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31 March 2021

Dr Ragna Redelstorff  
Heritage Officer Archaeology, Palaeontology & Meteorites Unit  
South African Heritage Resources Agency  
111 Harrington Street  
Cape Town 8001

Dear Dr Redelstorff

**RE: Request for Exemption of any Palaeontological Impact Assessment for the proposed L2068 Access Road, near Muden, KwaZulu Natal**

In my capacity as a professional palaeontologist, I am requesting exemption for palaeontological impact assessment in terms of the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998) which requires that the proposed development must be preceded by the relevant impact assessment, in this case for palaeontology.

As part of a larger project to improve access roads in KwaZulu Natal, in the Muden, Tongwe, Dakini area, the Access Road L2068 (Figure 1) has been proposed (28° 51' 20.59" S, 30° 51' 30.20" E). The site is on ancient volcanic rocks of the Natal-Namaqua Sequence, in particular on the Tugela Rand Complex that are norite, bronzite and serpentinite (Figure 2). These rocks are about 1200 million years old (Cornell et al, 2006) so predate any large organisms. Volcanic rocks do not preserve any fossils. No fossils are known from this region and this confirmed by the white colour background in the SAHRIS Palaeosensitivity Map (Figure 3).

Based on this information, the project will not impact on the fossil heritage in any way so we are requesting exemption from any further Palaeontological Impact Assessment, and that as far as the palaeontology is concerned, this project may proceed.

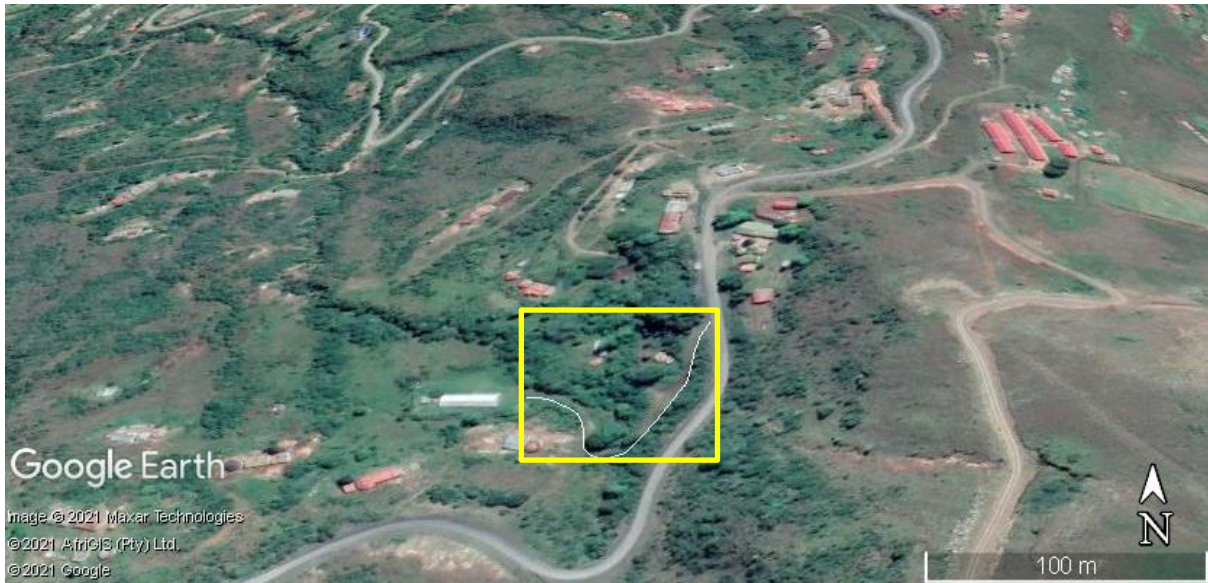


Figure 1: Google Earth map of the position of the proposed L2068 Access road.

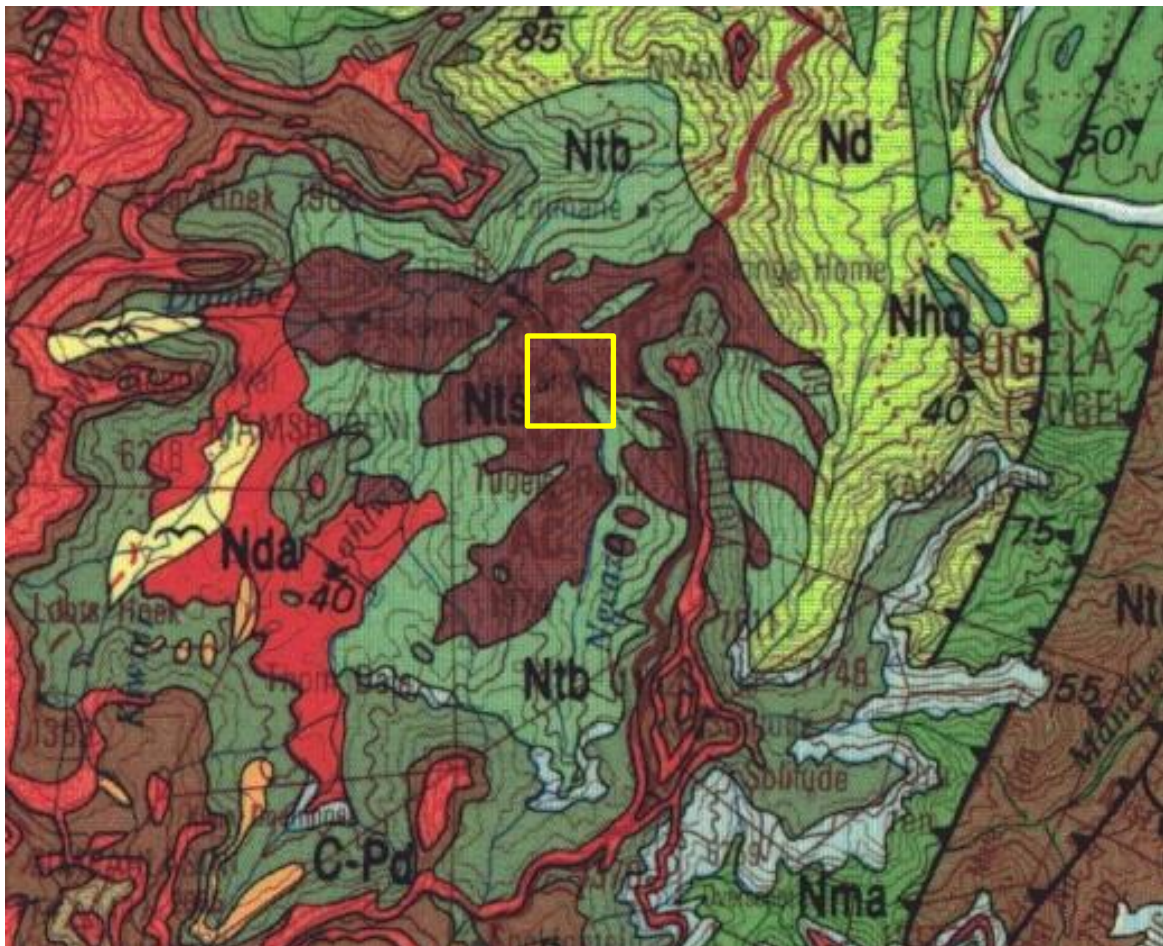


Figure 2: Geological map of the area around the L2068 access road indicated within the yellow rectangle. Abbreviations of the rock types are: Ntb = Tugela Rand Complex norite and bronzitite, = Nts Tugela Rand Complex serpentinite; Nho = Tugela Group intrusive hornblendite; Nd = Nkondeni Biotite; C-Pd = Dwyka Group tillites. Map enlarged from the Geological Survey 1: 250 000 map 2830 Dundee.

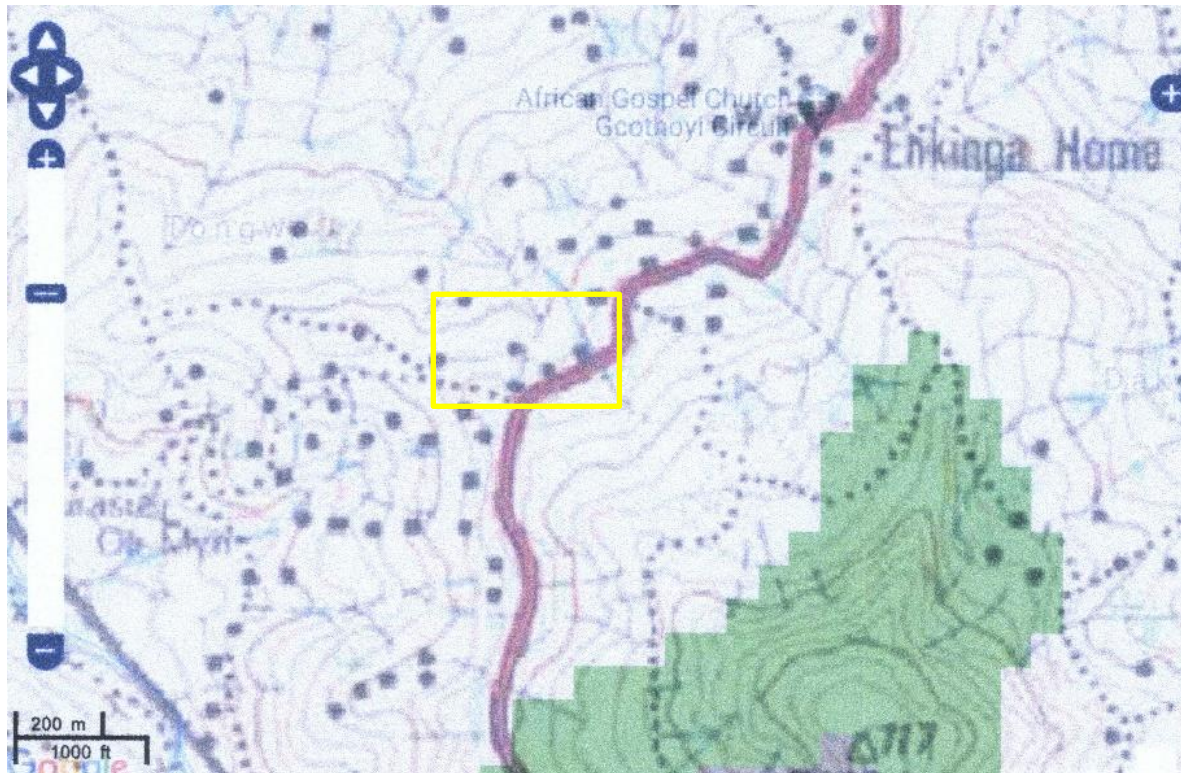


Figure 3: SAHRIS palaeosensitivity map for the site for the proposed L2068 access road shown within the yellow rectangle. Background colours indicate the following degrees of sensitivity: red = very highly sensitive; orange/yellow = high; green = moderate; blue = low; grey = insignificant/zero.

Yours faithfully

Prof Marion Bamford  
Palaeobotanist; PhD (Wits 1990)

**Reference cited:**

Cornell, D.H., Thomas, R.J., Moen, H.F.G., Reid, D.L., Moore, J.M., Gibson, R.L., 2006. The Namaqua-Natal Province. In: Johnson, M.R., Anhaeusser, C.R. and Thomas, R.J., (Eds). The Geology of South Africa. Geological Society of South Africa, Johannesburg / Council for Geoscience, Pretoria. Pp 325-379.

## **Declaration of Independence**

This letter has been compiled by Professor Marion Bamford, of the University of the Witwatersrand, sub-contracted by EnviroPro, South Africa. The views expressed in this report are entirely those of the author and no other interest was displayed during the decision making process for the Project.

Specialist: Prof Marion Bamford

A handwritten signature in blue ink, appearing to read 'M Bamford', with a horizontal line underneath.

Signature: