

**HERITAGE SURVEY OF THE MINING PERMIT  
APPLICATION FOR PORTION ONE OF FARM THE  
CORNER 11328 ET, UMZUMBE, KZN  
(REF NO. KZN 30/5/1/3/2/10675 MP)**

**FOR EXM ADVISORY SERVICES (PTY) LTD**

**DATE: 12 AUGUST 2021**

**By Gavin Anderson**

**Umlando: Archaeological Surveys and Heritage  
Management**

**PO Box 10153, Meerensee, 3901**

**Phone: 035-7531785      Cell: 0836585362**

**[umlando@gmail.com](mailto:umlando@gmail.com)**



## TABLE OF CONTENT

INTRODUCTION .....	4
KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018 .....	9
METHOD .....	11
Defining significance.....	12
RESULTS .....	15
DESKTOP STUDY .....	15
PALAEONTOLOGICAL SENSITIVITY .....	24
FIELD SURVEY.....	24
MANAGEMENT PLAN .....	25
CONCLUSIONS .....	25
REFERENCES .....	25
<b>EXPERIENCE OF THE HERITAGE CONSULTANT .....</b>	<b>26</b>
<b>DECLARATION OF INDEPENDENCE.....</b>	<b>26</b>
APPENDIX A .....	27
CORRESPONDENCE REGARDING THE GRAVES .....	27

## TABLE OF FIGURES

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT .....	5
FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT .....	6
FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT (2002) .....	7
FIG. 4: SCENIC VIEW OF THE STUDY AREA .....	8
TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES.....	14
FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA .....	17
FIG. 6: SURVEYOR GENERAL MAP OF THE CORNER 11328 (1902).....	18
FIG. 7: LOCATION OF THE STUDY AREA IN 1937 .....	19
FIG. 8: LOCATION OF THE STUDY AREA IN 1972 .....	20
FIG. 9: APPROXIMATE LOCATION OF THE GRAVES.....	21
FIG. 10 STUDY AREA IN 2015 .....	22
FIG. 11 STUDY AREA IN 2017 .....	23
FIG. 12: PALAEONTOLOGICAL SENSITIVITY MAP .....	24

## 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

Dantoprox (Pty) Ltd wish to apply for a mining permit for the extraction of Lithium, Feldspar, Aggregate, Quartz and Rare earth minerals on the Remaining Extent of Farm The Corner 11328 ET, Umzumbe, KwaZulu-Natal. The mining area applied for is an existing disturbed mining area. The previous mining permit has lapsed and this application is in terms of section 27 of the MPRDA, on the same land and area and for the same minerals to support the continued mining of the permit area. The proposed mining operations will extract Lithium, Feldspar, Aggregate, Quartz and Rare earth minerals.

iSambulo Environmental Consulting (Pty) Ltd have been appointed as the Independent Environmental Assessment Practitioners responsible for undertaking the Public Participation Process and EXM Advisory Services (Pty) Ltd have been appointed as the Independent Environmental Assessment Practitioners for the undertaking of the environmental reporting requirements.

Umlando was requested to undertake an assessment of the proposed development. Figures 1 – 3 show the location of the development.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT

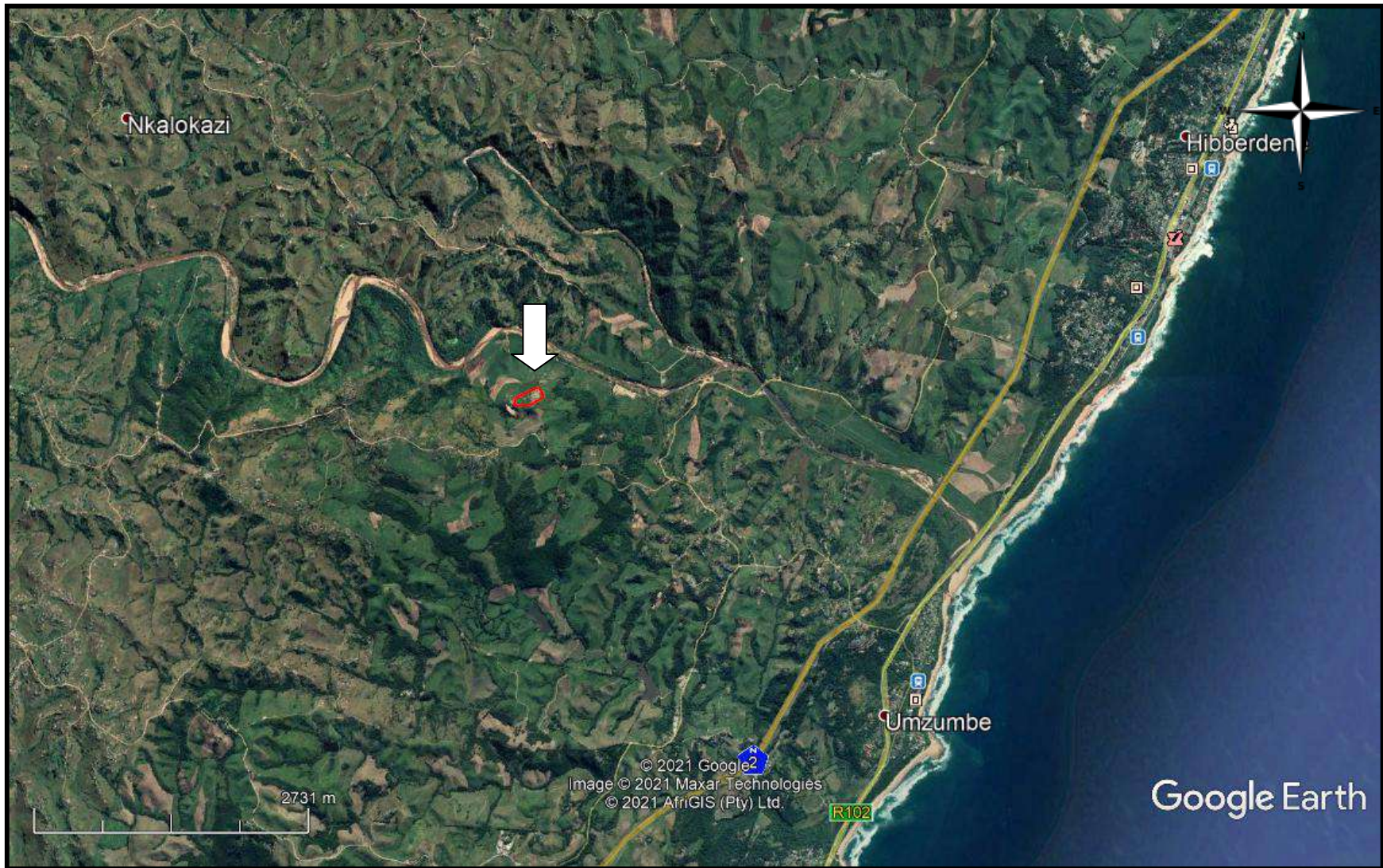


FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT



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

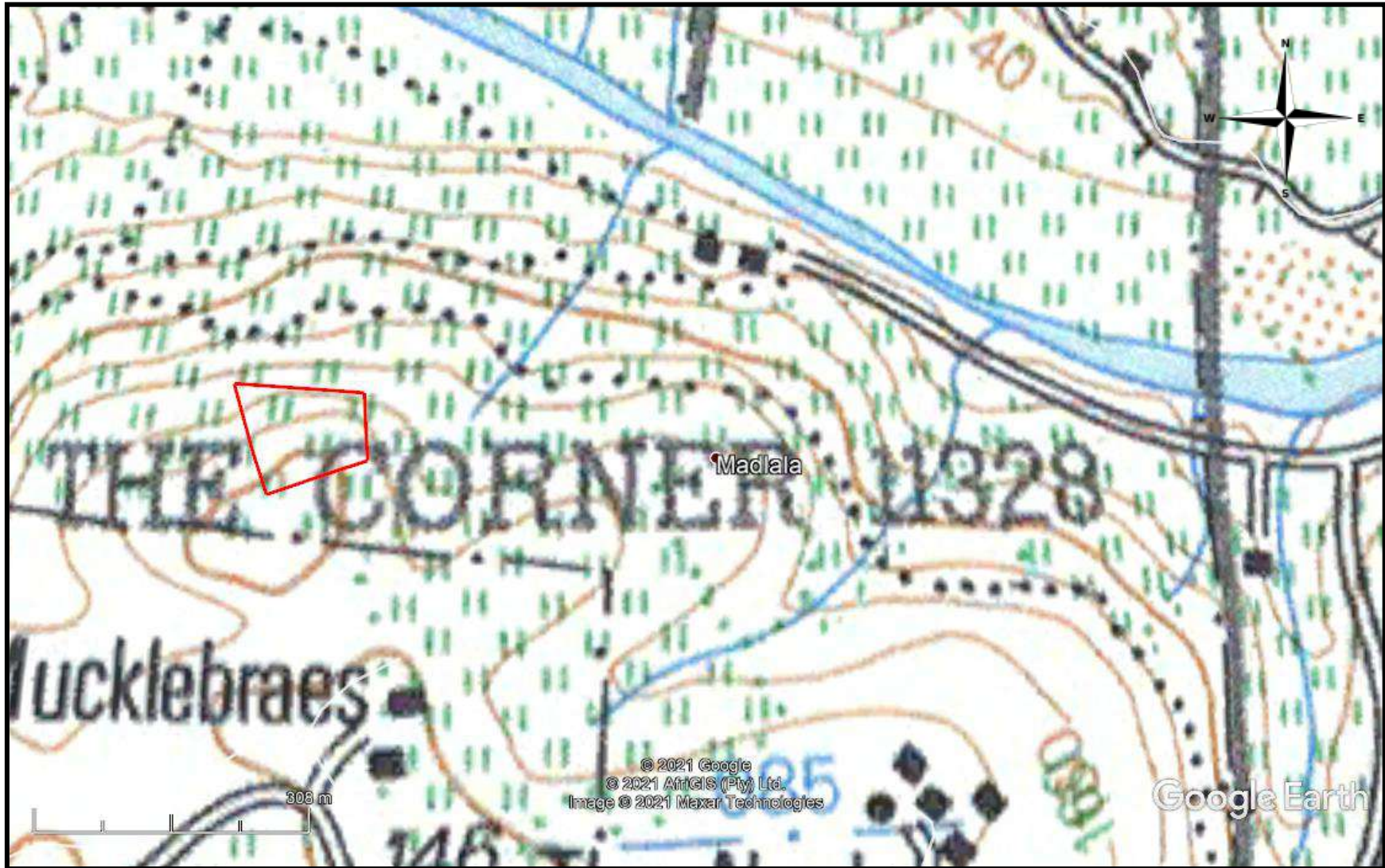


FIG. 4: SCENIC VIEW OF THE STUDY AREA





**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 1<sup>st</sup> and 2<sup>nd</sup> 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. Anderson (2018) surveyed the surrounding properties, where a few archaeological sites were recorded (fig. 5).

The Corner 11328 was first granted in 1902. No houses are indicated on the SG map (fig. 6).

Anderson (2018) noted that there were several houses in the general area from 1937 onwards (fig. 5). Some of these were continuously reused up to the present. Some of the earlier houses had human graves that were recorded during the survey. A possible site, A33, occurs between the two proposed permit application areas (fig. 7).

The 1972 topographical map indicates that the entire area is under sugarcane cultivation (fig. 8). This means that any houses that did exist had been removed; however, human graves could still exist below the surface.

Subsequent to the initial (2018) survey, I was informed that Ms Nobuhle Nyirongo had family graves to the north of the study area. Apparently, the graves of twins have been demolished/removed by existing mining activity. These graves may or may not have been demarcated. The twin's graves possibly occur within the current footprint, while the uncle's grave occurs just outside of it. Fig. 9 shows the assumed location of the graves. Fig. 10 shows the same area in 2015 before it was disturbed. Fig. 11 shows the area after initial disturbance in 2017.

A PPP was undertaken in 2018 with the community leaders and Ms Nyirongo (Appendix A). A site meeting followed this where the gravesite was visited. The graves were not found and there was a dispute about some graves or walling. Ms Nyirongo later supplied death certificates. No further interaction has occurred between the parties.



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

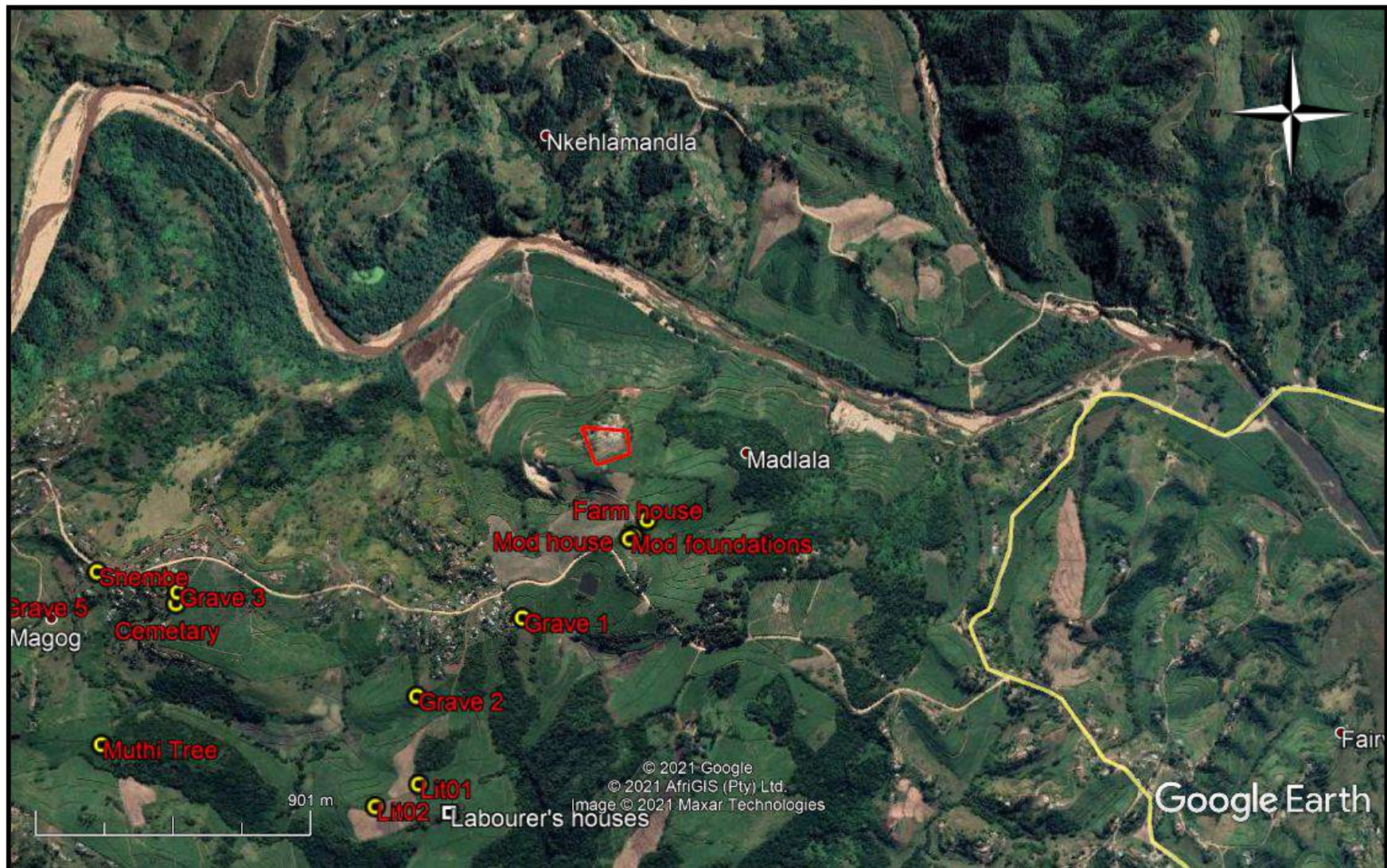


FIG. 6: SURVEYOR GENERAL MAP OF THE CORNER 11328 (1902)

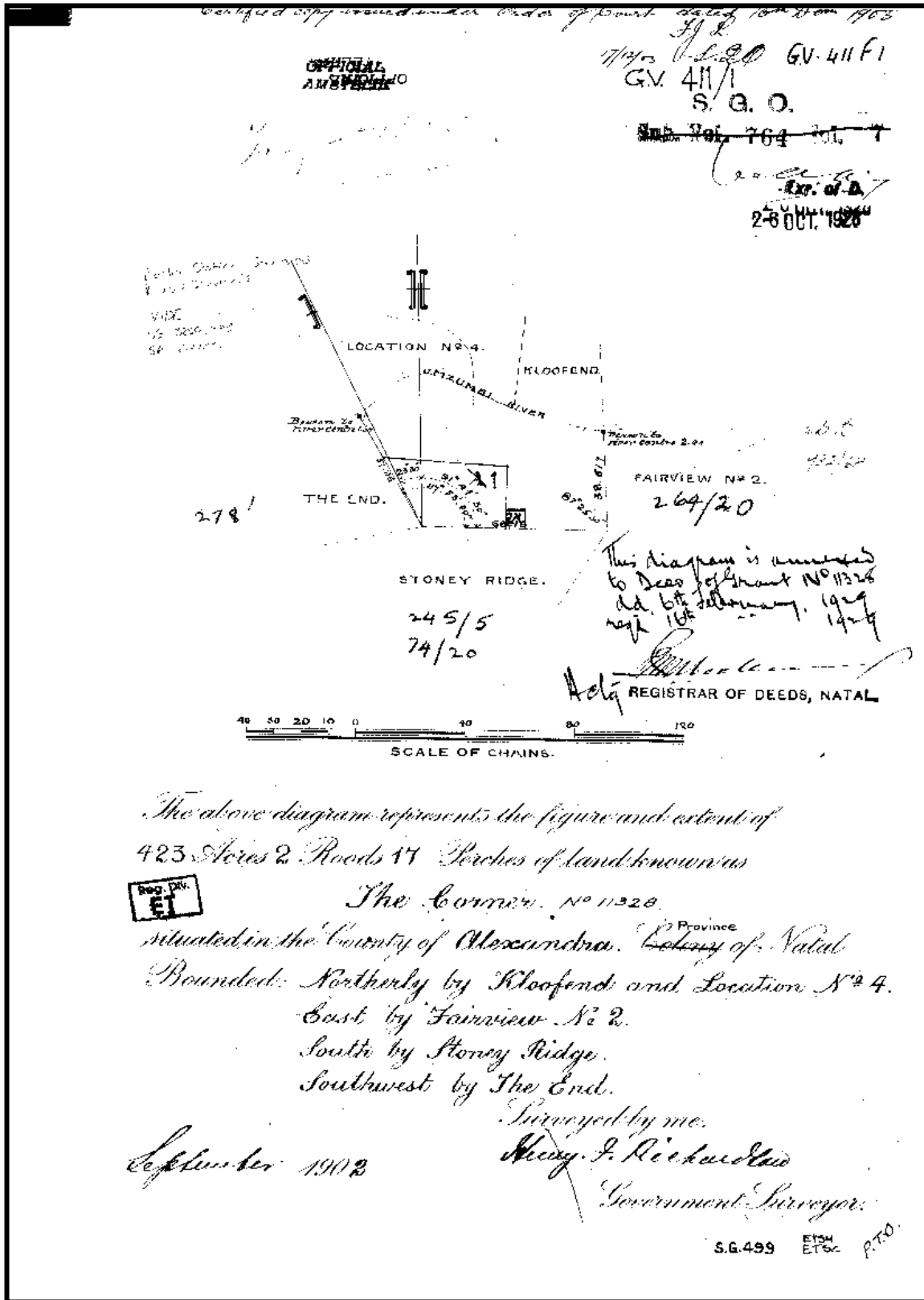


FIG. 7: LOCATION OF THE STUDY AREA IN 1937<sup>1</sup>



<sup>1</sup> 117A\_045\_35931

FIG. 8: LOCATION OF THE STUDY AREA IN 1972

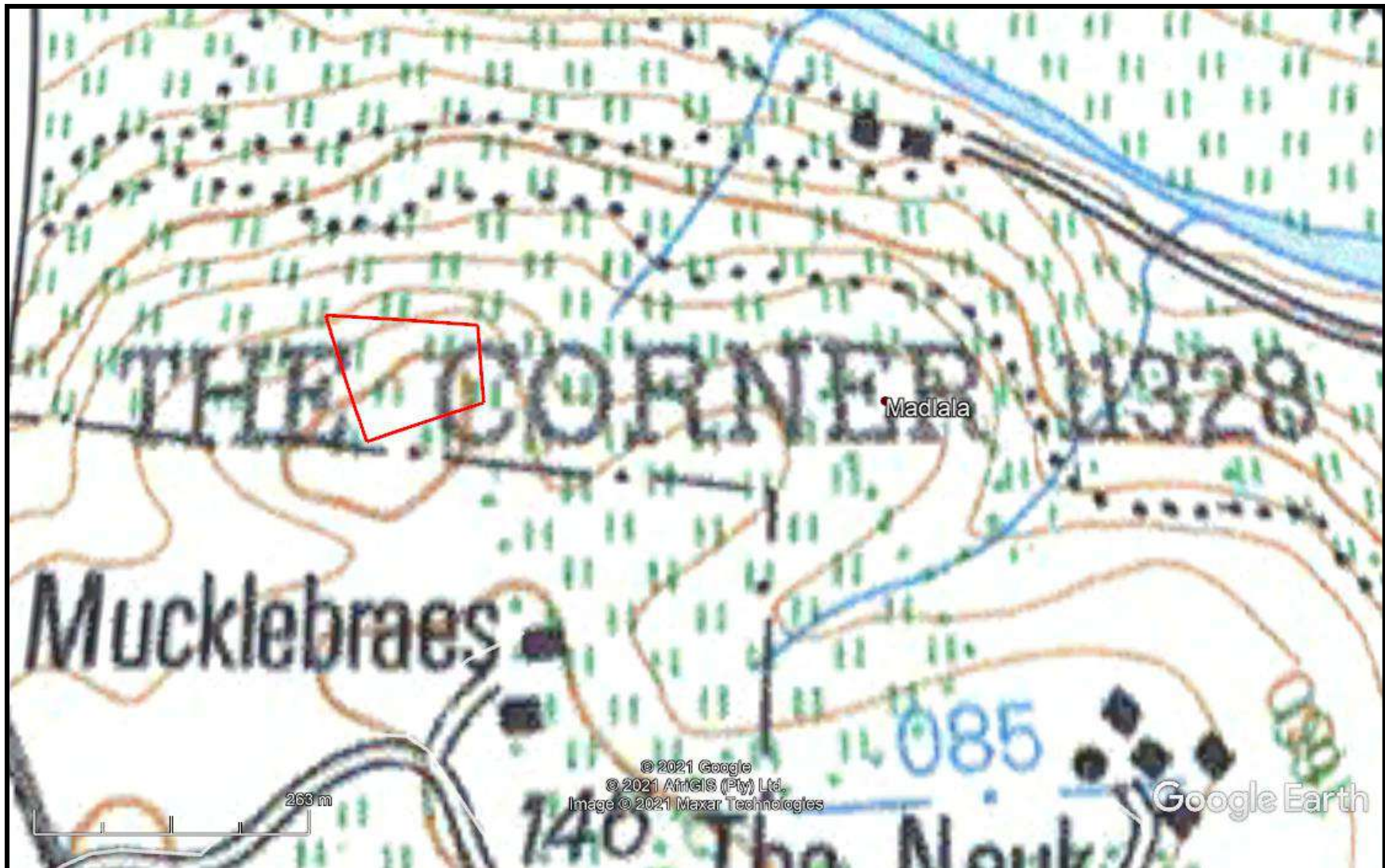


FIG. 9: APPROXIMATE LOCATION OF THE GRAVES

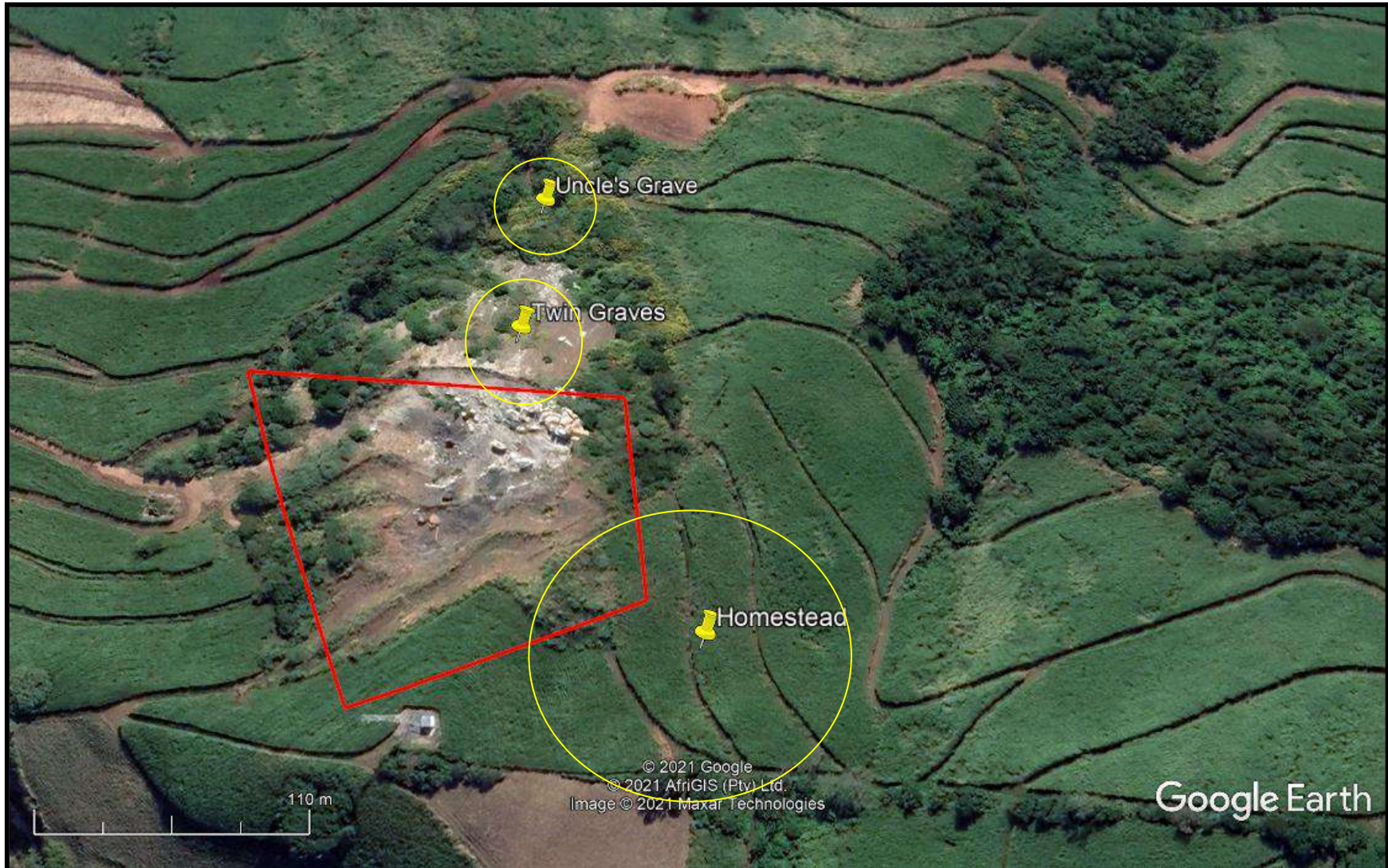


FIG. 10 STUDY AREA IN 2015

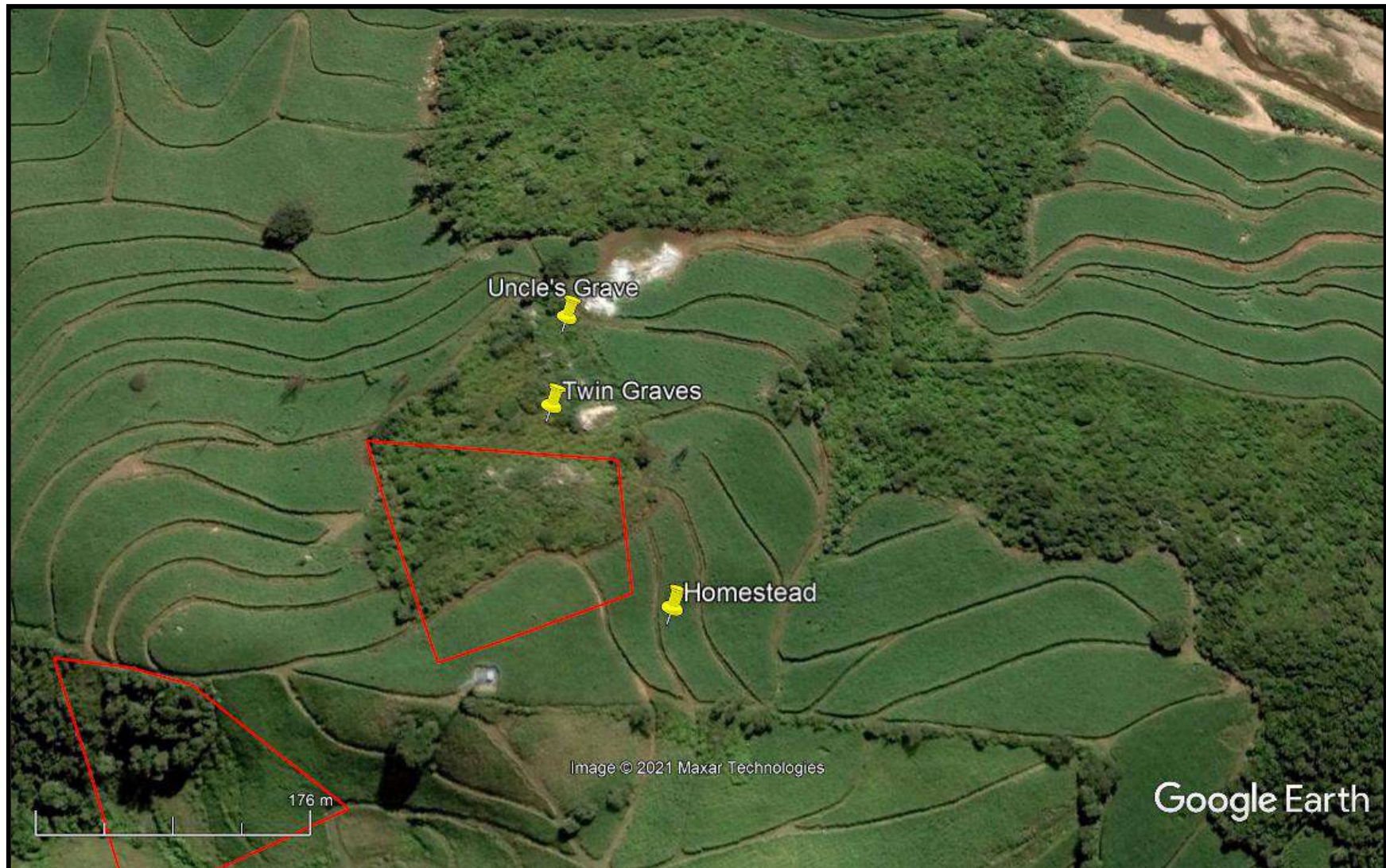
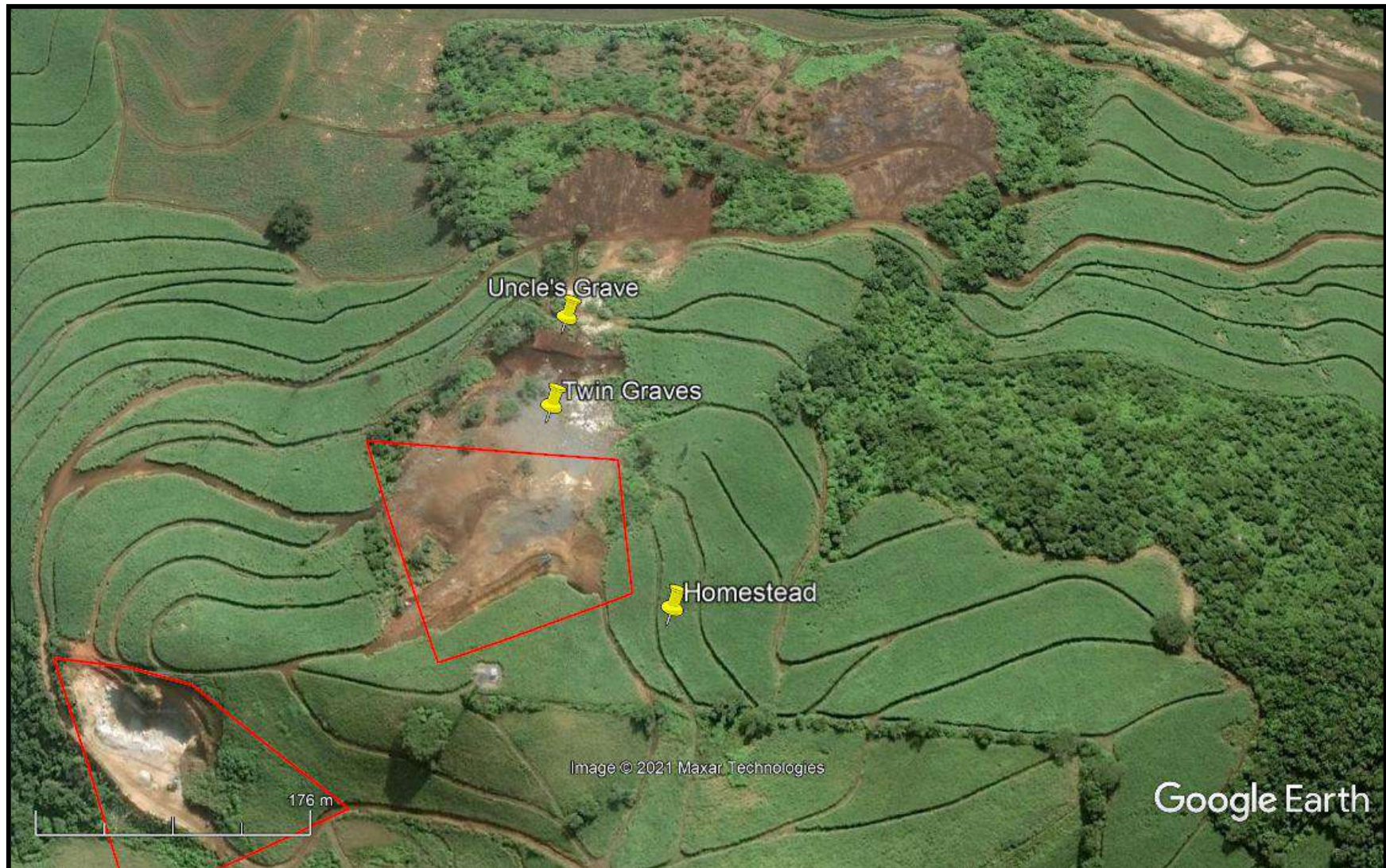


FIG. 11 STUDY AREA IN 2017



## PALAEONTOLOGICAL SENSITIVITY

The area is in an area of no palaeontological sensitivity (fig. 11). No further mitigation is required.

**FIG. 12: 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. The main aim of the survey was to attempt to locate the settlement and graves. The sugar cane and general ground cover was too dense to make an adequate survey for the graves.



The area will need to be cleared before a survey can be undertaken specifically for the possible graves if needed. Two areas with Blue gum trees were noted and these could be the remains of the settlement.

The various tracks were used to assess for potential archaeological artefacts as they provided adequate cuttings. No artefacts were noted and this fits the general pattern of the area from the previous survey.

### **MANAGEMENT PLAN**

A Public Participation Process was initiated in 2018 between the various parties (Appendix A). There appears to be disagreement between Ms Nyirongo, the community, and UCM, and the matter has not been finalised.

No management plan is required for the archaeology and palaeontology.

### **CONCLUSIONS**

The proposed mine will not affect palaeontological and archaeological sites. However, there are possible graves within 50m of the mining area. The issues surrounding the graves have not been finalised as the claimant has apparently not come back to UMC with further information.

### **REFERENCES**

Anderson, G. 2018. Heritage Survey Of The Proposed Salene Lithium Mine And Prospecting Rights, Kwazulu-Natal.

### **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 'Gavin Anderson', with a horizontal line underneath.

Gavin Anderson  
Archaeologist/Heritage Impact Assessor

**APPENDIX A**  
**CORRESPONDENCE REGARDING THE GRAVES**

## DMR/Nyirongo Grave Meeting Minutes

<b>Meeting</b>	<b>Pointing out of graves</b>
<b>Meeting Date:</b>	<b>24/07/2018</b>
<b>Meeting Time:</b>	<b>11:15 to 12:50</b>
<b>Meeting</b>	<b>Umzumbe – P51</b>
<b>Meeting</b>	<b>Sizo Mkhize</b>
<b>Attendees:</b>	<b>Apo Mulinga – UMC</b> <b>Alpheus Mabaso – UMC</b> <b>Pierre Baronet – UMC</b> <b>Wayne Baronet – UMC</b> <b>Karoon Moodley – DMR</b>
<b>Minutes Issued</b>	<b>Apo Mulinga</b>

Background Nobuhle Nyirongo has been in touch with UMC twice about the same matter. The first time was in the mid-year of 2016. Presents on site were Nkosi Madlala and Alpheus Mabaso. She couldn't locate the graves because of the canes being too long. She was advised to come back after harvest. She did come back. The people present were; Mabaso, Thobile and the nkosi's wife (Cleopatra). She managed to locate the graves on the eastern side out of our permits area (+100 meters). She located some stones that were ploughed over by the farmer. She insisted that they were the remain of the graves. She confirmed that there were only 2 graves. Mabaso marked the area with danger tapes to identify it. Mabaso notified UMC's management and confirmed that the graves were out of our permits area. We informed and invited the DMR to come and confirm the location of these graves. Sizo and Nomonde accepted the invitation. But unfortunately Nobuhle Nyirongo did not answer the call. Mabaso took the DMR representatives to the marked area. They took pictures and confirmed they were located out of our permit area.

**Discussion:**

On Tuesday 24<sup>th</sup> of July 2018, Nobuhle Nyirongo came back with a bigger delegation listed above. The main purpose of the meeting was for the Nyirongo family to point out where the graves were. Immediately after introduction of each individual present at the gathering,

The parties agreed to proceed and locate the graves.

A gentleman from the community spotted the graves in less than 5 minutes. He knew exactly where they were. The rest of the group could not find anything.

The family could not agree on the found graves saying it was a retaining wall.

UMC representatives noted that Nobuhle Nyirongo was now talking about 4 graves and was searching for the graves on our permits area.

This contradicts the family's first story

UMC disagrees because the permit area was covered with a forest, rocks and outcrop.

There was no cane planted in this area because of the rocky ground.

Nkosi Madlala suggested that we agreed on finding a solution before we parted. The Nyirongo family would like UMC to compensate them with R25,000.00 per grave.

**Decisions made**

In order to resolve this matter in a compassionate and legitimate way, UMC decided to take Mr. Moodley's recommendation to contact Amafa / Heritage KZN to find out about the best way forward. Before the above is done, UMC will request the Nyirongo family to supply them with the following: Full names of deceased, date of birth, date of death, copies of IDs and copies of death certificates.

UMC will communicate with the Nyirongo family through Nkosi Madlala and the 2 DMR representatives

**Email correspondence**

**From:** Apo Mulinga <[amulinga@afriess.net](mailto:amulinga@afriess.net)>  
**Sent:** Tuesday, October 16, 2018 8:32:05 AM  
**To:** [Karoon.Moodley@dmr.gov.za](mailto:Karoon.Moodley@dmr.gov.za)  
**Cc:** [sizomkhize.sm@gmail.com](mailto:sizomkhize.sm@gmail.com); [madlalam59@gmail.com](mailto:madlalam59@gmail.com); 'Wayne B'; [pcbaronet@mweb.co.za](mailto:pcbaronet@mweb.co.za); [mfuneni32@gmail.com](mailto:mfuneni32@gmail.com)  
**Subject:** RE: Nyirongo graves update

Good day Gentlemen,

This email serves to keep you updated on the Nyirongo graves matter.

On the 24<sup>th</sup> of September 2018, Nobuhle called to confirm receipt of UMC letter and to explain that her uncle and father graves were higher up.

Nobuhle also confirmed that she will get back to Umzumbe Mining Company as soon as she get the required documents from the home affairs.

Regards,

**A.K. MULINGA | Chief Executive Officer**

---

**UMZUMBE MINING COMPANY PTY. LTD**

Postnet Suite No: 431, Private Bag X709,  
Port Shepstone, 4240, South Africa  
Cell: +27 (0) 73 015 5951

**From:** Apo Mulinga <[amulinga@afriess.net](mailto:amulinga@afriess.net)>  
**Sent:** Tuesday, 25 September 2018 9:30 AM  
**To:** '[Karoon.Moodley@dmr.gov.za](mailto:Karoon.Moodley@dmr.gov.za)' <[Karoon.Moodley@dmr.gov.za](mailto:Karoon.Moodley@dmr.gov.za)>

**Cc:** '[sizomkhize.sm@gmail.com](mailto:sizomkhize.sm@gmail.com)' <[sizomkhize.sm@gmail.com](mailto:sizomkhize.sm@gmail.com)>;  
'[madlalam59@gmail.com](mailto:madlalam59@gmail.com)' <[madlalam59@gmail.com](mailto:madlalam59@gmail.com)>; 'Wayne B'  
<[waybaro22@gmail.com](mailto:waybaro22@gmail.com)>; '[pcbaronet@mweb.co.za](mailto:pcbaronet@mweb.co.za)' <[pcbaronet@mweb.co.za](mailto:pcbaronet@mweb.co.za)>;  
'[mfuneni32@gmail.com](mailto:mfuneni32@gmail.com)' <[mfuneni32@gmail.com](mailto:mfuneni32@gmail.com)>

**Subject:** Nyirongo graves update

Good day Gentlemen,

This email is just an update on the Nyirongo graves matter.

We have received attached forms from Nobuhle Nyirongo on Friday the 21<sup>st</sup> of September 2018.

The attached letter was hand delivered to Nobuhle Nyirongo this morning.

Regards,

**A.K. MULINGA** | Chief Executive Officer

---

**UMZUMBE MINING COMPANY PTY. LTD**

Postnet Suite No: 431, Private Bag X709,

Port Shepstone, 4240, South Africa

Cell: +27 (0) 73 015 5951

**UMZUMBE MINING COMPANY (PTY) LTD.**

Remainder of the farm corner 11328. Umzumbe, Kwa-Zulu Natal, **South Africa**

**To Nobuhle Nyirongo,**

**Monday, the 24<sup>th</sup> of September 2018**

**RE: BIRTH AND DEATH CERTIFICATE**

We would like to thank you for dropping at our offices 3 copies of notice of death by traditional leader forms on Friday the 21st of September 2018.

We are a bit confused about the details on these forms since you told us that the deceased were your father and uncles. The details on these forms are all of children. Nevertheless, Umzumbe Mining Company has committed to assist in the matter.

For us to proceed, we still need, as previously requested, birth and death certificates.

Since you have handed in the presented documents to Home Affairs, we are sure the certificates will be forthcoming.

Sincerely yours

Apo Mulinga

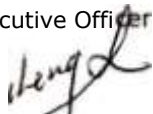


**P: +27 (073) 015 5951 [amulinga@afriass.net](mailto:amulinga@afriass.net)**

**Reg No 20111001705/07**

**Postal: Postnet Suite No.431, Private Bag X709.PortShepstone 4240,  
South Africa Directors: k Mulinga, W. Baronet**

Chief Executive Officer



n