ARCHAEOLOGICAL REPORT

Proposed 10MW Solar Facility on Farm 426 Skuitdrift, Northern Cape Province

prepared for

Cape EAPrac
P.O. Box 2070
George 6530
Tel: 044 874 0365
Fax: 044 874 0432
e-mail: sian@cape-eaprac.co.za

by

Andrew B. Smith
Department of Archaeology
University of Cape Town
Rondebosch 7700
e-mail: andrew.smith@uct.ac.za

EXECUTIVE SUMMARY

Instructions were given by Cape EAPrac to conduct an archaeological assessment of the proposed 10 MW solar facility on Farm 410 Skuitdrift in the Northern Cape Province.

A site visit was made on 22 February 2012, and surface indications noted, particularly around the base of inselbergs (koppies) which dot the landscape. The results showed scattered quartz pieces across the terrain, with denser concentrations around the koppies. These artefacts are probably mostly late, but a few MSA and ESA pieces were also noted.

The road to the Southern Farms was also inspected, as this would be the preferred route of a water pipeline from the Orange River.

The artefacts seen across the open veld constitute a low heritage potential. The more sensitive areas are below the koppies that lie immediately outside the footprint of the solar facility. Thus, there would appear to be no inhibitors to the solar installation from an archaeological perspective, but construction of the solar panels should stay within the footprint area to avoid any damage to the denser scatters of white quartz, which are clearly visible below the koppies.

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1. INTRODUCTION

Instructions were given by Cape EAPrac to conduct an archaeological assessment of the proposed 10 MW solar facility on Farm 410 Skuitdrift in the Northern Cape Province (Figure 1) (Ref 1:250,000 2818 Onseepkans). This study would be part of a larger Environmental Impact Assessment (EIA) to conform to NEMA legislation.

Little archaeological work has been done in this area, but in previous surveys very little has been found. As Beaumont et al. (1995: 264) note: “Surveys of large areas away from ... (dry) river beds have failed to yield any signs of human occupation, except around the granite inselbergs extruding above the peneplain which would have produced both shelter from the prevailing winds, as well as good viewing points for hunters after game...”. Ephemeral river beds, such as the Brabeesrivier, some 50km to the east of Skuitdrift, and water points, such as Droëgrond, to the south, often have produced cultural material (Smith 1995).

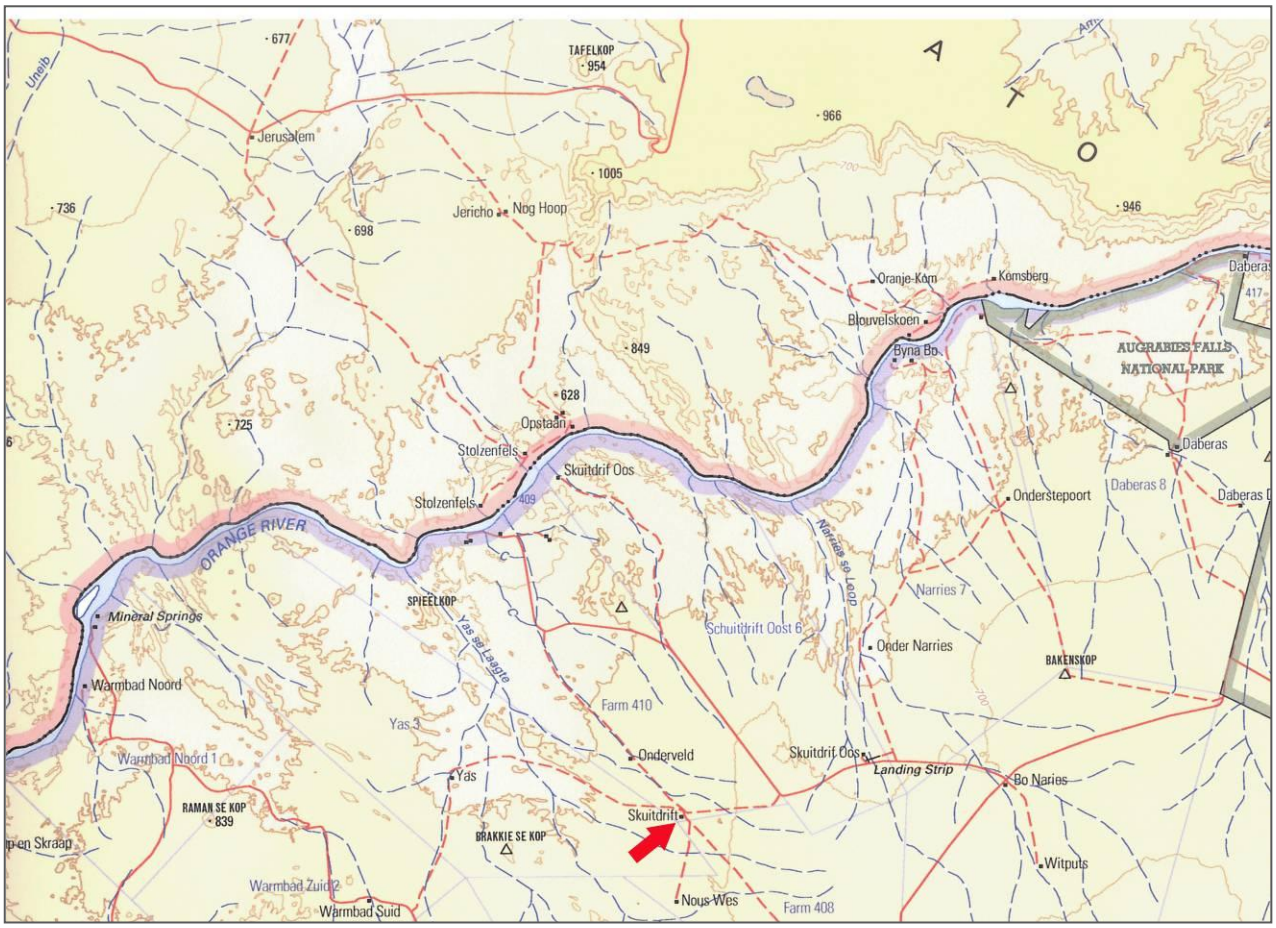


Figure 1: 1:250.000 map (2818 Onseepkans) showing location of Skuitdrift Farm

A site visit was made on 22 February 2012, and the location indicated by the farmer, Mr Fanus Nel. The ground was walked and a track recorded using a Garmin 60 GPS instrument. Way points were used to mark the location of material found on the surface during the survey (Figure 2).

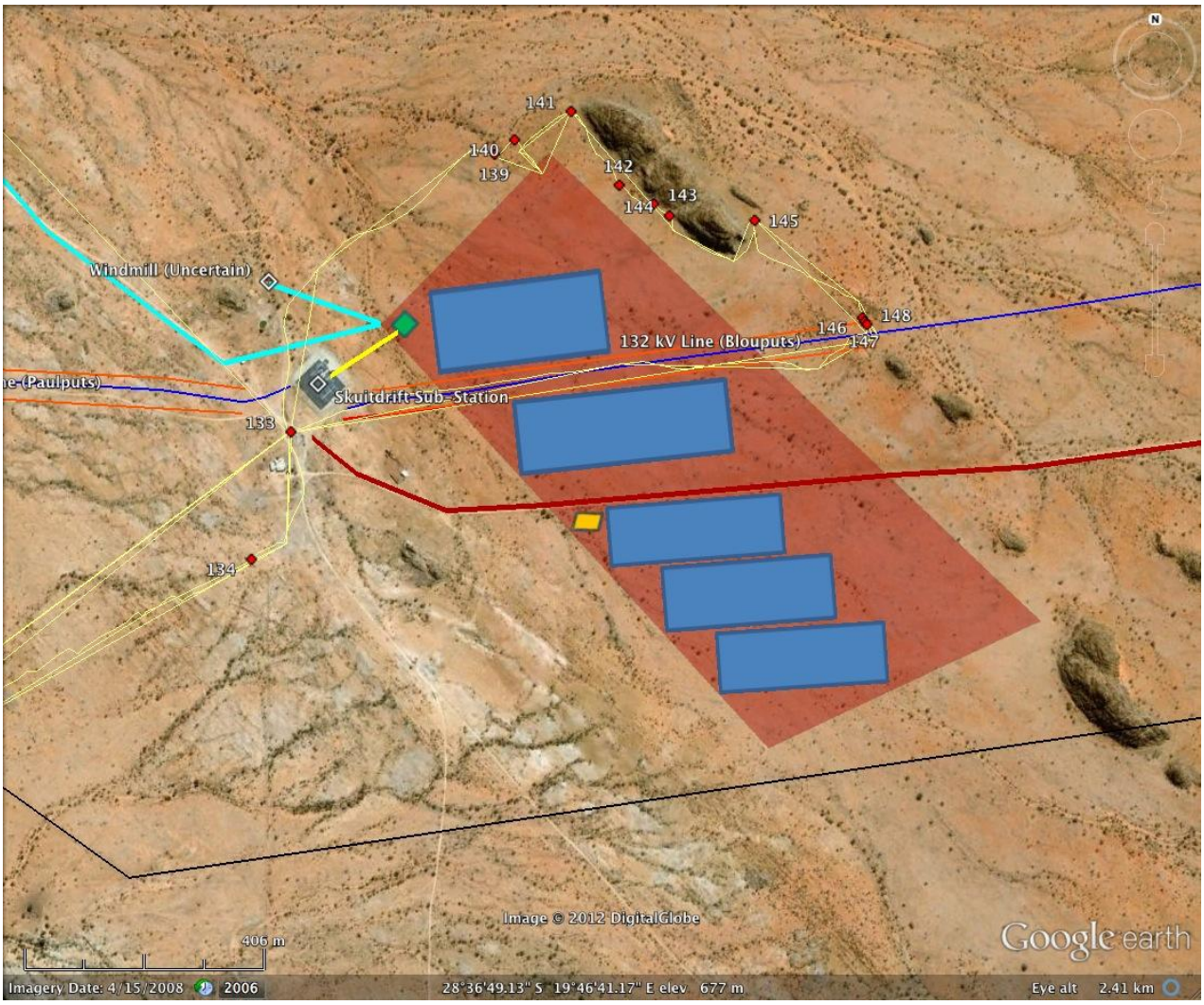


Figure 2: GPS track map across the proposed Skuitdrift 10MW solar facility footprint (ref: Google Earth)

2. METHODOLOGY

Surface indications of archaeological residues were noted and patterns recorded. Sub-surface material could also be noted by inspecting areas of springhare and aardvark activity. Roads and tracks through the relatively open scrub were also walked (Figure 3). Since there are a number of extruding granite-gneiss inselbergs (koppies) on the farm, the base of these was also inspected.

Figure 3: View along fence at northern end of footprint

3. RESULTS

The proposed area for the 10MW panels is open veld. I walked across the northern section and noted a scatter of quartz chips and flakes covering an area of approximately 75 x 130m (GPS 140-141) (Figure 4). These are of low significance.

Figure 4: Widely dispersed scatter of quartz flakes across stony ground

Although the koppies nearby are actually outside the footprint of the facility, it was below these hills that quartz flakes were to be found in considerable quantities (GPS 142-145) (Figure 5). The reason for this density was made obvious from the source outcrop of the quartz located not far away (GPS 146-148) (Figure 6). Associated with this natural outcrop were numerous flakes and an ESA(?) core axe (GPS 147) (see Gallery).

Figure 5: Dense scatter of quartz pieces at base of koppie

Figure 6: Source of quartz raw material

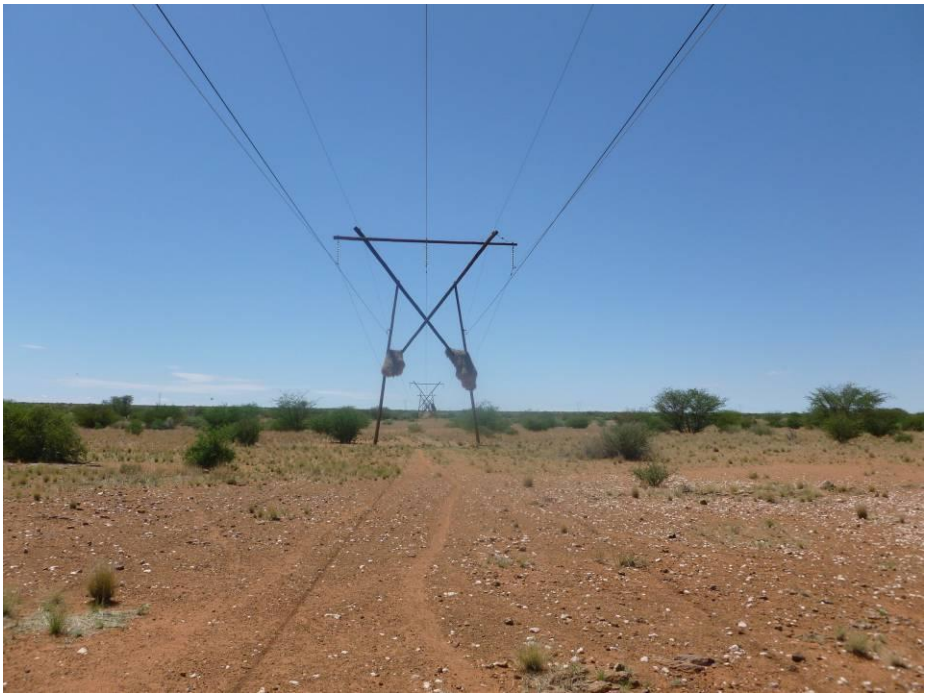


Figure 7: 132kv line looking west

In the other open, non-sandy substrate, quartz flakes were noted within the proposed footprint (Figure 7). These were of low density. In the more heavily vegetated, grassy areas, no pieces were found.

The road to Southern Farms (bordering the Orange River) was also inspected. This road is proposed as the water pipeline route from the river to the solar facility.
The only material of note was a dense scatter of quartz pieces (GPS 168). These pieces appear to be on the surface, but their quantity is unusual, and the fact that no visible quartz outcrop could indicate a 'quarry' site raises the question whether they were anthropogenic.

LABEL	LONGITUDE	LATITUDE	DESCRIPTION
139	19° 46' 34.3223" E	28° 36' 30.2896" S	Isolated quartz chips x 2
140	19° 46' 35.5381" E	28° 36' 29.5026" S	Scattered quartz flakes
141	19° 46' 39.0152" E	28° 36' 27.9716" S	Extent of above
142	19° 46' 42.0205" E	28° 36' 32.0162" S	Quartz chips around base of koppie
143	19° 46' 44.1283" E	28° 36' 33.0268" S	Extent of above
144	19° 46' 45.1056" E	28° 36' 33.6683" S	Extent of above
145	19° 46' 50.3386" E	28° 36' 33.8617" S	Extent of above
146	19° 46' 56.9852" E	28° 36' 39.0590" S	Source of quartz raw material
147	19° 46' 57.1237" E	28° 36' 39.2618" S	ESA core axe
148	19° 46' 57.2622" E	28° 36' 39.4166" S	Extent of above
168	19° 44' 4.3026 " E	28° 34' 35.1013" S	Quartz surface scatter along pipeline road

Table 1: GPS Waypoints

4. CONCLUSIONS & RECOMMENDATIONS

Except for the dense scatters below the koppies (GPS 142-145 and GPS 146-147), little of any archaeological significance was noted across the open veld. Since the koppies are just outside the solar facility footprint, these scatters should pose no problems to the proposed installation, but the people doing the construction should be aware of their existence.

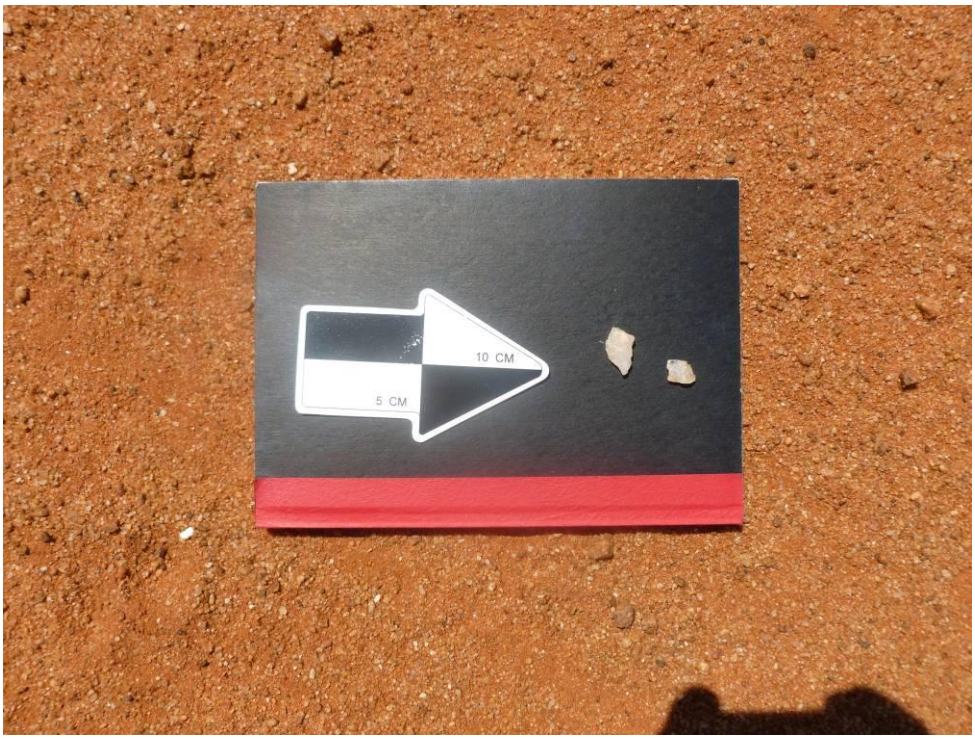
It is thus recommended that, although there are no inhibitors to the installation on the proposed footprint from an archaeological perspective, instructions should be given to the engineers to avoid these quartz scatter areas during the period of construction, so as to prevent any destruction of the sites. The dense scatters of white quartz stand out, so they are easily recognisable, even to the non-specialist.

5. REFERENCES

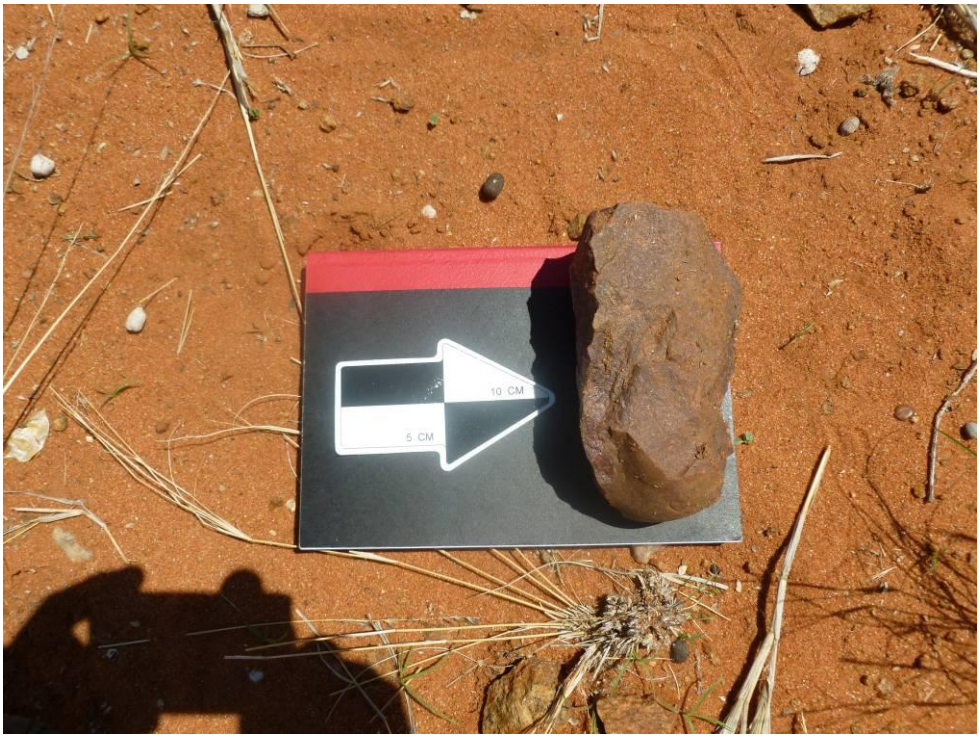
Beaumont, P.B., Smith, A.B. & Vogel, J.C. 1995. Before the Einiqua: The archaeology of the frontier zone. In: Smith, A.B. (ed.) *Einiqualand: Studies of the Orange River Frontier*: 236-264. Cape Town: UCT Press.

Smith, A.B. 1995. Archaeological observations along the Orange River and its hinterland. In: Smith, A.B (ed.) *Einiqualand: Studies of the Orange River Frontier*: 265-300. Cape Town: UCT Press.

6. GALLERY



Isolated quartz flake (GPS 139)



ESA quartzite core axe (GPS147)