Archaeological Desktop Assessment of the farm Doorn Knie 193 RE, near Kenhardt, Northern Cape Province.

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15 / 03 / 2017

Summary

The proposed development footprint consists of low topography terrain incised by intermittent water courses, linear depressions and pans. Whereas mostly visible (aboveground) historical structures, such as kraals, farmsteads and graveyards may be randomly distributed, water courses, depression margins and pan dune deposits are considered to be archaeologically sensitive as it represents potential loci for partly exposed hunter-gatherer living sites, as well as *in situ* stone tool assemblages and associated archaeozoological remains. It is advised that, if possible, a Phase 1 Archaeological Impact Assessment is conducted after individual exploration localities have been tentatively identified, but before the start of invasive prospecting (core drilling, trenching and pitting) so that potential archaeological sites can be identified, recorded and avoided.

Introduction

The report is a preliminary assessment of potential archaeological impact with regard to planned mining exploration and prospecting activities on the farm Doorn Knie 193, situated within the Siyanda District Municipality, about 60 km due south of the N14 national road between Upington and Springbok and about 70 km due west of Kenhardt in the Northern Cape Province (**Fig. 1**).

Locality data

1:50 000 scale topographic map: 2920AD Doringknie and 2920CB Boomrivier Site coordinates (**Fig. 2**):

- A) 29°19'27.38"S 20°21'30.05"E
- B) 29°17'17.30"S 20°26'25.20"E
- C) 29°26'19.40"S 20°28'33.31"E
- D) 29°28'44.11"S 20°25'32.94"E

The study area is located on the remnants of Late Cenozoic fluvial systems related to infill deposits (drainage depressions) of the Carnavon Leegte and associated gravel terraces of the Sak River near Brandvlei (De Wit *et al.* 2000).

Background

The Bo - Karoo landscape is characterized by mostly weathered stone tool surface scatters, while a number of Early, Middle and Later Stone Age sites have been associated with intermittent water courses, pans and pan-related sediments such as the one at Bundu Farm, a pan site on the eastern edge of Bushmanland, located between Marydale and Copperton, that contains a sequence including Earlier, Middle and Later Stone Age assemblages and preserved fauna (Kiberd 2006) (**Fig. 3**). According to Beaumont (1986) the Dwyka debris-littered plains between Kenhardt and Pofadder are associated with a low density artefact scatters representing the utilization of quartzite during the terminal Pleistocene. Archaeological records and historical eyewitness accounts suggest that Bushman hunter-gatherer and Khoi herder occupied the region prior to European settlement (Burchell 1824; Elphick 1977). Early travellers frequently encountered Koranna and Bushmen groups in the region (Burchell 1824; Skead 2009). Iron Age occupation is absent from the region as the most southerly distribution of Iron Age settlement in the northern Cape was limited to north of the Orange River by the end of 18th century (Maggs 1974; Humphreys 1976).

Hunter-gatherer living sites and abundant rock engraving localities are common. These localities are attributed to the /Xam, which is an extinct group of the San who occupied the Bushmanland and Upper Karoo regions until about 120 years ago (Deacon 1988) (**Fig. 3**). A fine example of rock engraving sites is found on a dolerite hill at Springbok Oog, northwest of Van Wyksvlei where a large concentration of rock engravings, including those of 19th century European settlers, have been recorded (van Riet Low 1941; Deacon 1988).

Impact Statement

The study area consists of low topography terrain incised by intermittent water courses and linear depressions along its north-south axis, while well-developed pan dune deposits are located along the southern boundary (eg. Doornknie se Vloer) (**Fig. 4**). Whereas mostly visible (aboveground) historical structures, such as kraals, farmsteads and graveyards may be randomly distributed, water courses, depression margins and pan dune deposits are considered to be archaeologically sensitive as it represents potential loci for partly exposed hunter-gatherer living sites (with cultural remains), as well as *in situ* stone tool assemblages and associated archaeozoological

remains. It is advised that, if possible, a Phase 1 Archaeological Impact Assessment is conducted after individual exploration localities have been tentatively identified, but before the start of invasive prospecting (core drilling, trenching and pitting) so that potential archaeological sites can be identified, recorded and avoided.

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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. 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.

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Figure 1. Map of the proposed study area on portion of 250 000 scale topographic 2920 Kenhardt.

Figures





Figure 3. Map of Stone Age hunter-gatherer living sites and rock engraving localities in the region (after Deacon 1988). Budu Pan is indicated by yellow square.



Figure 4. Potentially sensitive areas marked by yellow lines include water courses, linear depressions and well-developed pan dune deposits.