

# **ARCHAEOLOGICAL IMPACT ASSESSMENT**

## **S24G Application, illegal agricultural development on Mosplaas (Erf 2255, 2149, 1740 & 2125 Kakamas South Settlement), Kai! Garib Municipality Northern Cape**

Assessment conducted under Section 38 (3) of the National Heritage Resource Act  
(No. 25 of 1999)

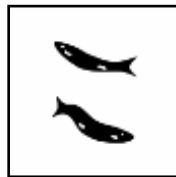
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## **Executive summary**

### *1. Introduction*

ACRM was instructed by GroenbergEnviro to conduct an Archaeological Impact Assessment (AIA) for an illegal agricultural development on the Farm Mosplaas (Erf 2255, 2149, 1740 & 2125 Kakamas South Settlement), Kai! Garib Municipality in the Northern Cape.

Mosplaas is located on the north eastern edge of the town of Kakamas, on the gravel road to Loeriesfontein/Kenhardt.

The illegal citrus plantations totalling 410a in extent were established in 1998, and between 2006 and 2010, without environmental authorisation.

The AIA forms part of a Section 24G Application. A S24G Application is a process in which to legally correct an unauthorised development.

### *2. Legal requirements*

In terms of Section 38 (1) (c) (iii) of the National Heritage Resources Act 1999 (Act 25 of 1999), a Heritage Impact Assessment (HIA) of the proposed project is required if the footprint area of the development is more than 5000m<sup>2</sup> in extent.

A HIA of the agricultural development was not undertaken at the time

### *3. Aim of the AIA*

The overall purpose of the AIA is to determine the impacts that the unauthorised development had on archaeological resources.

### *4. Limitations*

There were no constraints or limitations associated with the study.

### *5. Findings*

A field assessment of the development took place on 15<sup>th</sup> July 2020, in which the following observations were made:

No archaeological resources were recorded in the 410ha footprint area of the unauthorised development. The extensive agricultural development constitutes a highly transformed and modified landscape.

Two banded ironstone flakes were recorded on a rocky kopje overlooking the citrus plantations.

It is also noted that a number of archaeological surveys have been undertaken in Kakamas in recent years, which is characterised by low density scatters of isolated Stone Age tools.

*6. Built environment*

No old buildings, structures, features or equipment were recorded on the farm.

*7. Graves*

No graves were located on the farm.

*8. Impact statement*

The results of the study indicate that the listed activity (i. e. an extensive citrus development), has likely not had an impact of great significance on archaeological resources.

*9. Conclusion*

The receiving environment comprises a severely transformed landscape.

The literature survey suggests that it is unlikely that significant archaeological resources have been impacted by the development.

The impact significance of the illegally established citrus plantations on archaeological heritage is therefore assessed as LOW.

*10. Recommendations*

1. With regard to an illegal agricultural development on the Farm Mossop (Erf 2255, 2149, 1740 & 2125 Kakamas South Settlement), no further archaeological mitigation is required.

Table of Contents

	Page
Executive summary	1
1. INTRODUCTION	4
2. HERITAGE LEGISLATION	6
3. TERMS OF REFERENCE	6
4. THE STUDY SITE	6
5. STUDY APPROACH	11
5.1 Method of survey	11
5.2 Constraints and limitations	11
5.3 Results of the desk top study	11
6. FINDINGS	12
6.1 Illegally developed citrus orchards	12
6.2 Built Environment	13
6.3 Graves	13
7. ASSESSMENT OF IMPACTS	13
8. CONCLUSION	13
9. RECOMMENDATIONS	13
10. REFERENCES	14

## 1. INTRODUCTION

ACRM was instructed by GroenbergEnviro, on behalf of Keboes Fruit Farms (Pty) Ltd to conduct an Archaeological Impact Assessment (AIA) for an illegal agricultural development on the Farm Mosplaas (Erf 2255, 2149, 1740 & 2125 Kakamas South Settlement), Kai! Garib Municipality in the Northern Cape Province (Figures 1-3).

The illegal citrus plantations were established in 1998 (Ptn of Erf 2125), and between 2006 and 2010 without environmental authorisation (Kühn 2020).

The AIA forms part of a Section 24G Application process, which is designed to legally correct an illegal development.

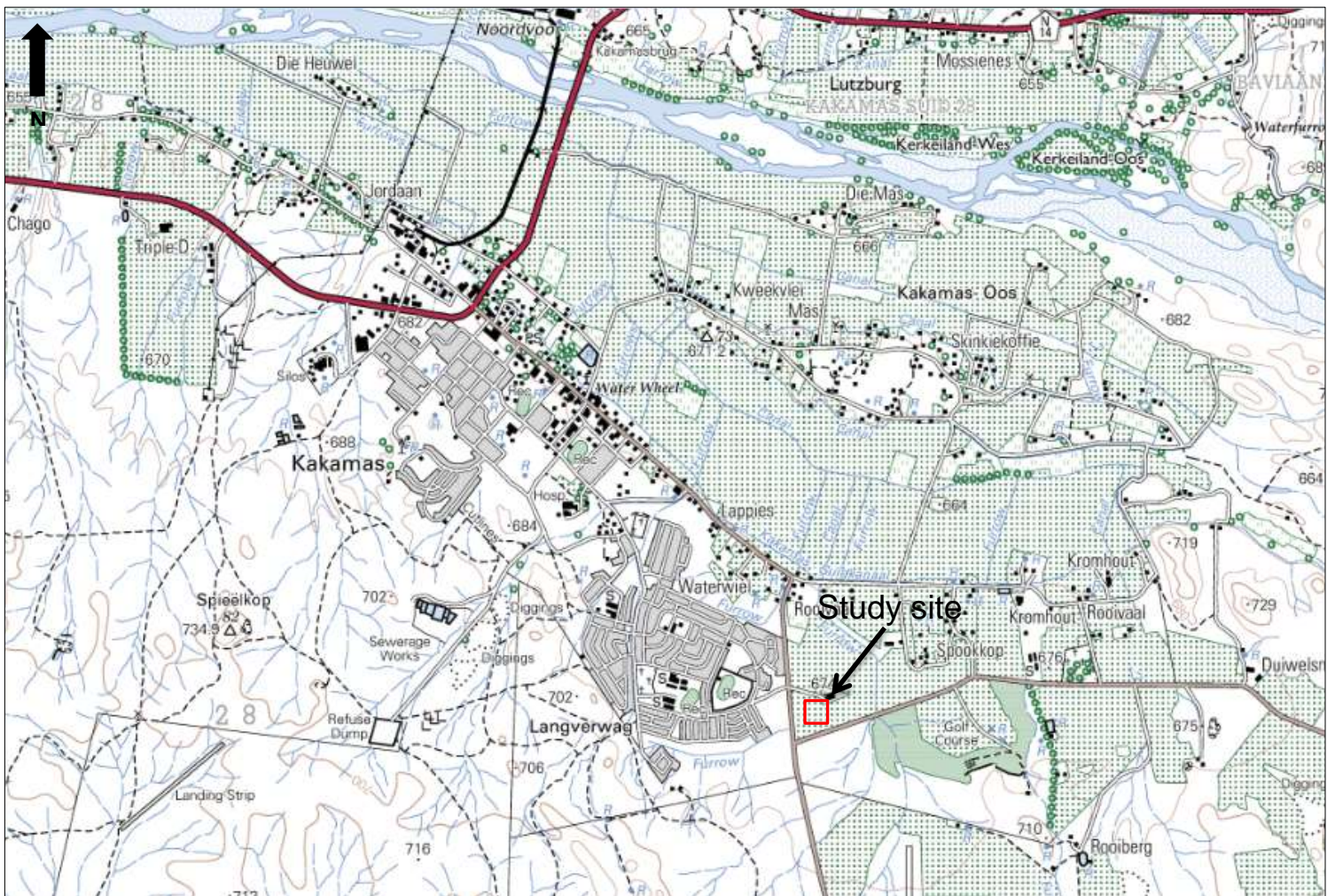


Figure 1. Locality Map (2820DC Kakamas). Red polygon illustrates the location of the farm Mosplaas on the north eastern edge of the town of Kakamas

Archaeological Impact Assessment, illegal citrus development on Mosplaas in Kakamas, Northern Cape

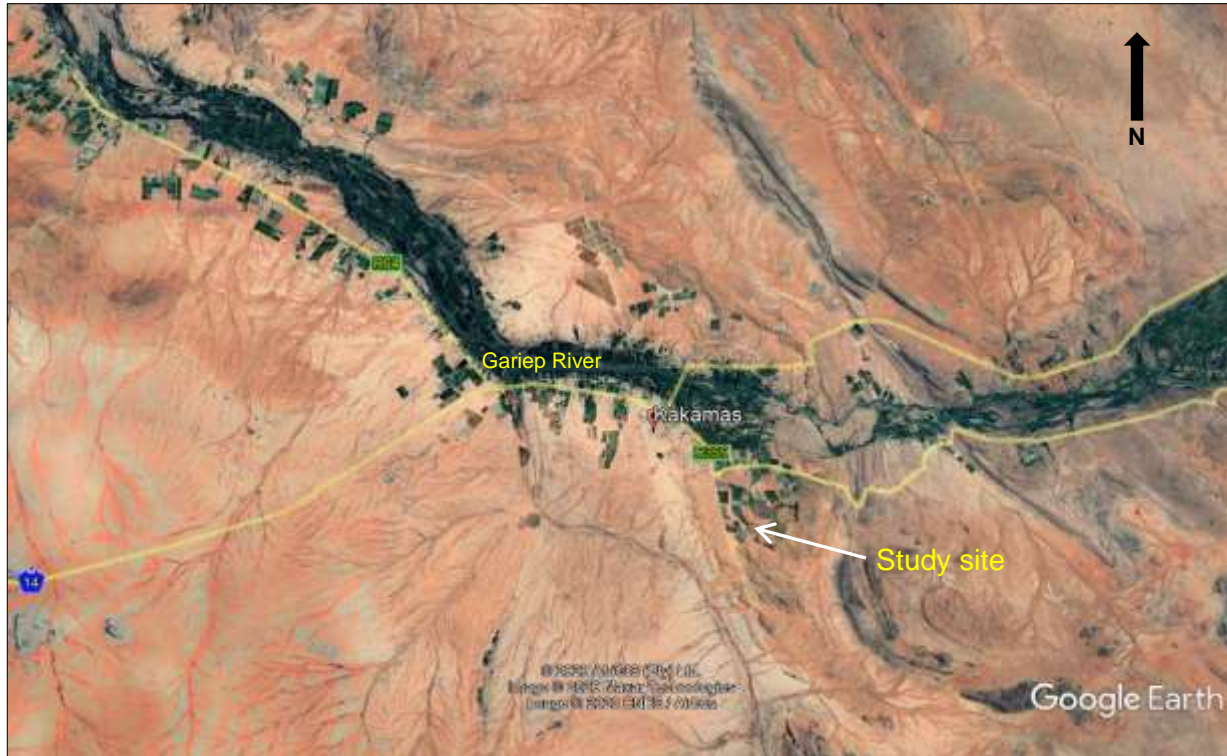


Figure 2. Google satellite map illustrating the location of the Farm Mosplaas in Kakamas.

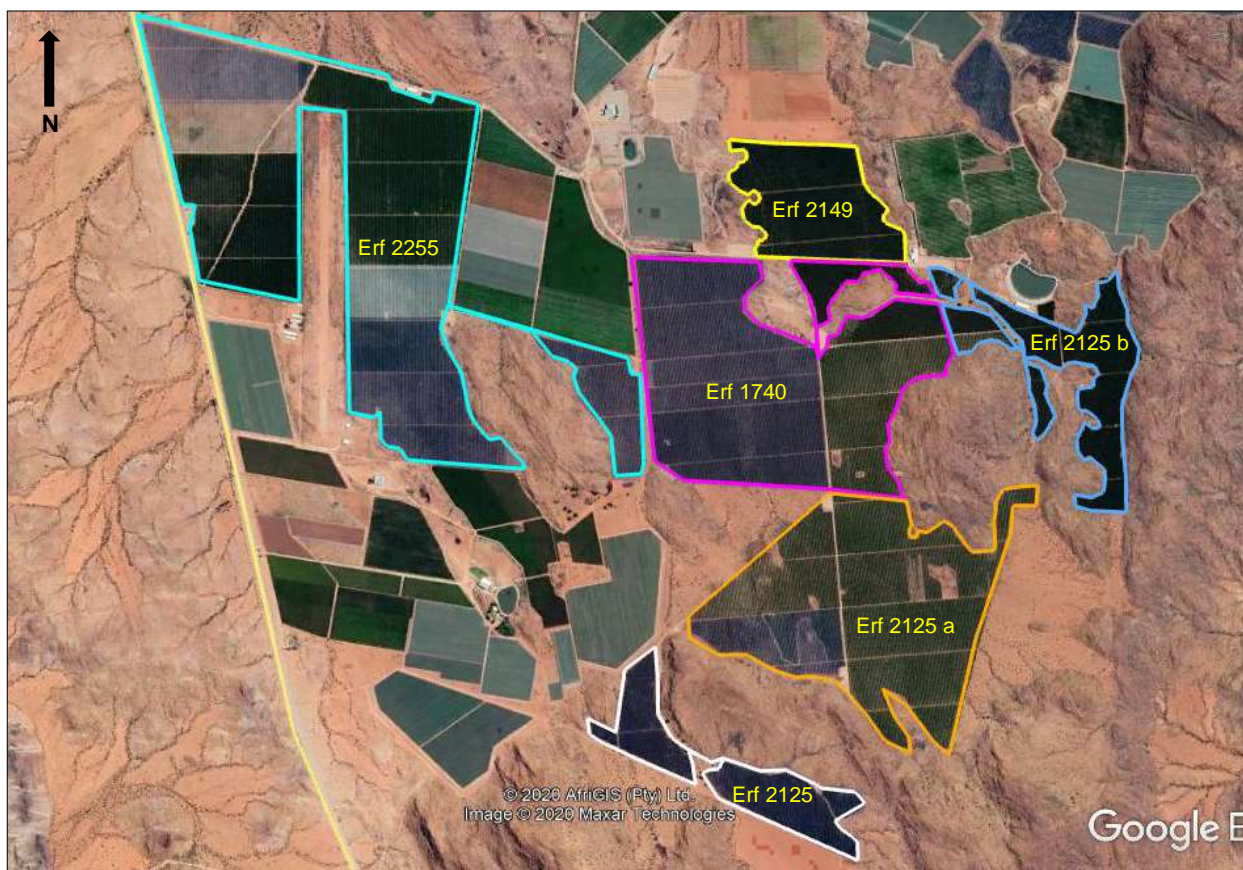


Figure 4. Google satellite map indicating the illegal citrus fields developed in 1998 & between 2006 & 2010

## **2. HERITAGE LEGISLATION**

The National Heritage Resources Act (Act No. 25 of 1999) makes provision for a compulsory Heritage Impact Assessment (HIA) when an area exceeding 5000 m<sup>2</sup> is being developed. This is to determine if the area contains heritage sites and to take the necessary steps to ensure that they are not damaged or destroyed during development.

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

- Landscapes, cultural or natural (Section 3 (3))
- Buildings or structures older than 60 years (Section 34);
- Archaeological sites, palaeontological material and meteorites (Section 35);
- Burial grounds and graves (Section 36);
- Public monuments and memorials (Section 37);
- Living heritage (defined in the Act as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Section 2 (d) (xxi)).

## **3. TERMS OF REFERENCE**

The terms of reference for the archaeological study were to:

- Determine whether there are likely to be any archaeological resources that may have been impacted by the proposed development activities;
- Identify potentially sensitive archaeological areas, and
- Recommend any mitigation action.

## **4. THE STUDY SITE**

Mosplaas Sitrus is located on the north eastern edge of the town of Kakamas, on the gravel road to Loeriesfontein/Kenhardt. The site lies south of the Orange River. Intensive development of citrus orchards has irrevocably transformed the landscape (Figures 5-15). Surrounding land use is agriculture and residential.

Archaeological Impact Assessment, illegal citrus development on Mosplaas in Kakamas,  
Northern Cape



Figure 5. Erf 2125 a. View facing north



Figure 6. Erf 2125 a. View facing north



Archaeological Impact Assessment, illegal citrus development on Mosplaas in Kakamas,  
Northern Cape



Figure 7. Erf 2125. View facing south



Figure 8. Erf 2125. View facing south

Archaeological Impact Assessment, illegal citrus development on Mosplaas in Kakamas,  
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Figure 9. Erf 2125 b. View facing north west



Figure 10. Erf 2125 b. View facing northeast



Figure 11. Erf 2125 b. View facing south west

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Northern Cape



Figure 12. Erf 1740. View facing west



Figure 13. Erf 2149. View facing north



Figure 14. Erf 1749. View facing south west



Figure 15. Erf 2255. View facing south

## **5. STUDY APPROACH**

### **5.1 Method of survey**

The overall purpose of the AIA is to determine the impacts that the illegal development had on archaeological resources.

To this end a site assessment was undertaken on the 15<sup>th</sup> July, 2020.

A literature survey was also carried out to assess the archaeological context of the surrounding area.

### **5.2 Constraints and limitations**

There were no constraints or limitations associated with the study. Access to the site was easy and archaeological visibility was good.

### **5.3 Results of the desk top study**

Several AIAs have been undertaken in Kakamas in recent years. Dispersed scatters of Later Stone Age (LSA) and Middle Stone Age (MSA) implements in banded ironstone, quartzite and indurated shale were recorded on weathered gravels during a study for a solar energy farm west of the town's Waste Water Treatment Works/WWTW (Kaplan 2012). A study for a proposed low cost housing development in the town did not encounter any archaeological resources (Kaplan 2013), while a few banded ironstone flakes were recorded in Erf 2142 inside the urban edge (Kaplan 2016). Dispersed scatters of LSA tools and a few MSA tools including a rare notched bifacial point were recorded during a recent study for the proposed upgrading of the WWTW (Kaplan 2020 in prep).

## 6. FINDINGS

### 6.1 Illegally developed citrus orchards

No archaeological resources were recorded in the 410ha footprint area of the unauthorised development. The extensive agricultural development constitutes a highly transformed and modified landscape. However, one banded ironstone MSA flake and a utilized cortex flake/chunk (S28° 49.382' E20° 39.737') were recorded in the rocky hills overlooking Erf 2125/Block 9 (Figures 16 & 17).



Figure 16. Track paths in blue and waypoint of archaeological finds (Point 708).



Figure 17. Point 708. Ruler scale is in cm

## **6.2 Built environment**

No old buildings, structures, features or equipment were recorded on the farm.

## **6.3 Graves**

No graves were encountered during the site assessment.

## **7. ASSESSMENT OF IMPACTS**

In the case of the illegal agricultural development on the farm Mosplaas in Kakamas, it is expected that impacts on pre-colonial archaeological heritage are likely to have been *LOW*.

## **8. CONCLUSION**

Cultivation of illegal citrus orchards on the Farm Mosplaas (Erf 2255, 2149, 1740 & 2125 Kakamas South Settlement) has completely transformed the receiving environment.

The literature survey indicates that it is unlikely that significant archaeological resources were impacted by the development.

The impact significance of the unauthorised development archaeological heritage is therefore assessed as *LOW*

## **9. RECOMMENDATIONS**

1. With regard to an illegal agricultural development on the Farm Mossop (Erf 2255, 2149, 1740 & 2125 Kakamas South Settlement), no further archaeological mitigation is required.

## 10. REFERENCES

Kaplan, J. 2020 (in prep). Archaeological Impact Assessment, proposed Kenhardt Bulk Water Supply Project, Northern Cape. Report prepared for EnviroAfrica. ACRM, Cape Town

Kaplan, J. 2017. Archaeological Impact Assessment, Proposed Keren Energy Kakamas Solar Energy Farm on Erf 1654 Kakamas, Northern Cape Province, Report prepared for EnviroAfrica. ACRM, Cape Town

Kaplan, J. 2016. Archaeological Impact Assessment, proposed housing development on Erf 1612, Kakamas. Report prepared for EnviroAfrica. ACRM, Cape Town

Kaplan, J. 2013. Archaeological Impact Assessment proposed low cost housing development in Kakamas, Northern Cape. Report prepared for EnviroAfrica. ACRM, Cape Town

Kühn, E. 2020. Section 24G Application Form, rectification of the clearing of land and the construction of vineyards and associated infrastructure on Erf 2255, 2149, 1740 and 2125 Kakamas South Settlement, Northern Cape Province. Report produced for Keboes Fruit Farms (Pty) Ltd. GroenbergEnviro, Wellington.