# PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED TRAWAL FRESH FRUIT BOREHOLES

Portion of Remainder of Portion 3 of the Farm Zypherfontein No. 66 and Portion 15 (Portion of Portion 3) of the Farm Zypherfontein No. 66 Clanwilliam

Prepared for:

# **ENVIROAFRICA CC**

Att: Mr Bernard de Wit PO Box 5367 Helderberg 7135 Ph: (021) 851 1616

Fax: 086 512 0154

Client:

# TRAWAL FRESH FRUIT COMPANY (PTY) LTD

Ву



# **Agency for Cultural Resource Management**

P.O. Box 159 Riebeek West 7306 Ph/Fax: 022 461 2755

Mobile: 082 321 0172 E-mail: acrm@wcaccess.co.za

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REFENISHULPBRON BESTUURDIENS

# **Executive summary**

A Phase 1 Archaeological Impact Assessment of the proposed abstraction of groundwater from four production boreholes on the Farm Vergenoegd near Klawer in the Clanwilliam District has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to the proposed activities.

#### 1. INTRODUCTION

EnviroAfrica, on behalf of Trawal Fresh Fruit Company (Pty) Ltd requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment for the proposed abstraction of groundwater from four production boreholes on the Farm Vergenoegd near Klawer in the Clanwilliam District, in the Western Cape Province. Pipelines will transport the groundwater to an existing holding dam on the farm from where the water will be used to irrigate existing farmlands. For the purpose of this study, no additional land clearing will take place.

The aim of the study is to locate and map archaeological heritage sites and remains that may be impacted by the planning, construction and implementation of the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

A Notification of Intent to Develop (NID) checklist has been completed by the archaeologist and submitted to Heritage Western Cape (Belcom) for comment.

#### 2. TERMS OF REFERENCE

The terms of reference for the archaeological study were to:

- Identify and map archaeological heritage resources in the vicinity of the proposed boreholes;
- Determine the importance of archaeological heritage resources in the vicinity of the proposed boreholes;
- Determine and asses the potential impacts of the proposed project on archaeological heritage resources, and
- Recommend mitigation measures to minimise impacts associated with the proposed project

In addition, the consulting archaeologist was requested to:

 Inspect landholdings (for future irrigation) north of Borehole 5, for any archaeological heritage remains.

#### 3. THE STUDY SITE

A locality map is illustrated in Figure 1.

An aerial photograph of the study site, indicating the proposed four production boreholes is illustrated in Figure 2.

The Farm Zypherfontein is a consolidation of two farms, namely Vergenoegd and Oudrif, and is situated about 10 km south east of Trawal. Access to the farm is off the N7 via the turnoff to Melkboom. The western boundary of the farm is situated alongside the Olifants River, about 10 kms south of the Doring River and some 12 kms north east of the Bulshoek Dam. The Clanwilliam –Trawal gravel road passes runs through the farm.

Borehole 5 is situated in the extreme north eastern edge of a large block of land which might (sometime in the future) be cleared for irrigation (Figures 3-8). Some historical grazing is evident on this relatively undisturbed portion of natural veld. Sheet wash and erosion is also present over parts of the landscape. The property slopes fairly steeply from east to west. There are no significant landscape features on the affected property. Existing infrastructure comprises a newly installed Eskom servitude running alongside the gravel road on the western boundary of the property. The remains of a dirt road also occur in the south.

Boreholes 20, 12 and 16 are situated in previously disturbed agricultural lands (Figures 9-20). All the land surrounding Borehole 20, for example, has already been planted out with vineyards, or (with respect to Boreholes 12 and 16) is in the process of being prepared for planting. Existing infrastructure, such as roads, irrigation pipes, pumps and Eskom power, is already in place. The receiving environment is therefore severely disturbed and degraded. There are no significant landscape features on the affected property.

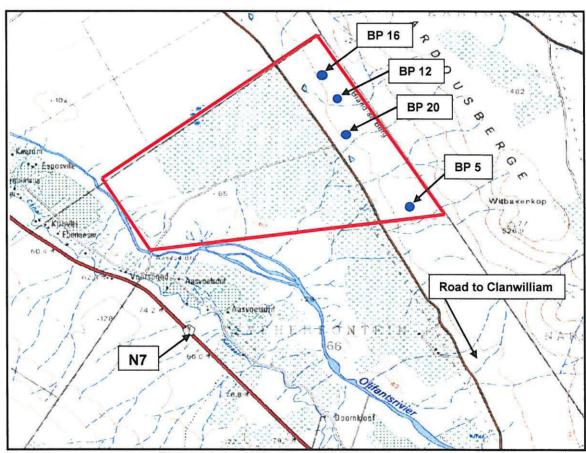


Figure 1. Locality Map (3118DC Klawer)

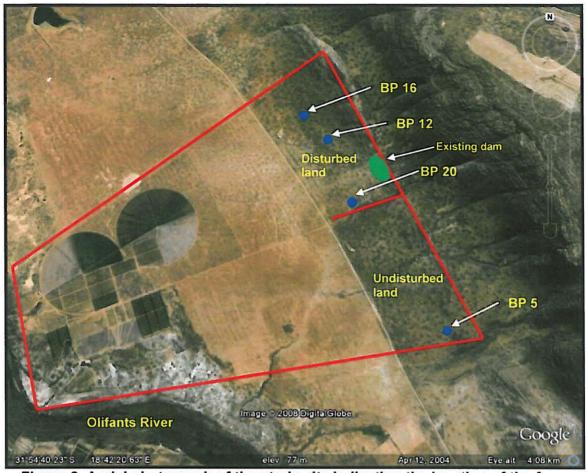


Figure 2. Aerial photograph of the study site indicating the location of the four production boreholes



Figure 3. Borehole 5 view facing north west



Figure 4. Borehole 5 view facing north



Figure 5. Undisturbed veld view facing north



Figure 6. Undisturbed veld view facing west



Figure 7. Undisturbed veld view facing north west



Figure 8. Undisturbed veld view facing south



Figure 9. Borehole 20 view facing south



Figure 10. Borehole 20 view facing north east



Figure 11. Borehole 20 view facing north west



Figure 12. Borehole 12 view facing south



Figure 13. Borehole 12 view facing north west



Figure 14. Borehole 12 view facing north



Figure 15. Borehole 12 view facing south



Figure 16. Borehole 12 view facing north west



Figure 17. Borehole 16 view facing south



Figure 18. Borehole 16 view facing west



Figure 19. Borehole 16 view facing south west



Figure 20. Borehole 16 view facing north west

#### 4. STUDY APPROACH

#### 4.1 Method

The approach followed in the archaeological study entailed an inspection of each of the proposed four production boreholes and the immediate surrounding area.

In addition, the undisturbed landholdings north of Borehole 5 (refer to Figure 2), identified for possible future fruit farming, was also searched for archaeological remains.

The site visit and assessment took place on the 03<sup>rd</sup> November, 2008.

#### 4.2 Constraints and limitations

There were no constraints or limitations associated with the study, although large patches of the relatively undisturbed lands (refer to Figure 2) are covered in fairly thick natural veld resulting in low archaeological visibility.

## 4.3 Identification of potential risks

There are no potential (archaeological) risks associated with the proposed project.

#### 5. FINDINGS

# **5.1 Borehole 5** (S 31° 55 08.7 S 18° 43 01.5 on map datum wgs 84)

No archaeological heritage remains were located during an investigation of Borehole 5. However, a handful of Stone Age tools were documented in the relatively undisturbed natural veld lying to north of the borehole (refer to Figures 5-8). These included one Later Stone Age (LSA) silcrete flake found in the sand/gravel access road, one flat silcrete flake, one thick quartzite blade and five Middle Stone Age (MSA) quartzite flakes found on the upper and mid, west facing slopes. The low density scatter is spread very widely over the surrounding landscape.

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

## **5.2 Borehole 20** (S 31° 54 32.8 S 18° 42 39.2)

No archaeological heritage remains were located during an investigation of Borehole 20. The borehole has already been sunk and the surrounding farmland has been cleared and intensively prepared for planting (refer to Figures 10 and 11).

## 5.3 Borehole 12 (S 31° 54 18.5 S 18° 42 29.6)

No archaeological heritage remains were located during an investigation of Borehole 12. The production borehole has already been sunk and the surrounding area has been contoured and cleared for planting (refer to Figures 14 - 16).

## 5.4 Borehole 16 (S 31° 55 06.6 S 18° 42 22.2)

No archaeological heritage remains were located during an investigation of Borehole 16. The borehole has already been sunk and the surrounding area has been cleared and contoured for planting (refer to Figures 19 and 20). A few areas on the upper slopes are still partially vegetated – but this comprises mainly Pioneer vegetation (indicating earlier disturbance).

### 7. IMPACT STATEMENT

The Phase 1 Archaeological Impact Assessment of four production boreholes on the farm Vergenoegd near Trawal has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to the proposed development activities.

The probability of locating important pre-colonial archaeological heritage remains during implementation of the project is likely to be improbable.