

Exemption of Phase 1 Archaeological and Palaeontological Impact Assessment for the N1 national road section between Sydenham and Glen Lyons, Bloemfontein District, Free State Province*.

Site: N1 national road section between Sydenham and Glen Lyons, Bloemfontein District.

Map Reference.: 2926AA Bloemfontein, 2926AB Maselspoort, 2826CD Glen

General Site Coordinates:

A) 29°13'21.48"S 26°11'5.82"E

B) 28°58'38.16"S 26°17'30.49"E

EKO Environmental Consultants requested an archaeological and palaeontological assessment for proposed maintenance work on the N1 national road section between Sydenham and Glen Lyons outside Bloemfontein (**Fig. 1 & 2**). The affected area lies within the outcrop area of Beaufort Group (Adelaide Subgroup) strata, which is assigned to the *Dicynodon* Assemblage Zone (vertebrate biozone). Dykes and sills of resistant Jurassic dolerite intrusions are also predominant along the footprint. The proposed development will be restricted to the existing two-lane tar road section and associated road reserves, which have been extensively disturbed by previous road-building and subsequent maintenance activities, including rehabilitation of vegetation (**Fig. 3 & 4**).

After a brief walk-through, it was established that potential **archaeological** impact resulting from the proposed development will be non-existent due to the disturbed nature of the road reserves. The soil overburden (residual deposits) is not palaeontologically vulnerable and the likelihood of **palaeontological** impact on underlying bedrock sediments below the superficial overburden is considered to be low.

It is recommended that the proposed activity is exempted from a Phase 1 archaeological and palaeontological impact assessment.

* Report prepared for EKO Environmental Consultants, 21 Dromedaris Street, Dan Pienaar Bloemfontein 9301 by L. Rossouw, National Museum Bloemfontein, c/o Aliwal and Charles Street, Bloemfontein 9300.

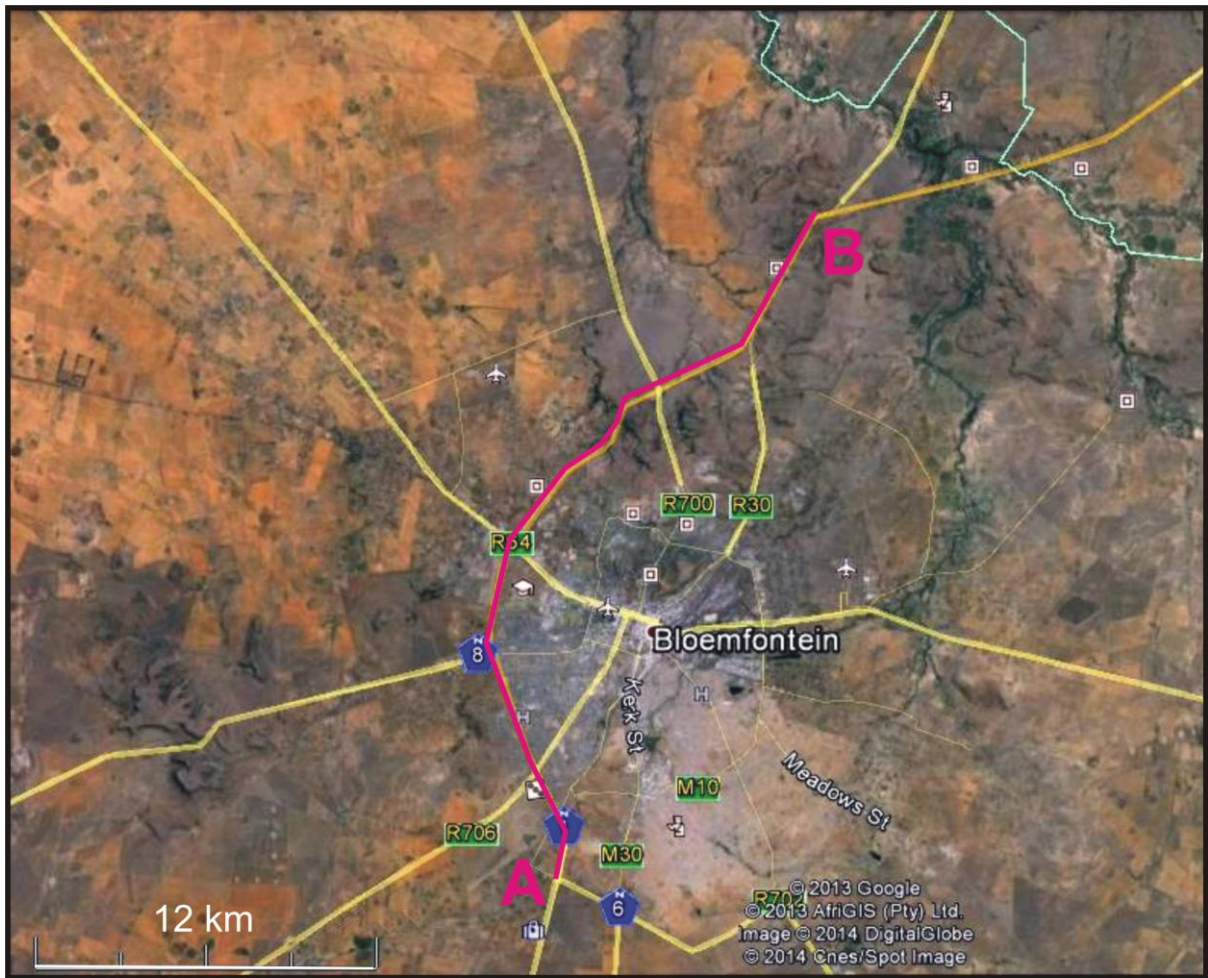


Figure 1. Aerial view of the N1 national road section between Sydenham and Glen Lyons outside Bloemfontein.

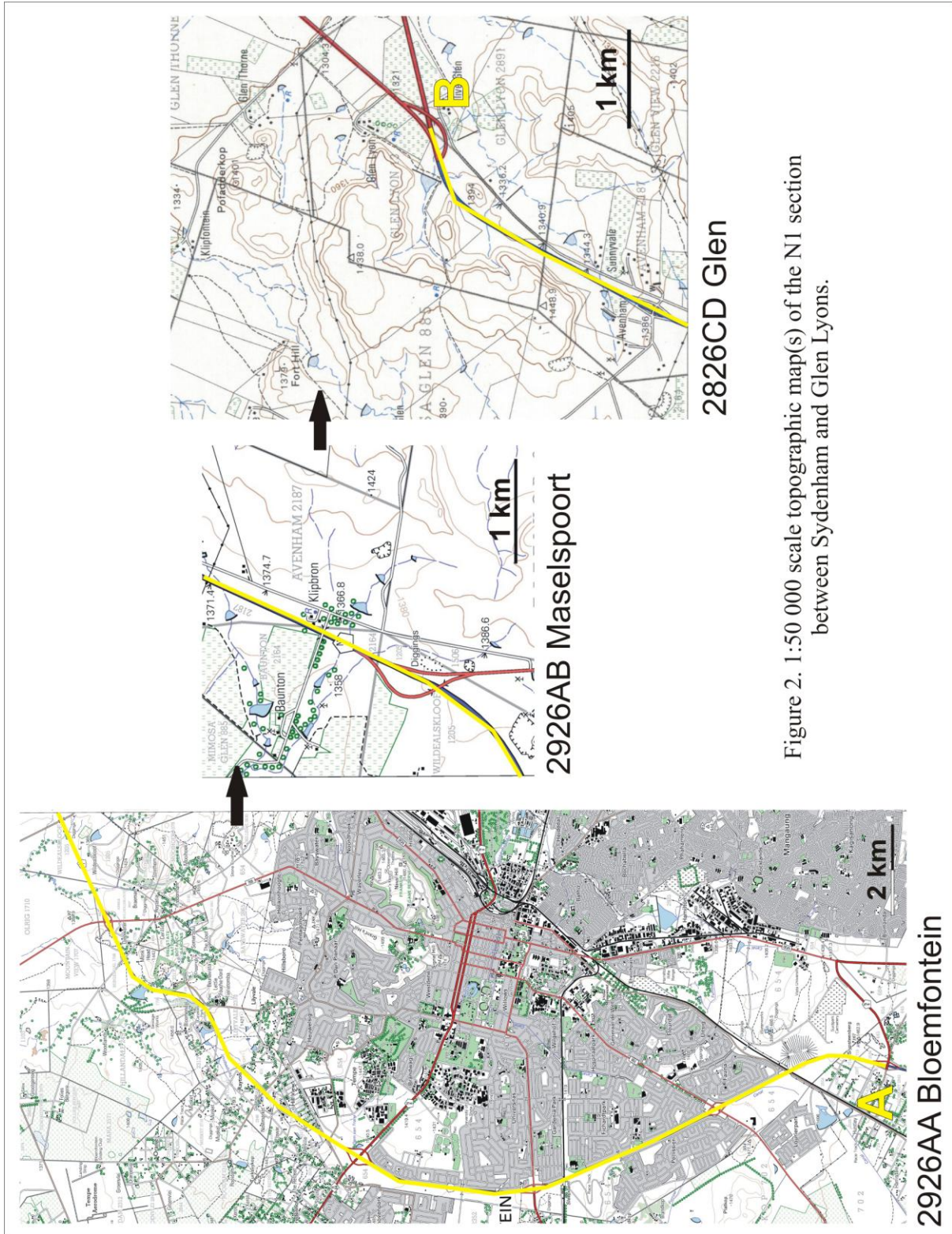


Figure 2. 1:50 000 scale topographic map(s) of the N1 section between Sydenham and Glen Lyons.



Figure 3. The two-lane section of the N1 halfway between Sydenham and Glen Lyons (top); dolerite cuttings (middle); grass-covered road reserve flanking the two lanes (bottom).

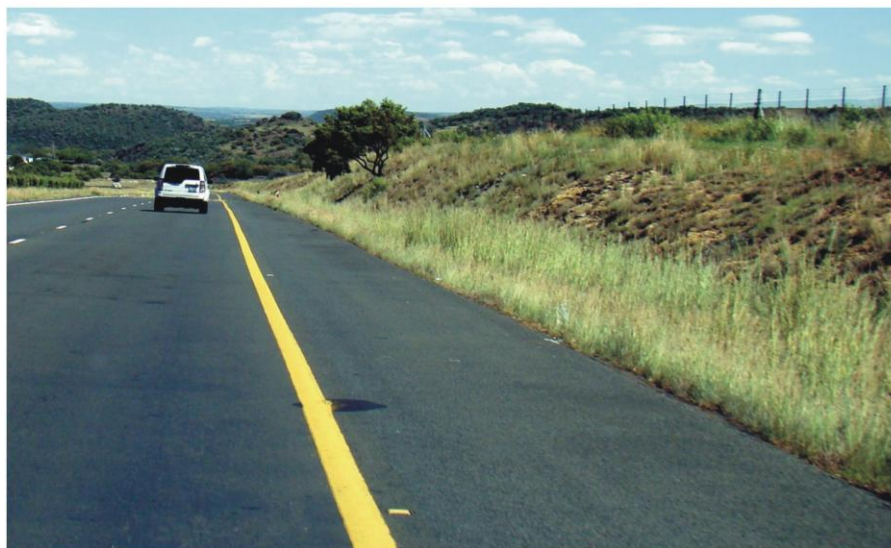


Figure 4. Grass- and tree-covered road reserve (top, middle);
Grass-covered (manicured) off-ramp at the
Kimberley interchange (bottom).