The Manager Archaeology, Palaeontology and Meteorites Unit South African Heritage Resource Agency P O Box 4637 Cape Town 8000

13 July 2020

Sir

LETTER OF RECOMMENDATION FOR EXEMPTION: THE PROPOSED MINING APPLICATION COMBINED WITH A WASTE LICENCE APPLICATION FOR THE MINING OF DIAMONDS (ALLUVIAL) NEAR SCHWEIZER-RENEKE ON A CERTAIN PORTION OF PORTION 12 (PTN OF PTN7 OF THE FARM DOORNHOEK 165, REGISTRATION DIVISION: HO, NORTH WEST PROVINCE

It is proposed to mine for diamonds (alluvial) near Schweizer-Reneke on a certain Portion of Portion 12 (Ptn of Ptn7 of the farm Doornhoek 165, registration division: HO, North West Province (Fig. 1 & 2).

I have reviewed the available information on the larger region and well as the study area specifically. This included published articles, unpublished reports, mostly HIA's done in the region, maps and aerial photographs and photographs. The detailed descriptions, illustrations and references are presented below in Sections 1, 2 and 3 of this document.

The findings of this review can be summarised as follows:

- Although precolonial settlement, i.e. Stone Age and Iron Age, took place in the larger region, it was of a low intensity. Unfortunately, due to the intensive farming activities in the region over the last 100 years or more, most of this have been destroyed.
- A number of sites of heritage significance dating to historic times are also found in the larger region. Similarly, to the precolonial features, many of these were also destroyed as a result of recent agricultural and urban development.
- Old maps and aerial photographs going as far back as 1938 indicate that the area was largely used for agricultural purposes and no built features are located inside the development area or even close to it.
- The current land-use of the area under consideration is agricultural fields. The implication of this is that it any sites, features or objects of cultural significance occurred here in the past, it in all probability would have been destroyed by these activities (Fig. 1, 7 & 8).

From the above review of the available information as well as the environment in which the developments is to take place, it is possible to say with a very high degree of certainty that the development of the diamond mining activities would not have an impact on any sites, features or objects of cultural heritage. I therefore recommend that the development can continue without the requirement of conducting a full heritage impact assessment, on condition of SAHRA's acceptance of the measures presented below:

- The SAHRIS Palaeontological Sensitivity Map (Fig. 4) indicate that the study area has a high sensitivity of fossil remains to be found and therefore a desktop palaeontological assessment of the study area is required. Based on that, a field assessment is likely.
- Should archaeological sites or graves be exposed in other areas during construction work, it must immediately be reported to a heritage practitioner so that an investigation and evaluation of the finds can be made.

### **Environmental assessors**

Milnex CC Environmental Consultants

Ms L Esterhuizen

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Property details							
Province	North West						
Magisterial district	Schw	Schweizer-Reneke					
Local municipality	Mamusa						
Topographic map	2725BA						
Closest town	Schweizer-Reneke						
Coordinates	Cent	Centre point					
	No	Latitude	Longitude	No	Latitude	Longitude	
	1	-27,12237	25,64309				
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#### Prepared for:

Milnex CC Environmental Consultants: Ms L Esterhuizen

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### Prepared by:

J A van Schalkwyk (D Litt et Phil),

- Heritage Consultant: ASAPA Registration No.: 164 Principal Investigator: Iron Age, Colonial Period, Industrial Heritage.
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# Submission of the report:

It remains the responsibility of the client to submit the report to the South African Heritage Resources Agency (SAHRA) or relevant Provincial Heritage Resources Agency (PHRA) by means of the online SAHRIS System.

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<sup>&</sup>lt;sup>1</sup> Left click on the icon to open the file in Google Earth, if installed on the computer. Alternatively, right click on the icon. In dialog box, select "Save Embedded File to Disk" and save to folder of choice.

#### **Specialist competency:**

Johan A van Schalkwyk, D Litt et Phil, heritage consultant, has been working in the field of heritage management for more than 40 years. Originally based at the National Museum of Cultural History, Pretoria, he has actively done research in the fields of anthropology, archaeology, museology, tourism and impact assessment. This work was done in Limpopo Province, Gauteng, Mpumalanga, North West Province, Eastern Cape Province, Northern Cape Province, Botswana, Zimbabwe, Malawi, Lesotho and Swaziland. Based on this work, he has curated various exhibitions at different museums and has published more than 70 papers, most in scientifically accredited journals. During this period, he has done more than 2000 impact assessments (archaeological, anthropological, historical and social) for various government departments and developers. Projects include environmental management frameworks, roads, pipeline-, and power line developments, dams, mining, water purification works, historical landscapes, refuse dumps and urban developments.

Behr Mungh

J A van Schalkwyk Heritage Consultant July 2020

#### SPECIALIST DECLARATION

I, J A van Schalkwyk, as the appointed independent specialist, in terms of the 2014 EIA Regulations (as amended), hereby declare that I:

- I act as the independent specialist in this application;
- I perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 (as amended) and any specific environmental management Act;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge
  of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I have no vested interest in the proposed activity proceeding;
- I undertake to disclose to the applicant and the competent authority all material information in my
  possession that reasonably has or may have the potential of influencing any decision to be taken
  with respect to the application by the competent authority; and the objectivity of any report, plan
  or document to be prepared by myself for submission to the competent authority;
- I have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- I have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- all the particulars furnished by me in this specialist input/study are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist

Behr Mingh

J A van Schalkwyk July 2020

## **1. REGIONAL OVERVIEW**

The cultural landscape qualities of the region essentially consist of two components. The first is made up of a limited pre-colonial (Stone Age and Iron Age) occupation. The second component is a rural area in which the human occupation consists of two elements, being made up of a farming community and an urban element, rural towns and townships, most of which developed during the last 150 years.

## 1.1 Stone Age

Very little habitation of the central highveld area took place during Stone Age times. Tools dating to the Early Stone Age period are mostly found in the vicinity of larger watercourses, e.g. the Vaal River or the Harts River and especially in sheltered areas such as at the Taung fossil site. During Middle Stone Age (MSA) times (c. 150 000 – 30 000 BP), people became more mobile, occupying areas formerly avoided. In many cases, tools dating to this period are found on the banks of the many pans that occur all over. The MSA is a technological stage characterized by flakes and flake-blades with faceted platforms, produced from prepared cores, as distinct from the core tool-based ESA technology.

Late Stone Age (LSA) people had even more advanced technology than the MSA people and therefore succeeded in occupying even more diverse habitats. Some sites are known to occur in the region. These are mostly open sites located near river and pans. For the first time we also get evidence of people's activities derived from material other than stone tools. Ostrich eggshell beads, ground bone arrowheads, small bored stones and wood fragments with incised markings are traditionally linked with the LSA.

The LSA people have also left us with a rich legacy of rock art, which is an expression of their complex social and spiritual believes. Such sites are located on the farms Rietput and Maraetchesfontein located to the east of Schweizer-Reneke and north of the study area; and Palachoema and Mimosa south of Schweizer-Reneke and west of the study area.

### 1.2 Iron Age

Iron Age people started to settle in southern Africa c. AD 300, with one of the oldest known sites at Broederstroom south of Hartebeespoort Dam dating to AD 470. Having only had cereals (sorghum, millet) that need summer rainfall, Early Iron Age (EIA) people did not move outside this rainfall zone, and neither did they occupy the central interior highveld area. Because of their specific technology and economy, Iron Age people preferred to settle on the alluvial soils near rivers for agricultural purposes, but also for firewood and water.

The occupation of the larger geographical area (including the study area) did not start much before the 1500s. By the 16th century things changed, with the climate becoming warmer and wetter, creating condition that allowed Late Iron Age (LIA) farmers to occupy areas previously unsuitable, for example the treeless plains of the Free State and North West Province.

The earliest Iron Age settlers who moved into the North West Province region were Tswana-speakers such as the Tlhaping, Hurutshe, Fokeng, Kgatla and Rolong. In the region of the study area, it was mostly the booRapulana and booRatlou sections of the Rolong (Breutz 1959).

### 1.3 Historic period

Many early travellers, hunters and missionaries (Burchell 1824, Campbell 1822, Smith 1834-1836 (Lye 1975), Moffat 1842 and Harris 1852) either passed through the area or close to it. Their writings leave us a tantalising description of what life was in these communities before large-scale interaction with

white settles took place. Some of the first whites to settle here were the missionaries Samuel Broadbent and Thomas Hodgson, who settled some distance to the east of what later became known as Wolmaransstad.

White settlers moved into the area during the first half of the 19<sup>th</sup> century. They were largely selfsufficient, basing their survival on cattle/sheep farming and hunting. Few towns were established and it remained an undeveloped area.

During the 1880s the white settlers exploited conflict between the different Tswana chiefdoms to obtain more land. From this developed the Republic of Stellaland, which, due to British intervention in the area due to the discovery of diamonds, was very short-lived. The town of Stella was to be the capital of the republic.

The last chapter in the history of the region was its incorporation under the policy of homeland development, into the Republic of Bophuthatswana. This was a very fragmented 'State' and it would have needed permanent support by the central government to keep it in place. Since 1994, this has fallen away, and the people and the region were reincorporated into the larger Republic of South Africa

The town of Schweizer-Reneke was established in 1888 and named after two officers that were killed during a battle with the Korana. According to available data bases this town has 5 buildings listed as of provincial significance. In addition, some cemeteries and monuments also occur.

### 2. SITE SPECIFIC OVERVIEW

The study area is located in a region that experienced a dramatic change in character during the past few decades. It went from an essentially rural area to one consisting of high intensity agricultural activities. This probably contributed to that fact that very few sites of heritage significance were retained (Fig. 3).

With references to the study area specifically, it seems that the area was largely used as agricultural fields since at least the 1960s as the early aerial photographs (1949 - Fig. 5) indicates that it was probably only used for grazing.

Infrastructure seems to have been little developed as the road (R504) passing south of the site was still a small gravel track. However, by the 1970s the infrastructure was formalised and the whole area was used as agricultural fields (Fig. 6), a situation that remains the same up to present time (Fig. 7 & 8).

# **3. ILLUSTRATIONS**

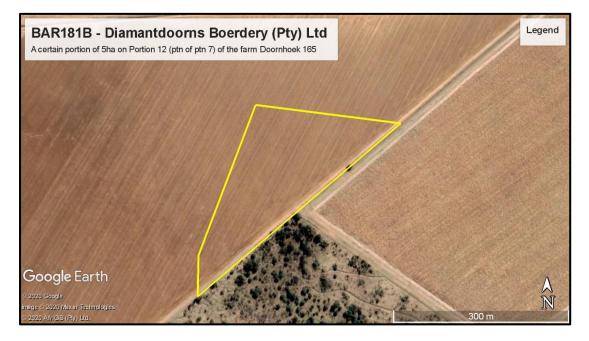


Figure 1. Layout of the proposed mining site

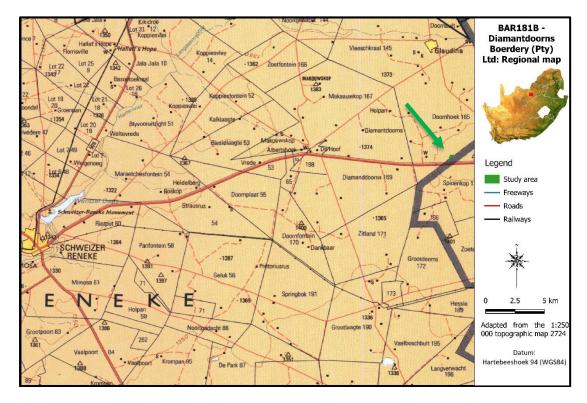


Figure 2. Location of the study area in regional context

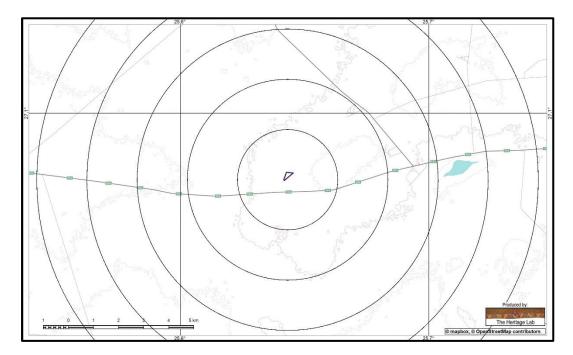


Figure 3. Location of known heritage sites and features. (Circles are spaced at a distance of 2km) (heritage sites = coded green dots)

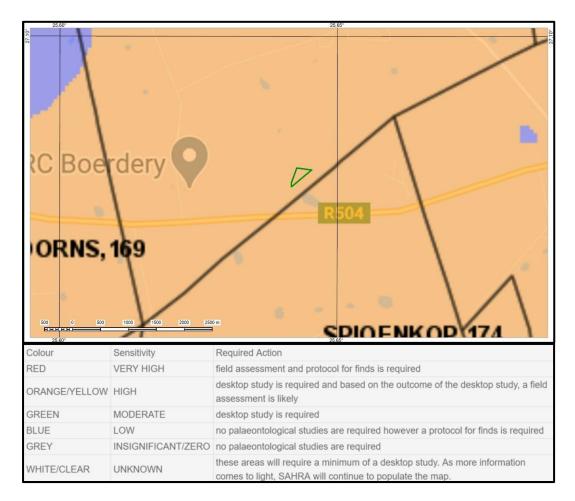


Figure 4. The Palaeontological sensitivity of the study area

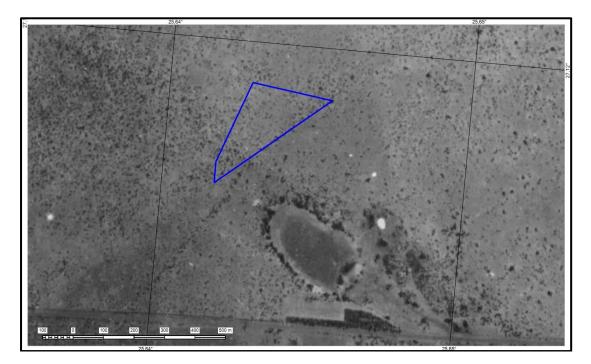


Figure 5. The study area on the 1949 version of the aerial photograph (Photo: 229\_005\_00359)

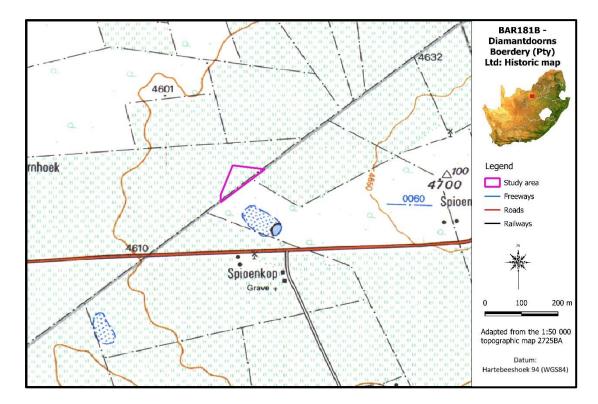


Figure 6. The study area on the 1971 version of the 1:50 000 topographic map



Figure 7. The study area in 2020 (Image: Google Earth)



Figure 8. Current views of the study area (Images supplied by Milnex)

# 4. REFERENCES

### 4.1 Data bases

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### 4.2 Literature

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# 4.3 Maps and aerial photographs

1: 50 000 Topocadastral maps Google Earth Aerial photographs: Chief Surveyor-General

## 5. ADDENDUM

### 1. Indemnity and terms of use of this report

The findings, results, conclusions and recommendations given in this report are based on the author's best scientific and professional knowledge as well as available information. The report is based on survey and assessment techniques which are limited by time and budgetary constraints relevant to the type and level of investigation undertaken and the author reserve the right to modify aspects of the report including the recommendations if and when new information may become available from ongoing research or further work in this field or pertaining to this investigation.

Although all possible care is taken to identify all sites of cultural importance during the investigation of study areas, it is always possible that hidden or sub-surface sites could be overlooked during the study. The author of this report will not be held liable for such oversights or for costs incurred as a result of such oversights.

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