

**HERITAGE IMPACT ASSESSMENT: PROPOSED CONSTRUCTION OF
THE RUIITE PHOTOVOLTAIC SOLAR ENERGY FACILITY,
WAGENMAKER'S DRIFT 24, XHARIEP DISTRICT MUNICIPALITY,
FREE STATE PROVINCE**

(Assessment conducted under Section 38(8) of the
National Heritage Resources Act 25 of 1999)

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EXECUTIVE SUMMARY

ACO Associates cc were appointed by ERM Southern Africa (Pty) Ltd, on behalf of the client, Solar Reserve, for the construction of the Ruimte photovoltaic solar energy facility on Portion 1 of the Farm Wagenmaker's Drift 24, Free State Province. The farm is on the R705, about 30km south-west of Jacobsdal and about 12km north of Koffiefontein.

A survey of the land was conducted by Lita Webley and Jayson Orton on the 17 February 2012. The desktop Palaeontological Impact Assessment was conducted by Dr Jennifer Botha-Brink of the National Museum in Bloemfontein.

The following heritage indicators were identified:

- The Riet River is known to have Quaternary fossils in its banks;
- Scatters of Middle Stone Age artefacts occur on the koppies;
- Engraved dolerite boulders were found on koppies both to the north and south of the PV panel area;
- Stone kraals were found near koppies;
- A single iron reservoir on a dressed stone base was found at the wind pump;
- The cultural landscape comprises grazing lands.

The following mitigation measures are recommended:

- No palaeontological mitigation is required as the proposed development is positioned well away from the Riet River or any tributaries and thus, the impact on palaeontological material is negligible (rated Low or negative);
- However, the ECO responsible for the development must remain aware that all sedimentary deposits have the potential to contain fossils and he/she should thus monitor all substantial excavations into sedimentary bedrock for fossil remains. If any fossils are found during construction, SAHRA should be notified immediately;
- It is recommended that no construction should be allowed on the koppies to the north or south of the proposed facility. This includes access roads, underground cabling or powerlines. This will ensure that the rock engravings which are found on the dolerite boulders on top of the hills, as well as stone kraals abutting the hills, are not destroyed;
- No mitigation measures are recommended with regard the Built Environment;
- If any human remains are uncovered during the construction of the site, work should stop in that area and the SAHRA Burials Unit should be notified. They will investigate and propose a way forward;
- It is recommended that the facility is constructed to the north of the southern koppies to ensure that it is not visible from the R705. It is anticipated that the visual impact of the facility on the Cultural Landscape of the area will be low, but this will need to be verified by the visual specialist.

TABLE OF CONTENTS

1. INTRODUCTION	4
2. DEVELOPMENT PROPOSALS.....	4
3. TERMS OF REFERENCE	5
4. LEGISLATION	5
5. RECEIVING ENVIRONMENT.....	6
5.1 Palaeontological Background.....	7
5.2 Archaeological Background.....	7
5.2 Historical Background	8
6. METHODOLOGY.....	9
6.1 Limitations	9
7. RESULTS OF THE SURVEY	9
7.1 Stone Artefact Scatters	12
7.2 Rock Engravings	12
7.3 Stone Kraals.....	14
7.4 Historic Structures	14
7.5 Cultural Landscape	14
8. ASSESSMENT OF IMPACT AND SIGNIFICANCE	14
8.1 Significance	15
8.2 Impact	15
8.3 Mitigation	17
9. RECOMMENDATIONS.....	17
10. REFERENCES	18

1. INTRODUCTION

ACO Associates cc were appointed by ERM Southern Africa (Pty) Ltd, on behalf of the client, Solar Reserve, for the construction of the Ruinte photovoltaic solar energy facility on Portion 1 of the Farm Wagenmaker's Drift 24, Free State Province. The farm is bisected by the R705, and is about 30km south-west of Jacobsdal and about 12km north of Koffiefontein. The southern point of the farm touches on the Riet River but the portion which is being considered for the solar facility is located to the north of the road.

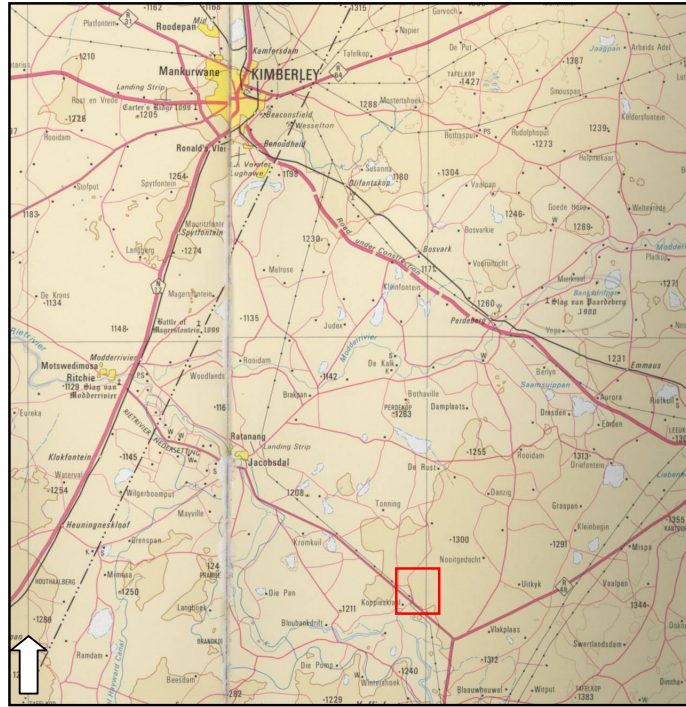


Figure 1: Location of the proposed solar facility to the south-west of Kimberley.

2. DEVELOPMENT PROPOSALS

The area of PV panel coverage varies between 15-18ha and 275ha. The facility would include:

- A workshop area of up to 150m x 150m;
- A new substation;
- Laydown areas;
- A water treatment deionisation plant and water tanks;
- Between 65 000 – 700 000 PV panels;
- Inverters and transformers;
- Access roads of 4m in width;
- Fencing and firebreaks.

The height of the installed panels from the ground level is likely to be 2-3m.

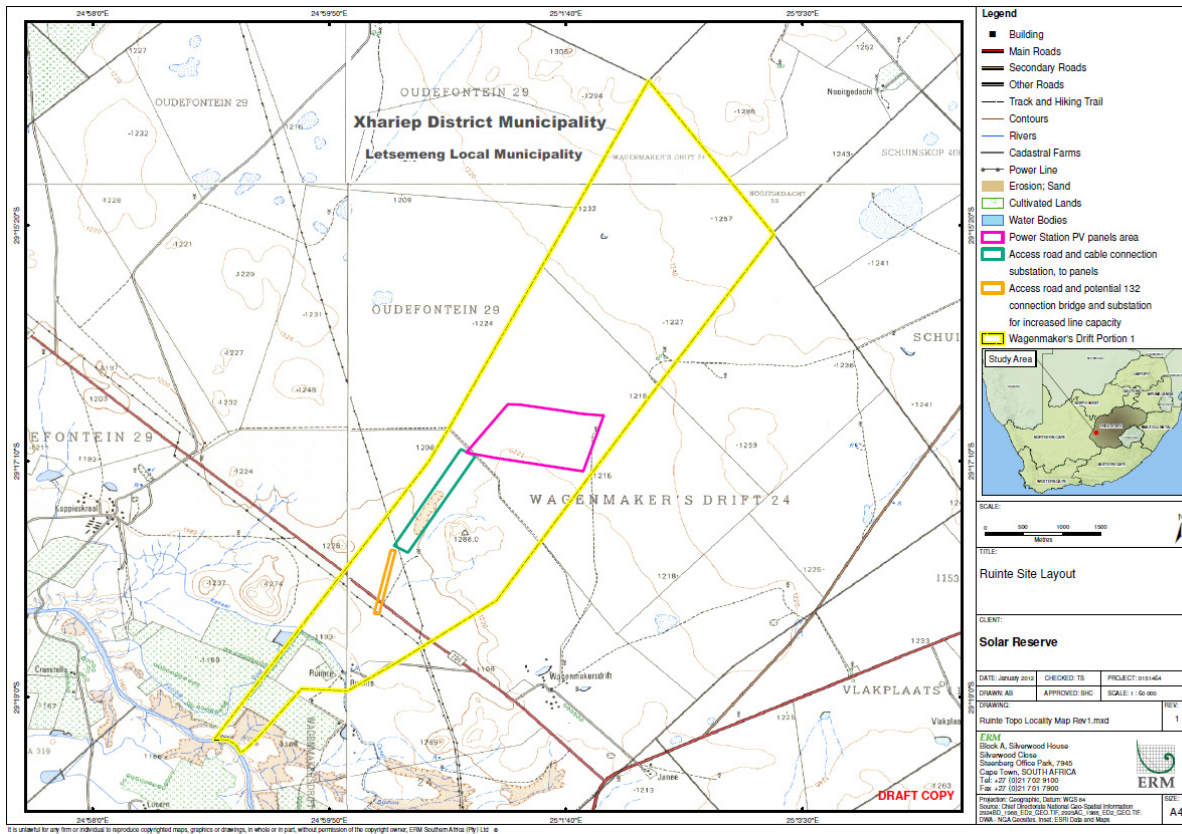


Figure 2: The location of the proposed solar facility with the purple polygon representing the PV panels area, the green polygon the access road and cable connection and the orange polygon the access road and potential 132 connection bridge and substation for increased line capacity. Map supplied by client.

3. TERMS OF REFERENCE

The assessment includes:

- A desk top study to determine the pre-history and history of the property;
- A site visit to locate and map heritage resources;
- The rating of significance of heritage resources on the property;
- An assessment of whether the construction of the solar reserve will result in a loss of significant heritage resources;
- Recommendations for mitigation if necessary.

4. LEGISLATION

The National Heritage Resources Act, No 25 of 1999 (Section 38 (1)) makes provision for a compulsory notification of the intent to development when any development exceeding 5000 m² in extent, or any road or linear development exceeding 300m in length is proposed.

The NHRA provides protection for the following categories of heritage resources:

- Cultural landscapes (Section 3(3))
- Buildings and structures greater than 60 years of age(Section 34)
- Archaeological sites greater than 100 years of age(Section 35)
- Palaeontological sites and specimens
- Shipwrecks and aircraft wrecks

- Graves and grave yards (Section 36).

The desktop Palaeontological Impact Assessment was conducted by Dr Jennifer Botha-Brink of the National Museum in Bloemfontein. The report is attached as an Appendix to this report.

5. RECEIVING ENVIRONMENT

The land identified for the construction of the PV panels is flat and covered in knee-high grass. However, the land immediately to the south and north of the proposed facility contains a number of low hills covered in dolerite boulders (Figure 2). The koppies to the south prevent the facility from being visible to motorists driving along the R705.



Plate 1: View from the position of the proposed solar facility looking in a south-easterly direction towards the southern koppies.



Plate 2: View of the dolerite boulders on one of the southern koppies.



Plate 3: View of the koppies on the northern section of Portion 1.

5.1 Palaeontological Background

According to the desktop Palaeontological Impact Assessment (appended in full at the end of this report), the geology of the farm Wagenmaker's Drift 24 contains rocks of the Tierberg Formation, Ecca Group, Karoo Supergroup, which are Early Permian in age (approximately 270 million years old). The rocks consist of mudstone, siltstone, sandstone, minor conglomerate and coal and were deposited in a shallow marine setting. Most fossils from the Ecca group have been recovered from the underlying Whitehill Formation and include several species of fish, crustaceans, deep water marine reptiles such as *Mesosaurus* and insects such as beetles. However, the Tierberg Formation preserves parts of small vertebrates such as fish teeth and scales and plant fragments of leaves and petrified wood. The most common fossils to be found in this formation are trace fossils.

On Wagenmaker's Drift 24, the Ecca Group sediments are intruded by non-fossiliferous Early Jurassic Karoo dolerite, which is represented by a small outcrop to the south and east of the proposed development. The Karoo Dolerite Suite comprises a network of igneous intrusions (dykes, sills) that intruded into older sediments of the Beaufort Group in the main Karoo Basin. These intrusions represent major eruptions of volcanic lava, which were triggered by the separation of Gondwana (an amalgamation of today's southern continents), which began approximately 183 million years ago.

The rest of Wagenmaker's Drift 24 comprises superficial deposits, which are of Late Cenozoic (Quaternary [2.6 million years ago] to Recent) age. Those on Wagenmaker's Drift 24 contain Quaternary Calcrete and Quaternary aeolian sand. Although the flatter areas containing these deposits generally contain few fossils, numerous quaternary fossils have been found in river gulleys, the Riet River being a well-known fossiliferous region, which borders the south-western part of Wagenmaker's Drift 24.

5.2 Archaeological Background

The Riet River area has attracted prehistoric human settlement since early Stone Age times and is particularly interesting because of the occurrence of the so-called "Riet River Burials" along the banks of the river (Humphreys 1970). Some 57 burials were excavated around the Koffiefontein area by an amateur archaeologist from 1922-1946 (Figure 3).

Brink et al. (1992) have discussed the results of a rescue excavation of human remains at Pramberg, some 15km south of Jacobsdal. They recorded at least 11 cairns on the site, the dolerite boulders used in the cairns being obtained from adjacent hills. With the cairns were concentrations of stone artefacts, bones, ostrich eggshells and a few potsherds. They also recorded a stone circle, the stone walling being made in the same way as those of the Type R settlements in the area (namely stacked outer casing with rubble infill). Of the three human remains excavated by Brink et al. (1992), one was associated with a small undecorated pottery bowl, with the other was adorned with ostrich eggshell beads around the neck and waist. A physical anthropological study of the human remains indicated that they were of Khoisan origin.

The stone artefacts were all on indurated shales (hornfels) and the pottery has been interpreted as deriving from the final phase of the Later Stone Age. The faunal assemblage comprised a mix of wild and domesticated animals but is "essentially a hunting economy, supplemented largely by cattle and to a lesser extent by sheep/goat" (Brink et al. 1992:60). The authors remark that similar sites occur elsewhere along the Riet River and they are of the opinion that there is circumstantial evidence to link the Type R stone walled settlements with the Riet River burials.

Rossouw (2011) investigated an area on the lower reaches of the Riet River but at least 100km to the east of Jacobsdal. He notes the much of the "course of the Riet River in the Jacobsdal and Koffiefontein districts are alluvial deposits in the form of river terraces that contain the remains of extinct Pleistocene ungulates" (Rossouw 2011: 5). The river terraces also contain Stone Age sites, pastoralist settlements, rock art and rock engravings and remnants of 19th century farmsteads and kraals. He notes that the majority of Type R settlements (which he ascribes to pastoralists), some

78 in total, occur along the river between Jacobsdal and the Kalkfontein Dam (see Figure 3 from Rossouw 2011). In addition Rossouw (2011) observes that rock engravings are frequently found on rocky outcrops (dolerite koppies) along the Riet River and the surrounding hills. Rossouw's survey, however, failed to find any Stone Age exposures.

Van Jaarsveld's (2006) survey of the Hydra-Perseus and Beta-Perseus transmission lines, which pass to the east of the area, was of a very general nature and failed to identify specific heritage resources along the route with the exception of towns.

Since the proposed facility is located in proximity to the Riet River, we anticipated that we might find burial cairns, stone walled settlements, rock engravings, etc on the site.

5.2 Historical Background

The town of Jacobsdal derives its name from Christoffel Jacobs who made a portion of his farm Kalkfontein available for the establishment of the town. The layout of the town commenced in 1859 and the town obtained municipal status in 1860. The Riet River irrigation settlement starts about 3 km west of the town and extends 15 km upstream to the confluence of the Riet and Modder Rivers.

Jacobsdal saw a great deal of military action during the Second Anglo-Boer War of 1899-1902 because it was close to the strategic towns of Kimberley and Mafeking. The wounded from the battles of Belmont/Graspan, Modder River, Magersfontein and Paardeberg were all nursed in the town. There are a number of important memorials and buildings in town, including the Burger Monument in front of the Dutch Reformed Church, erected in memory of the deceased at the Battle of Roodelaagte (or Graspan) in 25.11.1899. The town also has a cairn memorial erected by the Boers of Jacobsdal in November 1899 before departing for the battle of Graspan. The Dutch Reformed Church, consecrated in 1879 and enlarged in 1930, was used as a hospital during the Anglo Boer War. The oldest grave in the Jacobsdal Cemetery dates from 1859. British War graves and monuments can be found dating from the Anglo Boer War (1899 - 1902).

The battlefield of Magersfontein is situated 20km north-west of Jacobsdal. It was here that General Piet Cronje attempted to block Lord Methuen's advance on Kimberley. After being outflanked, General Cronje retreated to Jacobsdal. The British advanced on the town in February 1900, and Cronje fled taking with 5000 men, women and children. The town was captured by the British, being the first town in the Orange Free State to be captured. During the British occupation, the occupiers were surprised by an attack by the Boers that resulted in the death of 23 British soldiers. The British retaliated by burning down twenty houses and interning all the town's women and children in a concentration camp in Kimberley.

Jacobsdal was an important town during the Anglo-Boer War and we anticipated that we might find evidence of the war on the farm Wagenmaker's Drift.

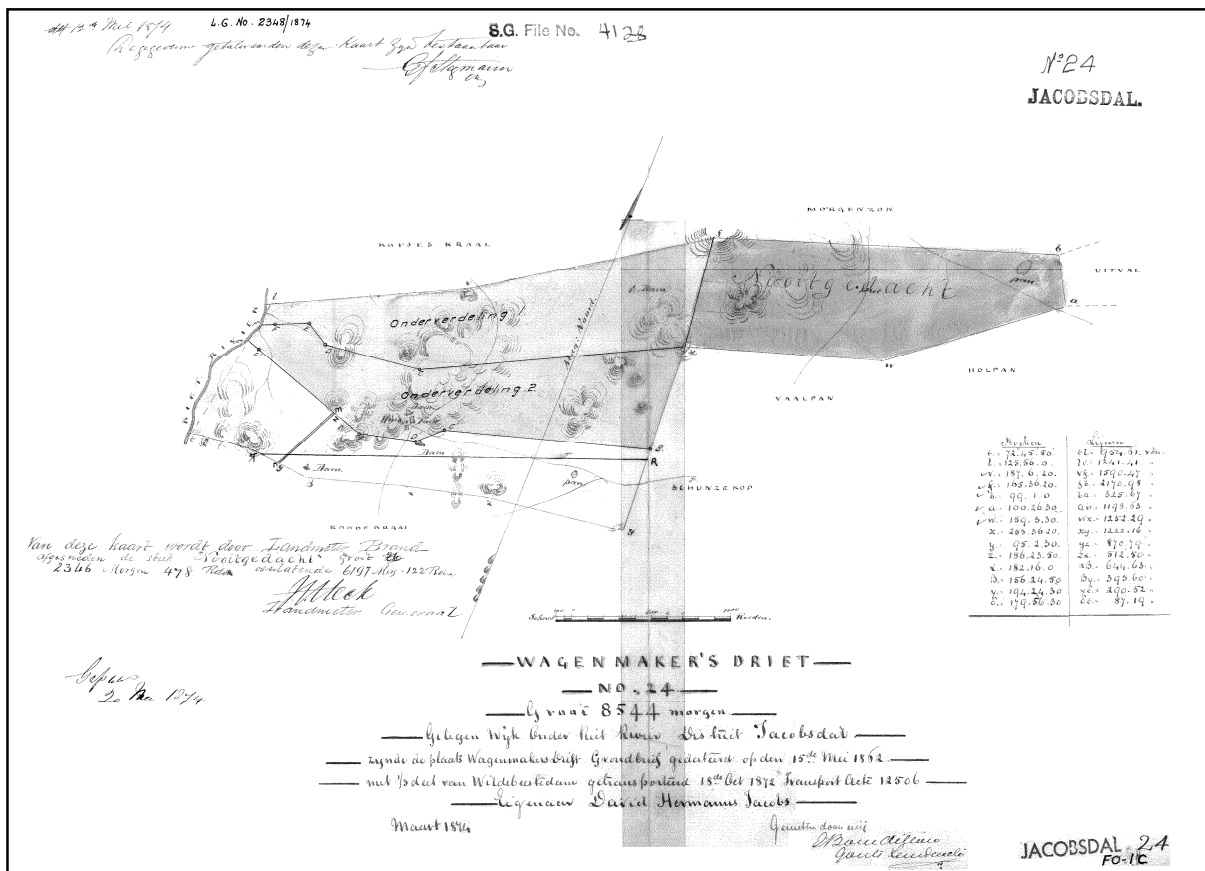


Figure 4: The S.G. map of Wagenmaker's Drift 24, showing that the farm was owned by DH Jacobs in 1862 (S.G. File No. 4128)

The ownership of the farm dates back to the establishment of the town of Jacobsdal and it is anticipated that there will be historic buildings on the land, particularly next to the Riet River.

6. METHODOLOGY

The survey was conducted by Lita Webley and Jayson Orton on the 17 February 2012. Polygons of the area (Figure 2) for the solar facility were loaded onto hand-held GPS receivers (on the WGS84 datum) which enabled us to target the relevant areas. All heritage sites were recorded with the GPS, photographed and their significance rated. No archaeological material was removed from the project area, but recorded and photographed *in situ*. The reader of this report is referred to the appendices which contain the details of observations made in the field.

6.1 Limitations

There were no significant restrictions to the survey. However, the absence of farm roads meant that we were not able to cover the area as thoroughly as we might have liked. A more detailed survey of the southern and northern koppies might reveal more rock engravings.

7. RESULTS OF THE SURVEY

There are not many farm roads which cross the interior of the property. Farm roads follow the farm boundary fences, as illustrated in Figure 5 (below). The survey was undertaken by vehicle and on foot. We did not find any heritage sites in the area identified for the construction of the solar PV panels (purple square). Archaeological sites were found on the koppies to the south and north of the proposed facility (Figure 6 & 7).

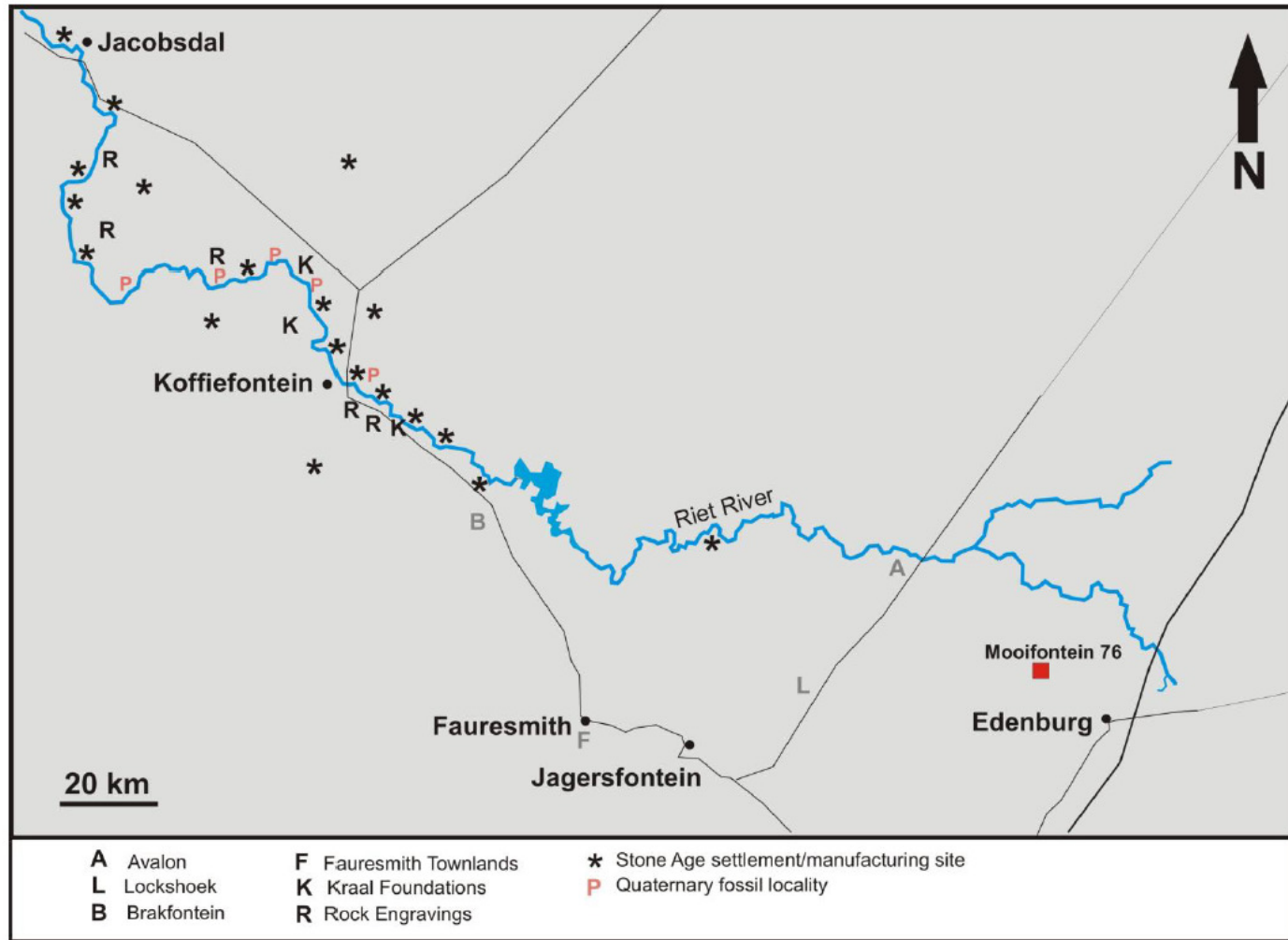


Figure 3: Map from Rossouw (2011), showing the location of various types of archaeological sites along the Riet River.

The heritage sites can be grouped into: scatters of stone tools, engraved rocks, stone kraals and a water tank possibly older than 60 years.

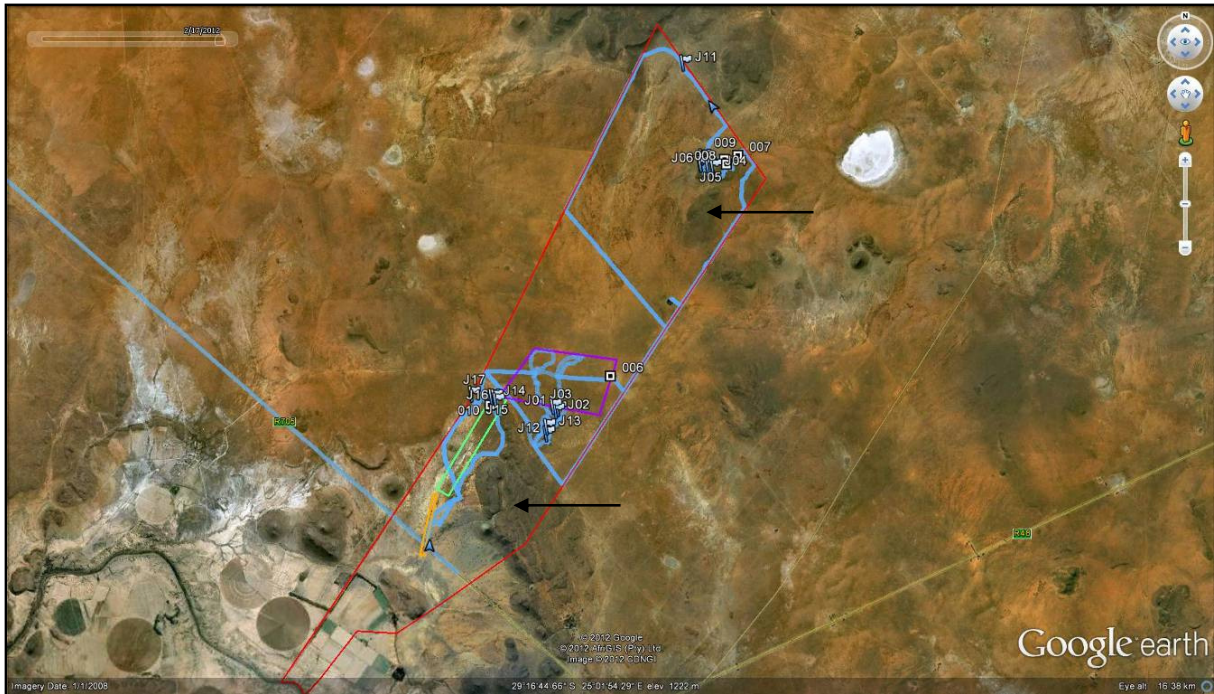


Figure 5: An aerial map showing our tracks (in pale blue) and the position of archaeological sites recorded during the survey. The two black arrows show the positions of the northern and southern koppies with respect to the proposed solar facility (outlined in purple).

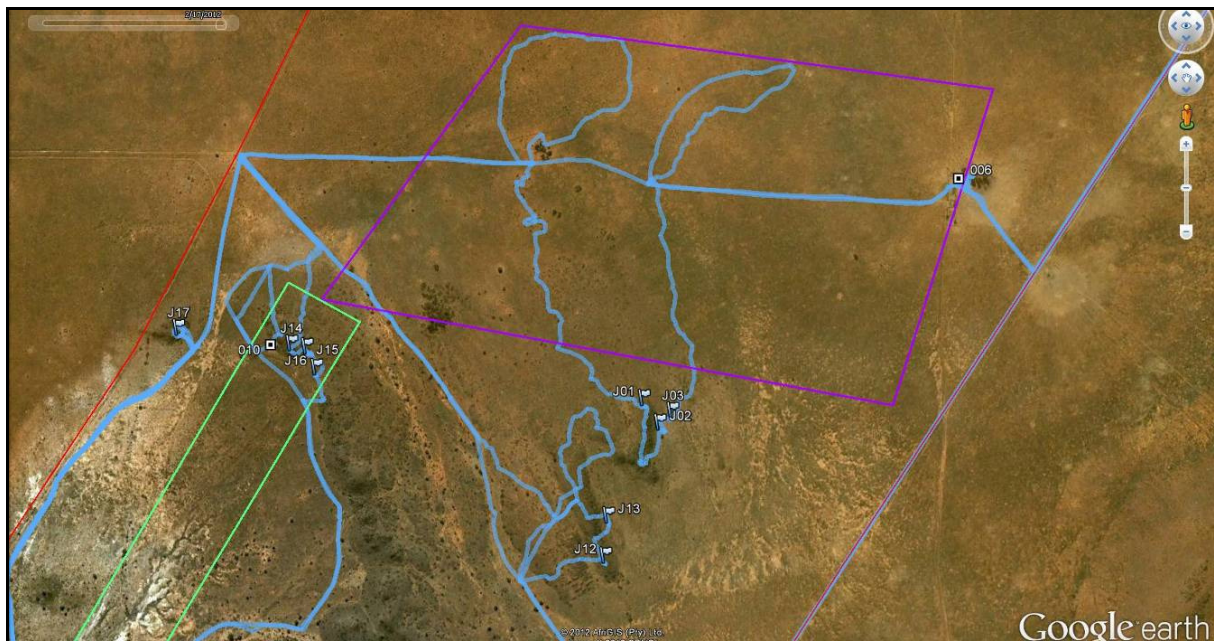


Figure 6: The purple polygon indicates the proposed location of the PV panels. No heritage sites were found inside the area with the exception of the windpump location (Site 006). Archaeological sites are restricted to the northern and southern koppies. Note that the top of the green polygon, which represents the “access road and cable connection substation, to panels” crosses one of the southern koppies and a number of archaeological sites.

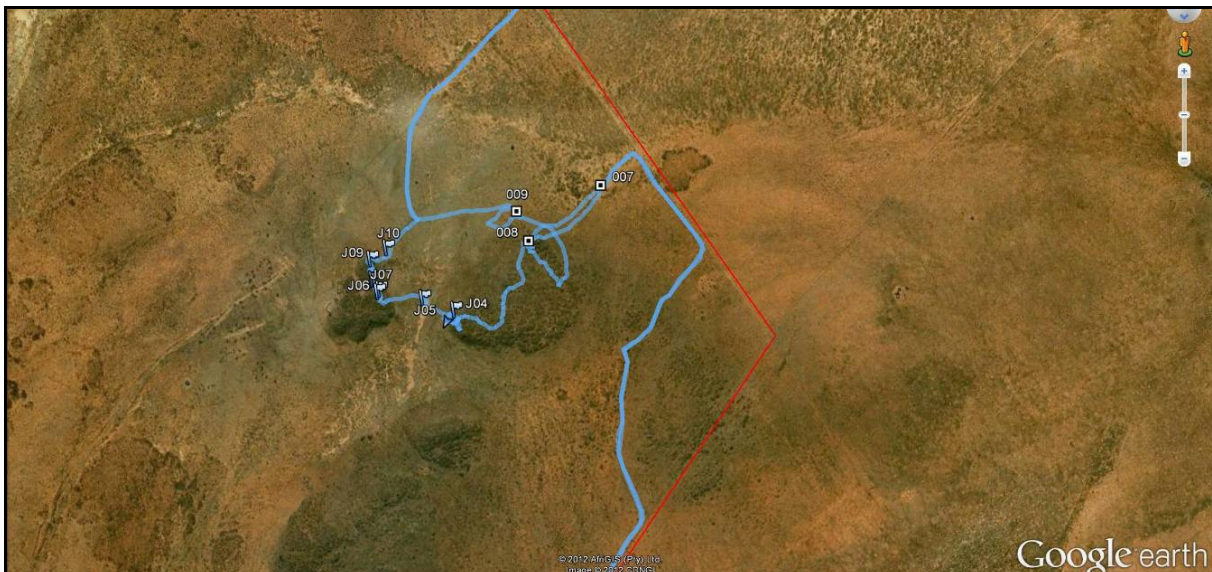


Figure 7: Archaeological sites located on the northern koppies.

7.1 Stone Artefact Scatters



Plate 4: MSA scatter with glass and iron from Site J03; **Plate 5:** MSA scatter from a small pan at Site 007.

The stone artefacts comprise weathered Middle Stone Age flakes on indurated shale (hornfels).

7.2 Rock Engravings

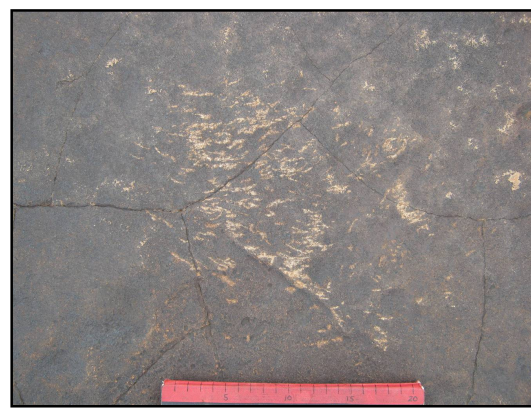


Plate 6: A grinding surface on a dolerite boulder at Site 008; **Plate 7:** Pecked engravings on a dolerite boulder at Site 008.

Fineline rock engravings from the interior of South Africa have been described by Morris (1988) and Smith et al. (2004). Morris defines these incised engravings as hairline or fineline petroglyphs, generally fully patinated. Fineline engravings may include figurative motifs, comprising of only outlines but there are also many geometric designs and “many apparent random lines” (1988:110). Some of the oldest dated fineline engravings from Wonderwerk Cave in the Northern Cape date to 12 000BP but it is believed that the majority are more recent. Sometimes these engravings contain images of Europeans including horses and clearly date to the historic period. The geometric fineline engravings include a wide variety of designs.



Plate 8: Weathered fine line engravings on a dolerite boulder at J04. The geometric design comprises lines radiating out from a central place, with some of the lines filled with vertical lines to form a “ladder design”.

Morris (1988) notes that “pecked” engravings in the Karoo consist of “fine dashes” are more recent than the fineline engravings and possibly date to within the last 2000 years.

In addition to pecking, grinding and fine lines, some of the boulders contain scratched historical graffiti. One has a date of 15 May 1916. Recent engravings elsewhere have been attributed to Europeans, Griquas and Khoekhoen groups. Some may have been made by late 19th century farm workers of Khoisan descent.

7.3 Stone Kraals



Plate 9: Rectangular stone kraal (Site J02); **Plate 10:** Stone circle built against the site of the hill (Site J04).

Historical kraals are generally thought to be rectangular in design while kraals constructed by Khoisan groups (including farmworkers of Khoisan descent) may have been circular. Very little has been published on stone kraals and the interpretation of stone structures is open to differing interpretation.

7.4 Historic Structures



Plate 11: Dressed stone base with cast iron water reservoir.

It is possible that the water reservoir at the water pump may be older than 60 years, but this is difficult to determine.

7.5 Cultural Landscape

The landscape is agricultural and used for the grazing of livestock. It is generally flat, except for a range of koppies in the south and in the north, and covered in knee-high grass. There are occasional groves of exotic trees which were introduced to the area. There is a set of transmission lines which crosses the southern section of the property.

8. ASSESSMENT OF IMPACT AND SIGNIFICANCE

The main heritage indicators are:

- Quaternary palaeontological material along the Riet River;
- Scatters of Middle Stone Age artefacts;
- Engraved dolerite boulders on koppies both to the north and south of the flat area identified for the construction of the PV panels;
- Stone kraals;
- A single iron reservoir on a dressed stone base;
- Cultural landscape.

8.1 Significance

The Ruimte Solar farm will affect areas on Wagenmaker’s Drift 24 that contain Ecca and Quaternary (aeolian sand) deposits. The areas on the farm that contain Jurassic dolerite (which are also non-fossiliferous) and Quaternary calcrete, do not fall within the proposed development site. Wagenmaker’s Drift 24 does have the potential to contain fossils as the south-western portion of the farm, which borders the Riet River, is known to contain Quaternary fossils in its banks. However, the proposed development is positioned well away from the river or any tributaries (dry river beds with potentially fossiliferous exposures) and thus, the impact on palaeontological material is negligible (rated Low or negative).

The MSA stone artefact scatters are found across the Karoo. They contain no diagnostic elements which would contribute to current studies on the MSA. They are considered to have low significance.

The engraved dolerite boulders with fineline engravings and pecking are of interest although they too, are widespread across the interior of the country. Nevertheless, this observation adds to our knowledge of the distribution of fineline rock engravings. They contribute to the range of variability observed with respect to designs. They are considered to have moderate to high significance.

The rectangular stone kraals are believed to belong to the historic period (i.e. to the period after 1862 when the farm was first settled), while circular kraals *may* be older and may have been constructed in the pre-colonial period by Khoisan herders. However, these roughly packed circular stone structures are not associated with LSA stone artefacts or pottery, and their affiliation is therefore unclear. They are considered to have low significance.

The water reservoir, which falls on the border of the edge of the area proposed for the construction of the PV panels, may be older than 60 years, although this may be difficult to determine. It has low significance.

The cultural landscape is generally of low cultural significance. A visual assessment by a specialist will determine the impact of the proposed facility on the landscape and on the R705.

8.2 Impact

The construction of the solar facility will have a low impact on the heritage resources of the area.

It is predicted (PIA report) that the the impact on palaeontological material is negligible (rated Low or negative).

Table 1: Impacts to Palaeontology

Criteria	Without Mitigation	With Mitigation
Extent	Local	Local
Duration	Permanent (loss of palaeontological resources is permanent)	n/a
Intensity	Low	Very Low

Probability	High	Low
Confidence	Medium	Low
Significance	Low	Low
Nature of cumulative impact	Low	
Can impact be reversed?	No, palaeontological resources are non-renewable	
Impact may cause irreversible loss of resources	Yes	
Can impact be mitigated?	Yes, avoid the banks of the Riet River.	

It is anticipated that the impact on the archaeology of the area will be low, as long as the facility avoids the rocky koppies on the southern and northern ends of the property. These koppies contain rock engravings with medium to high significance. Although no archaeological sites were found in the area identified for the PV panels, it is anticipated that the proposed access road (Figure 2) will cut across a small section of one of the southern koppies (Figure 6) and this may result in destruction of archaeological sites, including rock engraving sites and stone kraals.

Table 2: Impacts to Archaeology

Criteria	Without Mitigation	With Mitigation
Extent	Local	Local
Duration	Permanent (loss of archaeological resources is permanent)	n/a
Intensity	Low	Very Low
Probability	High	Low
Confidence	High	Medium
Significance	Low	Low
Nature of cumulative impact	Low	
Can impact be reversed?	No, archaeological resources are non-renewable	
Impact may cause irreversible loss of resources	Yes	
Can impact be mitigated?	Yes, avoid the rocky koppies to ensure that rock engravings and stone kraals are not destroyed.	

Table 3: Impacts to Built Environment

Criteria	Without Mitigation	With Mitigation
Extent	Local	Local
Duration	n/a	n/a
Intensity	Low	Low
Probability	Low	Low
Confidence	Medium	Medium
Significance	Low	Low
Nature of cumulative impact	None	
Can impact be reversed?	No impact	
Impact may cause irreversible loss of resources	No	
Can impact be mitigated?	No required	

Table 4: Impacts to Cultural Landscape

Criteria	Without Mitigation	With Mitigation
Extent	Local	Local
Duration	Long term	Long term
Intensity	Low	Low
Probability	Medium	Low
Confidence	Medium	Low
Significance	Low	Low
Nature of cumulative impact	Low	
Can impact be reversed?	Yes, after facility is de-commissioned	
Impact may cause irreversible loss of resources	No	
Can impact be mitigated?	Yes, place the facility to the north of the southern koppies, so that it cannot be seen from the R705.	

8.3 Mitigation

With regard palaeontological resources, it is recommended that no construction is allowed on the banks of the Riet River.

With regard archaeological resources, it is recommended that no construction should be allowed on the koppies to the north or south of the proposed facility. This includes access roads, underground cabling or powerlines. This will ensure that the rock engravings which are found on the dolerite boulders on top of the hills, as well as stone kraals abutting the hills, are not destroyed.

No mitigation measures are recommended with regard the Built Environment.

If any human remains are uncovered during the construction of the site, work should stop in that area, and the SAHRA Burials Unit should be notified. They will investigate and propose a way forward.

It is recommended that the facility is constructed to the north of the southern koppies to ensure that it is not visible from the R705. It is anticipated that the visual impact of the facility on the Cultural Landscape of the area will be low, but this will need to be verified by the visual specialist.

9. RECOMMENDATIONS

The following heritage indicators were identified:

- The Riet River is known to have Quaternary fossils in its banks;
- Scatters of Middle Stone Age artefacts were found on the koppies;
- Engraved dolerite boulders on koppies both to the north and south of the flat area identified for the construction of the PV panels;
- Stone kraals;
- A single iron reservoir on a dressed stone base;
- Cultural landscape.

The following mitigation measures are recommended:

- No palaeontological mitigation is required as the proposed development is positioned well away from the Riet River or any tributaries and thus, the impact on palaeontological material is negligible (rated Low or negative);

- However, the ECO responsible for the development must remain aware that all sedimentary deposits have the potential to contain fossils and he/she should thus monitor all substantial excavations into sedimentary bedrock for fossil remains. If any fossils are found during construction, SAHRA should be notified immediately;
- With regard archaeological resources, it is recommended that no construction should be allowed on the koppies to the north or south of the proposed facility. This includes access roads, underground cabling or powerlines. This will ensure that the rock engravings which are found on the dolerite boulders on top of the hills, as well as stone kraals abutting the hills, are not destroyed;
- No mitigation measures are recommended with regard the Built Environment;
- If any human remains are uncovered during the construction of the site, work should stop in that area, and the SAHRA Burials Unit should be notified. They will investigate and propose a way forward;
- It is recommended that the facility is constructed to the north of the southern koppies to ensure that it is not visible from the R705. It is anticipated that the visual impact of the facility on the Cultural Landscape of the area will be low, but this will need to be verified by the visual specialist.

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Table 5: List of heritage sites recorded during the assessment

Site Name	GPS co-ordinates	Discussion	Significance
006	S29 16 56.1 E25 01 53.8	Cast iron reservoir tank on square dressed stone base, possibly older than 60 years. Associated with fence kraals, windpump, tall trees and dipping tank.	Low
007	S29 15 13.1 E25 03 01.9	Scatter of MSA artefacts around a small pan at the top end of the property. Flakes are weathered and on indurated shale.	Low
008	S29 15 17.2 E25 02 55.9	A little koppie with dolerite boulders. Two boulders have shallow grinding surfaces. One boulder has some recent pecking and also some weathered, diagonal fine lines.	Medium
009	S29 15 15.0 E25 02 54.8	Very weathered background scatter of MSA stone artefacts made on indurated shale, distributed in the veld.	Very Low
010	S29 17 09.7 E25 00 49.2	Rectangular stone kraal, with one short wall backing against the koppie. About 9m x 18m. Contains a small "lammerkraal" of 1-2m in size inside one corner.	Low
J01	S29 17 14.8 E25 01 24.3	Possible stone circle but in poor shape	Low
J02	S29 17 16.8 E25 01 25.7	Historical stone kraal and quarry at the base of a koppie	Low-Medium
J03	S29 17 15.8 E25 01 26.9	MSA scatter plus glass and nail near kraal	Very Low
J04	S29 15 23.0 E25 02 49.8	Stone circle of 1.5m in diameter and engraved rock (fine line engravings, very weathered, occurring in two areas, one on each side of rock). Also some historical graffiti: 1918 May 15 JESEBERG ... NORE(P/B/D) ...SINA...	Medium-High
J05	S29 15 22.1 E25 02 47.1	MSA scatter in little pan area in neck between two koppies	Very Low
J06	S29 15 21.7 E25 02 43.3	Pecking, like earlier site. Fresh scars	Medium
J07	S29 15 21.5 E25 02 43.4	Engraved rock (fine lines, very weathered)	Medium
J08	S29 15 20.8 E25 02 42.8	Engraved rock (fine lines, very weathered)	Medium
J09	S29 15 19.3 E25 02 42.7	Six engraved rocks (fine lines, very weathered). One is a split rock with engraving on both parts, some are quite faint, one has historical graffiti as well but not legible writing	Medium
J10	S29 15 18.4 E25 02 44.0	MSA scatter with some blades	Low
J11	S29 14 34.7 E25 02 33.9	MSA scatter	Very Low
J12	S29 17 27.6 E25 01 20.7	Two small stone C-shaped circles (hunting blinds?). 1.5m and 1.2m in diameter. Set on the end of a small SE/NW ridge facing northeast. Somewhat tumbled but still clear	Medium
J13	S29 17 24.3	Extensive artefact scatter, mostly, if	Low

	E25 01 20.9	not all, MSA but with very variable weathering suggesting variable age	
J14	S29 17 10.3 E25 00 51.2	Historical graffiti: Adl...T	Low
J15	S29 17 10.6 E25 00 52.6	Historical kraal built against rocky outcrop. 9m by 4m with a possible diagonal wall in the middle. Outcrop forms one wall of the kraal	Low-Medium
J16	S29 17 12.3 E25 00 53.5	Five historical wine bottle fragments on rocky outcrop not far from kraal	Very Low
J17	S29 17 09.1 E25 00 40.4	Historical glass and ceramics on rocky koppie	Very Low