



ARCHAEOLOGICAL HERITAGE: LETTER OF EXEMPTION FROM FURTHER SPECIALIST STUDIES & MITIGATION

PROPOSED CONSTRUCTION OF A 25M HIGH TELECOMMUNICATION MAST ON REM OF THE FARM ELANDSHEUWEL 146 NEAR HANVOVER, NORTHERN CAPE PROVINCE

03 November, 2020

EXECUTIVE SUMMARY

While the Karoo landscape is known for its richness of Stone Age archaeological traces, both in the form of surface scatters of stone tools, and of rock engravings on dolerite outcrops, it is maintained that the overall archaeological impact significance of the proposed construction of a 25m high telecommunications mast on Rem of the Farm Elandsheuwel 149 near Hanover is considered to be LOW.

A field assessment of the proposed site undertaken by Dr Jayson Orton on 31 October 2020, recorded a few weathered flakes (of *low* significance) on top of the dolerite kopje. No rock engravings were found, but the remains of an ephemeral kraal were encountered near the foot of the outcrop.

Given the anticipated low impact significance of the proposed development on archaeological resources, there are no objections to authorisation of the proposed project, and it is recommended that exemption from further specialist archaeological studies and mitigation be granted.

1. Introduction

ACRM was appointed by EnviroAfrica, on behalf of Atlas Tower (Pty) Ltd to conduct a desktop screening study for the proposed construction of a telecommunications mast and base station on Rem of the Farm Elandsheuwel No. 146, near Hanover in the Northern Cape (Figure 1).

EnviroAfrica is the independent Environmental Assessment Practitioner responsible for facilitating environmental authorisation for the project. A Basic Assessment process will be followed.

2. Project description

The proposed development entails construction of a 55m high, telecommunication mast and associated infrastructure on the Remainder of Farm Elandsheuwel No. 146, Hanover, in the Umsobomvu Municipality, in Northern Cape Province. A 3m wide, approximately 125m long gravel access road will also be constructed from the existing gravel road to gain access to the proposed site (Figure 2). The total development footprint is approximately 100m². The mast's base station will be enclosed with a steel palisade fence. Electricity to power the mast will be sourced from an existing Eskom line. A new overhead line of approximately 420m will need to be constructed from the Eskom line to the site.



3. The study site

The proposed telecoms site (S 31° 15' 19.72" E 24° 45' 04.19") is a greenfield site located on top of a dolerite kopje approximately 140m from the N10 trunk road between Hanover and the N9, some 36.5 kms south east of Hanover, and 21kms south west of Noupoot (Figures 3-6).

4. Approach to the study

A desk top study was undertaken that entailed a search of the SAHRIS content management website.

A field assessment of the proposed development site was also conducted by Dr Jayson Orton of Asha Consulting on 31st October 2020.

5. Archaeological context

The Karoo landscape is known for its richness of Stone Age archaeological traces both in the form of surface scatters of stone tools and of rock engravings on dolerite outcrops (Beaumont & Morris 1990; Morris 1988). Surface scatters and quarry sites are sometimes also found at the foot of dolerite hills where hornfels outcrops occur.

Around Noupoot, which is about 21kms south west from the proposed site, there is some archaeological information available on the Stone Age occupation of the area. Apart from the well-known Blydefontein Shelter (Sampson 1970; Bousman 2005), scatters of LSA sites, and isolated MSA tools have been recorded during surveys for several solar energy farms north of the town (Booth & Sanker 2012; Booth 2011a, b; van Schalkwyk 2012). Large numbers of LSA tools were also recorded by Rossouw (2010) associated with several proposed borrow pits alongside the N9, south of Noupoot. The closest work undertaken near the study site was for a large wind farm south of the N10, between Noupoot and Middelburg (Anderson 2018), who recorded dispersed scatters of stone tools and a quarry site.

6. Result of the field assessment

A field assessment of the proposed telecommunication site was undertaken by Dr Jayson Orton on 31st October 2020 (Figure 7), who recorded a few weathered and fresh-ish hornfels flakes (Point 241) on top and on the ridge of the dolerite outcrop (Figure 8). No rock engravings were found. The remains of an ephemeral kraal (Point 240) were also recorded at the foot of the kopje (Figures 9 & 10). According to Orton (pers. comm), the remains have been graded as having low (IIC) significance.

7. Conclusion

While the Karoo landscape is known for its richness of Stone Age archaeological traces, both in the form of surface scatters, and of rock engravings on dolerite outcrops, it is maintained that the overall archaeological impact significance of the proposed construction of a 25m high telecommunications mast on Rem of the Farm Elandsheuwel 149 is considered to be LOW.

8. Recommendations

1. It is recommended that exemption from further specialist archaeological studies and mitigation be granted for this development.



9. References

Anderson, G. 2018. Heritage Survey of the Umsobomvu 1 Wind Energy Facility, Eastern and Northern Cape. Report prepared for EOH Coastal and Environmental Services. Umlando: Archaeological Surveys and Heritage Management. Meerensee KwaZulu Natal.

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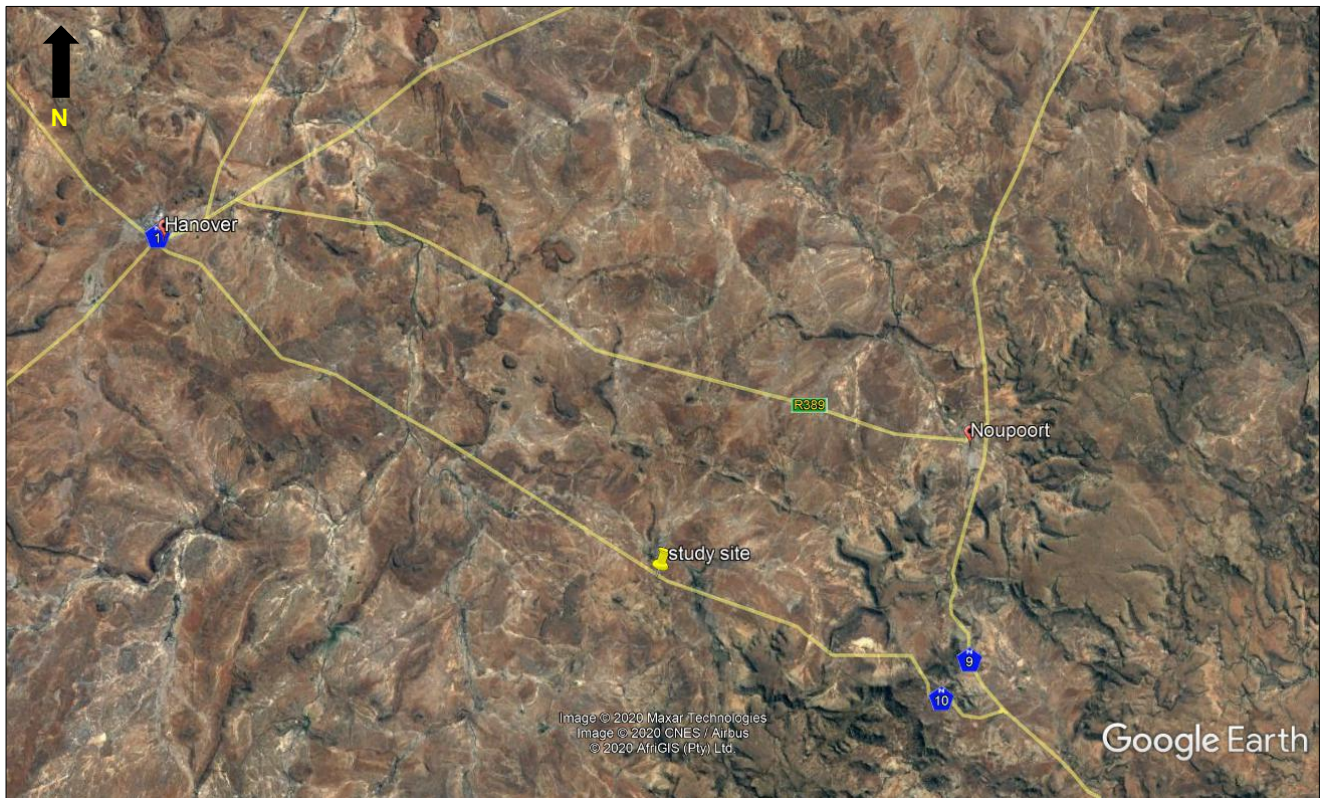


Figure 1. Google satellite map indicating the location of the proposed telecommunications mast (yellow pin) in relation to the town so Hanover and Noupport in the Northern Cape Province.

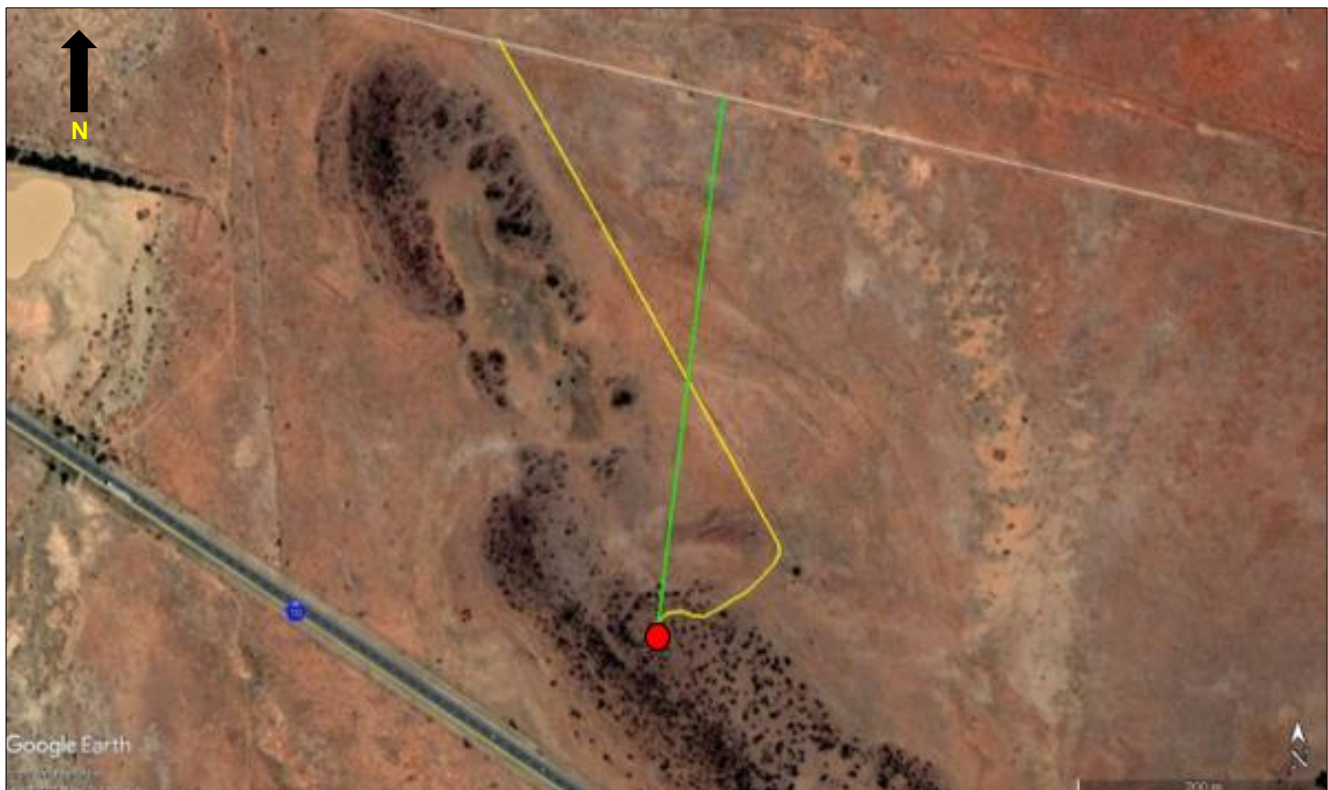


Figure 2. Google Earth image showing the location of the proposed site (red placemark) and the surrounding area. The proposed access road is indicated by the yellow line, and the proposed overhead powerline is indicated by the green line.



Figure 3. View of the study site from the N10 (EnviroAfrica 2020)



Figure 4. View of the study site from the N10 west (EnviroAfrica 2020)



Figure 5. The study site facing south east with the N10 in the background (Enviroafrica 2020). Arrow indicates the footprint area for the proposed telecommunication mast and base station



Figure 6. The study site facing north/north west (Orton November 2020).

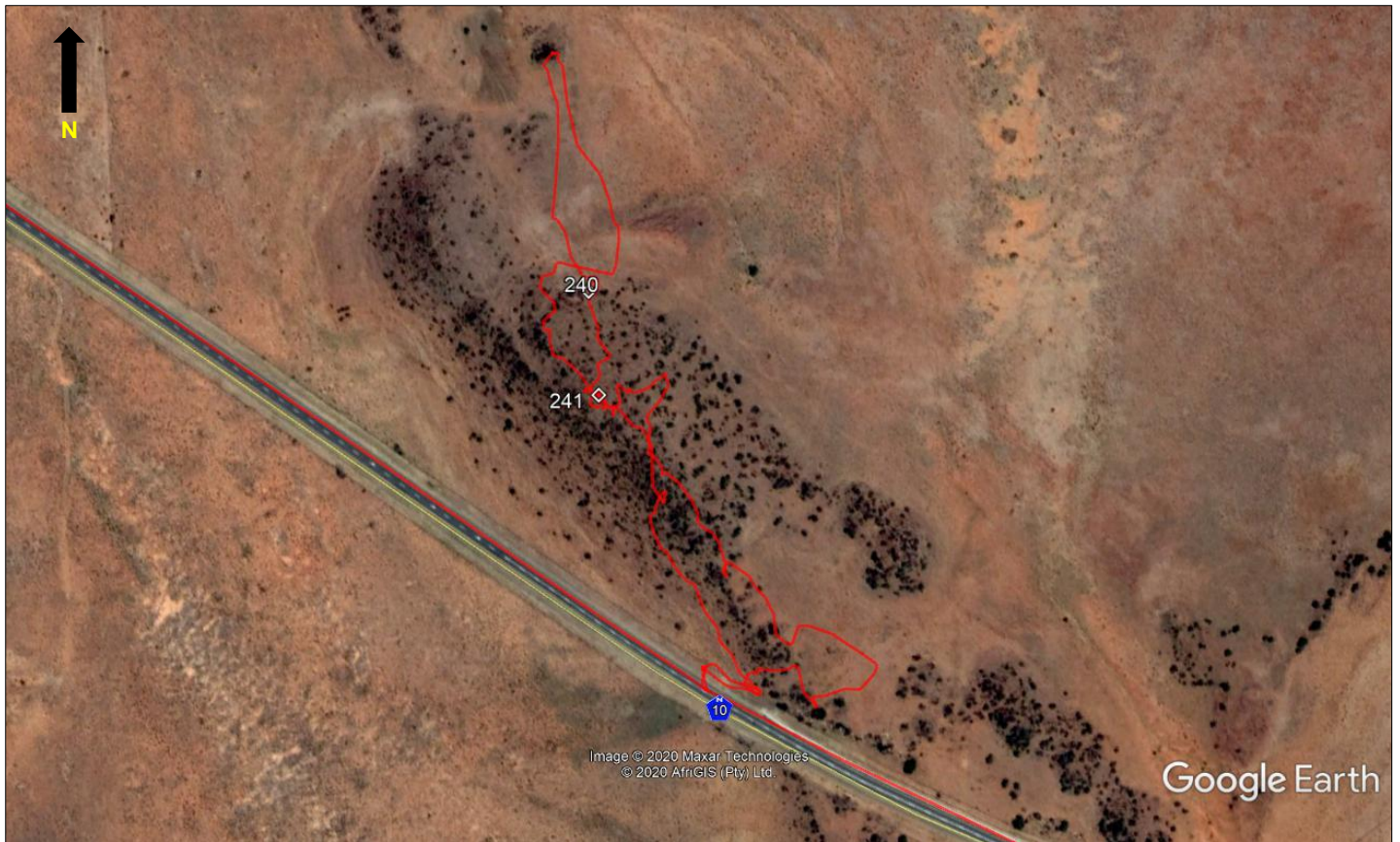


Figure 7. Track paths (in red) and waypoints of archaeological finds (Orton November 2020)



Figure 8. Stone flakes (Point 241). Scale is in cm (Orton November 2020)



Figure 9. Remains of an ephemeral kraal (Point 240) at the foot of the kopje under the bush extending toward the top left (Orton November 2020)



Figure 10. Remains of an ephemeral kraal/stone walling (Point 240) looking Uphill from the lower slopes of the kopje (Orton November 2020). The lowermost rocks appear to have been removed