

**MIDWAY TRUCK STOP EXTENSION, ESTCOURT,
KZN
FOR MONA CONSULTING ENGINEERS**

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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

The applicant purchased the Midway Filling Station in December 2017. Prior to the applicant taking ownership of the filling station, the previous owner, Mr Demos Antoniadis cleared a piece of land to the North of the filling station. This clearance was undertaken with EDTEAs approval. This letter was provided to the applicant before the land was purchased.

Once the applicant had taken ownership of the Midway Filling station, the establishment of a truck stop was proposed. The truck stop included capacity for 90 trucks and included the following:

- Truck parking area;
- Access road;
- Guard house;
- Ablution facilities;
- Kitchen/dining area;
- Associated infrastructure and services.

In order to comply with environmental legislation, the applicant appointed an Environmental Consultant to liaise with the relevant authorities EDTEA regarding environmental requirements as well as to compile an Environmental Management Plan for use during construction. The previous Environmental Consultant advised the applicant that, after consultation with the authorities, an Operational EMP was required and that the compilation of such a document would cover the environmental impacts associated with the project. The EMP was prepared and the truck stop was then constructed in February 2019.

Mr Harper then proposed the extension of the truck stop in July 2020. This extension involved increasing the holding capacity from 90 trucks to 190 trucks (based on 34 ton linked vehicles). The expansion area was approximately 2,109 ha in size and included the following:

- 2,109ha truck stop area
- 20m wide, 12m long access road with automated gate
- Fencing of the new area to merge with the existing truck stop area
- Expansion of toilets, showers and bathroom facilities for truck drivers.

As a result of this, the Environmental Management Plan was updated. Again, the applicant appointed an Environmental Consultant to undertake the necessary consultation (which he advised was taking place) with EDTEA and prepare an EMP for the site. As a result of the expansion of the truck stop, the EMP was updated in July 2020 to cover the expansion area. The applicant was under the impression that, based on advice from the previous EAP, Environmental Authorisation was not required and that he had followed due diligence in terms of obtaining the required environmental documentation. EDTEA disputed this and requested an EMP.

The total area cleared for both the original truck stop and the expansion area is approximately 36 200m² (3,62ha). Neither expansion had undertaken an HIA.

Umlando was requested to undertake an assessment of the affected area for potential heritage sites that could have occurred on the extension area. Figures 1 – 3 show the location of the development.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT

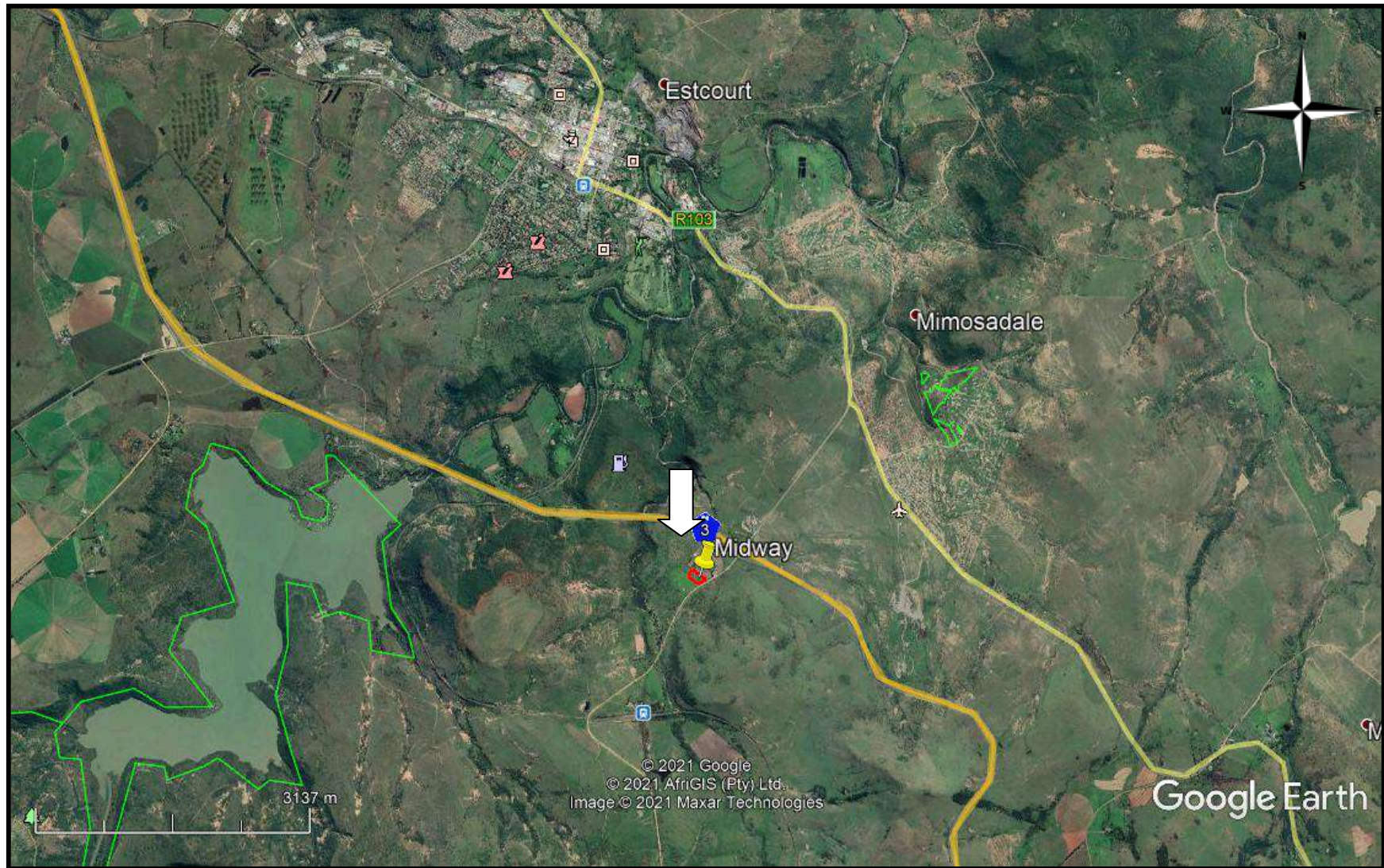


FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT

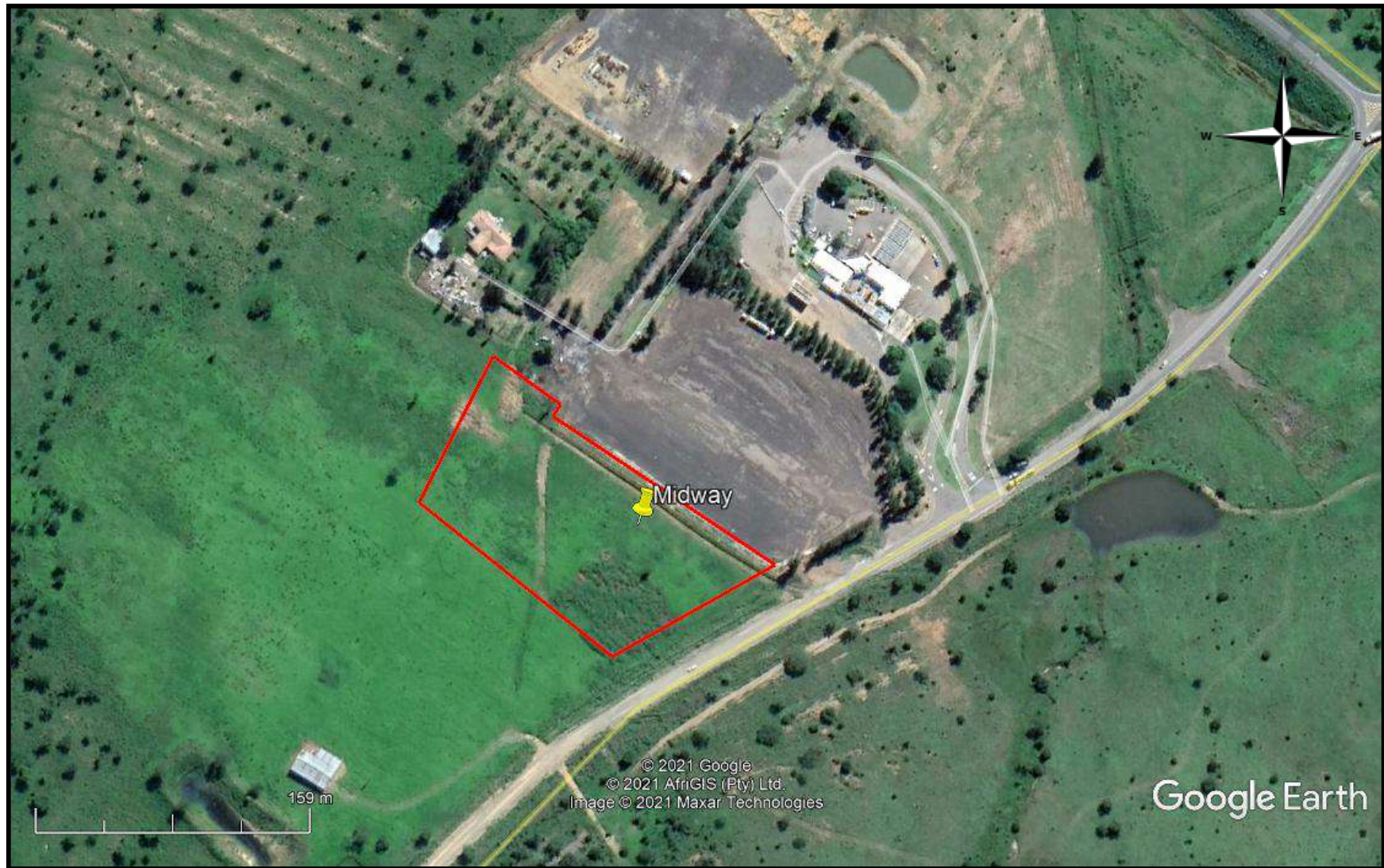


FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT (2002)

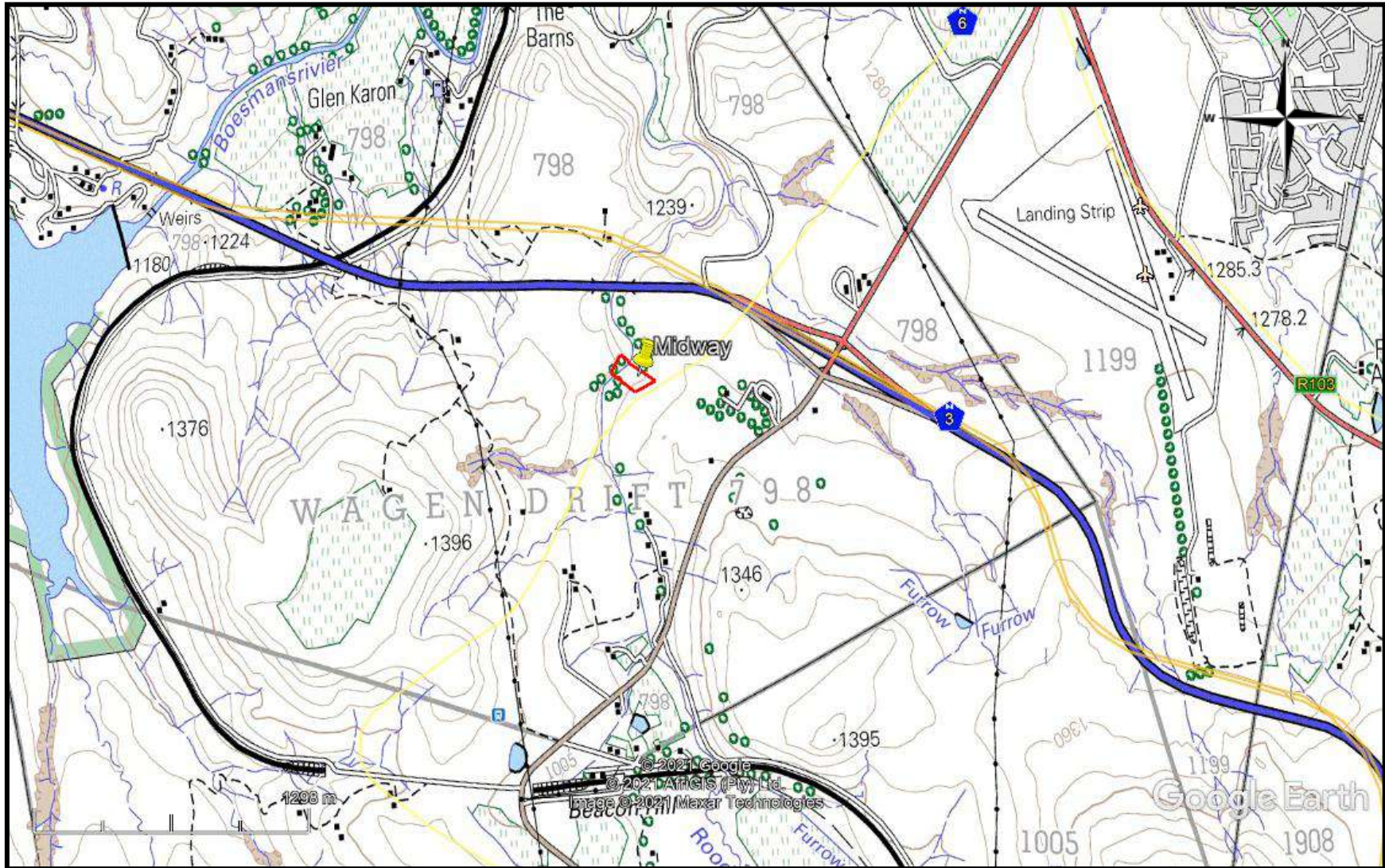


FIG. 4: SCENIC VIEW OF STUDY AREA



KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018

“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.”

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. This 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.

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
- 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. Table 1 lists the grading system.

TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES

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

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. Many archaeological sites occur in the general area. The archaeological sites tend to be open Stone Age scatters, overhangs with Rock Paintings, Late Iron Age walling, and Historical Period structures (fig. 5). These sites vary in significance. No known heritage sites occur within 100m of the study area.

The Farm Wagendrift 798 was first surveyed in 1878. The SG map indicates that there is a homestead on the land already, and this is probably the Wagendrift farmhouse (fig. 6). The farmhouse overlooks the Bushmans River to the north of the freeway. No other structures occur on the map.

By 1942, the farmhouse is referred to as The Barnes and several more buildings occur, but not near the study area (fig. 7). The land around the truck stop was agricultural land and had been ploughed. There are probable farm labourers' houses 250m to the west and south. The remnants of these houses are still visible on the Google Earth imagery.

The 1975 topographical map indicates that labourers' houses still occur in the same area (fig. 8). The agricultural field appears to have been gone fallow.

FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA

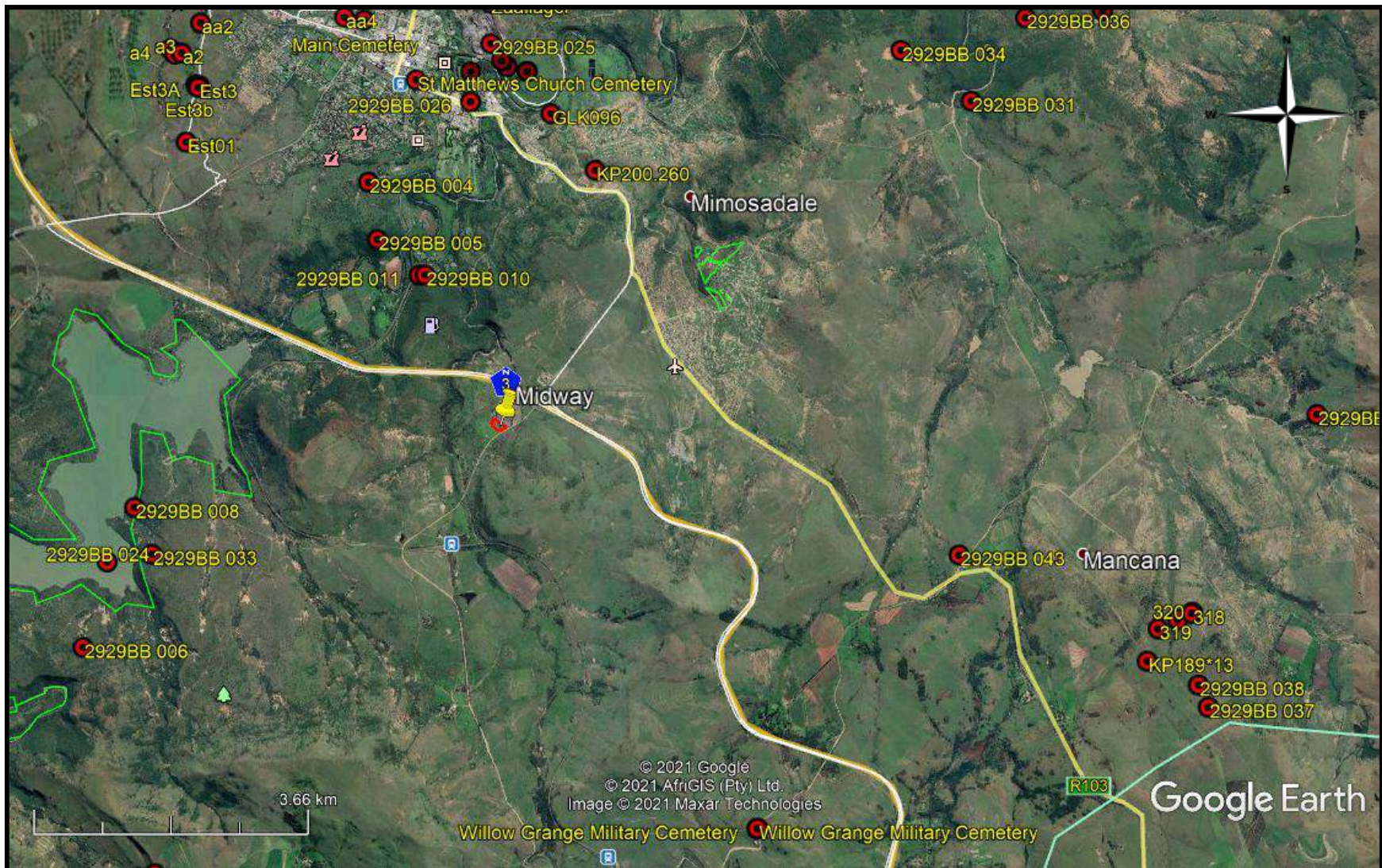


FIG. 6: SURVEYOR GENERAL MAP OF WAGENDRIFT 798 (1878)

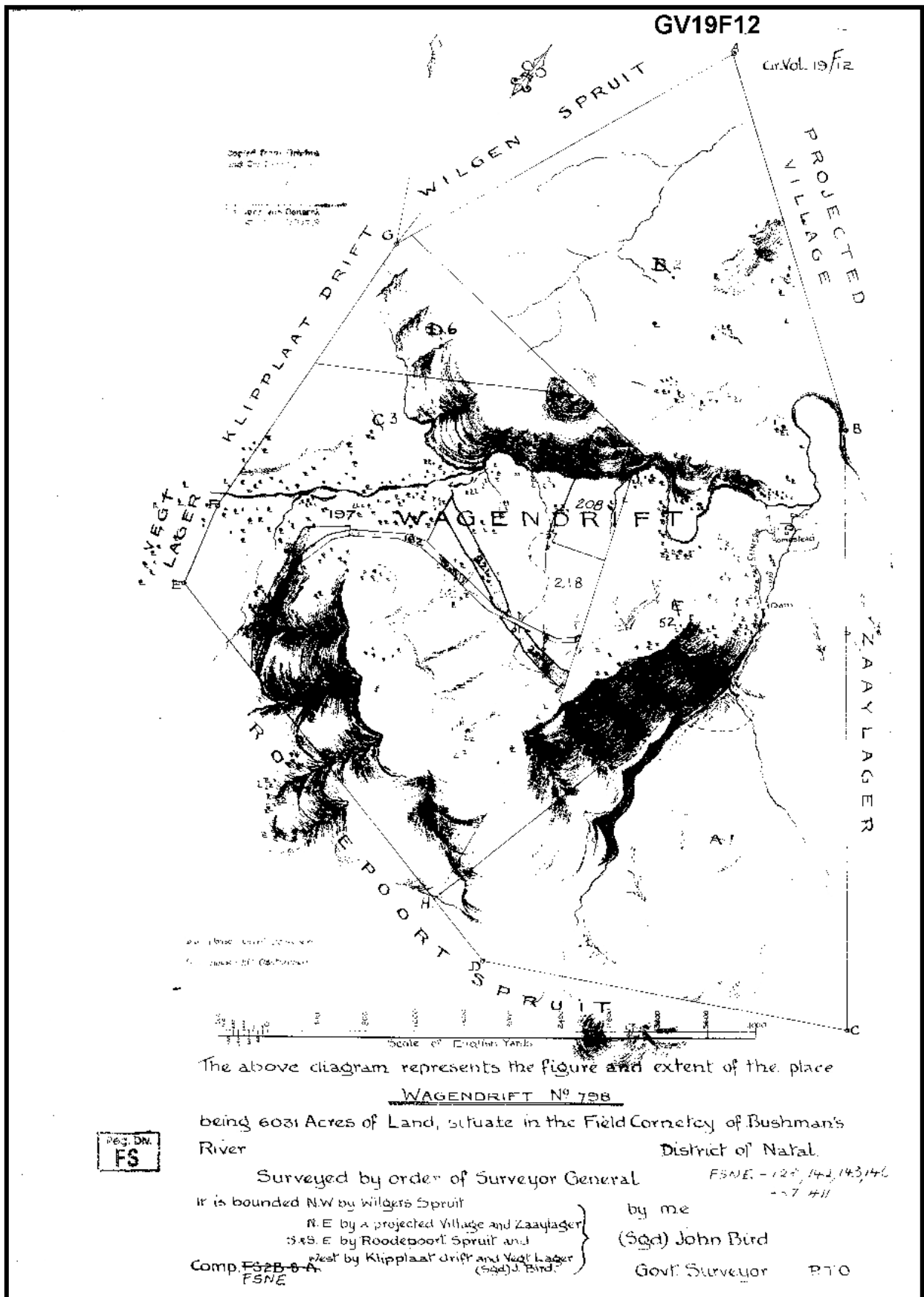


FIG. 7: LOCATION OF THE STUDY AREA IN 1947

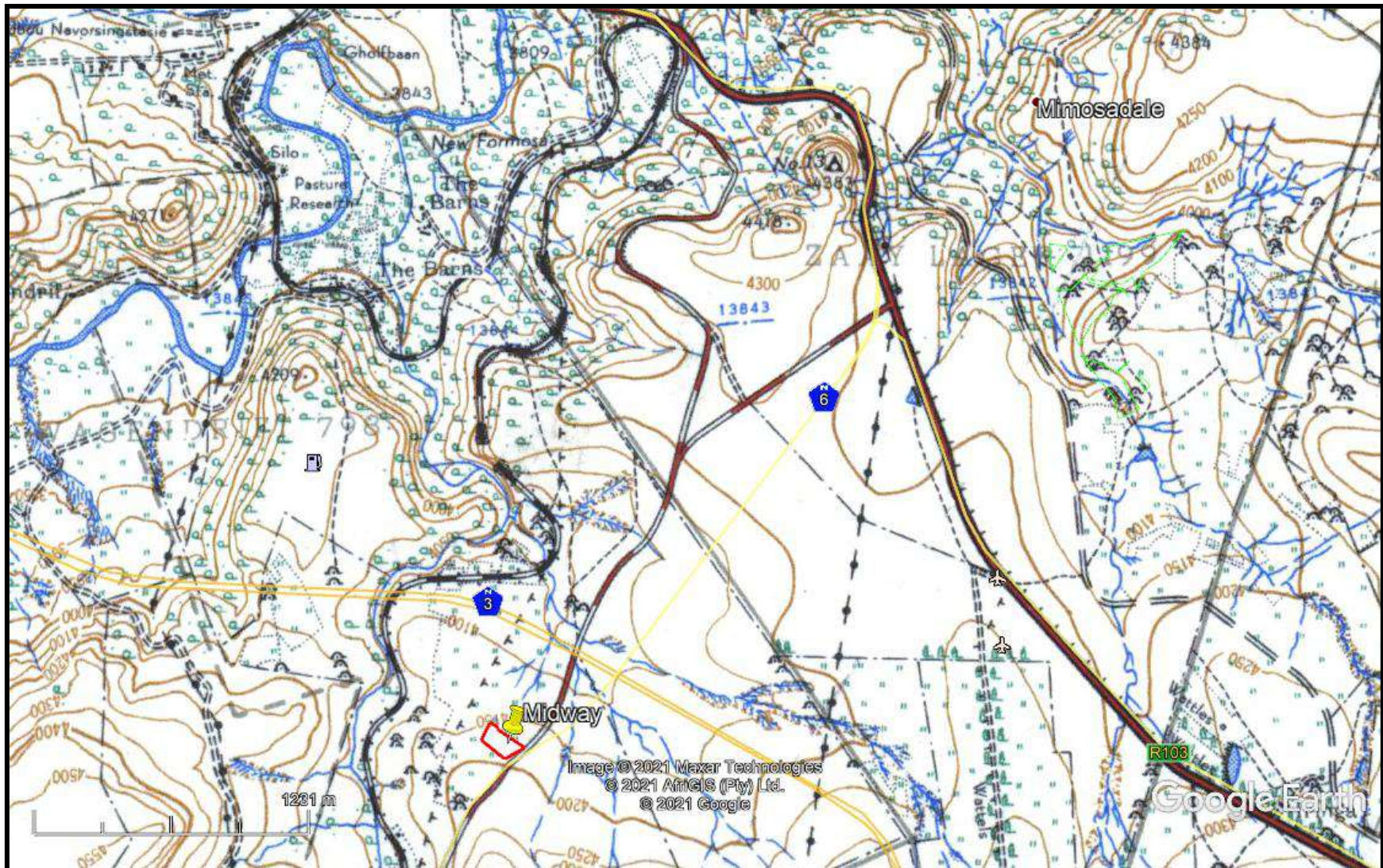
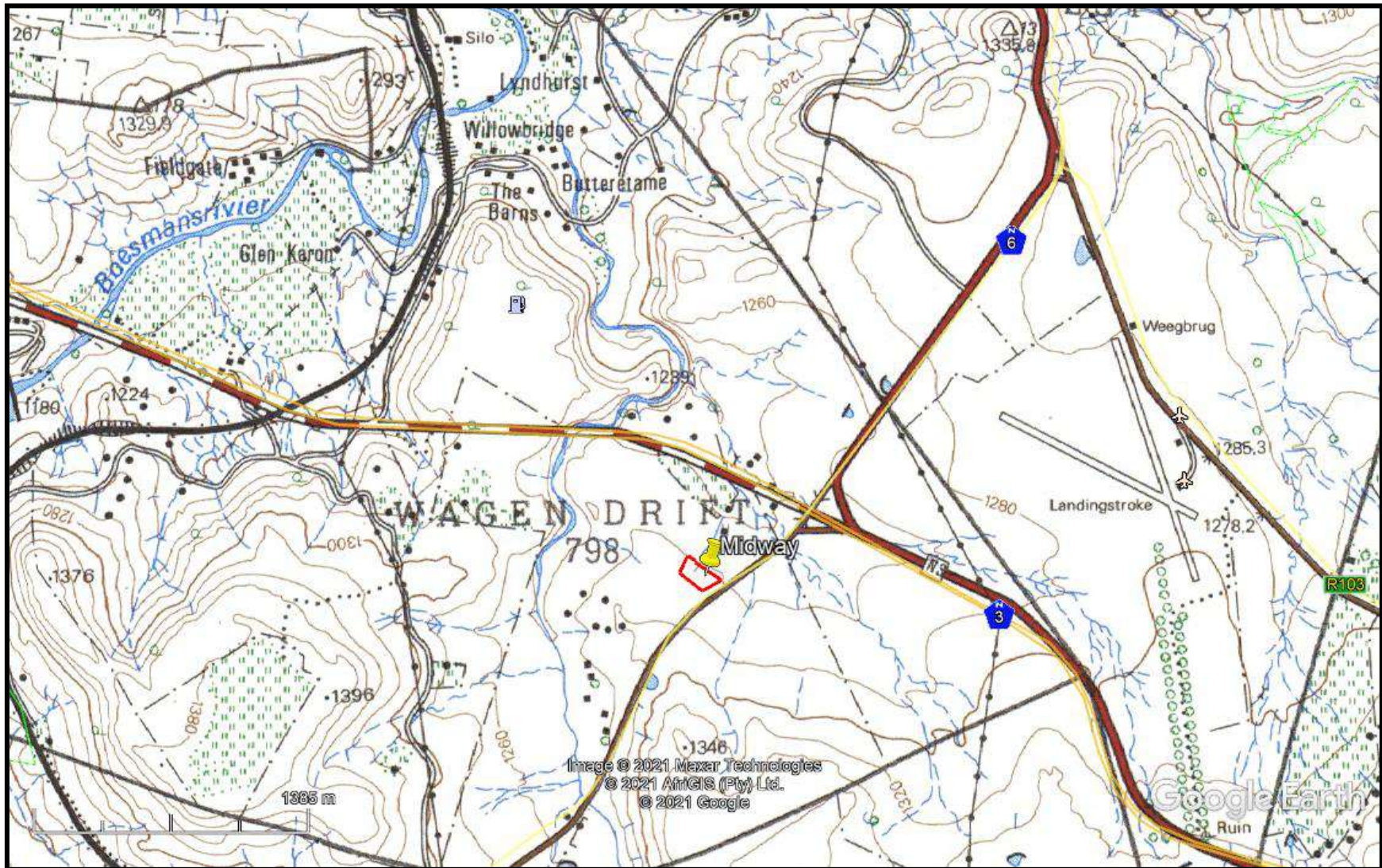


FIG. 8: LOCATION OF THE STUDY AREA IN 1975



PALAEONTOLOGICAL SENSITIVITY

The area is in an area of very high palaeontological sensitivity (fig. 9). However, the upper 1m – 1.5m will be weathered rock and have no fossil bearing material. The expansion did not remove more than 1m of deposit in total, and would thus probably not have affected unweathered palaeontological material.

FIG. 9: PALAEONTOLOGICAL SENSITIVITY MAP



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.

FIELD SURVEY

The field survey was undertaken on 11 August 2021. Ground visibility was very good since the area had already been cleared and levelled. . A survey around the edges did not note any archaeological material. That is there would not be an intact archaeological site.

If any stone tools or pottery did occur then they would have been isolated examples and in a secondary context since the area had been ploughed for several years.

RECOMMENDATIONS

The Midway Truck Stop expansion probably did not affect any heritage features. Any further expansion to the south, southwest and west could be affecting the old farm labourers' houses and possible graves. These areas will need to be assessed if there is any development.

CONCLUSION

The Midway Truck Stop expansion occurred without proper authorisation or an HIA for various reasons. The developer was requested to undertake the necessary studies by EDTEA.

A desktop heritage survey indicated that the area was potentially sensitive for archaeological material and very sensitive for palaeontological horizons. The desktop also noted that the study area had been used for agricultural fields and had been ploughed between 1940s and 1970s, thereafter it had gone fallow.

The survey did not locate any archaeological material. Less than a meter of deposit had been removed and thus only potentially weathered palaeontological material was affected.

REFERENCES

2929BB Estcourt 1942, 1975, 2000

GV19F12

SAHRIS Database

Umlando Database

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.

A handwritten signature in black ink, appearing to read 'G. Anderson', with a horizontal line underneath.

Gavin Anderson
Archaeologist/Heritage Impact Assessor