Exemption Letter – Ledig Mixed Housing CaseID 10225

Heidi Fourie – Palaeontologist 2017/03/29

Proposed Ledig Mixed Housing – Bojanala Platinum District Municipality, Rustenburg Local Municipality in the North West Province.

The project involves the proposed Bakubung Ba Ratheo Ledig mixed housing development and associated infrastructure.

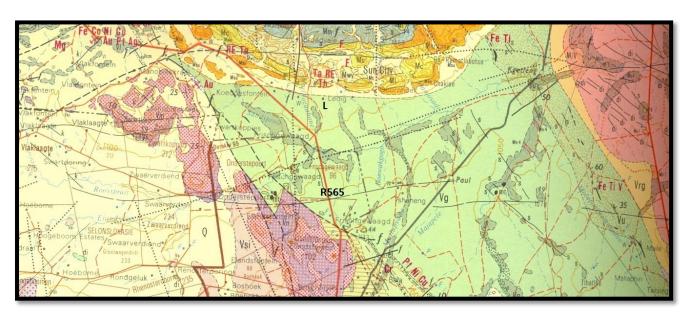
K2M Environmental (Pty) Ltd was appointed to do an Environmental Impact Assessment for the Bakubung Ba Ratheo Community and Kubu Property Investments. The development will be situated on Portion 15 of the Farm Ledig 909 JQ. Formations present form part of the Bushveld Igneous Complex.

The project plans to deliver a total of 5220 units of which 2500 are subsidised, 500 institutional units, 2000 bonded units, and 220 Security Village units. The property is 364,37 ha in size. The property is bordered by the R556 to the south, Sun City to the east, the Pilansberg Nature Reserve to the north, and the remainder of the Ledig community to the west.

Recommendation

This letter serves as a Letter of Exemption. The development will take place on a Formation with a Very Low Palaeontological sensitivity, therefore there is a very low possibility that significant fossils will be present in the bedrock of these geological units. The rock units are associated with intrusive igneous activities and no life would have been possible during implacement of the rocks (Groenewald and Groenewald 2014*).

Geology of area (1:250 000 Rustenburg 2526)



Legend to Map and short Explanation:

MI – Foyaite (yellow), Ledig Foyaite, Pilansberg Complex.

Mwy – Green foyaite (light yellow), Wydhoek Foyaite, Pilansberg Complex.

Mc – White foyaite, microfoyaite [::] (yellow), Chakise Foyaite, Pilansberg Complex,

Vg – Gabbro, norite, anorthosite [::] (green), Pyramid Gabbro-norite, Rustenburg Layered Suite, Bushveld Complex.

--f-- - Fault

RE – Rare earths. Ta – Tantalum and niobium. Th – Thorium.

L – Approximate position of Ledig development.

The Pilansberg Complex is Mokolian in age and the Bushveld Complex is Vaalian in age with a small section Late Mokolian in age.

The proposed development and associated structures will be situated on the Rustenburg Layered Suite of the Bushveld Complex. It is Vaalian in age (2,100-1,920 Ma) and consists of an igneous intrusion with anorthosite, hybrid gabbro, gabbro, diabase, epidiorite, pyroxenite, and norite rocks. The Bushveld Complex is a massive body of igneous origin and it is intrusive in the Transvaal Supergroup. Both mafic and ultramafic rocks are present in the Rustenburg Layered Suite. The site is covered in 'Bushveld' vegetation and the weathering product is known as 'black turf' (Kent, 1980; Visser, 1989). There is a presence of mining past and present.

Google.earth image



*Groenewald, G. and Groenewald, D., 2014. SAHRA Palaeotechnical Report: Palaeontological Heritage of the North West Province. South African Heritage Resources Agency.

Declaration (disclaimer)

I, Heidi Fourie, declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development project for which I was appointed to do a palaeontological assessment. There are no circumstances that compromise the objectivity of me performing such work.

I accept no liability, and the client, by receiving this document, indemnifies me against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with services rendered, directly or indirectly by the use of the information contained in this document.

It may be possible that the Exemption Letter may have missed palaeontological resources in the project area as outcrops are not always present or visible due to vegetation while others may lie below the overburden of earth and may only be present once development commences.

This report may not be altered in any way and any parts drawn from this report must make reference to this letter.

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