



BPI for Palaeontological Research

Private Bag 3, WITS 2050, South Africa • Telephone +27 11 717-6682 • Fax +27 11 717-6694

Email: bruce.rubidge@wits.ac.za

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Mr Wouter Fourie
Heritage Unit
Professional Grave Solution Pty. Ltd.

E-Mail: wouter@gravesolutions.co.za

Dear Mr Fourie,

Sterkfontein Heritage Lodge, Rant-en-Dal, Krugersdorp

As requested, I have undertaken an EIA to assess the possible affect on palaeontological heritage which will result from the establishment of leisure and hospitality development on the 47 ha property of Sterkfontein Heritage Lodge, Rant-en-Dal, Krugersdorp.

In my opinion this development will not negatively affect palaeontological heritage in the area affected and no mitigation measures are required.

Please come back to me if there is anything you do not understand or are unhappy with in the report.

Yours sincerely

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

Professor Bruce Rubidge

PROPOSED LEISURE AND HOSPITALITY DEVELOPMENT AT STERKFONTein HERITAGE LODGE, RANT-EN-DAL, KRUGERSDORP - PALAEOLOGICAL IMPACT ASSESSMENT -

Introduction

An EIA was undertaken to determine the effect on palaeontological heritage which could result from the proposed establishment of leisure and hospitality development on the 47ha property of Sterkfontein Heritage Lodge, Rant-en-Dal, Krugersdorp situated at S26°04.151'/E27°46.226'.

Generalised Geology of the route traversed

The area surrounding the proposed development is underlain by rocks of the Witwatersrand Supergroup which are Precambrian in age.

Specific geology of the area to be developed

The entire development will take place on ground underlain by rocks of the Hospital Hill and Government subgroups of the West Rand Group of the lower Witwatersrand Supergroup.



Figure 1: View over the property looking south. Sterkfontein Heritage Lodge is situated behind the exposed area of red earth. This area is situated on rocks of the Government Subgroup.

The Government Subgroup in this area comprises largely arenaceous quartzite and argillaceous iron formation (Figure 1). Most of the area is covered by grassland toward the northwest, and by wattle trees in the south. The north-easterly side of the property is underlain by predominantly quartzitic rocks of the Hospital Hill Subgroup (Figure 2).



Figure 2: Exposures of Hospital Hill Subgroup.

Palaeontological Heritage

The rocks of the Witwatersrand Supergroup, which are of Archaean age (Precambian), are not known to contain fossils.

Recommendation

As the entire area to be developed underlain by rocks of the Witwatersrand Supergroup which do not contain fossils, no palaeontological mitigation measures are required.

Bibliography

McCarthy, T.S. 2006. The Witwatersrand Supergroup. *In*: Johnson MR, Anhaeusser and Thomas RJ (Eds). *The Geology of South Africa*. Geological Society of South Africa, Johannesburg/Council for Geoscience, Pretoria. 155-186.

McCarthy, T.S. and Rubidge, B.S. 2005. *The story of Earth and Life – a southern African perspective on the 4.6 billion year journey*. Struik Publishers, Cape Town. pp 333.

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