Exemption from a Phase 1 Heritage Impact Assessment for the extension of an existing gravel quarry on farm Roodewal 292, Bloemfontein, Free State Province*.

Site: Farm Roodewal 292, Bloemfontein Map Ref.: 2926 AB Maselspoort Site Coordinates: A) 29° 5'44.46"S 26°21'56.84"E B) 29° 5'44.88"S 26°22'8.48"E

C) 29° 5'53.07"S 26°22'8.62"E

D) 29° 5'53.67"S 26°21'57.07"E

EKO Environmental Consultants requested a heritage impact assessment for the extension of an existing gravel quarry on a 8 ha area of farmland on the farm Roodewal 292. (Fig. 1 & 2). The local palaeontological footprint of the region is primarily represented by Late Permian Karoo vertebrate fauna and late Pleistocene mammalian fossils. Bedrock sedimentary strata are assigned to the Dicynodon Assemblage Zone (vertebrate biozone). The Stone Age archaeological record of Modder River catchment east of Bloemfontein spans back to the early Middle Stone Age. Prehistoric archaeological remains previously recorded in the region include stone tools and mammal fossil remains from sealed and or exposed contexts. Along much of the course of the Modder River and its tributaries, alluvial deposits contain numerous occurrences of in situ Middle and Later Stone Age material eroding out of the overbank sediments where they are often found in association with late Pleistocene fossil mammal remains that are occasionally discovered in fluvial sediments along the Modder River and its tributaries. The affected area is underlain by palaeontologically insignificant dolerite outcrop, capped by geologically recent (Quaternary) residual soils (Fig. 3). Potential archaeological impact resulting from the proposed development is considered non-existent due to the disturbed nature of the terrain as a result of past farming activities. The soil overburden (residual deposits) is not palaeontologically vulnerable and the likelihood of palaeontological impact on the superficial overburden is considered to be low (Fig. 4).

It is recommended that the proposed development is exempted from a Phase 1 heritage impact assessment.

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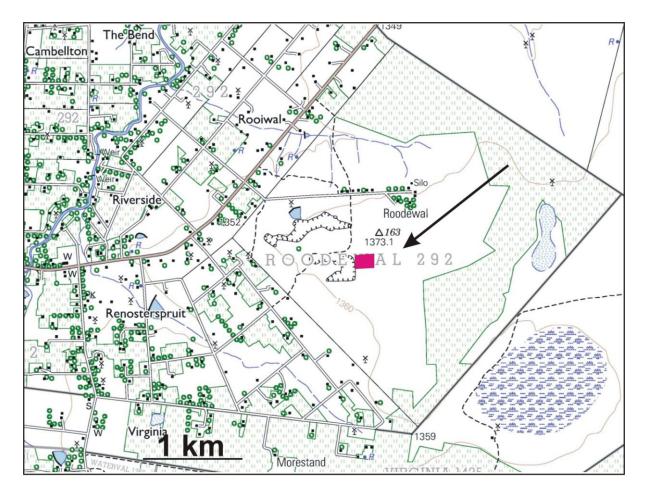


Figure 1. Map of Roodewal 292 (portion of 1:50 000 scale topographical map AB Maselspoort).



Figure 2. Aerial view of the site.



Figure 3. The site is located on dolerite bedrock, considered to be of low palaeontological sensitivity (SAHRIS 2014). Grey = low sensitivity; no palaeontological studies are required.

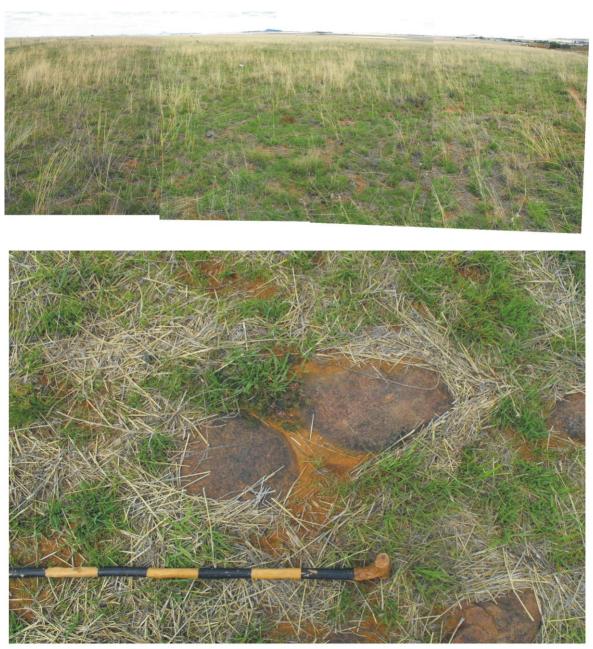


Figure 4. The affected area is underlain by palaeontologically insignificant dolerite outcrop, capped by geologically recent residual soils.