

**PROPOSED LIGHT INDUSTRIAL DEVELOPMENT ON
PORTION 16, FARM GLEDHOW MOUNT NO. 1983,
KWADUKUZA LOCAL MUNICIPALITY,
KWAZULU-NATAL**

Desktop Heritage Assessment

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**FOR: Confluence Strategic Development & Environmental Partner
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I, Jean Beater, act as an independent specialist for this project and I do not have any vested interest either business, financial, personal or other, in the proposed activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014.

SPECIALIST DETAILS

Name	Qualification	Professional Registration
Jean Beater	MA (Heritage Studies) MSc (Environmental Management)	Member of Association of South African Professional Archaeologists (No. 349) Member of IAIAAsa (No. 1538)

1. INTRODUCTION

uShukela Milling (Pty) Ltd are the landowners of various portions of Farm Gledhow Mount No. 1983 located within the KwaDukuza Local Municipality, iLembe District. Farm Gledhow Mount No. 1983 has recently been subdivided to unlock development opportunities. RSPG Dev. Co (Pty) Ltd, on behalf of the landowner, propose to construct a “light industrial” development on proposed Portion 16 of Farm Gledhow Mount No. 1983. The property is currently zoned Agriculture 1 with portions of the property still being used for sugarcane farming. The light industrial development will consist of platforms, parking bays and an internal road network (public and service roads). The development will connect to the existing municipal services network in the area. The total footprint of the industrial development is approximately 7.7 hectares (pending final layout) (Confluence 2023:1).

A desktop heritage assessment was undertaken as the project site has been under cultivation since 1937 and the possibility of finding intact heritage resources is considered to be very low.

2. LEGISLATIVE REQUIREMENTS

The development footprint approximately 7.7 hectares (77000m²) hence the proposed development triggers section 41 (1) (c)(i), (ii) and (iii) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018) which lists developments or activities that require an HIA. The relevant sub-sections refer to: any development or other activity which will change the character of a site- (i) exceeding 5000 m².

In terms of section 3 of the NHRA, heritage resources are:

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and paleontological sites;
- (g) graves and burial grounds, including—
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the *Gazette*;

- (v) historical graves and cemeteries; and
- (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) of significance relating to the history of slavery in South Africa;
- (i) movable objects, including:
 - (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

3. LOCATION

The proposed light industrial development is located on the southern outskirts of the town of Stanger between the railway line which is situated on the south-eastern boundary of the development and the R102 road which is situated on the north-western boundary of the proposed development (see **Fig. 1**). **Fig. 2** shows the conceptual layout of the light industrial development.

4. TERMS OF REFERENCE

Undertake a desktop heritage assessment in order to determine the impact of the proposed light industrial development on heritage resources (if any). Provide mitigation measures, if necessary, to limit or avoid the impact of the proposed project on heritage resources.

Submit the desktop heritage report to the provincial heritage resources authority, the KwaZulu-Natal Amafa and Research Institute (hereafter referred to as the Institute), for their assessment and comment.



Figure 1: Light industrial development site outlined in pink



Figure 2: Conceptual layout of light industrial development

5. METHODOLOGY

A survey of literature, including other heritage impact assessment reports completed for the surrounding area, was undertaken in order to ascertain the history of the wider area and what type of heritage resources have or may be found in the area or site of development.

Older maps and aerial photographs were consulted in order to understand what the project site was like previously. These maps and photographs were obtained from the Department of Rural Development and Land Reform's CDNGI geospatial information website (www.cdnqiportal.co.za).

Photographs of the project site were provided by the Environmental Assessment Practitioner (EAP), Confluence Strategic Development & Environmental Partner.

6. HISTORICAL BACKGROUND OF PROJECT AREA & SURROUNDINGS

According to Prins (2020:3), the greater Stanger/KwaDukuza area has been relatively well surveyed for heritage sites. The evidence indicates that the wider surrounding area contains a wide spectrum of heritage sites covering different time-periods and cultural traditions.

Around 1 700 years ago an initial wave of Early Iron Age people settled along the inland foot of the sand dunes on sandy but humus rich soils which would have ensured good crops for the first year or two after they had been cleared. These early agro-pastoralists produced a characteristic pottery style known as Matola. The Matola people also exploited the wild plant and animal resources of the forest and adjacent sea-shore. By 1 500 years ago another wave of Iron Age migrants entered the area. Their distinct ceramic pottery is classified to styles known as "Msuluzi" (AD 500-700), Ndongondwane (AD 700-800) and Ntshekane (AD 800-900). Three sites belonging to these periods occur along the banks of the Tugela River (Prins 2020:3-4), which is located over 20km north-east of project site.

The greater KwaDukuza area is also associated with Zulu King Shaka in the early 1820's. It is at Stanger where King Shaka had his capital, KwaDukuza, and it was here that he was murdered by his half-brothers Dingane and Mhlangane. The exact spot of Shaka's death is thought to be where an old mahogany tree is located in the grounds of the Stanger/KwaDukuza municipal offices. The grain pit where Dingane is thought to have secretly buried Shaka is marked by a large rock in the King Shaka Memorial Garden in the town. In Stanger, near King Shaka's memorial, is

a small river known as Shaka's spring. Nearby on the Imbozamo River, was Shaka's bathing pool and cave where he would rest after swimming. Not much further off is the famous Execution Cliff where executions were carried out (Prins 2020:4). These sites are located to the west and north of the project site.

The town of Stanger was founded in 1873 and proclaimed a township in 1920 becoming a municipality in 1949. The town was named after William Stanger (1811-1854), the first Surveyor-General of Natal (Raper undated:415). The first sugar mill built in KwaZulu-Natal, Gledhow Mill, by C.G.Smith in 1880 is situated a short distance south east of the project area hence the use of the site for sugar cane cultivation.

The 1937 aerial photograph (**Fig. 3**) shows the site to be under sugar cane cultivation. This is also visible on the 1967 aerial image (**Fig. 4**) and on the 1968 1:50 000 topographic map (2931AD) (**Fig. 5**). The topographic map shows a power line running along the northern boundary of the project site.



Figure 3: 1937 aerial photograph of project site outlined in orange



Figure 4: 1967 aerial image of project site

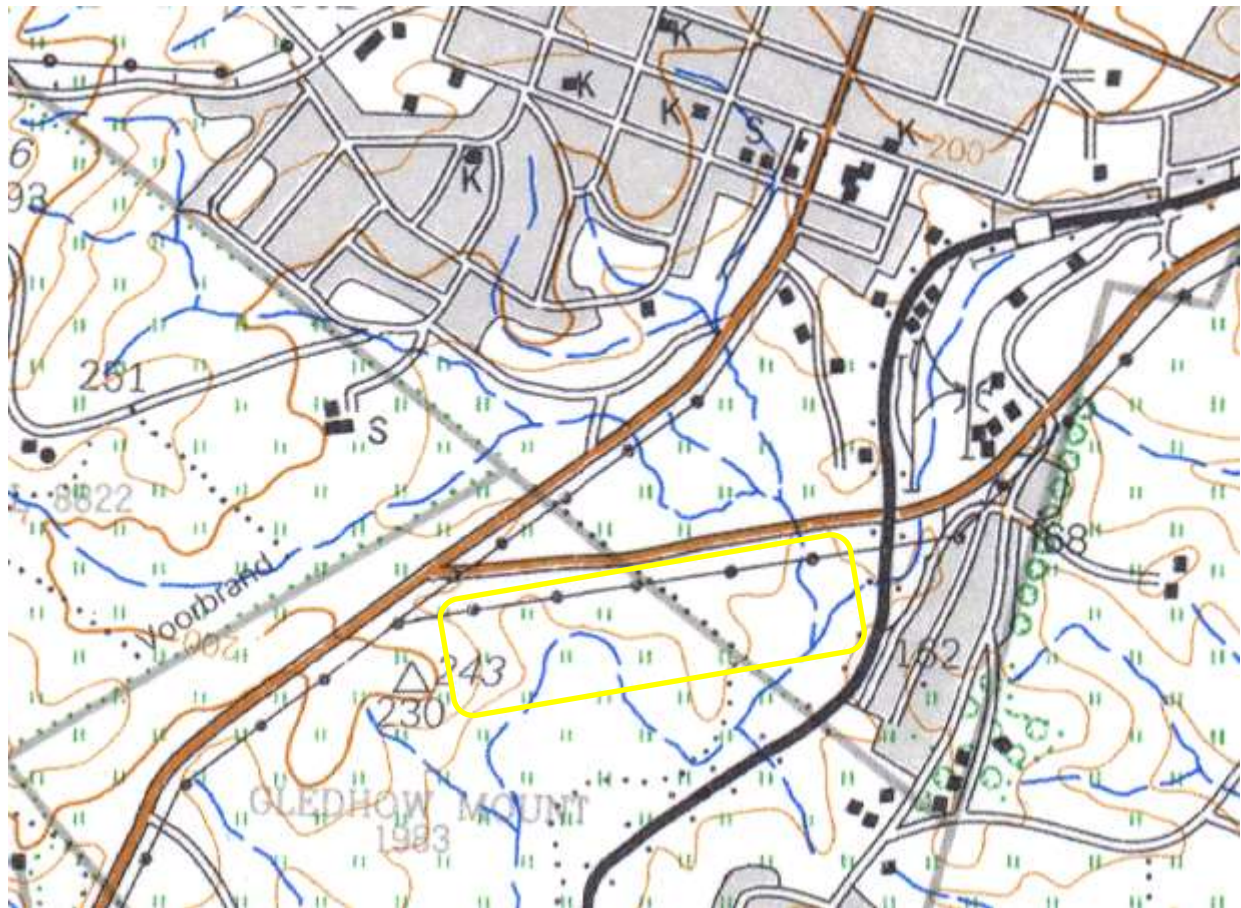


Figure 5: Section of 1968 topographic map with site outlined in yellow

7. DESKTOP ASSESSMENT

The site is presently used for sugarcane farming (as it has been since 1937) and the vegetation is recovering farmland. The farmer currently dumps organic matter left over from sugarcane processing on the site. A tributary of the uMvoti River flows along the eastern and southern boundaries of the site (Confluence 2023:2).

Figures 6 and 7 below are views across the project site looking in a westerly and north-westerly direction with power lines in the background.



Figure 6: View over project site



Figure 7: View over sugar cane fields

Figures 8 to 12 show the project site with accompanying disturbance (ploughed sections, for example) from sugar cane farming. The structures that lie outside the project site but close to the boundary of the site can be seen in **Fig. 8**. Due to the ongoing disturbance of the project site, it is unlikely that intact heritage resources will be found.



Figure 8: Ploughed land along northern boundary with structures outside site



Figure 9: View over watercourse



Figure 10: View across the south-eastern portion of the site with dwellings in background



Figure 11: View of centre of project site



Figure 12: View of southern portion of project site

The project site falls into an area of moderate fossil sensitivity therefore a desktop palaeontological study was undertaken. This study indicates that the proposed site lies on the Pietermaritzburg Formation that rarely has trace fossils. The Pietermaritzburg Formation was deposited in shallow to deep water conditions and only in the ancient shoreline facies would there be a chance of finding trace fossils such as worm burrows. It is noted that the area has been cultivated for sugarcane for decades and no fossils would be present in the soils (Bamford 2023:9).

The geological structures suggest that the rocks are the right age to contain fossils but these would only be below ground or in rocky outcrops, not in the soil cover. Since there is a small chance that fossils from the Pietermaritzburg Formation may be disturbed, a Fossil Chance Find Protocol must be included in the Environmental Management Programmer (EMPr) for the proposed development. The potential impact to fossil heritage resources is rated as extremely low (Bamford 2023:11).

8. DISCUSSION AND CONCLUSION

The project area has been used for sugar cane cultivation since the late 1930s (and possibly earlier) hence the chance of finding intact and significant heritage resources is highly unlikely. The desktop palaeontological assessment indicated that the potential impact to fossil heritage resources by the proposed development will be extremely low.

It is therefore recommended that from a heritage perspective, the proposed light industrial development can proceed.

9. MITIGATION MEASURES

- For any chance heritage finds, all work must cease in the area affected and the Applicant / Contractor must be immediately informed. A registered heritage specialist must be called to site to inspect the finding/s. The Institute must be informed about the finding/s.
- The heritage specialist will assess the significance of the resource and provide guidance on the way forward.
- Permits must be obtained from the Institute if heritage resources are to be removed, destroyed or altered.
- Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist.
- Should any recent remains be found on site that could potentially be human remains, the South African Police Service as well as the Institute must be contacted. No SAPS official may remove remains (recent or not) until the correct permit/s have been obtained.
- All recommendations and mitigation measures provided in the desktop palaeontological study must be adhered to such as the inclusion of the fossil chance find protocol into the EMPr.

10. REFERENCES

Bamford, M. 2023. *Palaeontological impact assessment for the proposed Gledhow Ptn 16 light industrial development, KwaDukuza, KwaZulu-Natal Province. Desktop study (Phase 1)*

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Raper, P.E. *Dictionary of Southern African Place Names*. Pretoria: HSRC