

**ARCHAEOLOGICAL INVESTIGATION
THE PROPOSED REHABILITATION OF THE N9
FROM WOLWEFONTEIN TO COLESBERG
AND THE PROPOSED CONSTRUCTION OF THE
N1/N9 ACCESS INTERCHANGE AT COLESBERG
NORTHERN PROVINCE**

Prepared for

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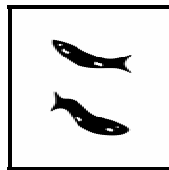
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Proposed construction of a grade separated interchange at the N1/N9 intersection at Colesberg

Executive summary

An archaeological investigation of the proposed construction of a grade separated interchange at the N1/N9 intersection in Colesberg, Northern Cape has identified no significant impacts to pre-colonial archaeological heritage remains that will need to be mitigated prior to the proposed development activities.

The proposed new intersection at the N1/N9 is planned to improve road user safety.

The following findings were made:

Stone Age artefacts were documented at the proposed N1/N9 intersection at Colesberg, but the material are spread very thinly and unevenly over the surrounding landscape.

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

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1. INTRODUCTION

1.1 Background and brief

CCA Environmental (Pty) Ltd, on behalf of South African National Roads Agency Limited (SANRAL) requested the Agency for Cultural Resource Management to undertake an archaeological investigation of the proposed new grade separated interchange at the N1/N9 intersection in Colesberg as part of the proposed rehabilitation and upgrading of National Route 9 (N9), between Colesberg and Wolwefontein in the Northern Cape Province.

The proposed project would entail the rehabilitation of the N9 Section 7, between Wolwefontein (km 63.63) and Colesberg (km 94.84). The proposed upgrading of the road is to stay within the existing road formation.

The proposed new intersection at Colesberg is planned to improve traffic flows and road user safety at an existing dangerous intersection.

The aim of the study is to locate, identify and map archaeological heritage remains that may be negatively impacted by the implementation of the proposed project, and to propose measures to mitigate against the impact.

Two layout alternatives were assessed for the proposed interchange.

Dr John Almond has been appointed to undertake a Palaeontological Impact Assessment of the proposed project.

2. TERMS OF REFERENCE

The terms of reference for the archaeological study were:

- to determine whether there are likely to be any archaeological sites of significance at the proposed interchange site;
- to identify and map any sites of archaeological significance at the proposed interchange site;
- to assess the sensitivity and conservation significance of archaeological sites located at the proposed interchange site;

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- to assess the status and significance of any impacts resulting from the proposed development, and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist at the proposed interchange site.

3. THE STUDY AREA

Colesberg is situated about 280 kms south of Bloemfontein on the N1.

Alternative 1:

The site for Alternative 1 comprises a large patch of land alongside the N1 in Colesberg and immediately south of the Engen Garage. The affected site is covered in thick grass and small thorny scrub and bush. There are a few large open patches of compact ground (Figure 1). A ruined farm labourer's house is situated in the northern portion of the site. The remains of a modern weir – designed to facilitate runoff from a nearby farm dam - is situated in the western portion of the proposed site.



Figure 1. Proposed site for the N1/N9 interchange (Alternatives 1 and 2) south of Engen.



Figure 2. Proposed site for the N1/N9 interchange (Alternative 2) north of Engen.

Alternative 2:

The site for the second and preferred proposed alternative N1/N9 interchange is situated to the south, east and north of the Engen Garage (Figures 1 and 2). The site is covered in thick grass and small thorny scrub and bush, interspersed with large open patches of compact ground. The receiving environment is severely degraded and modified. It comprises landholdings within the perimeter of the Engen Garage, and agricultural land alongside the N1.

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4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a site inspection and investigation of the proposed grade separated interchange site.

Archaeological heritage remains were recorded using a Garmin Geko GPS unit set on map datum wgs 84.

Two site visits were undertaken to assess the two layout alternatives proposed. The site visits took place on 19 March 2008 and 17 November 2008.

4.2. Constraints and limitations

There were no constraints or limitations associated with the study.

4.3 Identification of potential risks

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

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 000m², or the rezoning or change of land use of a site exceeding 10 000 m², requires an archaeological impact assessment"

The relevant sections of the Act are briefly outlined below.

5.2 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.

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5.3 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.

5.4 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 Alternative 1 (S 30° 43 639' E 25° 05 029')

A dispersed scatter of Later Stone Age (LSA) tools were documented in a patch of open ground directly alongside the fence line south of the Engen Garage in Colesberg. The tools include several flakes, one small round core, one retouched flake, a chunk and one weathered Middle Stone Age (MSA) flake (Figures 3 and 4).

A few dispersed tools, all in dolerite, were documented over the remainder of the site. These include a patinated MSA blade and several more LSA flakes and chunks found on patches of exposed ground.

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



Figure 3. Scatter of tools south of Engen Garage



Figure 4. Collection of stone tools. Scale is in cm

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6.2 Alternative 2 (S 30° 43 639' E 25° 05 029')

Apart from a small, dispersed scatter of Later Stone Age (LSA) tools recorded on the proposed site in March 2008, no additional archaeological remains were documented during the assessment of the second proposed alternative interchange in November 2008. The receiving environment is in a severely degraded condition (refer to Figures 5 and 6).



Figure 5. Site for the proposed alternative Interchange. View facing east



Figure 6. Site for the proposed alternative interchange. View facing southwest from the N1

7. IMPACT STATEMENT

The archaeological investigation of the two proposed alternative layouts for the N1/N9 access interchange at Colesberg, has identified no significant impacts to pre-colonial archaeological remains that will need to be mitigated prior to construction activities commencing.

The proposed project will not have any negative impact on the heritage qualities of the receiving environment. Visual impacts will be minimised and the cultural landscape qualities of the study site and affected environment will not be compromised, either.

Table 1 presents an assessment of the archaeological impacts of the proposed project.

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

	Extent	Duration	Intensity	Probability	Confidence	Significance Without Mitigation	Significance With mitigation
Alternative 1	Local	Short term	Low	Improbable	High	Very Low	N/A
Alternative 2	Local	Short term	Low	Improbable	High	Very Low	N/A

8. RECOMMENDATIONS

With regard to the proposed rehabilitation of the N9 in the Colesberg area and the proposed new grade separated N1/N9 access interchange at Colesberg, in the Northern Cape Province, no archaeological mitigation is required, and the project should be allowed to proceed.