# Agency for Cultural Resource Management

Specialists in Archaeological Studies and Heritage Resource Management

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10 June, 2008

Att: Mr Calvin van Wyk

Assistant Director Heritage Western Cape Private Bag X9067 Cape Town 8000

Dear Calvin

#### **REPORT AND NID FOR BELCOM**

Please find the following NID checklist and report to be presented at the next BELCOM meeting (31 July 2008).

 Phase 1 Archaeological impact assessment proposed Helderberg Integrated Waste Management Facility, Somerset West.

Yours sincerely

Jonathan Kaplan

# PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED HELDERBERG INTEGRATED WASTE MANAGEMENT FACILITY SOMERSET WEST WESTERN CAPE PROVINCE

Prepared for:

### STRATEGIC ENVIRONMENTAL FOCUS

Att: Ms Vici Napier PO Box 1330 Durbanville 7708 Ph: (021) 979 3822

For :

**CITY OF CAPE TOWN** 

By



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#### Executive summary

A Phase 1 Archaeological Impact Assessment of the proposed Helderberg Integrated Waste Management Facility in Somerset West near Cape Town has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to the proposed development activities.

Two canditate sites have been identified for the proposed project, namely: Vaalfontein (Farm 781) and Onverwacht 2 (Portion 35 of Farm No. 918).

The following findings were made:

- Vaalfontein: No pre-colonial archaeological heritage remains were documented during the study.
- Onverwacht 2: No pre-colonial archaeological heritage remains were documented during the study. Remnants of recent farm buildings and associated infrastructure occur on the proposed site, but these fall mostly **outside** the proposed development area.

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#### **1. INTRODUCTION**

Strategic Environmental Focus requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment (AIA) for the proposed Helderberg Integrated Waste Management Facility (IWMF) near Somerset West, in the Western Cape Province.

The proposed project comprises a Refuse Transfer Station and Material Recovery Facility in the Helderberg area.

Two canditate sites have been identified for the IWMF, namely: Onverwacht 2 (Portion 35 of Farm No. 918) and Vaalfontein (Farm 781).

Vaalfontein is owned by the Helderberg Municipality while Onverwacht is privately owned.

The approximate size of each property is about 12 ha, each.

Both properties are currently zoned Agriculture, and will be rezoned in order to accommodate the proposed development activities.

The extent of the proposed development falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

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 for each of the proposed canditate sites 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 undertake a site visit and desk top study;
- to describe the archaeological heritage baseline of the proposed site(s);
- to identify and map archaeological heritage resources on the proposed site(s);
- to determine the importance of any archaeological heritage resources, and
- to identify mitigatory measures to protect and maintain any valuable archaeological heritage sites that may exist within the proposed site(s)

## 3. THE STUDY SITE

A locality map is illustrated in Figure 1.



Figure 1. Locality Map (3418BB Somerset West)

An aerial photograph of the two candidate sites is illustrated in Figures 2 and 3.

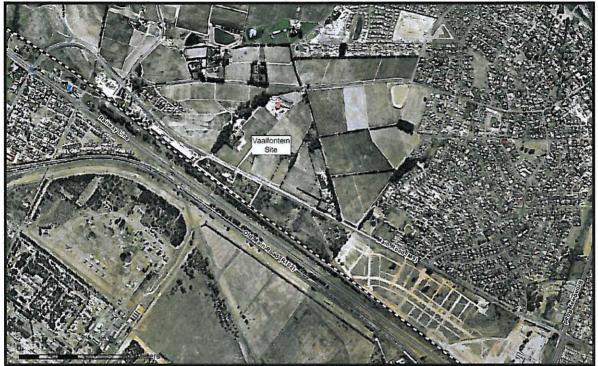


Figure 2. Aerial photograph of the Vaalfontein site



Figure 3. Aerial photograph of the Onverwacht 2 site

#### 3.1 Vaalfontein (Portion of Farm 781)

The proposed Vaalfontein site (S 34° 03' 42.3" E 18' 48 15.5") comprises a fairly narrow strip of land situated alongside the railway reserve and old Main Road, about 3 kms south west of Somerset West. A portion of the site is currently occupied by the City of Cape Town Vaalfontein Cleansing and Water Services. The eastern portion of the site is infested with alien vegetation (mainly Port Jackson and some Blue Gums). Illegal dumping of building rubble and domestic waste is widespread, while a gravel road runs through this portion of the property (Figures 4-6). The western portion is degraded and infested with alien vegetation (mainly Port Jackson). Ground cover comprises thick Kikuyu and Kweek grass. Piles of concrete and remains of concrete structures occur in this portion of the property (Figures 7-12). These remains are part of a decommissioned Department of Public Works facility. There are several poorly maintained drainage channels on the site. The surrounding land use comprises vacant agricultural land, vineyards, and residential and light industrial development activities.



Figure 4. Vaalfontein east alongside Main Road



Figure 6. Vaalfontein east



Figure 5. Vaalfontein east



Figure 7. Vaalfontein west alongside Main road



Figure 8. Vaalfontein west



Figure 9. Vaalfontein west



Figure 10. Vaalfontein west



Figure 11. Vaalfontein west



Figure 12. Vaalfontein west

#### 3.2 Onverwacht 2 (Portion 35 of Farm No. 918)

The proposed Onverwacht site (S 34° 06' 41.5" E 18' 52 31.9") is situated immediately north of the N2 about 3 kms south east of Somerset West. Access to the site is via the N2. The proposed site borders a railway line on its northern boundary and the Pentecostal Church Park in the east. The proposed site is also very close to the Chris Nissen Park housing development. The site is severely degraded and disturbed. Large portions of the property are covered with Kikuyu and Kweek grass and fairly densely infested with alien Port Jackson, Pines and Blue Gums (Figures 11-16). Existing infrastructure comprises the remains of a concrete water tank alongside the railway line, foundations of several small (modern) farm structures, the ruined remains of a piggery, a concrete reservoir, and the ruined remains of a modern farmhouse (Figures 17-20). Except for the water tank and the foundations of one or two small structures, all the ruins fall **outside** the proposed development area. Much building rubble occurs on the remainder of the property. Dumping is also widespread. Some drainage lines also occur. Cattle currently graze on the property. The surface deposits over the site comprise mainly soft sand and weathered quartzites.



Figure 11. Onverwacht 2 view facing north east



Figure 13. Onverwacht 2 view facing east



Figure 11. Onverwacht 2 view facing south east



Figure 14. Onverwacht 2 view facing north



Figure 15. Onverwacht 2 view facing north



Figure 18. Onverwacht 2 concrete reservoir



Figure 16. Onverwacht 2 view facing south



Figure 17. Onverwacht 2 piggery



Figure 19. Onverwacht 2 ruins of farmhouse



Figure 20. Onverwacht 2 water tank

#### 4. STUDY APPROACH

#### 4.1 Method

The approach followed in the archaeological study entailed a foot survey of the proposed and proposed alternative site.

The site visit and assessment took place on the 5<sup>th</sup> May, 2008.

#### 4.2 Constraints and limitations

There were no constraints or limitations associated with the study. However, Vaalfontein is quite heavily infested with alien vegetation and thick grass cover, resulting in low archaeological visibility.

#### 4.3 Identification of potential risks

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

#### 4.4 Results of the desk top study

Several AIA's have been undertaken in the surrounding area close to the Onverwacht 2 canditate site. Early Stone Age (ESA) flake tools have been documented on the Farm Firlands south east of the proposed site (Kaplan 2006a, b 2007a, b), while a few ESA flake tools were also found on the Farm Gustrouw alongside the N2 close to Broadlands Road (Kaplan 2007c). ESA and Middle Stone Age (MSA) tools were also documented during a study of the proposed upgrading of the N2, in the Somerset West area (Kaplan 2003).

No archaeological remains were documented during an assessment of a portion of Vaalfontein (Farm 781), which has been identified as the site for a proposed metropolitan cemetery (Kaplan 2005). An informal, farm worker cemetery was located on the Farm Eendrage, alongside Farm 781 that will be incorporated into the proposed Vaalfontein cemetery.

#### 5. LEGISLATIVE REQUIREMENTS

The following section provides a brief overview of the relevant legislation.

#### 5.1 The National Heritage Resources Act (Act No. 25 of 1999)

The National Heritage Resources (NHR) Act requires that "...any development or other activity which will change the character of a site exceeding 5 000m<sup>2</sup>, or the rezoning or change of land use of a site exceeding 10 000 m<sup>2</sup>, requires an archaeological impact assessment"

The relevant sections of the Act are briefly outlined below.

#### 5.2 Archaeology (Section 35 (4))

Section 35 (4) of the NHR stipulates that no person may, without a permit issued by HWC, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

#### 5.3 Structures (Section 34 (1))

No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the South African Heritage Resources Agency (SAHRA) or Heritage Western Cape.

#### 5.4 Burial grounds and graves (Section 36 (3))

Section 36 (3) of the HHR stipulates that no person may, without a permit issued by the South African Heritage Resources Agency (SAHRA), destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority.

#### 6. FINDINGS

6.1 Vaalfontein (Farm 781)

No archaeological heritage remains were documented during the study of the proposed canditate site.

No burial sites or graves were documented, either.

The proposed site does not have any formal heritage status.

6.2 Onverwacht 2 (Portion 35 of the Farm No. 918)

No archaeological heritage remains were documented during the study of the proposed canditate site.

The proposed site does not have any formal heritage status.

#### 7. IMPACT STATEMENT

The Phase 1 Archaeological Impact Assessment has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to the proposed development activities.

The assessment of the proposed project has rated the potential impact to archaeological material as being **low**, for both canditate sites.

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

The proposed canditate sites are not considered to be archaeologically sensitive, vulnerable or threatened.

It is highly unlikely given the severely modified nature of the receiving environment, but unmarked human burials may be uncovered or exposed during earthmoving operations.

The assessment of the potential impacts on archaeological resources is summarised in Table 1. This applies to both the preferred location (Vaalfontein), and the proposed alternative site (Onverwacht 2).

	Without Mitigation	With Mitigation
Extent	Site specific	Site specific
Duration	Short term	Short term
Intensity	Low	Low
Probability	Improbable	Improbable
Significance	Low	Low
Status of the impact	Positive	Positive
Degree of confidence	High	High

#### Table 1. Assessment of the archaeological impacts of the proposed project

#### 8. 'NO GO' ALTERNATIVE

The `no-go' alternative does not apply.

Both sites are suitable for development and one canditate site is not preferred over the other.

#### 9. RECOMMENDATIONS

 Should any human remains or graves be disturbed, exposed or uncovered during vegetation clearing operation, excavations and earthworks, these should immediately be reported to the archaeologist or the South African Heritage Resources Agency (Dr A. Jerardino (021) 462 4502). Burial remains should not be disturbed or removed until inspected by the archaeologist.

#### **10. REFERENCES**

Kaplan, J. 2007a. Phase 1 Archaeological Impact Assessment Portion 8 of Farm Firlands No. 959 Gordons Bay. Report prepared for CCA Environmental (Pty) Ltd. Agency for Cultural Resource Management.

Kaplan, J. 2007b. Phase 1 Archaeological Impact Assessment Portion 21 of Farm Firlands No. 959 Gordons Bay. Report prepared for IC @ Plan. Agency for Cultural Resource Management.

Kaplan, J. 2007c. Phase 1 Archaeological Impact Assessment Portion 43 of the Farm Gustrouw 418 Broadlands, Somerset West. Report prepared for De Villiers Brownlie Associates. Agency for Cultural Resource Management

Kaplan, J. 2006a. Phase 1 Archaeological Impact Assessment Portion 18 of Farm Firlands No. 959 Gordons Bay. Report prepared for IC @ Plan. Agency for Cultural Resource Management.

Kaplan, J. 2006b. Phase 1 Archaeological Impact Assessment Erf 6259 Gordons Bay. Report prepared for IC @ Plan. Agency for Cultural Resource Management.

Kaplan, J. 2005. Archeological Assessment Metropolitan Cemetery Study Phase 2 – Vaalfontein Outspan. Report prepared for Settlement Planning Services. Agency for Cultural Resource Management

Kaplan, J. 2003. Phase 1 AIA proposed N1 N2 Winelands Toll Road Project. Report prepared for Crowther Campbell and Associates. Agency for Cultural Resource Management.