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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 Marula Platinum Mines Solar Plant
SLR Project (Job) Number: 710.09002.00016

In my capacity as a professional palaeontologist, I am requesting exemption for any 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.

Marula Platinum Mines propose to establish a Photo Voltaic Plant on the mine property (Fig, 1). They are considering three alternatives with one of them being the preferred option. **All three options** lie on the Quaternary sands, soils and alluvium (Fig. 2) that are indicated as having low palaeosensitivity (blue) on the SAHRIS map (Fig. 3). The igneous rocks of the Rustenburg Layered Suite all have zero to insignificant palaeosensitivity (grey; Fig. 3).

No fossils have been recorded from the Quaternary sands as these are weathered and transported materials. Only if there are features such as palaeo-springs or palaeo-pans would there be a chance of finding any young, fragmentary or very small fossils of bones or silicified wood (Partridge et al., 2006). No such feature is visible on the satellite imagery but a Fossil Chance Find Protocol has been included in this letter so that if any fossils are found when excavations and construction commences, the process to follow can be communicated to the environmental officer or other responsible person.

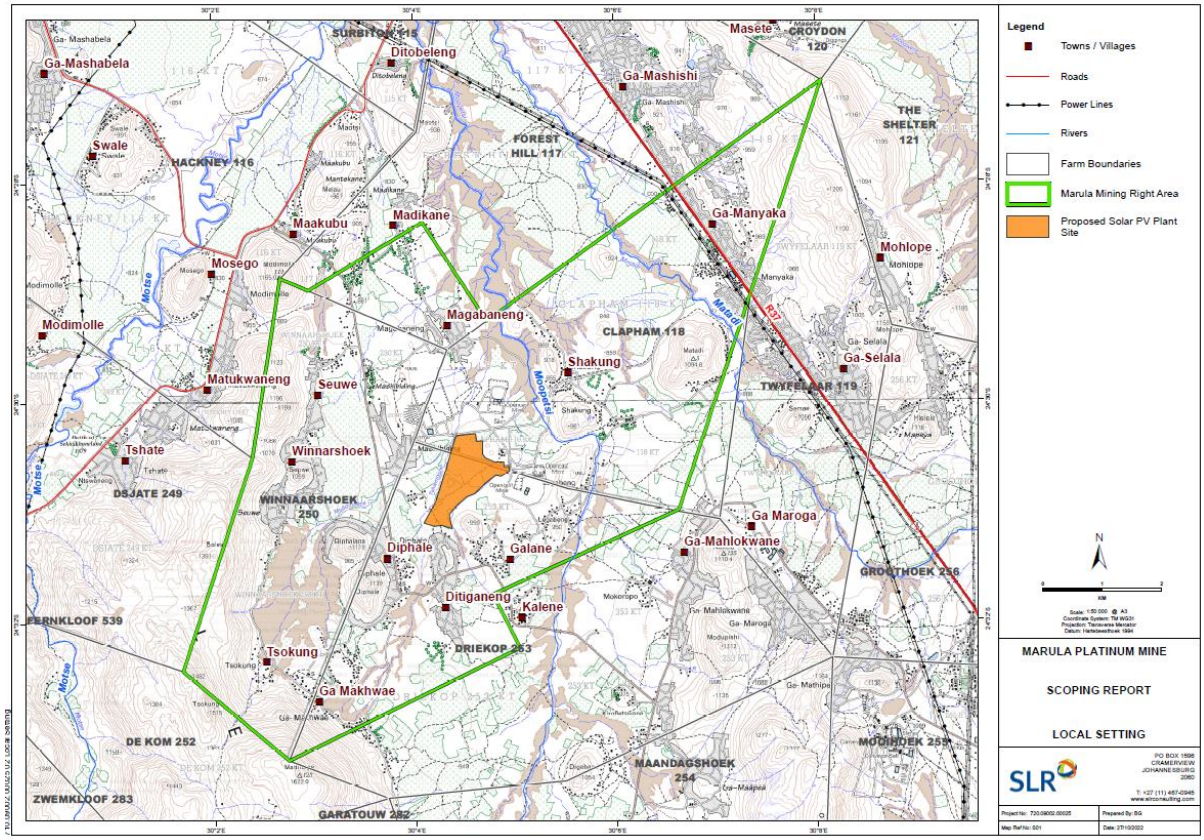

Figure 1: Detailed topographic map of the proposed Marula Solar PV plant location (orange polygon).

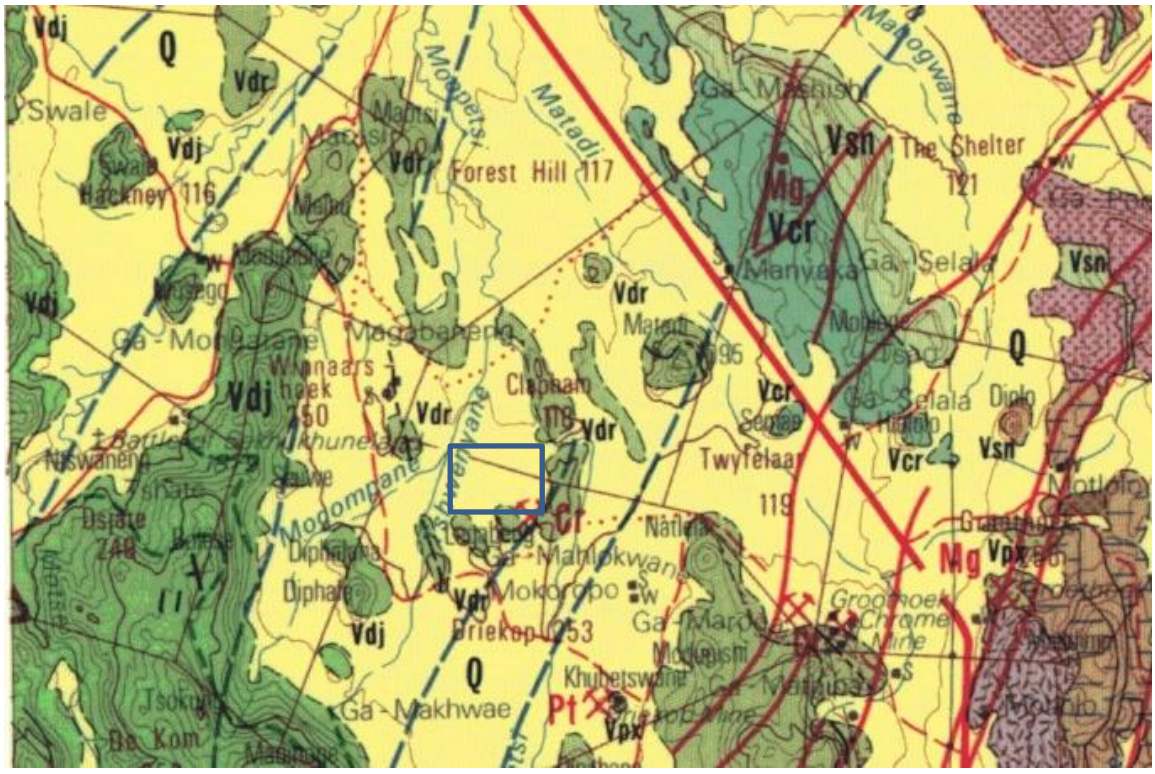

Figure 2: Geological map of the area around the Marula Platinum Mine. The location of the proposed project is indicated within the blue rectangle. Abbreviations of the rock

types are: Q=Quaternary alluvium and scree. Vdj = Dsjate subsuite (gabbro and anorthosite; Vdr = Dwars River subsuite (norite and anorthosite); Vcr = Croyden subsuite (pyroxenite), all three of the Rustenburg Layered Suite, Bushveld Igneous Complex). Map enlarged from the Geological Survey 1: 250 000 map 2430 Pilgrims Rest.

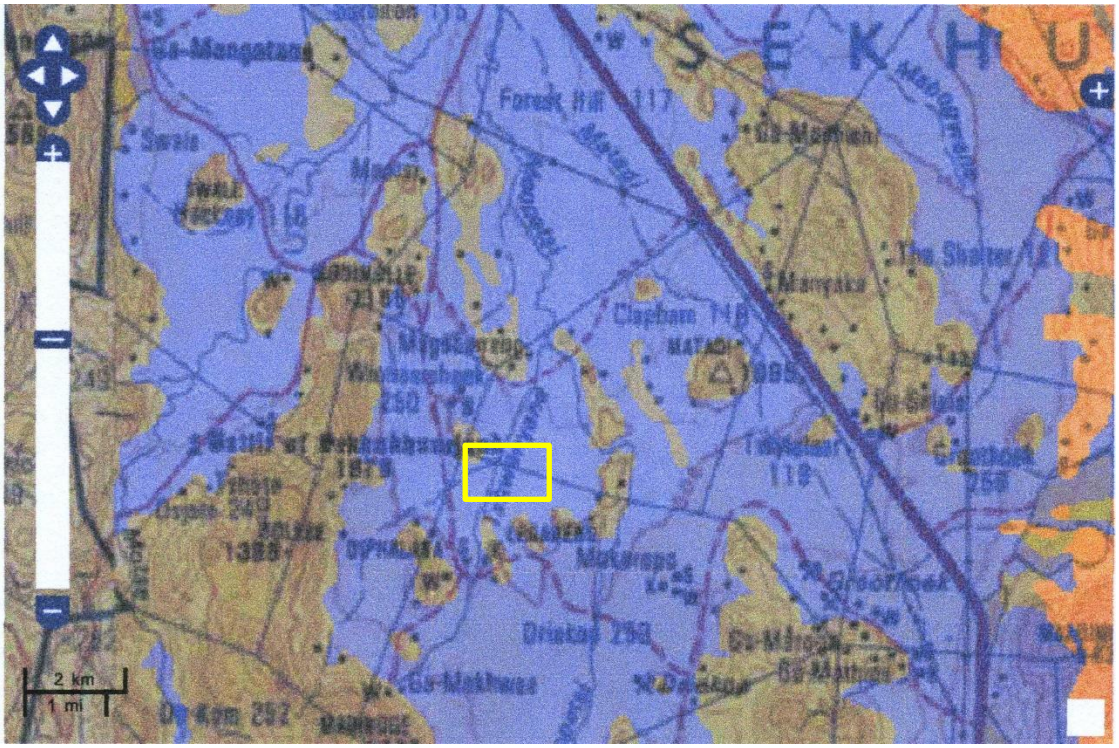

Figure 3: SAHRIS palaeosensitivity map for the site for the proposed Marula Mine Solar PV plant shown within the yellow rectangle. Background colours indicate the following degrees of sensitivity: red = very highly sensitive; orange/yellow = high; green = moderate; blue = low; grey = insignificant/zero.

Yours faithfully

Prof Marion Bamford
Palaeobotanist; PhD (Wits 1990)

Literature consulted:

Cawthorn, R.G., Eales, H.V., Walraven, F., Uken, R., Watkeys, M.K., 2006. The Bushveld Complex. 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 261-281.

Partridge, T.C., Botha, G.A., Haddon, I.G., 2006. Cenozoic deposits of the interior. 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 585-604.

Chance Find Protocol

Monitoring Programme for Palaeontology – to commence once the excavations / drilling /construction activities begin.

1. The following procedure is only required if fossils are seen on the surface and when drilling/excavations commence.
2. When excavations begin the rocks and must be given a cursory inspection by the environmental officer or designated person. Any fossiliferous material (plants, insects, bone, coals or shells) should be put aside in a suitably protected place. This way the project activities will not be interrupted.
3. Lists of possible fossils can be provided to the developer to assist in recognizing them.
4. Photographs of the putative fossils can be sent to the palaeontologist for a preliminary assessment.
5. If there is any possible fossil material found by the developer/environmental officer then the qualified palaeontologist sub-contracted for this project, should visit the site to inspect the selected material and check the dumps where feasible.
6. Fossil plants or vertebrates that are considered to be of good quality or scientific interest by the palaeontologist must be removed, catalogued and housed in a suitable institution where they can be made available for further study. Before the fossils are removed from the site a SAHRA permit must be obtained. Annual reports must be submitted to SAHRA as required by the relevant permits.
7. If no good fossil material is recovered then no site inspections by the palaeontologist will be necessary. A final report by the palaeontologist must be sent to SAHRA once the project has been completed and only if there are fossils.
8. If no fossils are found and the excavations have finished then no further monitoring is required.

Declaration of Independence

This letter has been compiled by Professor Marion Bamford, of the University of the Witwatersrand, sub-contracted by SLR Consulting (Africa) (Pty) Ltd, Johannesburg, 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

Signature: