ARCHAEOLOGICAL IMPACT ASSESSMENT AND HERITAGE REVIEW THE PROPOSED N21 (R300) CAPE TOWN RING ROAD PROJECT

PROPOSED FARMERS ALTERNATIVE AND PROPOSED ALTERNATIVES B1 AND B2

Prepared for

CHAND AND ECOSENSE JOINT VENTURE

By

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1. INTRODCTION

1.1 Background and brief

Chand and Ecosense Joint Venture has requested the Agency for Cultural Resource Management to undertake a Phase 1 Archaeological Impact Assessment (AIA) and Heritage Review (HR) of the proposed Farmers Alternative and proposed Alternatives B1 and B2 (Sector 3), of the N21 (R300) Cape Town Ring Road Toll Project (Ecosense and Chand 2000).

The proposed R300 Cape Town Ring Road Toll Project is intended as a toll road between Muizenberg and Melkbosstrand, which will be declared as a National Road, the N21

The proposed project is divided into five Sectors. Sectors 1-5 have already been assessed (Kaplan 2002a)

The aim of the current study is to locate, identify and map archaeological and historical remains that may be negatively impacted by the proposed Farmers Alternative and proposed Alternatives B1 and B2, and to propose measures to mitigate against the impact.

2. TERMS OF REFERENCE

The terms of reference for the study were:

1. to identify areas of archaeological and historical importance that will be affected by the proposed Farmers Alternative and proposed Alternatives B1 and B2;

2. to assess the proposed route(s) in relation to any site(s) of archaeological and historical importance;

3. to determine the significance of the identified impacts both before and after mitigation; and

4. to make recommendations that would be relevant to the design, construction and operational phases of the proposed project.

3. LOCATION AND STUDY AREA

The location and study area for the proposed project is illustrated in Figure 1.

Figures 2-9 illustrates the effected environment. It is very clear that the receiving environment has been severely modified and altered. The route(s) is characterised by undulating hills and passes through intensively farmed areas, such as wheatfields, vineyards and rape fields. The route also crosses the Diep River. The affected environment is a predominantly rural landscape with a strong `sense of rural place'[1]. A number of historical homesteads occur in the general study area.

[1] `sense of rural place' is defined as the understanding of the environment indicated by use, history, and the surrounding landscape

4. STUDY APPROACH

The approach used in the study entailed a foot and vehicle survey of the proposed routes.

5. IDENTIFICATION OF POTENTIAL RISKS

There are no potential risks associated with the proposed project.

6. THE 2002 STUDY

The proposed Cape Town Ring Road project is divided into five Sectors (Kaplan 2002a).

For the purpose of this report, only Sector 3 (Northern Greenfields Sections) will be reviewed (see Figure 1), as it is located within the proposed Farmers Alternative and proposed Alternative B1 and B2 routes.

Early Stone Age[2] (ESA) and Middle Stone Age[3] (MSA) tools were located between the proposed Wellington Interchange (R302) and the N7. The route crosses mainly agricultural lands that have been altered and modified as a result of intensive farming practices. The tools were all found in a severly disturbed context and have been assigned low importance ratings (Kaplan 2002a).

Eight farm homesteads were located between the R302 and the N7, of which six are considered to be of some historical importance (Kaplan 2002a & OVP Landscape Architects 2002). According to the draft visual impact assessment report, the proposed route in Sector 3 will not impact significantly on the historical and cultural landscape (OVP 2002).

7. IMPACT DESCRIPTION AND ASSESSMENT

7.1 The proposed Farmers Alternative and proposed Alternatives B1 and B2

Relatively large numbers of ESA and MSA stone tools were located during the assessment of the proposed Farmers Alternative and proposed Alternatives B1 and B2. The tools, which included some heavily patinated (weathered) ESA flake tools, comprised an incomplete handaxe, a large cleaver, large cores, flakes, chunks, and split cobbles. MSA tools also include unmodified and retouched flakes, chunks, a range of cores, a possible grindstone, and a hammerstone.

Most of the tools are made on a range of fine to relatively fine-grained quartzite river cobbles, while some tools in silcrete were also noted. The ESA tools are most likely assigned to the early Acheulean Tradition[4] of the ESA.

[2] A term referring to the period between 250 000 and about 2 million years ago.
[3] A term referring to the period between 250 000 and 20 000 years ago.
[4] A term referring to the period roughly between 1.5 million and 250 000 years ago.

The tools were found in heavily ploughed and terraced fields, among large piles of rocks cleared from surrounding farmlands, alongside road culverts, drainage trenches and channels, raised earth banks, fence lines, small dongas and `sloots'. Tools were also found above the Diep River floodplain (Figures 10 and 11).

ESA and MSA tools are found throughout the Swartland region of the southwestern Cape. Such tools are commonly found in heavily worked farmlands, on sheet-washed slopes, in old borrow pits, quarries and dongas, and close to most water sources such as streams and rivers (Humphreys 1994; Kaplan 2001, 2002a and personal observation).

Importance of finds: **low**

Suggested mitigation: **none required**

The overall impact of the proposed project on archaeological remains is likely to be low (Table 1).

Table 1. Assessment of archaeological impacts of the proposed N21 (R300) Cape Town Ring Road Toll Project: Farmers Alternative and Alternatives B1 and B2.

CRITERIA	IMPACT			
	CONSTRUCTION		OPERATION	
	WITHOUT MITIGATION	WITH MITIGATION	WITHOUT MITIGATION	WITH MITIGATION
Extent	L	L	L	L
Duration	M	L	M	L
Intensity	M -	L-	M -	L-
Probability	M	M	M	M
Status	Negative	Negative	Negative	Negative
Consequence	L	L	L	L
Significance	**L**	**L**	**L**	**L**
Confidence	H	H	H	H
Overall Significance	L	L	L	L
Nature of Impact	Minor	Minor	Minor	Minor
Degree of Confidence	H	H	H	H
Decision Guideline	Impacts not likely to affect project decision	Impacts not likely to affect project decision	Impacts not likely to affect project decision	Impacts not likely to affect project decision

7.2 Farmsteads

With regard to the proposed Farmers Alternative and proposed Alternatives B1 and B, only one farmstead, Sondagsfontein, is reviewed, although the new route also passes close to the historic farm Vrymansfontein, alongside Adderley Road (see Kaplan 2002a).

- **Sondagsfontein (or Zondagsfontein)**

According to Fagan (1994:561), the present main house was built by the present owner in the same place as an earlier T-shaped house. The three simple long outbuildings standing next to each other to form an L, we all constructed of thick stone walls and had previously been thatched, although they now have iron roofs. There used to be work and storerooms and a well as stables in these buildings, which could all be 18th structures (Figures 12 & 13).

More modern buildings and outbuildings, and additions to older existing buildings, have been added, and are in scale with the older ones so that the original order has been maintained. A number of older buildings have also fallen into disrepair and ruin (Figure 14).

A Large stand of Bluegum trees completely obscures the farmstead from Adderley Road, thus significantly softening and reducing any visual impact that may be effected by the proposed Farmers Alternative and Alternatives B1 and B2.

The proposed road corridors are also located some distance from the farmstead, which is located on a sloping werf, and not visible from Adderley Road, thus further minimising the visual impact even further.

Large overhead Eskom powerlines currently also cross the surrounding rural landscape, already contributing to a negative visual impact on the historical landscape and the `sense of rural place'

7.3 Other finds

An avenue of large Bluegum trees occurs in Darling Road, between Van Schoorsdrif Road and the N7, in Vissershok East (Figure 15). The avenue comprises the southernmost extent of the old Darling/Mamre Road, which has been cut off by the N7, and is no longer in use.

Although not a declared National Monument, the Mamre Road is considered to be conservation-worthy (David Hart, South African Heritage Resources Agency, pers. comm. 1996).

The proposed Farmers Alternative will pass relatively close (to the east) of the old road

Importance of site: **potentially high**

Suggested mitigation: **none required**

8. `RED FLAG' AREAS

No `Red Flag' areas occur in the proposed Farmers Alternative and proposed Alternatives B1 and B2. Although care should be taken to avoid directly impacting on the old Mamre/Darling Road.

9. `NO GO' AREAS

Archaeological impacts would most likely be very low if construction of the proposed road does not go ahead.

10. CUMULATIVE IMPACT

The overall/cumulative impact (i.e. the total impact) of the proposed road on archaeological sites is likely to be very low.

11. CONCLUSION

The study has shown that the proposed N21 (R300) Cape Town Ring Road Toll Project (the proposed Farmers Alternative and proposed Alternatives B1 and B2), will have no significantly high negative impacts on archaeological and historical sites.

In general, the receiving environment is not considered to be archaeologically sensitive, vulnerable or threatened.

12. RECOMMENDATIONS

With regard to the N21 (R300) Cape Town Ring Road Toll Project; proposed Farmers Alternative and proposed Alternatives B1 and B2, the following recommendations are made.

- A buffer of 50 m should be established between the Bluegum tree-lined Mamre/Darling road and the proposed Farmers Alternative.
- No archaeological mitigation is required.
- No more detailed studies are required.

There is, however, a need for ongoing archaeological and historical input during the planning (design), implementation and construction phases of the proposed project.

The recommendations are subject to the approval of Heritage Western Cape.

13. REFERENCES

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