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29 March 2014

Koot Raubenheimer Maxim Planning Solutions (Pty) Ltd PO Box 6848 Flamwood 2572

E-Mail: koot@maxim.co.za

Dear Mr Raubenheimer,

Palaeontological Scoping Report – Ventersdorp proposed Township development

As requested, herewith a letter of exemption with regard to the palaeontological aspect of environmental management relevant to the establishment of the proposed township Tshing Extension 8 and Ventersdorp Extensions 10-12 on behalf of the Ventersdorp Local Municipality.

As is evident from my report the proposed development should not have any impact on palaeontological heritage, but have included a mitigation clause.

Yours sincerely

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Bruce Rubidge PhD, FGSSA, FRSSA, Pr Sci Nat



PALAEONTOLOGICAL SCOPING REPORT -

EXECUTIVE SUMMARY

This is a scoping Palaeontological Impact Assessment report on the establishment of the proposed township Tshing Extension 8 and Ventersdorp Extensions 10-12 on behalf of the Ventersdorp Local Municipality in North West Province. The entire area is underlain by rocks of the Precambrian Ventersdorp and Witwatersrand Supergroups which are not known to host fossils.

In my opinion this development will not negatively affect palaeontological heritage. If, in the extremely unlikely event, that fossils are exposed in younger alluvial deposits in the process of development activities, a qualified palaeontologist must be contacted to assess the exposure for fossils so that the necessary rescue operations are implemented.

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- a. Specialist Expertise Palaeontology/ Stratigraphy/ Geology
- b. Declaration of Independence

b. 1. RG

29 March 2014

Date:

Signature:

1. Developer:

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Contact person: Koot Raubenheimer

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Report Date

29 March 2014

INTRODUCTION

The proposed township development is located to the west of Tshing Extension 5 in the Ventersdorp area (Figure 1).

The development, which includes the development of residential property as well as the required amenities and infrastructure, covers portions of the Farm Roodepoort 191 IP, Erven 893 to 904 of Ventersdorp Extension 10, and a portion of the Farm Doornpan 193-IP. These developments will be Tshing Extension 8 on Doornpan, Ventersdorp Extension 11 and Ventersdorp Extension 12, on Roodepoort.

This report is in response to a request from SAHRA that a desktop palaeontological assessment must be completed of the area covered by the proposed township development.

BACKGROUND INFORMATION

Ventersdorp Local Municipality has proposed the development of low cost housing and associated infrastructure. This will include a total of 943 residential stands, together with associated infrastructure such as crèche facilities, churches and parks. The area earmarked for the development comprises the following parcels of land.

- Tshing Extension 8: 32,4215 hectares
- Ventersdorp Extension 10: 3,1 hectares
- Ventersdorp Extension 11: 24,2310 hectares
- Ventersdorp Extension 12: 8,1861 hectares

DESCRIPTION OF PROPERTY

The proposed township development areas, outlined in Figures 1 and 2, comprise the Remaining Extent of Portion 25 (a Portion of Portion 8) of the Farm Roodepoort 191 IP, Erven 893 to 904 of Ventersdorp Extension 10, and a Portion of the Remaining Extent of Portion 3 (a Portion of Portion 1) of the Farm Doornpan 193IP. These developments will be Tshing Extension 8, on Doornpan, Ventersdorp Extension 11 and Ventersdorp Extension 12, on Roodepoort 191.

This report is in response to a request from SAHRA that a desktop palaeontological assessment must be completed of the area covered by the proposed township development.



Figure 1: 1:50 000 topographic map showing the position of the proposed development (outlined in red)

GEOLOGICAL SETTING

Following the 1:250 000 geological map (2626 West Rand, Government Printer) the area for the proposed development is situated entirely on Precambrian rocks of the Ventersdorp and the Witwatersrand supergroups. No dolomites of the Transvaal Supergroup are present in the study area.

Tshing Extension 8 is underlain by basaltic amygdoloidal lava, agglomerate and tuff of the Rietgat Formation, and Ventersdorp Extension 10 and 11 are underlain by quartz-veldspar porphyry of the Makwassie Formation. Both of these formations fall within the Platberg Group of the Ventersdorp Supergroup.



Figure 2: Geological Map showing the position of the proposed development (outlined in yellow) relative to geological formations.

Ventersdorp Extension 12 is underlain by shale, quartzite, banded ironstone and hornfels of the Hospital Hill Formation of the West Rand Group of the Witwatersrand Supergroup.

There is a possibility that the surface is covered by Quaternary alluvial deposits, but these are not indicated on the geological map.

BACKGROUND TO PALAEONTOLOGY OF STUDY AREA

As the rocks of the Ventersdorp Supergroup are of igneous origin there is no possibility of fossils being present, and the sedimentary rocks of the Witwatersrand Supergroup which are of Archaean age are not known to contain fossils. There is a slight, but very unlikely, possibility that if Quaternary alluvial deposits are present on the surface these could host fossils.

RECOMMENDATION

In my opinion this development will not negatively affect palaeontological heritage and suggest that, from a paleontological perspective, this development should proceed. If, in the extremely unlikely event that fossils are exposed in surficial alluvial deposits in the process of development activities, it will create a unique opportunity to explore the area for fossils.

It is thus recommended that, should fossils be exposed, a qualified palaeontologist be contacted to assess the exposure for fossils so that the necessary rescue operations are implemented. Depending on the nature of the fossils discovered, this could entail excavation and removal to a registered palaeontological museum collection. A list of professional palaeontologists is available from South African Heritage Resources Agency (SAHRA).

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