HERITAGE SURVEY OF THE PROPOSED MKUZE AIRPORT CITY DEVELOPMENT, KWAZULU-NATAL

FOR UMHLOSINGA DEVELOPMENT AGENCY

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By Gavin Anderson

Umlando: Archaeological Surveys and Heritage

Management

PO Box 102532, Meerensee, 3901

Phone/fax: 035-7531785 Fax: 0865445631

Cell: 0836585362



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INTRODUCTION

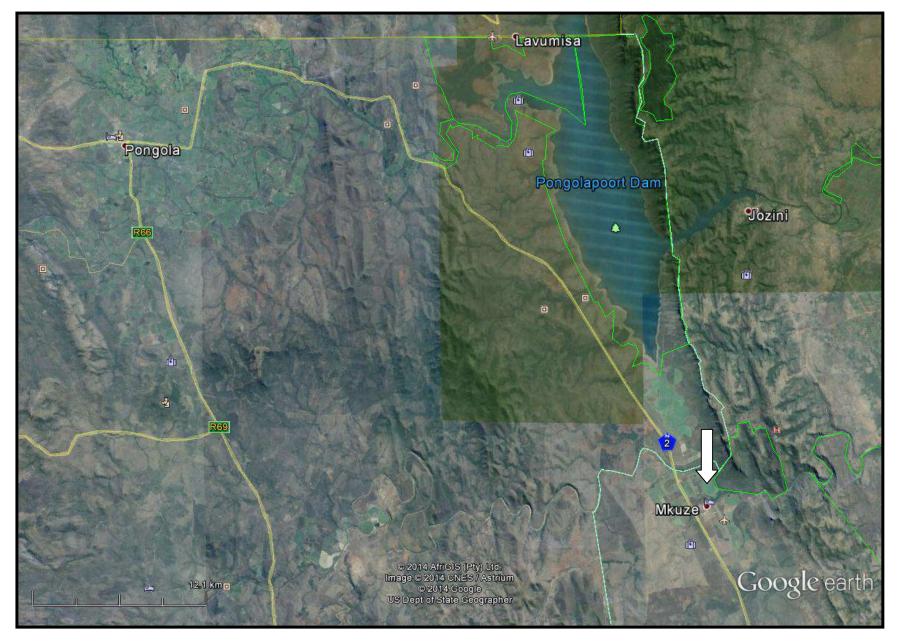
Umhlosinga Development Agency is planning to upgrade and expand the Mkuze airport. The proposal is known as the Mkuze Airport City Development, and is located on the eastern side of Mkuze, KwaZulu-Natal. The study area is ~3km x 2km in maximum length, and occurs in existing sugar cane land.

The proposal consists of changing the current farm land around the existing airport. This will include the following:

- Agricultural Village
- Agriculture
- Airport
- Airport Building
- Commercial
- FET College / Government Precinct
- Hotel & Conference Centre
- Light Industrial
- Residential Low Income
- Residential Medium Income
- Residential High Income

Figures 1 – 3 show the location of the planned development.

FIG. 1 GENERAL LOCATION OF THE STUDY AREA



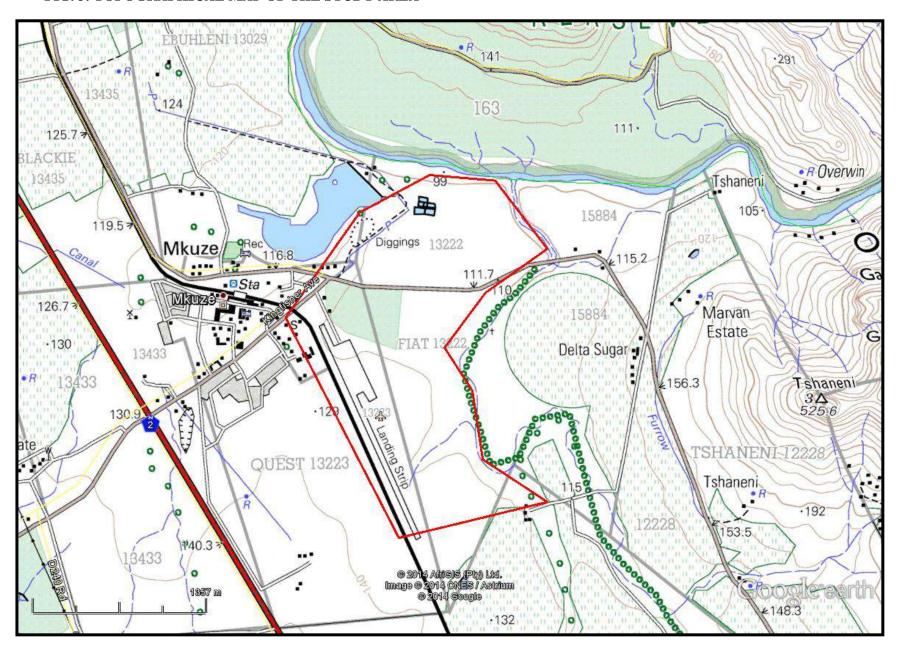
Mhaze Airport HIA,doc Umbardo 17/11/2014

FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA



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FIG. 3: TOPOGRAPHICAL MAP OF THE STUDY AREA



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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 databases that have been collated by Umlando. These databases contain archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national provincial monuments and battlefields Southern (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries 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.

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. 4). These sites include all types of Stone Age and Iron Age sites. No known sites occur in the study area. Those sites recorded near the study area consist of Early and Middle Stone Age scatters. Umlando has recorded Stone Age scatters near the town of Mkuze, and to the north of the freeway.

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

Ghost Mountain occurs ~2km to the east and forms part of the cultural landscape and living heritage of the area.

The 1937 aerial photographs indicate that some of the land was cultivated. No buildings or settlements occur in the study area in 1937.

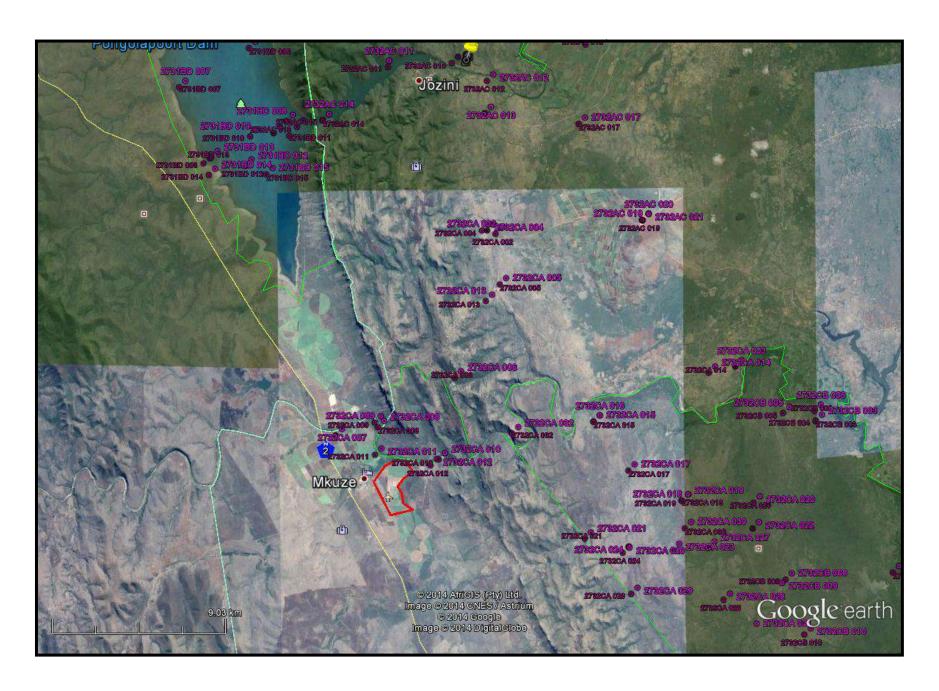
The 1969 topographical map indicates that there is an increase in agricultural activity and associated buildings. These buildings include farm labourers houses (referred to as compounds) and pump houses. The houses occur on the 2002 topographical map and 2013 Google Earth imagery.

FIELD SURVEY

Much of the land has been affected by sugarcane farming activity. The soil tends to be shallow in most places and thus ploughing activity has exposed the layers that contain stone tools. Some areas were dense with sugar cane resulting in poor archaeological visibility. Various tracks were surveyed to obtain a general sample of the area.

No heritage sites per se were observed along the route. The study area has many isolated stone tools or small scatters of ~ 5 tools in a small area (less than 3m²). Fig. 7 shows some of these tools. All of the tools are in a secondary context due to farming activities. The tools are too few in number and scattered to be a called a site. The area should be noted as having occurrences of these artefacts. The stone tools are of low significance and no further mitigation is required.

FIG. 4: LOCATION OF KNOWN HERITAGE SITES NEAR THE STUDY AREA



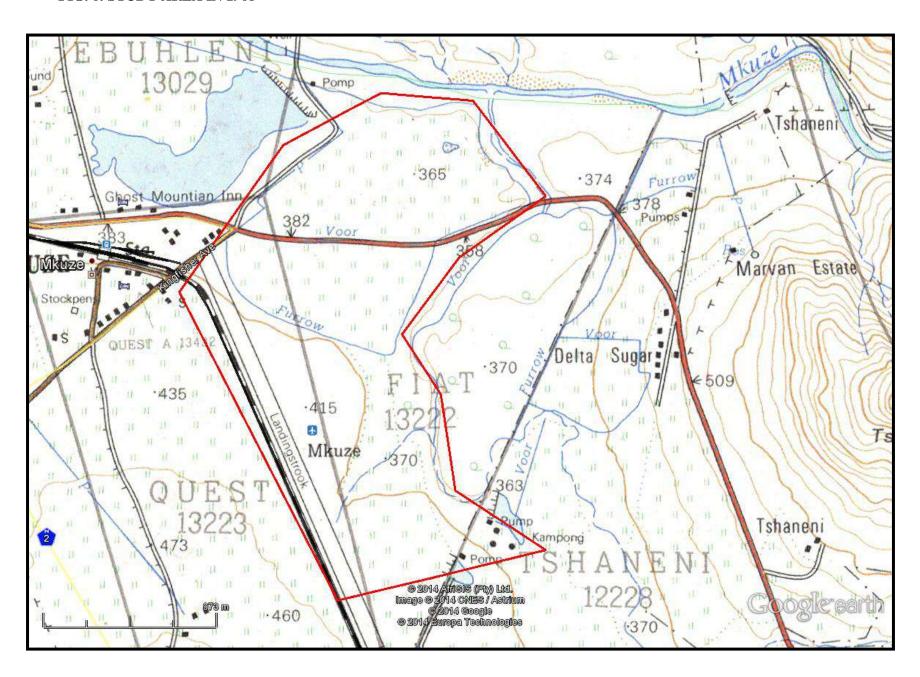
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FIG. 5: STUDY AREA IN 1937



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FIG. 6: STUDY AREA IN 1968



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FIG. 7 GENERAL VIEWS FO THE STUDY AREA









FIG. 8 STONE TOOLS NOTED IN THE STUDY AREA





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If any buildings are to be demolished then they may need to be assessed. All buildings older than 60 years of age require a permit from Amafa KZN if they are to be damaged or altered. This includes the airport and farm labourers' buildings, as well as old pump structures. The developer will need to prove that these buildings are younger than 60 years, and this can be undertaken by a Deeds Office search.

CONCLUSION

A heritage survey was undertaken for the proposed Mkuze Airport City Development. The proposal will consist of industrial, commercial and residential development around the Mkuze Airport. The land is currently used for sugar cane farming and the existing Mkuze airport.

The survey noted that the entire area has scatters of Middle Stone Age tools. These tools are too widely dispersed and in a secondary context, to be considered as a site, and were noted as occurrences of tools.