

Phase 1 Heritage Impact Assessment for a proposed new Poultry Abattoir Facility near Parys, Free State Province.

Report prepared by

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Introduction

The application relates to a 2.5 ha area designated for the development of a proposed new poultry abattoir facility near Parys, Free State Province (**Fig. 1**). The site is situated in open grassveld on low topography terrain on the farm Klipbos, next to the R723 provincial road and about 5 km south-southeast of the Parys CBD (**Fig. 2 & 3**).

Map Ref.: 1:50 000 topographical map 2627CD Parys

1:250 000 geological map 2626 Wes Rand

Site Coordinates: 26°57'1.66"S 27°28'43.32"E

The heritage significance of the affected area was evaluated on the basis of existing field data, database information and published literature. This was followed by a field assessment by means of a pedestrian survey. A Garmin Etrex Vista GPS hand model (set to the WGS 84 map datum) and a digital camera were used for recording purposes. Maps and aerial photographs (incl. Google Earth) were consulted and integrated with data acquired during the on-site inspection. Site significance classification standards prescribed by SAHRA (2005) were used to indicate overall significance and mitigation procedures where relevant (**Table 1**).

Background

The site is situated within the 80 km-wide Vredefort Dome, a World Heritage Site which represents the central portion of a deeply eroded complex impact structure that formed 2023±4 Ma ago in the Archaean and Palaeoproterozoic rocks of the Kaapvaal craton (Gibson and Reimold 2001) (**Fig. 4**). According to the 1:250 000 scale geological map 2626 Wes Rand the site is underlain by undifferentiated Swazian granites and gneiss that are not considered palaeontologically sensitive (**Fig. 5**).

Plentiful signs of Stone Age human occupation are visible on the landscape in and around the Vredefort Dome World Heritage Site. Early to Middle Stone Age artifacts are derived from the Vaal gravels between Vereeniging and and include an abundance of Acheulian (Early Stone Age) hand axes, cleavers and core-axes, primarily made from quartzite (Sohnge *et al.* 1937; Cooke 1949). Late Iron Age stone-walled settlements built by Sotho-Tswana speakers also form part of the rich cultural heritage of the Vredefort Dome from 1400 to 1800 AD (eg. Askoppies and Buffelskloof) (Maggs 1976; Pelsler 2004; Nkhasi-Lesaoana 2008)

(Fig. 6). European settlement occurred from 1836 (Voortrekkers) while establishment of the Boer republics and the discovery of diamonds and gold further contributed to the distinctive historical character of the region. There are plentiful rock art sites with engravings recorded in the Lower Vaal River Basin including the area around Parys (van Riet Lowe 1941). There is currently no record of engraving sites in the immediate vicinity of the study area.

Field Assessment

The proposed impact area is mantled by a gravelly residual soil, degraded by previous (modern) farming activities, where no *in situ* Stone Age archaeological material, capped or distributed as surface scatters on the landscape, were observed (Fig. 7 & 8). There are also no indications of rock art (engravings), prehistoric structures, graves or historically significant buildings older than 60 years within the boundaries of the study area.

Impact Statement & Recommendation

Impact on palaeontological, archaeological or historically significant remains within development footprint is considered non-existent. It is recommended that the planned development is exempt from further palaeontological investigation. Also, the terrain is regarded as of low archaeological significance and is assigned a rating of Generally Protected C (GP.C). As far as the palaeontological and archaeological heritage is concerned, the proposed development may proceed provided that all activities are restricted to within the boundaries of the development footprint.

References

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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 and have no interest in secondary or downstream developments as a result of the authorization of this project.

Yours truly,

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

13 / 12 / 2017

Table 1. Archaeological field rating categories as prescribed by SAHRA.

Field Rating	Grade	Significance	Mitigation
National Significance (NS)	Grade 1	-	Conservation; national site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; provincial site nomination
Local Significance (LS)	Grade 3A	High significance	Conservation; mitigation not advised
Local Significance (LS)	Grade 3B	High significance	Mitigation (part of site should be retained)
Generally Protected A (GP.A)	-	High/medium significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium significance	Recording before destruction
Generally Protected C (GP.C)	-	Low significance	Destruction

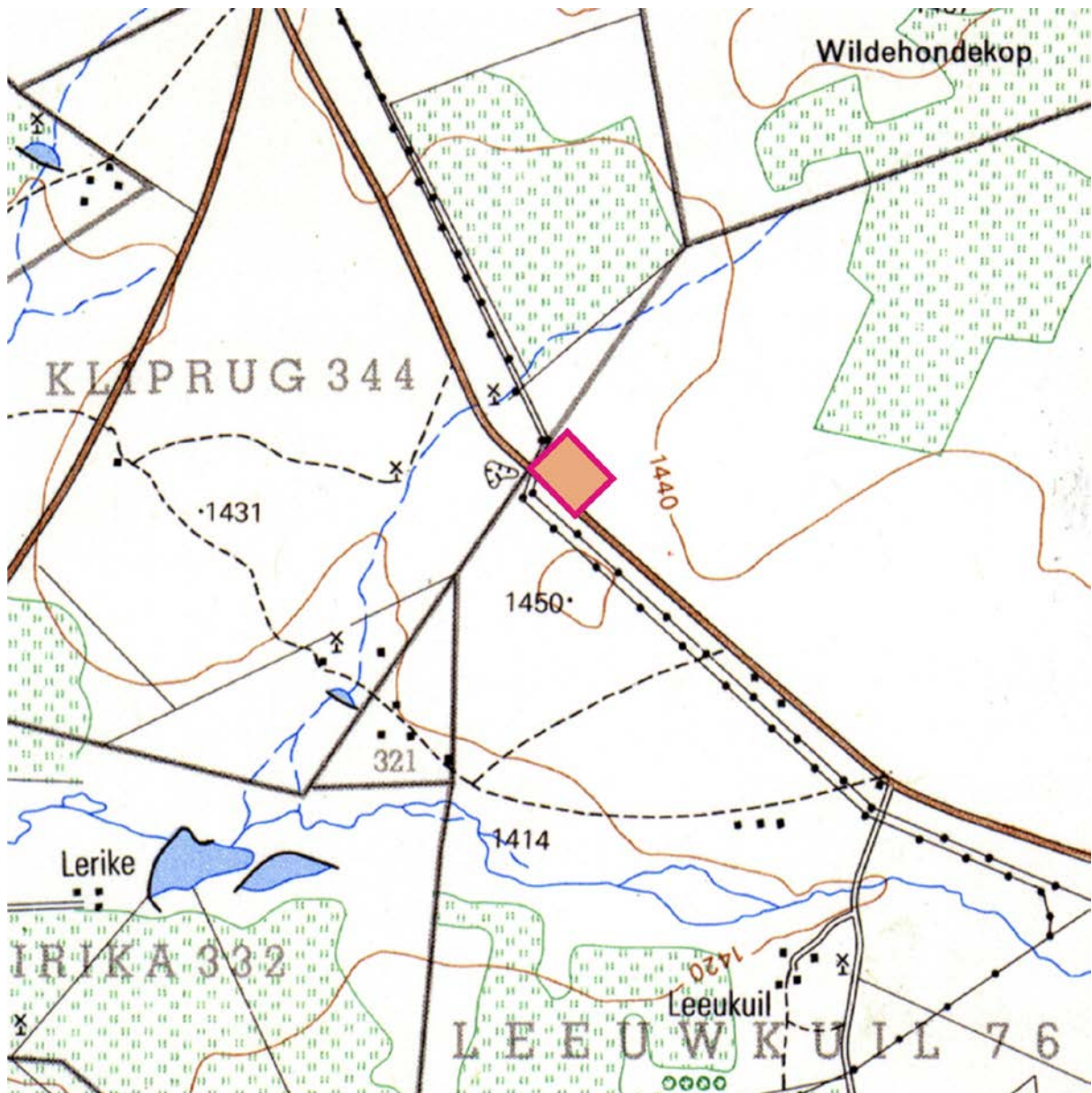


Figure 1. Map of the proposed new poultry abattoir development area (portion of 1:50 000 scale topographic 2627CD Parys).

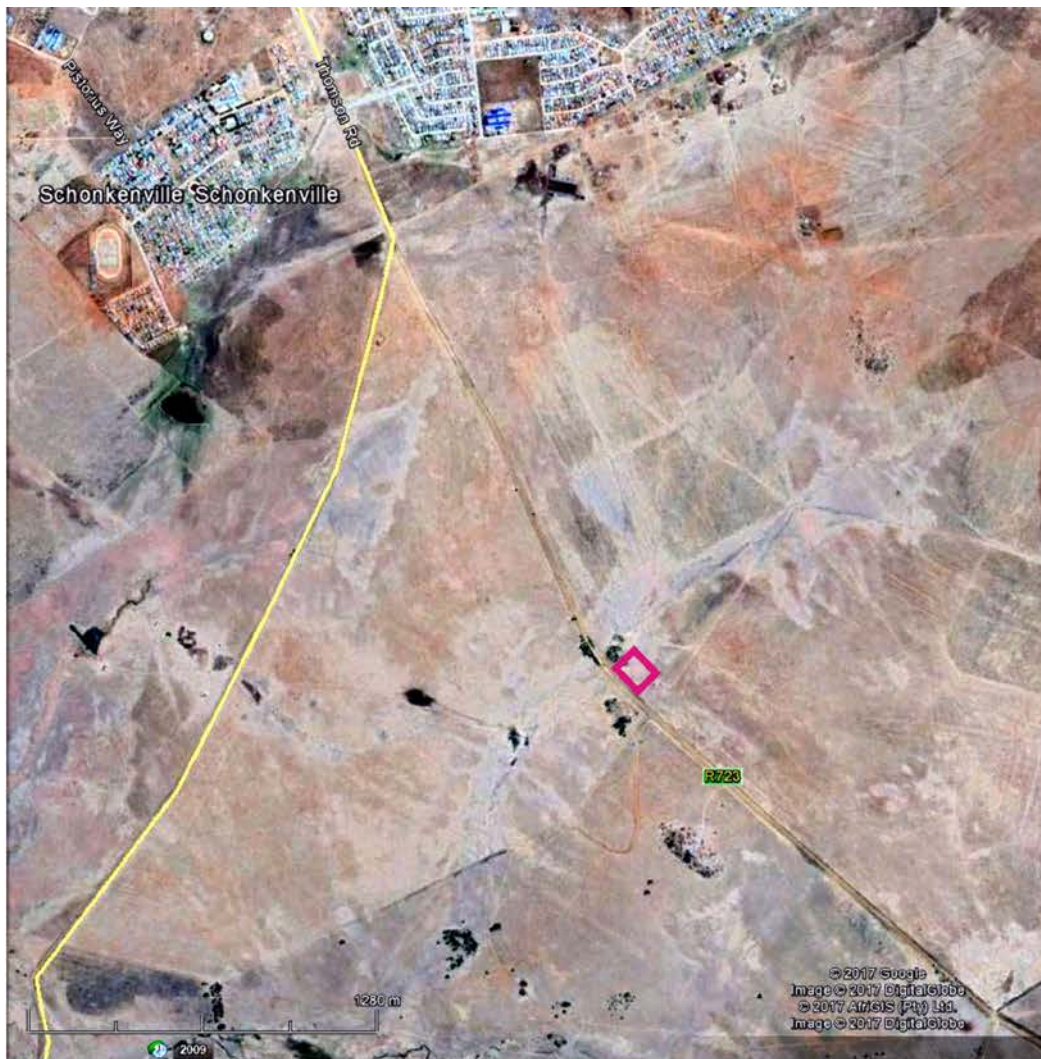


Figure 2. Aerial view of the study area.

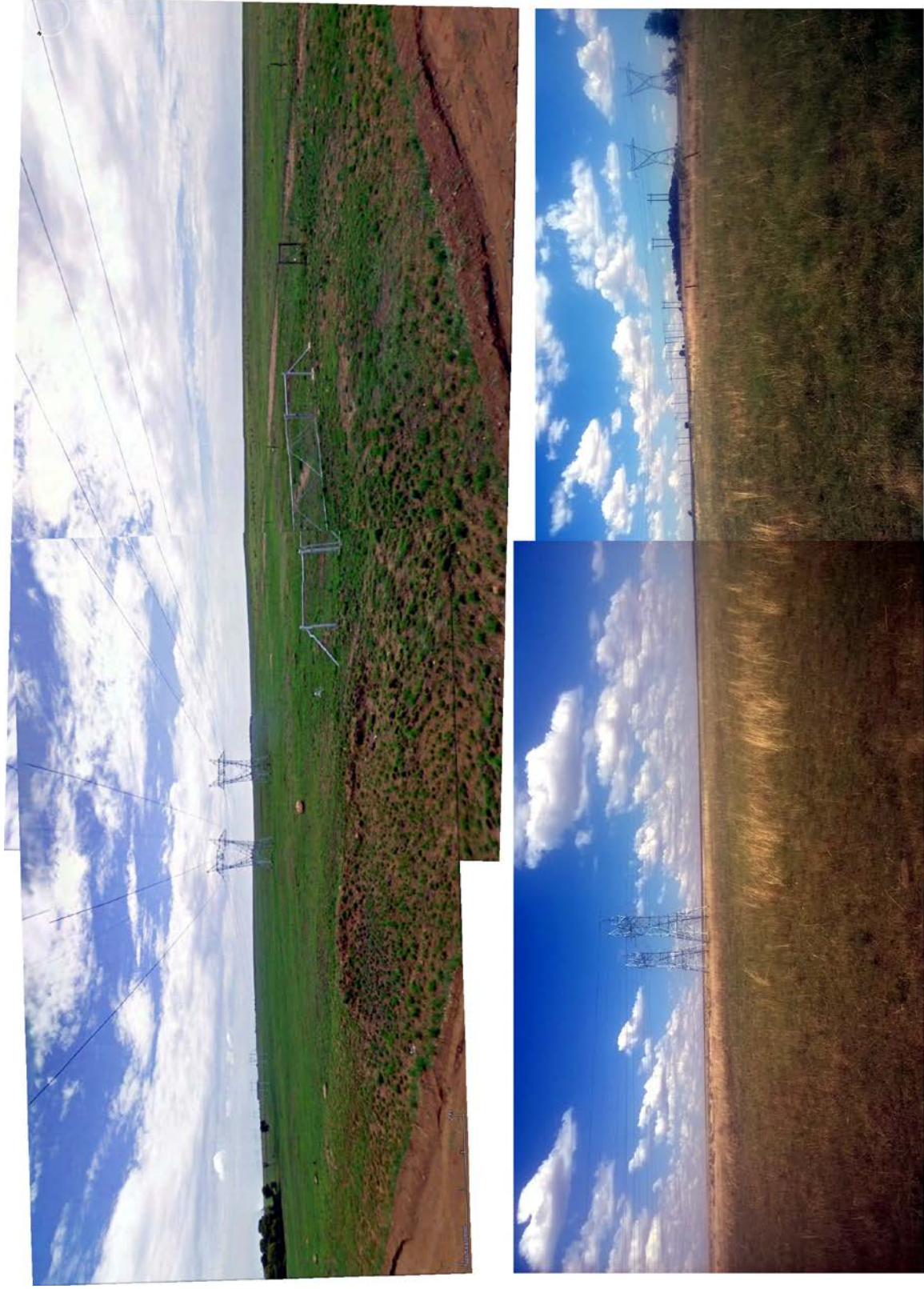


Figure 3. General view of the study area, looking east (top) and southeast (below)..

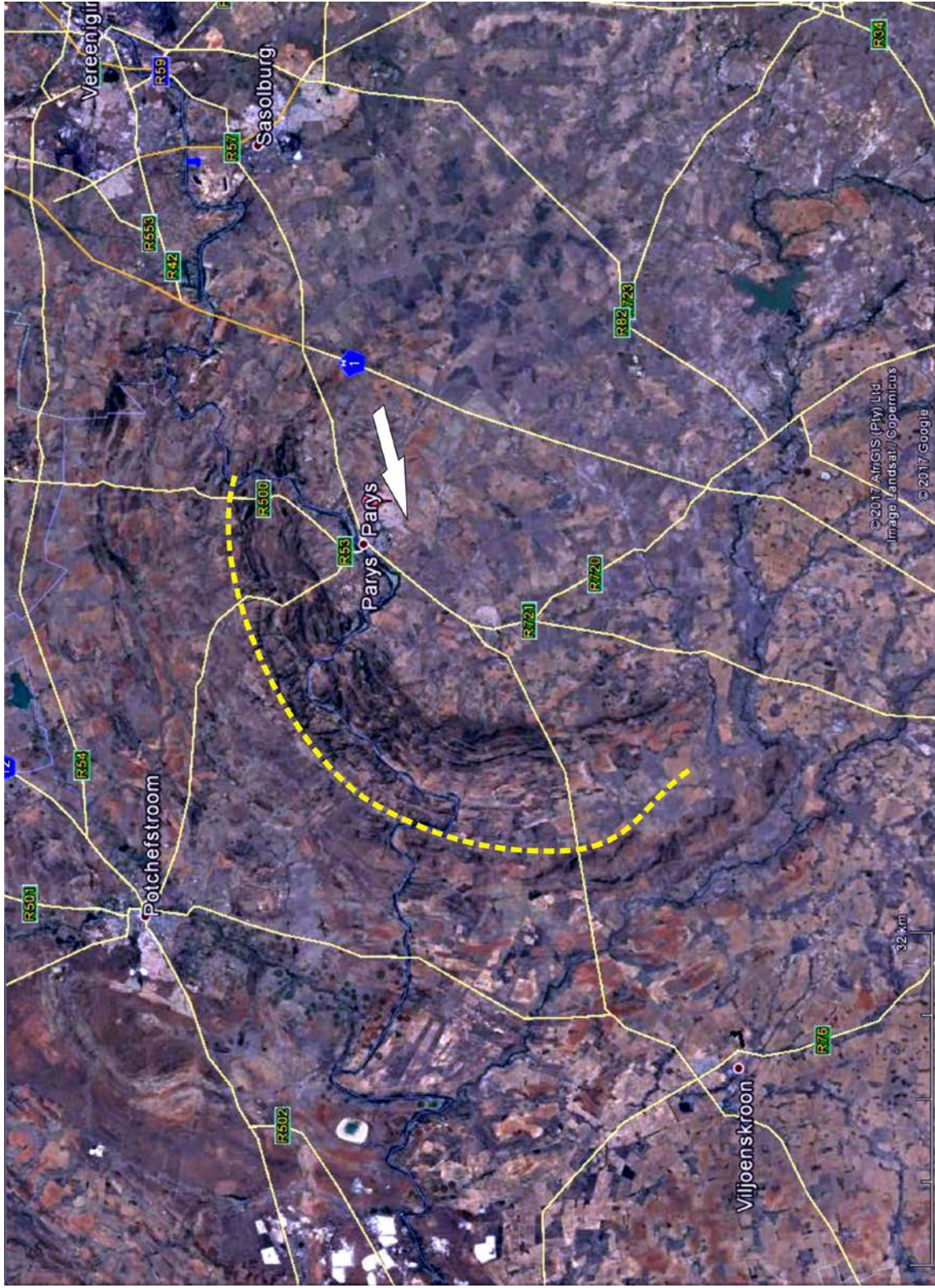


Figure 4. Aerial view of the central portion of Vredefort Dome impact structure. White arrow = position of study area

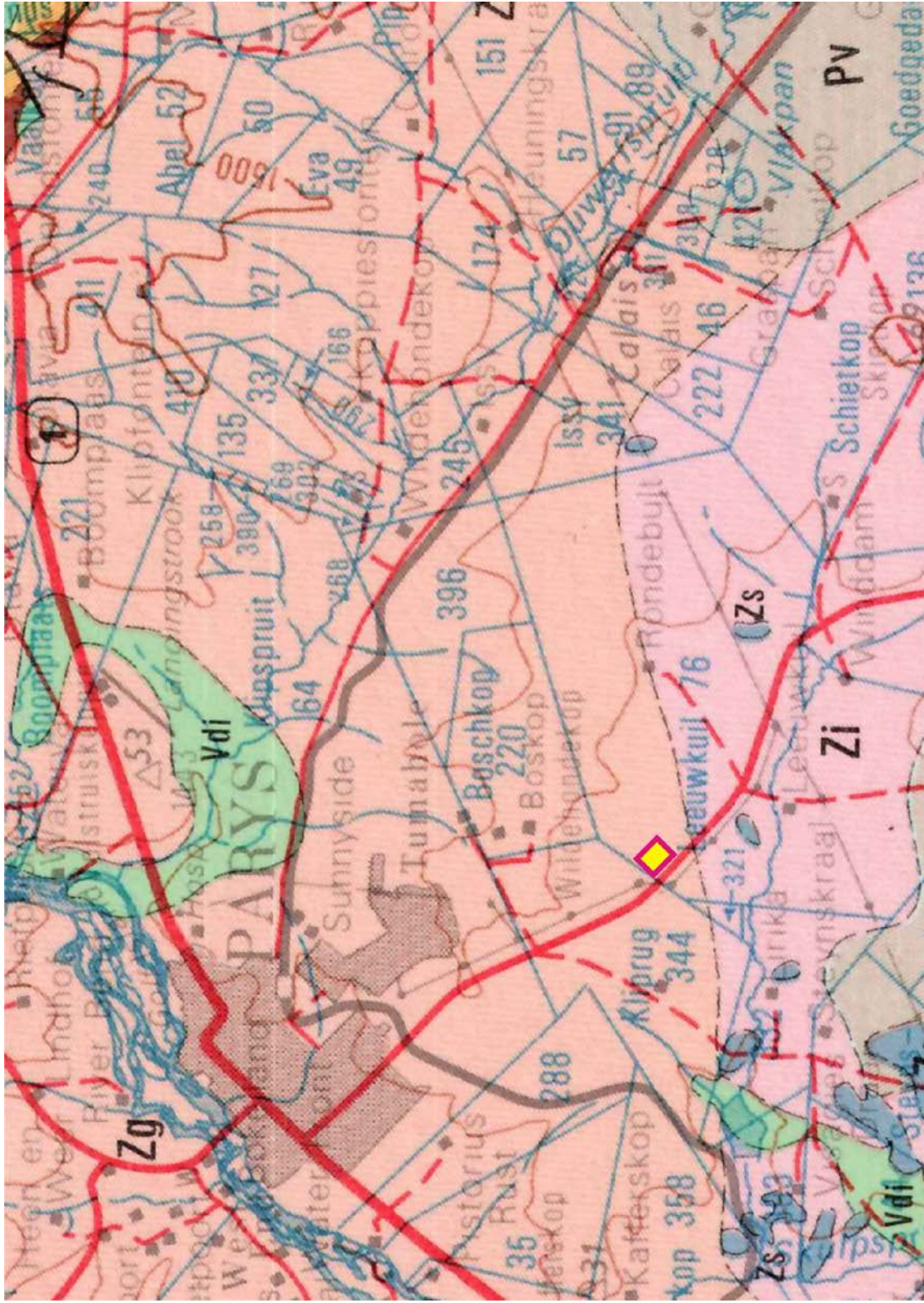


Figure 5. According to the 1:250 000 scale geological map 2626 West Rand the site (yellow rectangle) is underlain by undifferentiated Archaean and Palaeoproterozoic rocks (granites and gneiss, Zg).

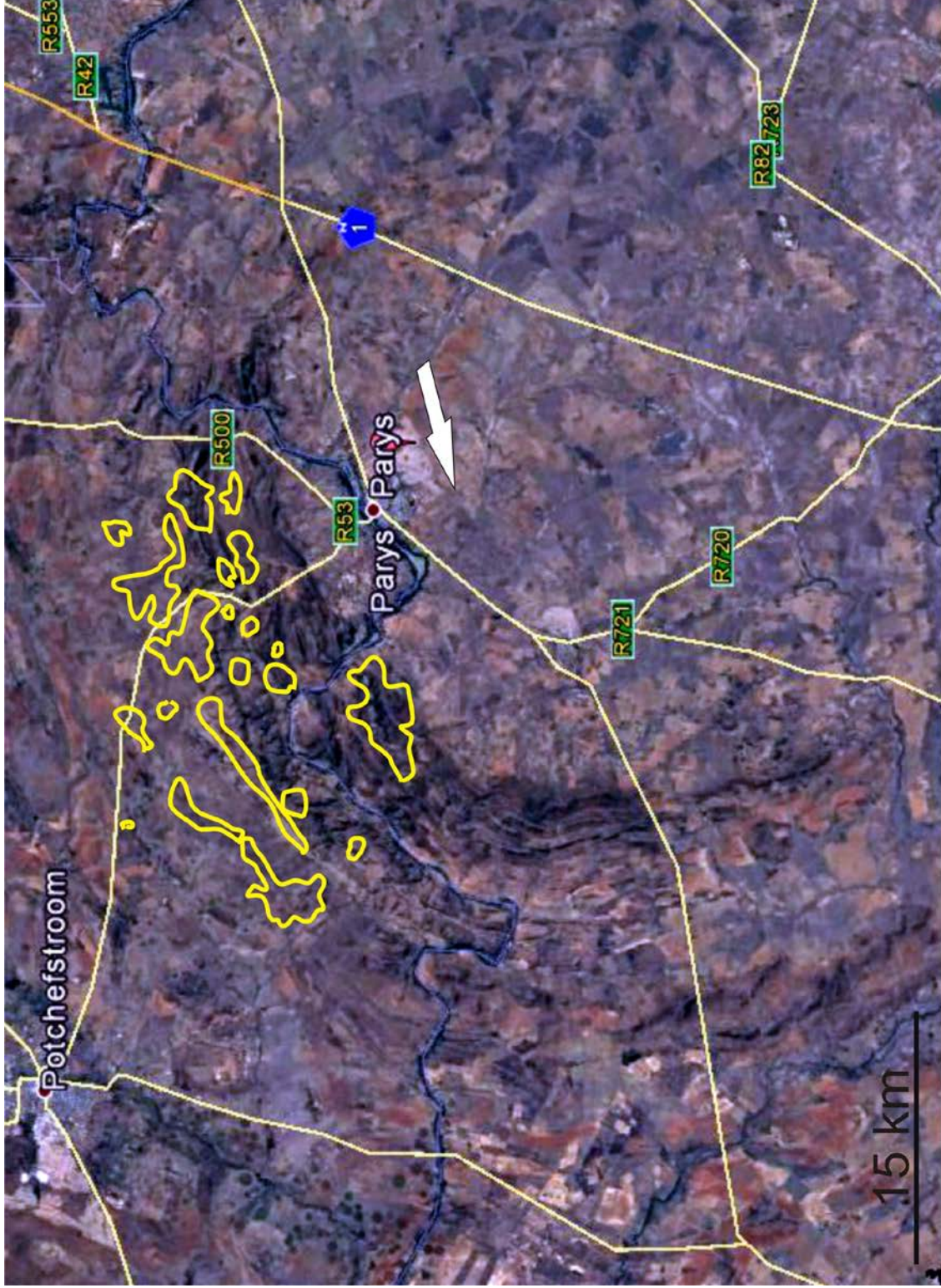


Figure 6. Distribution of Late Iron Age stone-walled settlements (yellow polygons) built by Sotho-Tswana speakers. White arrow = position of study area



Figure 7. The site is located on flat open grassland capped by a gravelly residual soil (below left) underlain by coarse to medium-grained granite (below right).
Scale 1 = 10cm.