

Agency for Cultural Resource Management

Specialists in Archaeological Studies and Heritage Resource Management

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Att: Mr Henry Nawa
Eskom Land Development
PO Box 222
Brackenfell
7561

Dear Mr Nawa

PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED MONTAGU - BARRYDALE 66 KV LINE (PHASE 2) AND BARRYDALE 66/22KV SUBSTATION WESTERN CAPE PROVINCE

1. Introduction and brief

Eskom Land Development¹ requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment (AIA) for the proposed Montagu - Barrydale 66 kV line (Phase 2) and Barrydale 66/22 kV substation (Figure 1).

Eskom proposes to extend the remaining Montagu - Barrydale 66 kV line and construct a new 66/22 kV substation at Barrydale. The length of the proposed line is about 21 km and the footprint for the proposed substation is approximately 100 m x 100 m in extent. The span between powerline poles is about 200 m (Henry Nawa pers. comm.).

A Phase 1 AIA of Phase 1 of the proposed project was completed in 2005².

The extent of the proposed development (a linear development exceeding more than 300 m in length) falls within the requirements for an archaeological impact assessment as required by Section 38 of the Heritage Resources Act (No. 25 of 1999).

It was initially proposed that the new 21 km 66 kV powerline be built parallel to the scenic R62, but this route was discounted as it is highly visible and the line would cause negative visual impacts.

¹ Eskom is represented by Mr Henry Nawa. PO Box 222, Brackenfell, 7561. Fax (021) 980 3053.

² Kaplan, J. 2005. Archaeological Heritage Study, proposed construction of a new 66 KV overhead powerline between Montagu substation and Barrydale. Report prepared for Eskom. Agency for Cultural Resource Management

The preferred alternative is more appropriate and feasible as it runs through valleys and ridges, but mostly at the foot of mountain. In most portions along the route, the line is hidden by the natural aspects of the receiving environment. The visual impact is therefore greatly minimised, and the new line will, for the most part, not be visible from R62. The proposed new line will feed into an existing 22 kV line alongside R62 (refer to Figure 1).

2. Terms of reference

The Terms of Reference for the Archaeological Impact Assessment are to:

- Undertake a Phase 1 Archaeological Impact of the proposed route and the proposed substation, and
- Identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed route area and the proposed substation.

3. The study area

The study area is Barrydale in the Klein Karoo region of the Western Cape Province (Figure 1).

The proposed 66/22 kV substation will be located about 2 kms on the outskirts of the town of Barrydale (Figure 2). The area for the proposed substation is unused and cleared of vegetation. Dumping is widespread and evidence of grazing is also apparent.

The proposed new 66 kV powerline will be located either in, or on the edge of natural veld and agricultural lands (Figures 3-13).

4. Approach to the study

The proposed powerline route was surveyed on foot and by vehicle.

The site visit and assessment took place on 22 March, 2007

5. Limitations

Major sections of the route are well vegetated resulting in low archaeological visibility. Vehicle access to some sections of the route was also limited, but most of the route was covered by the archaeologist.

6. Results of the study

6.1 Proposed substation (S° 33 54 866 E° 20 42 451 on map datum wgs 84).

One Early Stone Age (ESA) quartzite flake, one Middle Stone Age (MSA) indurated shale flake and one quartz flake was located on the proposed substation site (refer to Figure 2).

The archaeological heritage remains have been rated as having low local significance.

6.2 Proposed powerline route

Several large ESA quartzite flakes, chunks and one large core were located in heavily grazed farmlands on the farm Bergsig (refer to Figure 4).

Two ESA quartzite flakes, one indurated shale flake and one indurated shale blade tool was found in old grazing lands on the farms Helderstroom.

Three MSA indurated shale flakes and several quartz chunks were found in agricultural lands on the Farm Op de Tradouw (refer to Figures 10 and 11).

Several ESA quartzite flakes and chunks were documented in agricultural lands alongside R62 (refer to Figure 14).

The above artefacts were not necessarily located in the proposed route alignment.

The archaeological heritage remains have been rated as having low local significance.

It is interesting to note that large numbers of MSA and Later Stone Age tools, mostly in indurated shale, were located during the AIA of Phase 1 of the proposed study and that most of the remains were located on large sheet washed and eroded slopes located to the north of R62.

7. Impact statement

The impact of the proposed Montagu - Barrydale 66 kV line (Phase 2), and Barrydale 66/22 kV substation on important archaeological heritage remains is likely to be low.

The probability of locating significant archaeological sites or remains during the implementation (i.e. the Construction Phase) of the proposed project is likely to be improbable.

The assessment of the potential impacts on archaeological resources is summarised in Table 1.

	Without Mitigation	With Mitigation
Extent	Site specific	Site specific
Duration	Temporary	Temporary
Intensity	Low	Low
Probability	Improbable	Improbable
Significance	Low	Low
Status	Positive	Positive
Confidence	High	High

Table 1. Archaeological impact assessment of the proposed Montagu - Barrydale 66 kV line (Phase 2), and Barrydale 66/22 kV substation

8. Concluding statement

The Phase 1 Archaeological Impact Assessment has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed development activities.

9. Recommendations

With regard to the proposed Montagu - Barrydale 66 kV line (Phase 2), and Barrydale 66/22 kV substation, the following recommendations are made

- Should any unmarked human remains be disturbed, exposed or uncovered during excavations for the proposed substation and overhead powerlines, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 462 4502) or Heritage Western Cape (Mr N. Ndlovu @ 483 9692).
- The proposed project should be allowed to proceed as planned.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Jonathan Kaplan', with a long horizontal flourish extending to the right.

Jonathan Kaplan

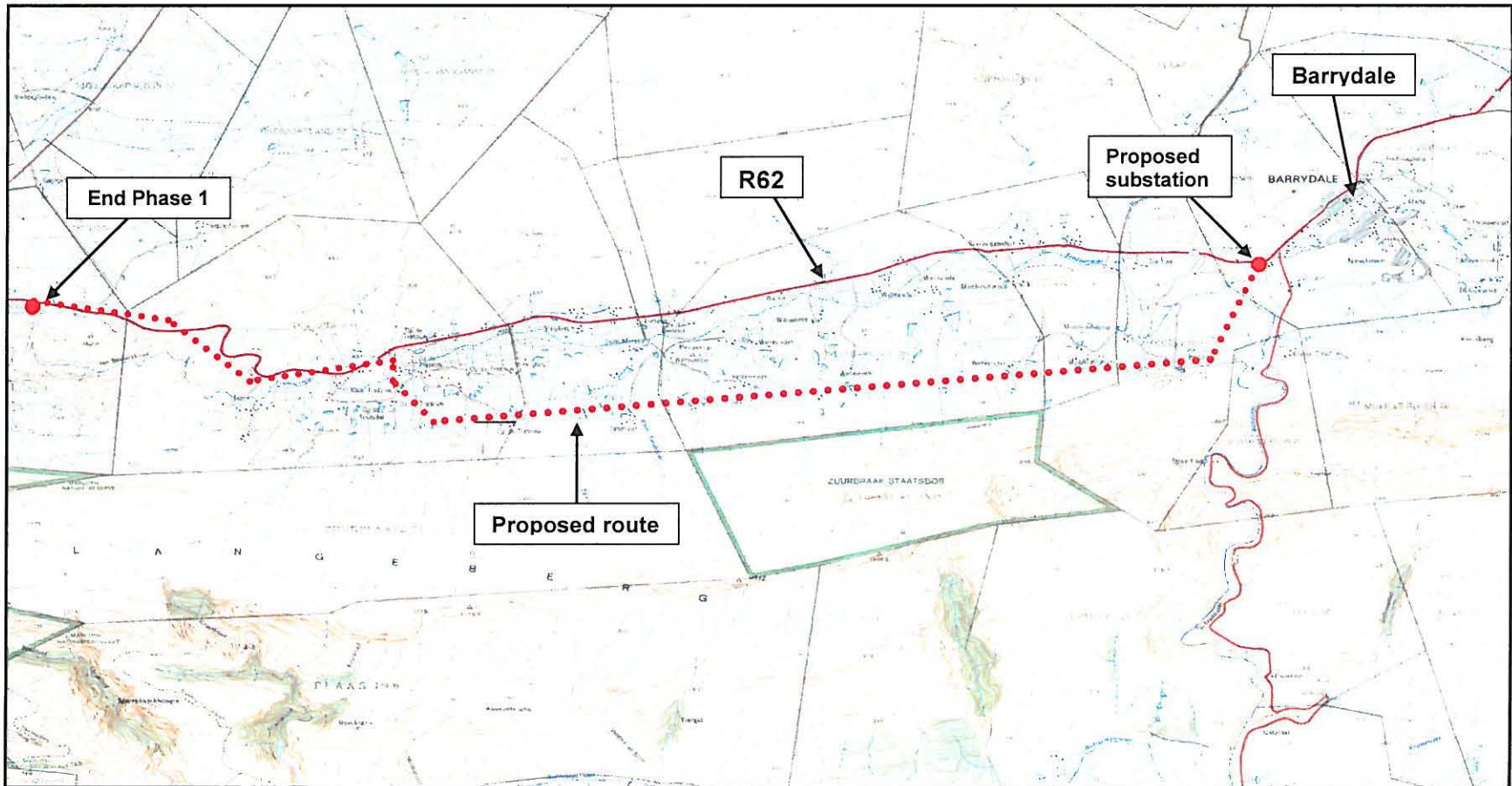


Figure 1. Locality map and route of the proposed new 66 kV powerline and proposed new substation (3320 DC Barrydale)



Figure 2. Proposed 66/22 kV substation



Figure 4. View of the proposed route facing west



Figure 3. View of the proposed route facing south



Figure 5. View of the proposed route facing east



Figure 6. View of the proposed route facing west



Figure 8. View of the proposed route facing east



Figure 7. View of the proposed route facing east



Figure 9. View of the proposed route facing east



Figure 10. View of the proposed route facing north west



Figure 12. View of the proposed route alongside R62 facing south east



Figure 11. View of the proposed route facing north west



Figure 13. View of the proposed route alongside R62 facing west