

AN ARCHAEOLOGICAL ASSESSMENT OF POWER LINE ROUTES BETWEEN MUISVLAK AND EKSTEENFONTEIN, RICHTERSVELD

Prepared for

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1. INTRODUCTION

The scoping report for the construction of the power line¹ briefly mentioned the possibility that archaeological sites could be present along the route but considered that anything of significance, if it were present, would not be too adversely affected by the construction process. The Archaeology Contracts Office at the University of Cape Town was commissioned by Ninham Shand, who are undertaking the Environmental Impact Assessment (EIA), to conduct an assessment of the routes in order to comment more fully on the potential impacts to the archaeology.

2. METHOD

A two day field trip was undertaken in mid-December 1998 during which time the proposed routes were assessed by following them as closely as possible in a 4x4 vehicle and looking for potential site locations. A map of the route at a scale of 1:50 000 as well as the detailed pole layout was supplied by Ninham Shand. Sites that were located were described and plotted on the supplied map.

2.1 Limitations to the study

Due to cost factors, time in the field was limited to two days. It was not possible in that time to assess the route in anywhere near the detail that was required in the brief. Difficulty was experienced in locating the precise position of the poles particularly in section 4 where the fairly uniform landscape makes navigation by geographical features difficult. GPS cannot be relied upon to provide accurate enough plots for location of precise points. Notwithstanding these problems, the overall impression of the archaeology is that it is minimal and that the above limitations will not have affected overall conclusions.

3. RESULTS

3.1 Section 4

This portion of the route traverses the coastal Sandveld. Previous experience working along the Namaqualand coast² has demonstrated that while archaeological sites occur throughout the Sandveld, the numbers drop significantly with distance from the shoreline. The immediate coastal strip contains by far the greatest number of sites, and is the area which is not at all affected by the proposed works. The initial section of the route in passing through the Alexcor mining area has meant that chances of impact by the current work is lessened as this area has already been severely impacted. As explained it was not possible to examine every single meter of the route, but in following it as closely as possible one was able to make observations about other portions of the landscape virtually identical to the power line route

Only 4 archaeological sites were found in Section 4. Of these, 1 occurs on the proposed route (site 2) and 1 occurs at and around a gate where a number of tracks and fences

¹ Phelan, J. & Liversidge, R. 1998. Environmental impact assessment for the construction of a 22 Kv power line from Muisvlak to Lekkering and Eksteenfontein. Unpublished scoping report prepared for Namaqualand District Council.

² Halkett, D.J. & Hart, T. 1997. An archaeological assessment of the coastal strip, and a proposed management plan for: De Beers Namaqualand Mines. Unpublished report prepared for De Beers Namaqualand Mines. Archaeology Contracts Office, UCT. 2 vol.

intersect (site 1). The locations of the sites are shown in Figure 1. Some of these tracks may be used by maintenance and construction vehicles in the future but the site has already been impacted.

All sites consist of ephemeral marine shell scatters with small amounts of stone debris lying in small dune deflations. None of the sites observed in this section were adjudged to be of such significance to warrant mitigation.

Site 1: 16° 55' 17.6" Lat 29° 8' 28.3" Lon (from map plot)

Site 2: 16° 56' 55.3" Lat 29° 6' 52.5" Lon (from map plot)

3.2 Sections 1, 5, 2

These sections lie within more mountainous/rocky and riverine environs. Again we were unable to examine every meter of the routes but were certainly able to access most of the alignment.

No archaeological sites were observed along the route or close to it.

3.3 Section 6

This section lies up the valley from the village of Lekkersing and continues over a section of mountainous terrain toward Eksteenfontein. We were unable to negotiate this mountainous barrier by car and part of the group walked over and the vehicle went around to the farm Kalkfontein where we again met up. Most of the route could be accessed although not every meter could be searched.

Up the valley from the village is the local cemetery. This lies off the power line route but is an example of a common practice in predominantly rocky areas to bury the deceased in the deeper silts encountered on old river terraces/beds. Close to the gate beyond the modern cemetery, above the confluence of two dry stream channels, are at least three stone cairns that could mark older, traditional graves. Other loose rocks in the area could represent the collapsed remains of other grave markers. While neither of these sites lie on the route, it is not impossible that where poles are sunk in similar environments, the possibility exists (although minute) of encountering human remains. In some cases grave markers may have disappeared leaving no trace of the presence of the features.

No archaeological sites were observed along the route or close to it.

3.4 Section 3

The route climbs up on to the flattish top of a high ridge where it runs for some distance before descending down to Eksteenfontein. Except for a portion of the south eastern part of the route most of it could be accessed.

One area on the route contains 4 possible graves (site 3). The location of these is shown in Figure 2. These take the form of 3 roughly "circular" stone cairns and 1 conventional rectangular grave outlined with a few stones with possible rough headstone lying nearby. These "graves" lie some distance apart from each other and there is only a small chance that a pole may intersect one of these features. It is impossible though, to predict unmarked burials.

No prior mitigation is suggested but “graves” must be avoided when placing poles. Due to a problem with photographs taken during the fieldwork it is not possible to show the actual graves in this report. I have included examples of similar stone cairns from elsewhere in the Richtersveld (Plates 1-3) to show what these features generally look like.

Site 3: 17° 14' 35.8" Lat 28° 50' 54.1" Lon (from map plot)

3.5 Section 7

This is the alternative route to section 3. While some sections could be accessed, lack of time prevented us from looking at less accessible portions that lie across steeply sided ravines not easily accessible by vehicle.

No archaeological sites were observed along the portions of the route that were investigated, or in similar environments close to the route.

3.6 Assessment of the significance of impact

Archaeological sites have been found on only two sections of the route. Tables 1 and 2 assess the impacts according to the suggested criteria. While there is a very small possibility that 3 sites may be impacted by developments, they are not of suitable significance to warrant prior mitigation, hence the similarity of the assessments. Since archaeological material is non-renewable, the duration of any impact is long term even if mitigated. Variability in confidence of the ratings reflect limitations in fulfilling the brief i.e. not every meter of the route could be examined nor could we determine exactly the position of the poles (apart from certain marked end points). My overall impression is however that the archaeology is sparse and that significant sites will be situated close to the permanent water sources of the area.

4. PREVIOUS RESEARCH

Despite the amount of work undertaken recently in the Richtersveld by Dr. Lita Webley from the Albany Museum in Grahamstown, no comprehensive research programs have been undertaken in the area covered by the power line route. Her work has been largely south of Springbok³ and north of Khubus⁴. In the past however, occasional forays were made into the area in an attempt to locate archaeological sites. During 1976, the third year archaeology students from the University of Cape Town undertook a project which sought to locate both “hunter” and “herder” sites in the Richtersveld to determine if any distinctions could be made between the two types⁵. The area covered by the project was quite large and overlapped with the power line route (route 1 section 3) as a result of the short time and limited transport, not many sites were located. Two of these sites are close to the area that we are concerned with here i.e. near the springs at

³ Webley, L.E. 1992. The history and archaeology of pastoralist and hunter-gatherer settlement in the north-western Cape, South Africa. Unpublished PhD dissertation, Department of Archaeology, UCT.

⁴ Webley, L.E. 1997. Jakkalsberg A and B: the cultural material from two pastoralist sites in the Richtersveld, Northern Cape. South African Field Archaeology. v6 no1, 3-19.

⁵ 1976. Archaeology III field school survey in the Richtersveld, North-west Cape Province: 21 June – 3 July. Unpublished student reports held in the Dept. of Archaeology, UCT.

Eksteenfontein, although not on the power line route itself. Most of the other sites located by this group lie to the north of Eksteenfontein.

5. CONCLUSIONS

A small number of archaeological sites were observed along the power line route. Only two lie directly on the route but are not of such a nature to warrant mitigation. The first of these (site 1) is an ephemeral shell and stone scatter while the other consists of a number of stone mounds possibly representing traditional grave markers (site 3). Another site lies next to a gate in a jeep track that may be used for access by maintenance vehicles (site 2). This site has already been impacted where it lies in the track but a significant portion lies to the south on an adjoining fenced property and is not threatened by these proposals.

During the survey, a number of Early/Middle stone age artefacts were observed spread widely about the landscape although never in large enough quantities to allow definition of individual sites.

6. RECOMMENDATIONS

- 6.1 From what has been observed there appears to be little or no chance that any important archaeological material will be impacted during erection of the power line. It is however possible that stone mounds which are encountered from place to place in the veld could represent traditional grave markers. It is not possible to confirm this without undertaking invasive procedures which in this instance were not warranted. It must be pointed out to construction crews who will dig the holes for the poles, that such mounds should be avoided if it should so happen that pole location coincides with a mound. If any human remains are encountered (in graves not marked by any form of grave marker) pole location should if possible be shifted slightly and the remains reburied where they were found. A note should be kept of the location of such burials and these details should be sent to the consulting archaeologist so that the information can be archived. Under no circumstances should human remains be removed.
- 6.2 While there is only a minute chance of impacts occurring to archaeological material, the National Monuments Council (Kimberley) should be notified, and permission sought to impact site 2 if this becomes necessary.

7. ACKNOWLEDGEMENTS

We would like to thank Alexcor for allowing us permission to look at those sections of the route which crossed their property and particularly Mr. Ruiters (security) who accompanied us while we were on the property.

8. PROFESSIONAL TEAM

Fieldwork

Dave Halkett

Report

Belinda Mütti

Dave Halkett

	Engineers Alignment
	Route1 Section4
Extent	Small <u>Small</u>
Duration	Long <u>Long</u>
Magnitude	Very low <u>Very low</u>
Probability	Very low <u>Very low</u>
Confidence	Medium/High

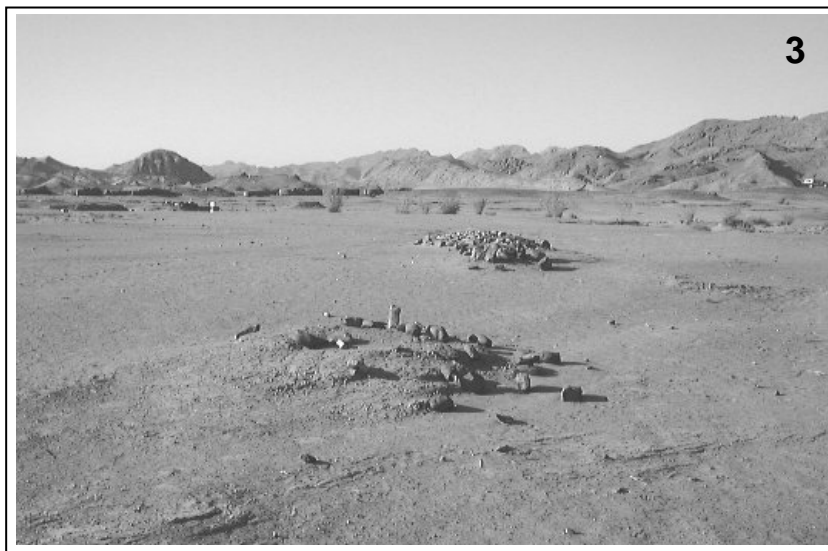
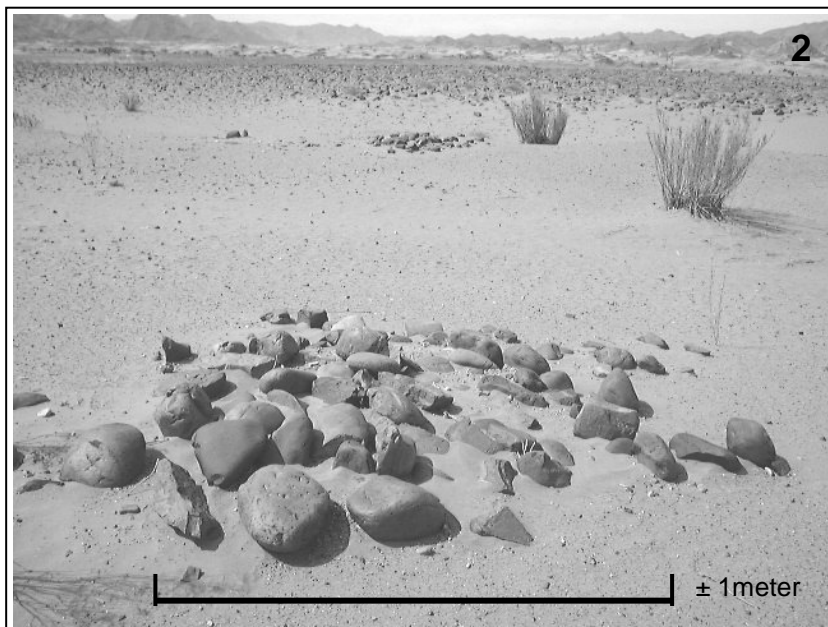
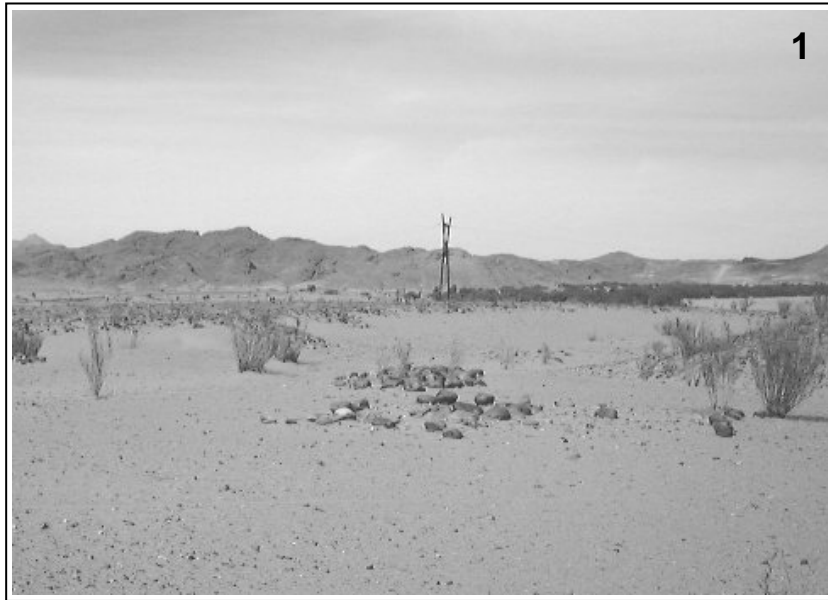
Underlined: impact with mitigation

Table 1: Assessment of impact on archaeological material (Sites 1 and 2).

	Engineers Alignment	Alternative Scoping Report Alignment
	Route1 Section3	Route2 Section7
Extent	Small <u>Small</u>	Small <u>Small</u>
Duration	Long <u>Long</u>	Long <u>Long</u>
Magnitude	Very low <u>Very low</u>	Very low <u>Very low</u>
Probability	Very low <u>Very low</u>	Very low <u>Very low</u>
Confidence	Medium/High	Medium/Low

Underlined: impact with mitigation

Table 2: Comparative assessment of impact on archaeological material on alternate routes



Plates 1 and 2 show traditional grave markers in the form of stone cairns. Plate 3 shows later graves conforming to the Christian grave layout. A crude headstone often accompanies such graves and usually will not have any inscription. The preservation of grave mounds varies. Often stones are removed for use on other graves, or deflation causes stones to disperse as is happening with most of the above examples. All the above examples are located close to Sendelingsdrift in the northern Richtersveld.

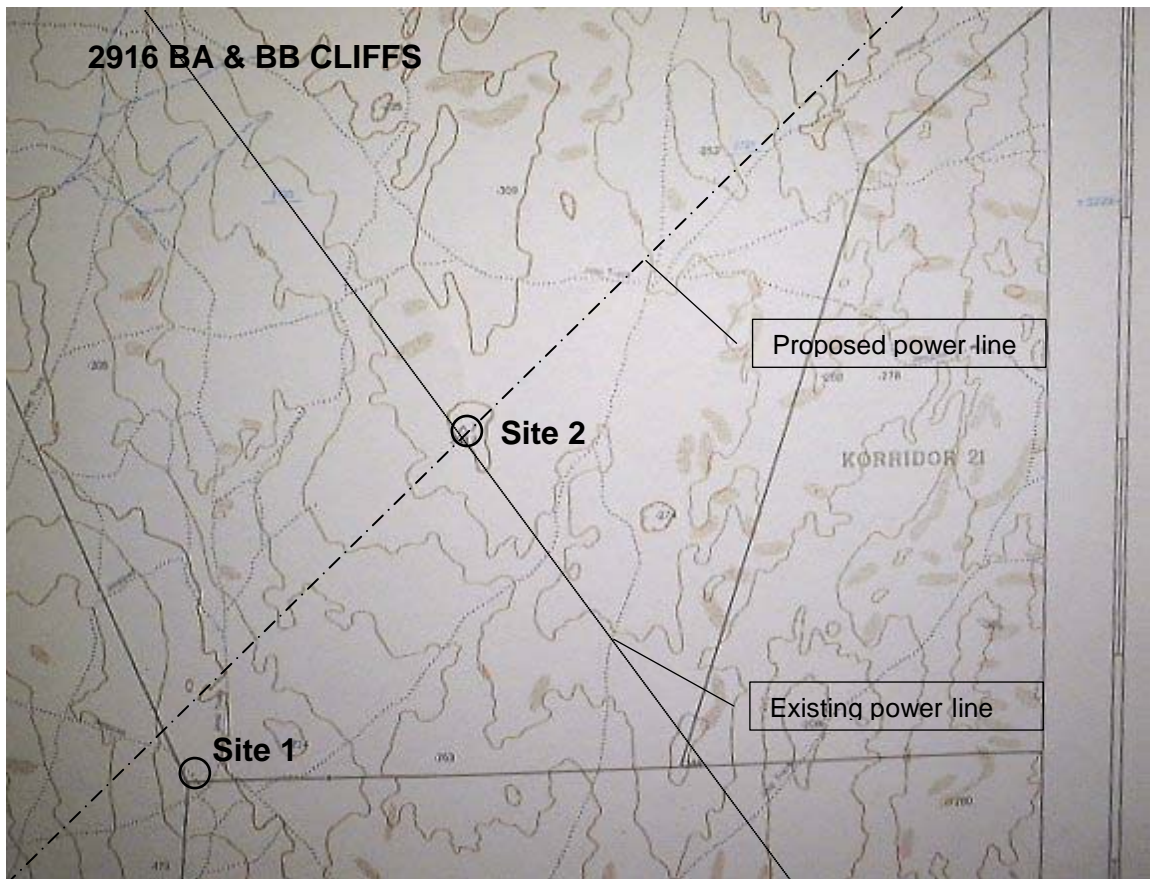


Figure 1: Portion of 1:50 000 map showing the location of archaeological sites

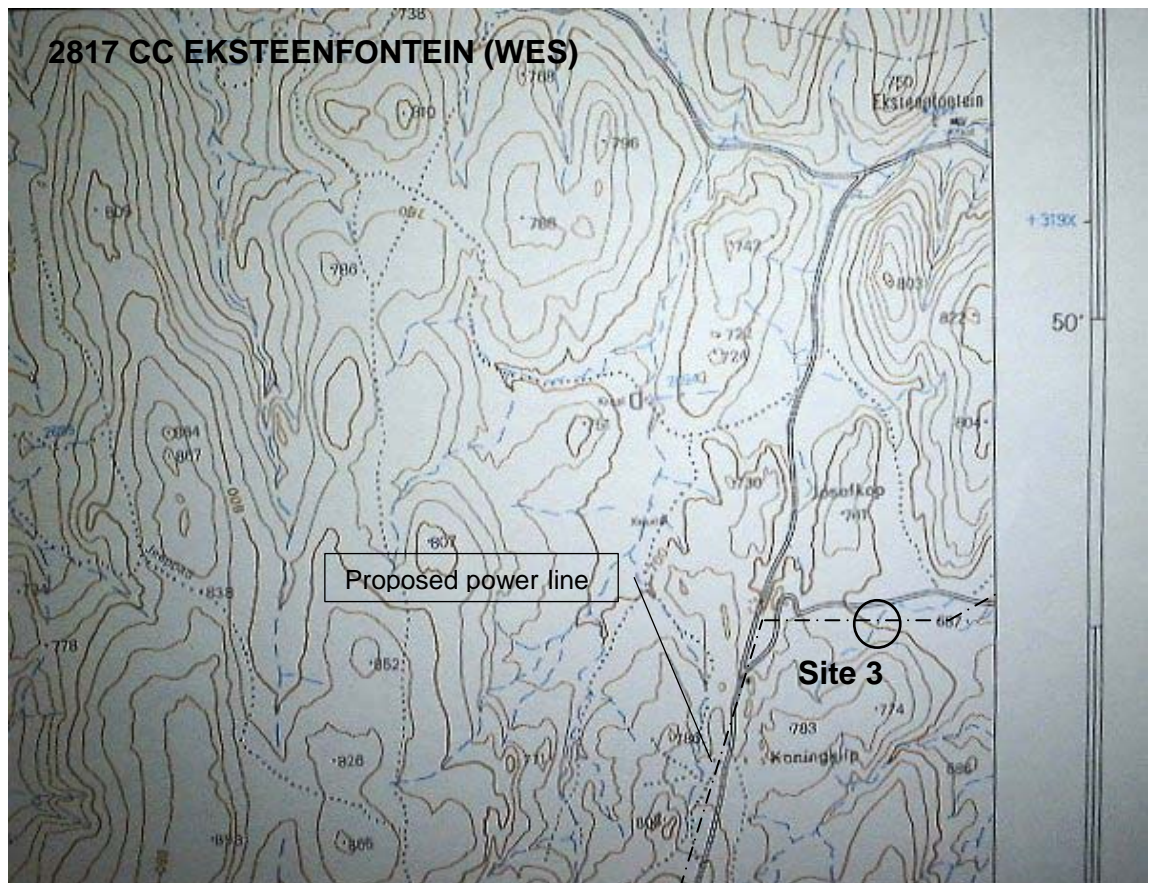


Figure 2: Portion of 1:50 000 map showing the location of archaeological sites