

# Exemption of a Phase 1 Heritage Impact Assessment for the proposed installation of a Vodacom optic fibre cable along provincial road reserves in the vicinity of Groblersdal, Limpopo Province\*.

---

Site: Groblersdal, Limpopo Province

Map Ref.: 1:50 000 topographical map 2529AB Groblersdal and 2429 CD Marble Hall

General coordinates (**Fig. 1**):

- A) 25° 9'57.29"S 29°24'0.41"E
- B) 24°59'56.07"S 29°20'32.35"E
- C) 24°55'29.00"S 29°25'19.91"E
- D) 25° 2'47.61"S 29°30'33.45"E

Neotel, on behalf of Vodacom, proposes to install approximately 71 kilometres of fibre optic cable along provincial and local road reserves and within the municipal boundaries the Sekhukhune District Municipality and crossing the borders of Elias Motsaledi and Ephraim Mogale Local municipalities between Groblersdal, Leeuwfontein and Tafelkop, Limpopo Province (**Fig. 1 - 2**). The installation will occur by means of two installation methods, namely, **overhead** cable installation and **underground** cable installation.

Approximately 48 kilometres of the line will be constructed using overhead cables. The installation will occur by using 9 meter and 11 meter poles:

- The 9m poles will be planted at a depth of 1.5 m and a hole will be opened for this purpose with the dimensions of 0.35m x 0.35m (= 0.1225m<sup>2</sup> or 0.147 m<sup>3</sup>);
- The 11m poles will be planted at a depth of 1.7m and a hole will be opened for this purpose with the dimensions of 0.45m x 0.45m (= 0.2025m<sup>2</sup> or 0.3038 m<sup>3</sup>);  
and
- Poles will be planted at intervals ranging between 80 and 280 metres.
- When watercourses are to be crossed, poles will be planted outside the 32 meter range of either side of the watercourse. This means that no poles will be planted within the 32 meters of a watercourse, nor within the watercourse itself.

- Some Road crossings will take place in the same manner as above and poles will be planted on either side of the road to meet national and provincial road regulations.
- In instances where watercourses (Rivers / Steams) are to be crossed, the same installation method as above will be applied and poles will be planted on either sides of the river. **This will however not constitute a “Water Use” in terms of the National Water Act, Act 36 of 1998 as the installation will not change the characteristics of such watercourse and will not impede or divert the flow of water in anyway.**

Approximately 23 kilometres of the line will be constructed using underground cables. The installation will occur by means of trenching:

- Trenches with a width of 450 mm and one (1) meter deep will be opened.
- In areas (most of the urban areas) where mechanical trenching is impossible, hand trenching methods will be used. This will be done by using picks and shovels.
- In instances where roads and or railways are to be crossed, a directional drilling method will be used. This means drilling below the road surface from one side to the other.

The proposed development footprint is underlain by palaeontologically insignificant Bushveld Complex granites and there are currently no records of vertebrate fossil occurrences from the superficial overburden (e.g. Quaternary fluvial deposits) in the area. No surface archaeological remains were found during previous archaeological surveys conducted in the Groblersdal area (van der Walt 2011; van Vollenhoven *et.al* 2014). The fibre optic cable will be installed on degraded terrain from previously built-up areas, and on land formerly altered by farming activities and road construction. Since the impact area will be restricted to provincial and local road reserves including bridges, potential archaeological or palaeontological impact that may result from the installation of the underground fibre optic cable is considered extremely low. This also applies to the overhead sections, which includes avoiding potentially sensitive overbank sediments of Olifants River crossing (GPS coordinates 24°59'18.69"S 29°21'24.97"E). In my opinion this development will not

negatively affect palaeontological or archaeological heritage. It is recommended that the proposed development is exempt from a Phase 1 Heritage Impact Assessment.

Yours truly,

A handwritten signature in black ink, appearing to read 'L Rossouw', written in a cursive style.

Dr Lloyd Rossouw  
National Museum Bloemfontein  
Tel. 051 4479 609  
Cell. 0842505992  
[lloyd@nasmus.co.za](mailto:lloyd@nasmus.co.za)

#### DECLARATION OF INDEPENDENCE

I, Lloyd Rossouw, declare that I act as an independent specialist consultant. I do not have or will not have any financial interest in the undertaking of the activity other than remuneration for work as stipulated in the terms of reference. I have no interest in secondary or downstream developments as a result of the authorization of this project and have no conflicting interests in the undertaking of the activity.

**\*Report prepared for Enviroworks Environmental Consultants, 5 Walter Sisulu Road Bloemfontein 9300.**

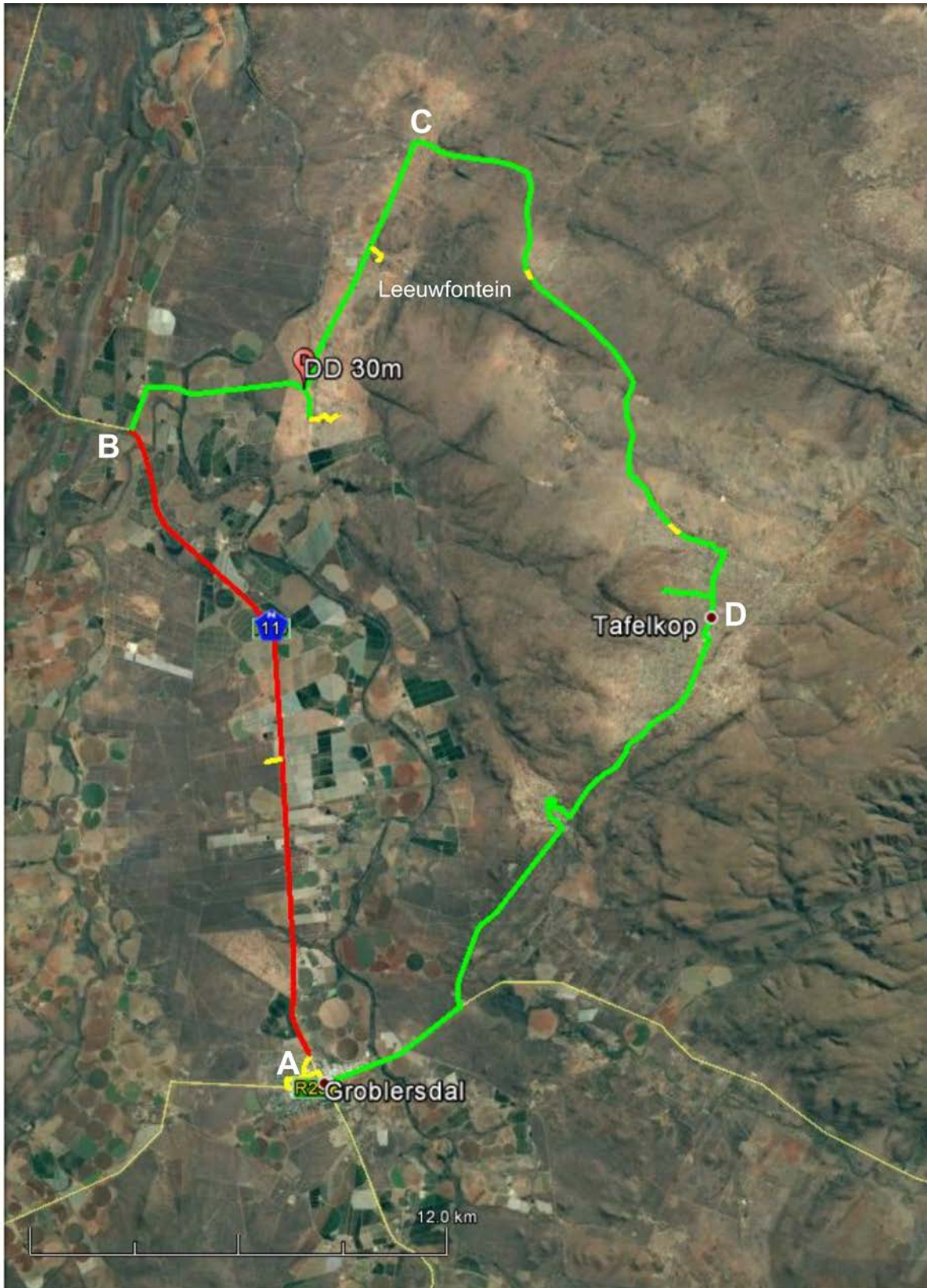


Figure 1. Aerial view of the proposed overhead (green) and underground (red and yellow) optic fibre route.





Figure 2. General view of the road reserve and watercourse crossings along the proposed route.