

**HERITAGE SURVEY OF THE PROPOSED
GREYTOWN LANDFILL SITE, KWA-ZULU NATAL**

FOR LOMBARD AND ASSOCIATES

DATE: 21 JULY 2012

By Gavin Anderson

**Umlando: Archaeological Tourism and Resource
Management**

PO Box 102532, Meerensee, 3901

Phone/fax: 035-7531785 Fax: 0865445631

Cell: 0836585362



TABLE OF CONTENT

INTRODUCTION	3
KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008	7
METHOD	9
Defining significance.....	10
RESULTS	13
DESKTOP STUDY	13
FIELD SURVEY.....	16
GLI01	16
HOUSE	16
MANAGEMENT PLAN	22
CONCLUSION.....	22
APPENDIX A	23
SITE RECORD FOMS.....	23

TABLE OF FIGURES

FIG. 1 GENERAL LOCATION OF THE LANDFILL SITE.....	4
FIG. 2: AERIAL OVERVIEW OF THE LANDFILL SITE	5
FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED LANDFILL SITE	6
FIG. 4: LOCATION OF THE LANDFILL SITE IN 1937	14
FIG. 5: LOCATION OF THE LANDFILL SITE IN 1963	15
FIG. 6: CURENT STATE OF THE PROPOSED LANDFILL SITE	17
FIG. 7: LOCATION OF ARTEFACTS AND SITES.....	18
FIG. 8: ABANDONED "TOWER"	19
FIG. 9: POTTERY FRAGMENTS FROM GLI01	20
FIG. 10: HOUSE ADJACENT TO THE LANDFILL SITE	20
FIG. 11: GEN LOUIS BOTHA MONUMENT IN RELATION TO THE SITE	21

INTRODUCTION

“The uMzinyathi District Municipality has identified the need for waste disposal facilities in the district. The distance between the northern and southern areas of the district has meant that the most feasible option is to develop two sub-regional sites. The northern landfill will mainly serve the areas within the Endumeni and Nquthu Municipalities whilst the southern site will cater for the Msinga and uMvoti local municipal areas.

The sites will only accept general waste which includes domestic refuse, non-hazardous industrial waste, commercial waste, garden refuse and builders’ rubble. The sites will not accept any hazardous waste i.e. waste which has toxic, chemical or long-lasting properties which may have a negative effect on human health or the environment” (BID Lombard & Associates 2012)

Umlando was contracted by Lombard & Associates to undertake the heritage survey of the landfill site. The site is 4km southeast of Greytown and situated in an existing forestry area (fig.’s 1 – 3)

One archaeological site was recorded during the survey. One building was noted as being over 60 years in age. There are no red flags for the proposed site in terms of the heritage.

FIG. 1 GENERAL LOCATION OF THE LANDFILL SITE

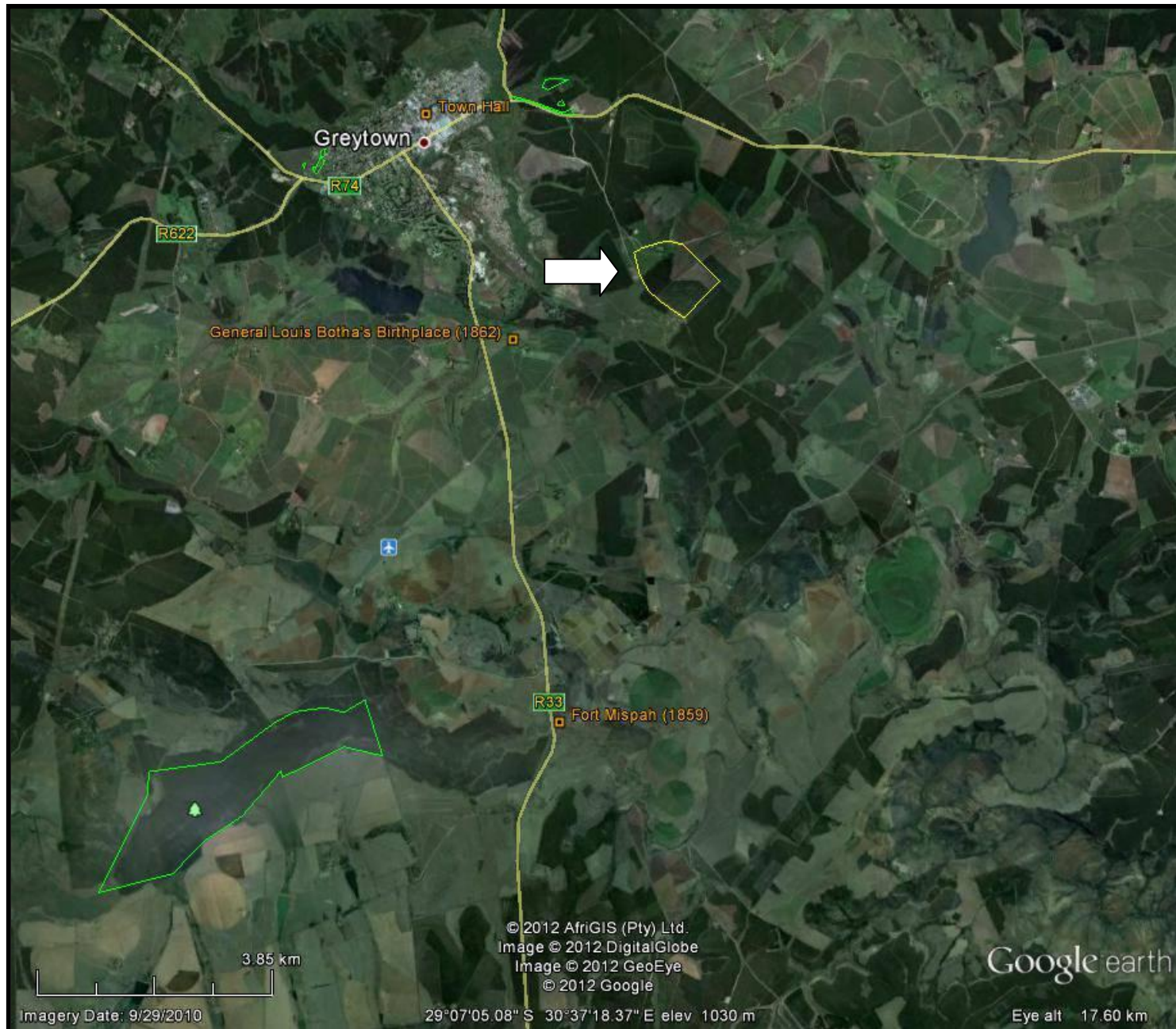
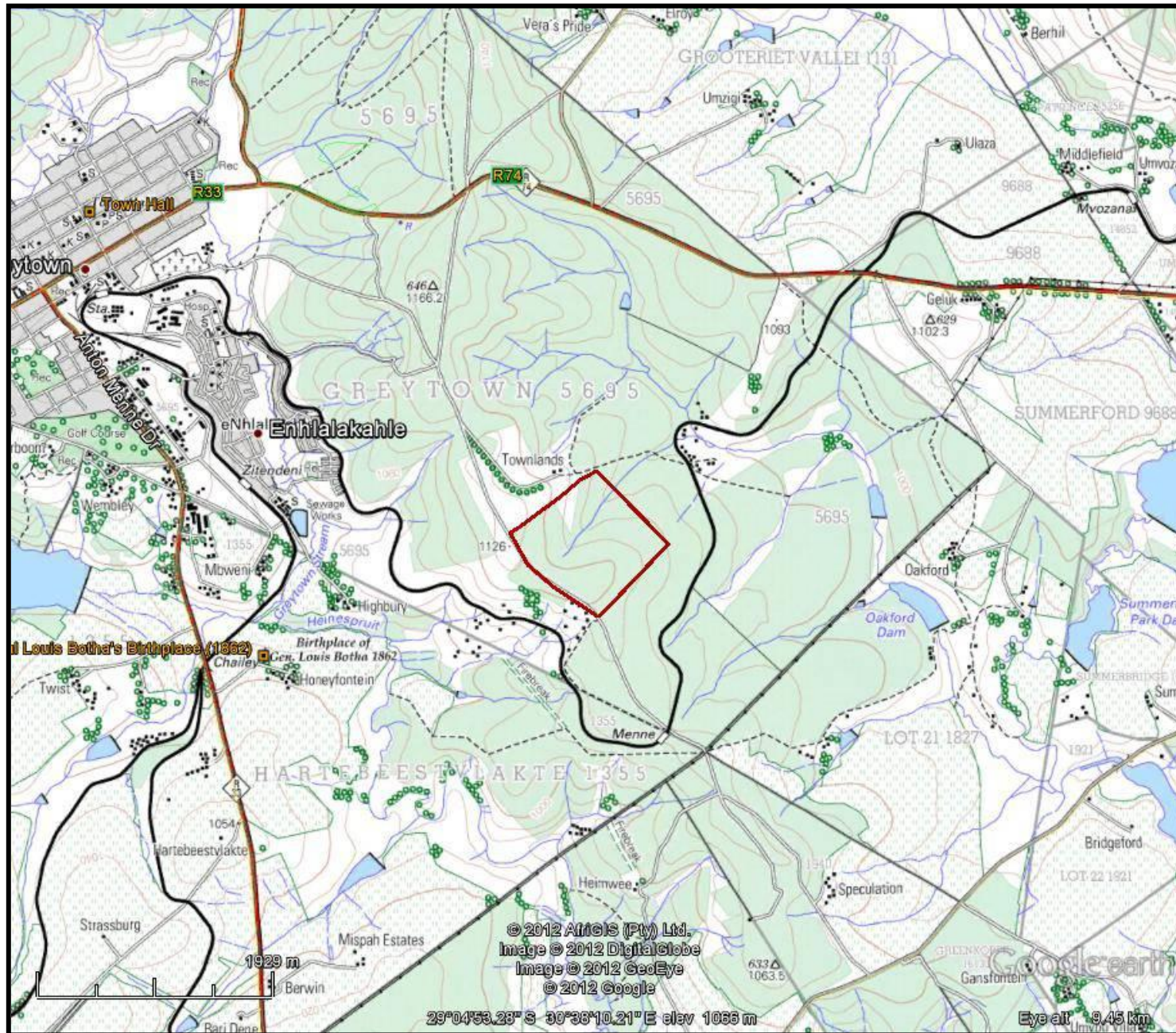


FIG. 2: AERIAL OVERVIEW OF THE LANDFILL SITE



FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED LANDFILL SITE



KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008

1. “ General protection: Structures.—
 - a. 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.
 - b. 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.
2. The Council may, by notice in the *Gazette*, exempt—
 - a. a defined geographical area; or
 - b. 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.
 - c. A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.
3. General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—
 - a. the grave of a victim of conflict;
 - b. a cemetery made up of such graves; or
 - c. 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.
4. General protection: Traditional burial places.—
 - a. No grave—
 - b. not otherwise protected by this Act; and
 - c. 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.

5. The Council may only issue written approval once the Council is satisfied that—
 - a. the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
 - b. the applicant and the relevant communities or individuals have reached agreement regarding the grave.
 - c. 36. General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—
6. 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.
7. 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.
8. 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.
9. 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.

10. 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.
11. 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. 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 settlements with 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 use of historical maps allows us to note the locations of potential heritage sites in areas where the vegetation is too dense, or where there is no physical evidence of a settlement. That is, some areas have a high rate of deterioration of archaeological/organic remains, and human graves are generally ephemerally marked or demarcated with organic remains. By using the maps we can indicate sensitive areas and suggest appropriate management plans.

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.

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.

There are no previously recorded archaeological sites in the area, within 10km radius of the site. Those sites that occur 20km of the site include Stone Age and Iron Age sites.

There are several National Monuments in the general area. However, the landfill site will not be visible from any of these monuments. These monuments include:

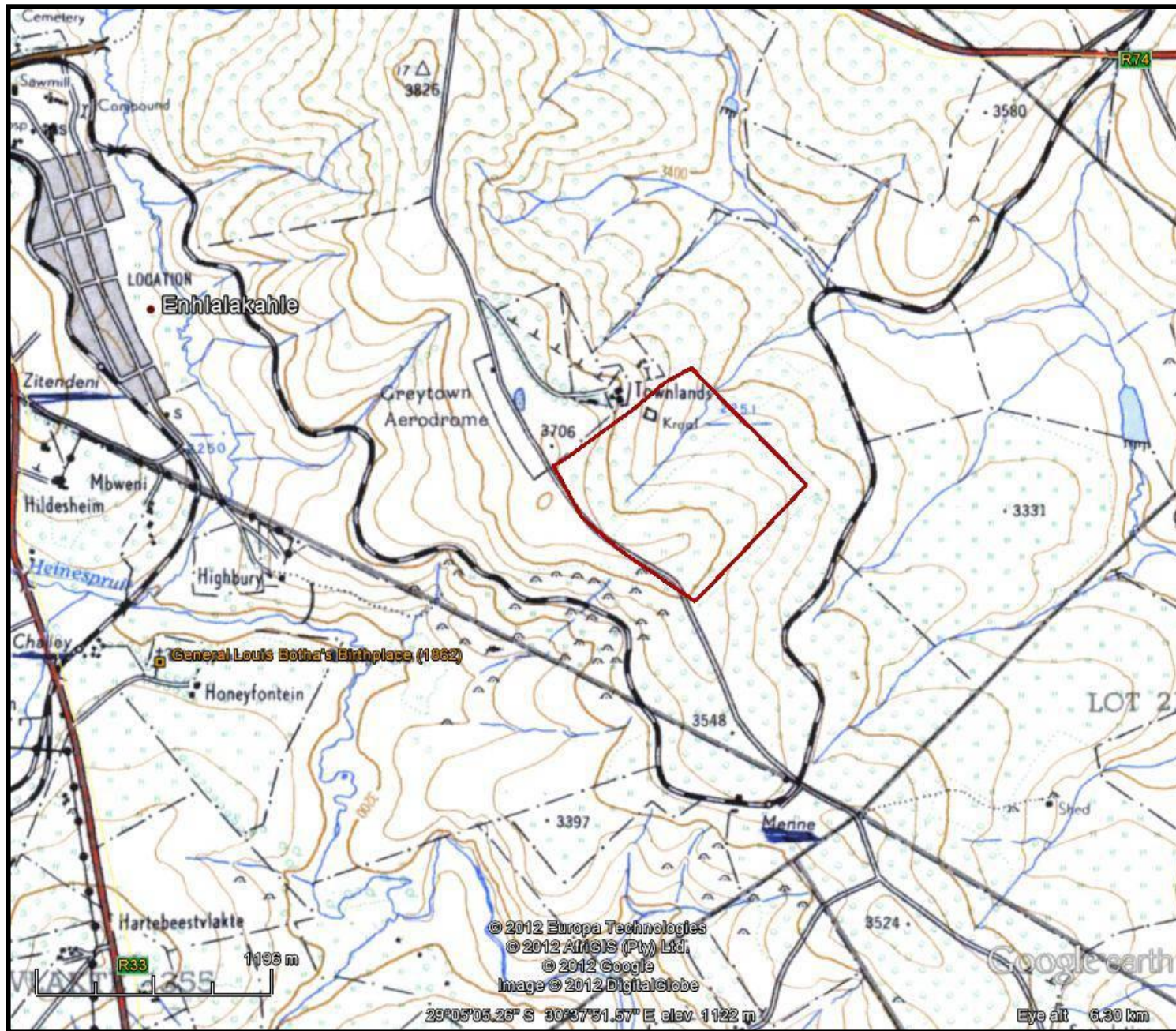
- General Louis Botha's Birthplace (1862)
- Greytown Town Hall
- Fort Mispah (1859)

The 1937 aerial photograph (fig. 4) indicates that the land has been used for afforestation for over 75 years. This map also indicates that there are buildings along the northwest boundary. In the southwest corner of the map, and outside of the site are several labourers houses. The houses still occur in the same location today. All of these buildings are protected by the KZN Heritage Act of 2008. These would be

FIG. 4: LOCATION OF THE LANDFILL SITE IN 1937



FIG. 5: LOCATION OF THE LANDFILL SITE IN 1963



FIELD SURVEY

The proposed site occurs in an area that has been used for afforestation for more than 75 years. The southwestern area was less vegetated and there was good archaeological visibility. The main areas amongst the trees had dense ground cover. I used the various paths within the plantation to determine the occurrence of archaeological material. Figure 6 shows the various areas of the plantation. Fig. 7 indicates the location of the features, sites and artefacts.

The 1963 map indicates a kraal in the affected area: this does not exist on 1937 and 2000 maps. There is a “tower” where the kraal used to be (fig. 8), but this is not older than 60 years.

GLI01

GLI01 is located within the afforested area that has been recently cleared. The site consists of a scatter of pottery sherds and two upper grinding stone fragments. The pottery appears to date to the Late Iron Age or Historical Period (fig. 9). The sherds are weathered and in a secondary context. I would not expect more of the site to be present due to the impact afforestation has on sites.

Significance: The site is of low significance as the sherds are few in number and a secondary context.

Mitigation: No further mitigation is required.

HOUSE

The house associated with the plantation occurs outside of the affected area. However, the building may be used for offices for the landfill site. These buildings occur on the 1937, 1963 and 2000 maps. There appears to be several additions to the original buildings (fig. 10). An assessment for the buildings was not undertaken as there are no details regarding the plans for these structures.

FIG. 6: CURENT STATE OF THE PROPOSED LANDFILL SITE



FIG. 7: LOCATION OF ARTEFACTS AND SITES



FIG. 8: ABANDONED "TOWER"



FIG. 9: POTTERY FRAGMENTS FROM GLI01

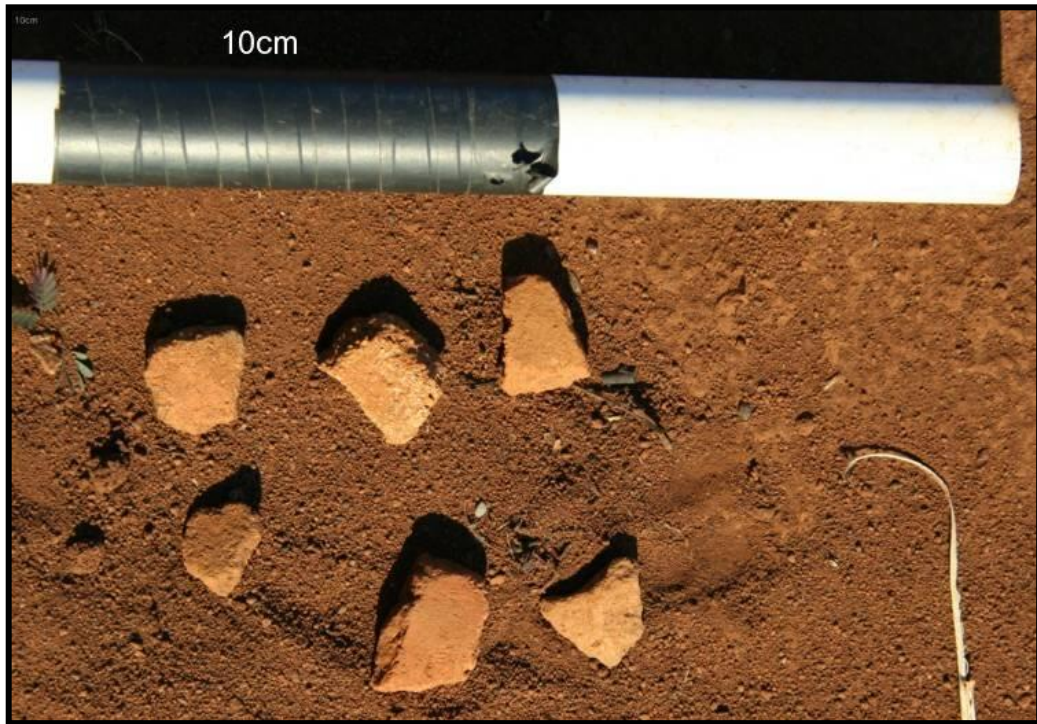


FIG. 10: HOUSE ADJACENT TO THE LANDFILL SITE



Significance: The buildings need to be assessed.

Mitigation: The house will require an assessment from an architect historian if it is demolished or structurally changed if converted into offices. All built structures older than 60 years are protected by the KZN Heritage Act. The KZN Heritage Built Environment will need to be informed about building plans before any alteration occurs.

An isolated Iron Age pottery sherd was noted in the road. There are buildings outside of the affected area that are older than 60 years. These need to be assessed if they will be affected by the road upgrade. An assessment may be required if the road upgrade occurs within 20m of the buildings.

The Landfill Site will not have a negative visual impact on National Monuments, as the landfill site is opposite side of the hill. Figure 11 shows the Gen Louis Botha Monument in relation to the site. It is the only monument in direct view of the site.

FIG. 11: GEN LOUIS BOTHA MONUMENT IN RELATION TO THE SITE



The palaeontological aspects were not considered as there will be no subsurface construction. The geology in the affected area is not suited for palaeontological remains. While there are shale deposits in the area, they do not occur in the affected area.

MANAGEMENT PLAN

The archaeological site, GLI01, is of low significance and does not require any mitigation. The client will need to apply to KZN Heritage for a destruction permit.

The main house, and any other buildings, will need an assessment if they are to be altered or destroyed. The client will need to approach the KZN Heritage Built Environment department for permission for the alterations and/or destruction of the building.

CONCLUSION

A heritage survey was undertaken for the proposed Greytown Landfill site. One archaeological site with an ephemeral scatter of artefacts was recorded. The buildings adjacent to the site could date as far back as 1937, and these would require an assessment by an architect historian if they were to demolish or altered in any manner.

The client will need to apply to KZN Heritage for a permit to affect the archaeological site.

**APPENDIX A
SITE RECORD FOMS**

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:

Iron Age:

Historical Period: X

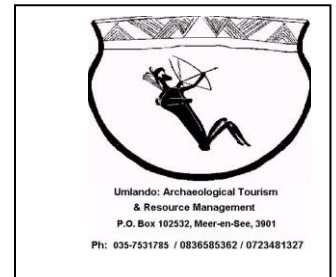
Recorder's Site No.: GLI01

Official Name: N/A

Local Name:

Map Sheet:

GPS reading: S29 05 01.8 E30 37 51.8



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From the R33 and R74 intersection north of Greytown, travel for 9.5km, in a northeast direction. Turn right onto the unpaved road and continue for 4.2km. Stop and walk downhill (northeast) for 120m just before the lower. Site occurs in the afforested area.

SITE DESCRIPTION:

Type of Site: Open

Merits conservation: No

Threats: Yes

What threats: Greytown Landfill

RECORDING:

Graphic record: Yes Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson

Address: PO Box 102532, Meerensee, 3901

Date: 16/07/2012 Owner: Private

Description of site and artefactual content.

Site consists of an ephemeral scatter of adiaagnostic pottery below the top of the hill. 2 upper grinding stones, on river pebbles) were noted.