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# The Evolutionary Studies Institute



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30 May 2015

Mr Theo Kotze  
TEKPLAN Environmental Consultants  
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E-Mail: [theokotze@hotmail.com](mailto:theokotze@hotmail.com)

Dear Mr Kotze,

## **Palaeontological Desktop Study – University of Venda Residence Development**

As requested, herewith a Desktop Palaeontological Impact Assessment with regard to the proposed student residence development at the University of Venda in Thohoyandou, Limpopo Province.

Yours sincerely

**Bruce Rubidge** PhD, FGSSA, FRSSA, Pr Sci Nat

ESI

**PALAEONTOLOGICAL DESKTOP STUDY  
STUDENT RESIDENCE DEVELOPMENT,  
THOHOYANDOU, LIMPOPO PROVINCE.**

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## **EXECUTIVE SUMMARY**

A desktop Palaeontological Impact Assessment was undertaken on the site earmarked for the proposed development of student residences on the campus of the University of Venda on the proposed (part of the farm Beuster 253-mt) in Thohoyandou, Thulamela local Municipality, Limpopo Province.

The entire study area is deeply underlain by Precambrian basaltic rocks of the Sibasa Formation of the Soutpansberg Group. There is no possibility that the basalts of the Sibasa Formation could contain fossils.

In my opinion this development will not negatively affect palaeontological heritage.

## **TABLE OF CONTENTS**

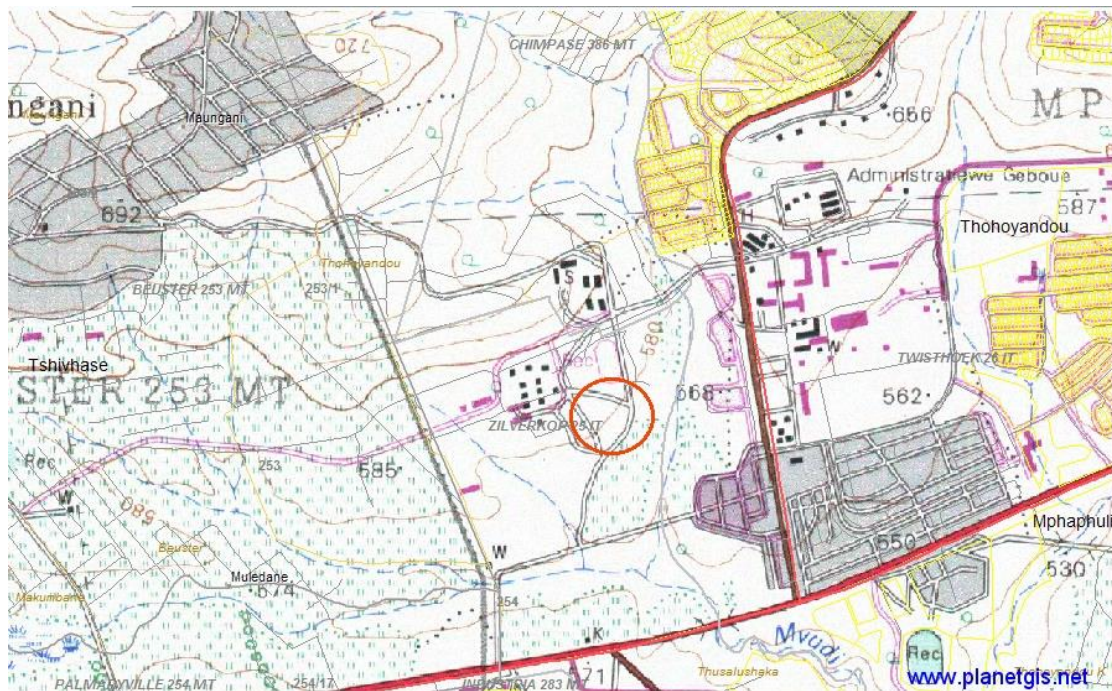
Background of development .....	5
Details of the study area .....	6
Geological Setting .....	6
Palaeontological Heritage .....	6
Recommendation .....	7
Conclusions .....	7
Bibliography .....	7

## REPORT

### Background Information of the development

This desktop report is part of a Heritage Impact Assessment to determine the effect of the proposed development to establish 18 new student residences on the campus of the University of Venda in Thohoyandou, Thulamela local Municipality, Limpopo Province. The study area is situated on part of the farm Beuster 253-mt which is now part of Thohoyandou, and covers a surface area of about 14 ha.

The study was commissioned by TEKPLAN Environmental Consultants, Polokwane and I was requested to provide a desktop assessment of the effect that the proposed development will have on the palaeontological heritage.



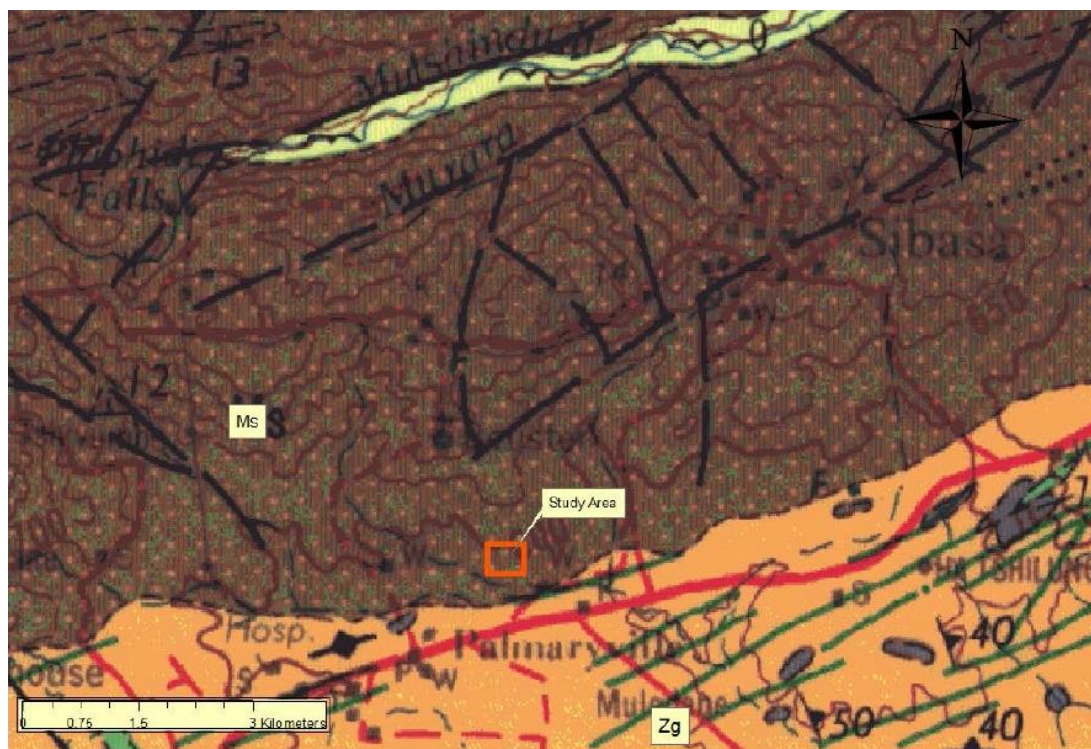
*Figure 1: Map (1:50 00 scale) showing the position of the proposed student residence development on the campus of the University of Venda situated on portion of the farm farm Beuster 253-mt in Thohoyandou, Thulamela local Municipality, Limpopo Province (2230 CD).*

### **Details of the study area**

The study area proposed for the development of 18 student residences is on campus of the University of Venda in Thohoyandou, Thulamela local Municipality, Limpopo Province, on part of the farm Beuster 253-mt. (Figure 1) and is covered by the 1:50 000 topographical Map Sheet 2230 CD.

### **Geological Setting**

Based on the 1:250 00 geological sheet, 2330 Messina, the area is underlain by Precambrian basalts of the Sibasa Formation of the Soutpansberg Group to the north and leucocratic biotite gneiss, leucocratic granite and pegmatite, grey biotite gneiss and migmatite of the Sand River Gneiss of the Central Zone of the Limpopo Belt to the south (Figure 2).



*Figure 2: Geology of the Study area (1:250 000 Geological Map Series of the Republic of South Africa, Sheet number 2330 Messina). Orange square shows study area*

### **Palaeontological Heritage**

As the entire study area is underlain by Precambrian igneous and metamorphic rocks it is extremely unlikely that fossils will be found in the study area.

## **Recommendation**

Because rock successions underlying the area for proposed development are of igneous or metamorphic origin and are Precambrian in age there is very little chance that the proposed development will have any effect on palaeontological heritage. In any development there is always the slight possibility that isolated overlying younger deposits could contain fossils. In the unlikely event that fossils are exposed in such deposits it will create a unique opportunity to explore the area for fossils. It is thus recommended that if fossils are exposed as a result of construction activities, a qualified palaeontologist must be contacted to assess the exposure for fossils before further development takes place 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).

## **Conclusions**

The proposed development of the University Residences at the University of Venda will extend over Precambrian igneous and metamorphic rocks and it is extremely unlikely that fossils will be exposed as a result of the development. It is considered that, from a palaeontological perspective, the proposed development should proceed. Should fossils be uncovered in superficial soil deposits during the course of construction activities, the developer must immediately contact a qualified palaeontologist to assess the situation and, if necessary, undertake excavation of the fossils.

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A handwritten signature in blue ink, appearing to read 'B.S. Rubidge'.

**Bruce Rubidge** PhD, FGSSA, FRSSA, Pr Sci Nat  
30 May 2015