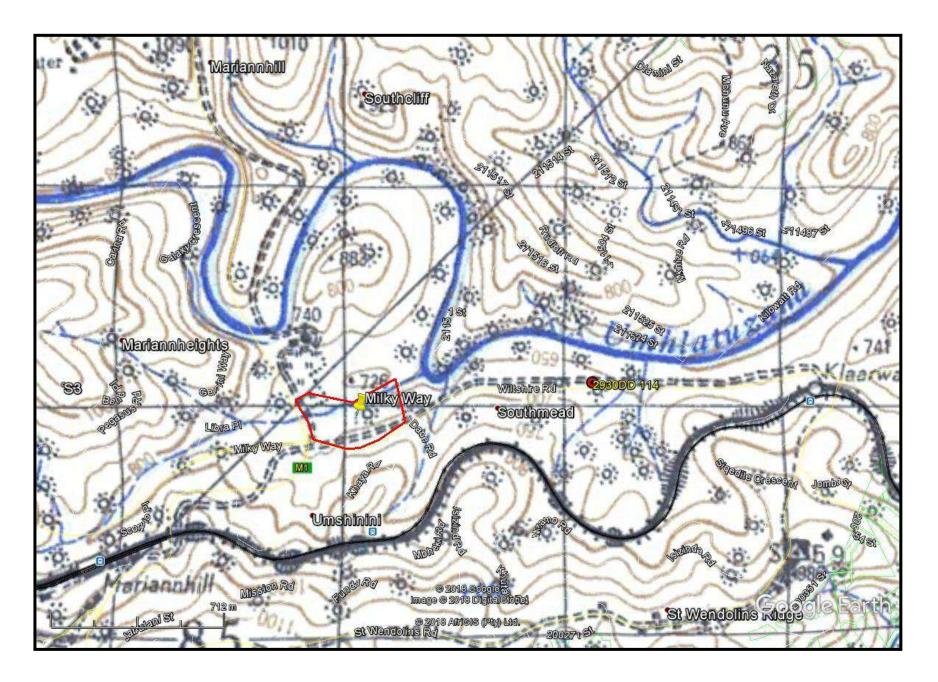
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FIG. 8: STUDY AREA IN 1968



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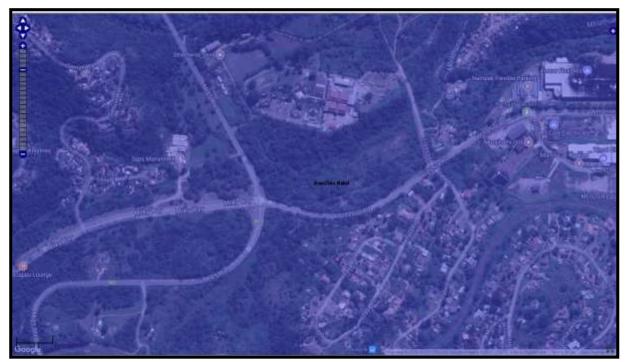
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PALAEONTOLOGICAL IMPACT ASSESSMENT

The study area is considered to have very low palaeontological sensitivity (fig. 9). No further PIA studies are required.

FIG. 9: PALAEONTOLOGICAL SENSITIVITY MAP



COLOUR	SENSITIVITY	REQUIRED ACTION
RED	VERY HIGH	field assessment and protocol for finds is required
ORANGE/YELLOW	нідн	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.



FIELD SURVEY

A field survey was undertaken in July 2018. The southern half of the site has been disturbed by the original Wiltshire road and a large sewerage pipeline. The eastern part of the study area falls on the 100-year floodplain and appears to have been levelled at some stage. This might be related to the road. There are several small excavations along this section; however, none of these had any archaeological material.

The western part of the site, that is adjacent to the M1 and north of the stream, has been recently cleared of undergrowth. This area appears to have been slightly terraced in the past. No artefacts or features were observed in this area.

There were a few areas that we inaccessible due to dense vegetation. These areas are near the river and are unlikely to yield heritage sites.

No further HIA mitigation is required.

CONCLUSION

A heritage survey was undertaken for the proposed Milky Way Shopping Centre. The desktop study indicated that archaeological sites were noted in the general area. Similarly historical buildings were noted to occur in the general area as well as one of the original roads.

The field survey noted that the area south of the river had been disturbed with servitudes, roads and minor sand excavations. No heritage features or sites were observed during the survey no further heritage mitigation is required.

REFERENCES

Aerial photos:

117B_048_35611

1:50 000 topographical

2930DD & 2931CC Durban 1940 2930DD & 2931CC Durban 2000

Database

Natal Museum Site Record Database SAHRIS Database Umlando Database

Literature

Eco-Pulse Environmental Consulting Services. 2015 Proposed Milky Way Shopping Centre Development In Mariannhill, Ethekwini Municipality, Kwazulu-Natal. Freshwater Habitat Assessment Report. Rev. 10. Report No: Ep164-01



EXPERIENCE OF THE HERITAGE CONSULTANT

Gavin Anderson has a M. Phil (in archaeology and social psychology) degree from the University of Cape Town. Gavin has been working as a professional archaeologist and heritage impact assessor since 1995. He joined the Association of Professional Archaeologists of Southern Africa in 1998 when it was formed. Gavin is rated as a Principle Investigator with expertise status in Rock Art, Stone Age and Iron Age studies. In addition to this, he was worked on both West and East Coast shell middens, Anglo-Boer War sites, and Historical Period sites.

DECLARATION OF INDEPENDENCE

I, Gavin Anderson, declare that I am an independent specialist consultant and have no financial, personal or other interest in the proposed development, nor the developers or any of their subsidiaries, apart from fair remuneration for work performed in the delivery of heritage assessment services. There are no circumstances that compromise the objectivity of my performing such work.

Gavin Anderson Archaeologist/Heritage Impact Assessor

