

# Agency for Cultural Resource Management

Specialists in Archaeological Studies and Heritage Resource Management

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15 March, 2010

**Att:** Ms Keshni Rughoobeer  
Jeffares & Green (Pty) Ltd  
Consulting Engineers  
P.O. Box 38561  
Pinelands  
7430

Dear Ms Rughoobeer,

## **PROPOSED UPGRADE OF THE PIEKENIERSKLOOF PASS, WESTERN CAPE**

### **1. Introduction**

Jeffares and Green Consulting Engineers, on behalf of the South African National Roads Agency Limited (SANRAL) requested that the Agency for Cultural Resource Management conduct an archaeological impact assessment for the proposed upgrading of the Piekenierskloof Pass located along the N7 near Citrusdal in the Western Cape (Figures 1 & 2).

The proposed upgrade will assist in alleviating traffic congestion along the Pass as well as enhance the overall safety and quality of the road.

The project entails the following:

- Strengthening and widening of the existing pavement;
- The addition of climbing and crawling lanes, and
- The construction of an appropriate surface

It is envisaged that certain areas along the route will require cut and fill activities in order to widen the lanes. The affected sections of the proposed upgrade are from, km 65 (just past the Eendekuil turnoff on the Piketberg side of the Pass), till km 75 (the turnoff to Citrusdal). Widening will be between 0.5–1 m on the eastern side of the Pass and between 1–3 m on the western side of the road. Existing guard rails will be removed and later reinstalled. There will be no excavation or earthworks outside the existing fence line, along the entire length of the affected section of the road. Material excavated from the cut and fill activities will also be used in the pavement layers. One or two rest areas along the route on the Citrusdal side of the N7 will also be upgraded. Source material will be obtained from existing commercial borrow pits. No new borrow pits will be exploited. A construction camp site will most likely be situated at Eendekuil.

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

A Notice 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 assessment were to:

- Identify and map any archaeological and historical sites that may be impacted by the proposed upgrading of the Piekenierskloof Pass;
- Determine the importance of archaeological and historical sites that may be impacted by the proposed upgrading of the Piekenierskloof Pass;
- Determine and assess the potential impacts of the proposed project on the archaeological resources, and
- Recommend mitigation measures to minimise impacts associated with the proposed project.

## **3. The study site**

Piekenierskloof Pass situated between Piketberg and Citrusdal and previously known as Grey's Pass was engineered and constructed in 1858. According to historical accounts it is also known that Jan Dankaert first led an expedition over the mountains in 1660. And later in 1662 Pieter Cruythoff led the first expedition over the mountains to include a wagon. According to Dr Graham Avery of Iziko: SA Museum (pers. comm. 1998), San hunter-gatherers, were recorded at the bottom of the Piekerneerskloof in the mid 1700s.

Piekenierskloof Pass was designed and built by Thomas Bain, the famed road engineer. By the mid-1800s the British Governors at the Cape were encouraging the building of mountain passes to open up communication with the interior. Work on the pass commenced in 1857 with about 200 convicts on the team and by the end of the year the western approach up the plateau was open for use. As was to become his trademark, Bains constructed a number of dry-stone retaining walls and parapets and paid particular attention to the various drainage provisions. By July 1858, the whole pass, although not complete, was in general use. The pass was opened in November 1858 and officially named Grey's Pass in honour of the Governor of the Cape, Sir George Grey.

Grey's Pass carried traffic over the mountains for more than 100 years, until a new pass (the Piekenierskloof) was completed in 1958. The proposed new route from the Citrusdal side was up a new line on the west bank of the Olifants River. Bains's original route ran up the eastern bank of the Olifants River. Work began on the new pass in 1939 (just

before the outbreak of World War 2) and only started again in the early 1950's and was eventually completed in 1958. The new pass was named Piekenierskloof Pass<sup>1</sup>.

#### **4. Legal framework: The National Heritage Resources Act**

The National Heritage Resources 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.

Section 38 of the Act also indicates that any person constructing a powerline or road or similar linear developments exceeding 300m in length is required to notify the responsible heritage resources authority, who will in turn advise whether an impact assessment report is needed before development can take place.

#### **5. Approach to the study**

A 1-day site visit took place on the 22<sup>nd</sup> February, 2010. The pass, from the R300/Citrusdal intersection (at km 75), till the historic 'Die Toll Huis' coffee shop (at about km 70), was traversed on foot (Figures 3-18). Thereafter, the pass was driven and inspected and photographed at selected intervals (till ± km 65).

It is envisaged (by the engineers) that two sandstone outcroppings on the eastern side of the Pass at about km 72.2 (Figures 19 & 20) will be removed by either blasting, trimming or cutting, in order to widen the existing alignment up to the fence line. There is also the possibility that another sandstone kopje at about km 74.5 (Figure 21) might also need be removed in order to widen the road. This kopje will also be removed by either, blasting, trimming or cutting, up the fence line. These outcroppings were specifically searched for San rock art sites.

#### **6. Constraints and limitations**

There were no constraints or limitations associated with the proposed project.

#### **7. Identification of potential risk sources**

Based on the results of the study there are no archaeological and heritage risks associated with the proposed upgrade of the Piekenierskloof Pass.

#### **8. Findings**

No archaeological remains, including rock art sites were documented during the field study, although it is known that several San rock art sites do occur on the Farm Modderfontein alongside the Pass (Mr Christian Stekhoven pers comm.), but these will not be impacted by the proposed upgrade.

The historic Toll House (dated 1849) at ± km 70 will not be impacted by the proposed upgrade (Figure 22). Some widening of the road will take place along this section of the Pass, but only on the eastern side of the road.

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<sup>1</sup> Ross, G. 2002. The Romance of Cape Mountain Passes. David Philip Cape Town.

According to Mr Alan Moffett (pers. comm.) of Arcus Gibb Engineering Services no (historic) dry walling or parapet walls will be impacted by the proposed upgrade. Some modern stone walling, however, will be removed and later reinstalled on the eastern side of the Pass.

With regard to drainage provisions (also a trademark of Bains), drainage will need to be improved by installing subsoil drains and concrete lined drains, but only existing (modern) culverts will be used and several new culverts will also be installed.

## **9. Impact statement**

No archaeological heritage remains will be impacted by the proposed upgrading of the Piekenierskloof Pass.

## **10. Recommendations**

The Archaeological Impact Assessment of the proposed upgrade of the Piekenierskloof Pass on the N7 has identified no significant impacts to pre-colonial or historical archaeological material that will need to be mitigated, prior to proposed development activities.

The proposed project should be allowed to proceed as planned.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Jonathan Kaplan', with a stylized, cursive script.

Jonathan Kaplan



Figure 1. Locality Map



Figure 2. Google photograph of the Piekenierskloof Pass



Figure 3



Figure 7



Figure 4



Figure 8



Figure 5



Figure 9



Figure 6



Figure 10



Figure 11



Figure 15



Figure 12



Figure 16



Figure 13



Figure 17



Figure 14



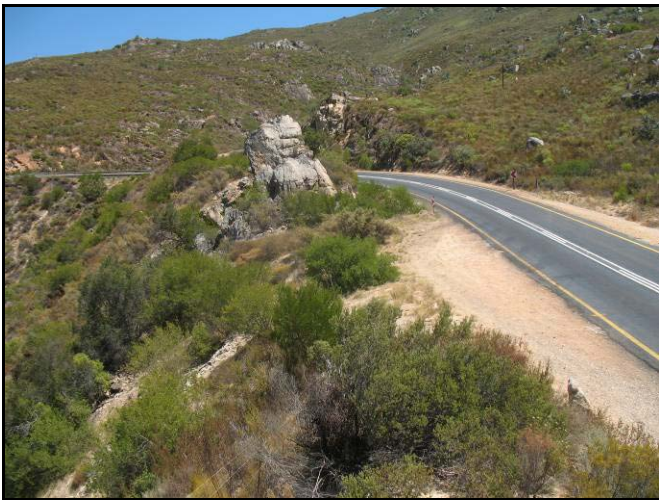
Figure 18



**Figure 19. Sandstone outcropping to be removed**



**Figure 21. Outcropping possibly to be removed**



**Figure 20. Sandstone kopje to be removed**



**Figure 22. The historic toll house will not be impacted by the proposed upgrade**



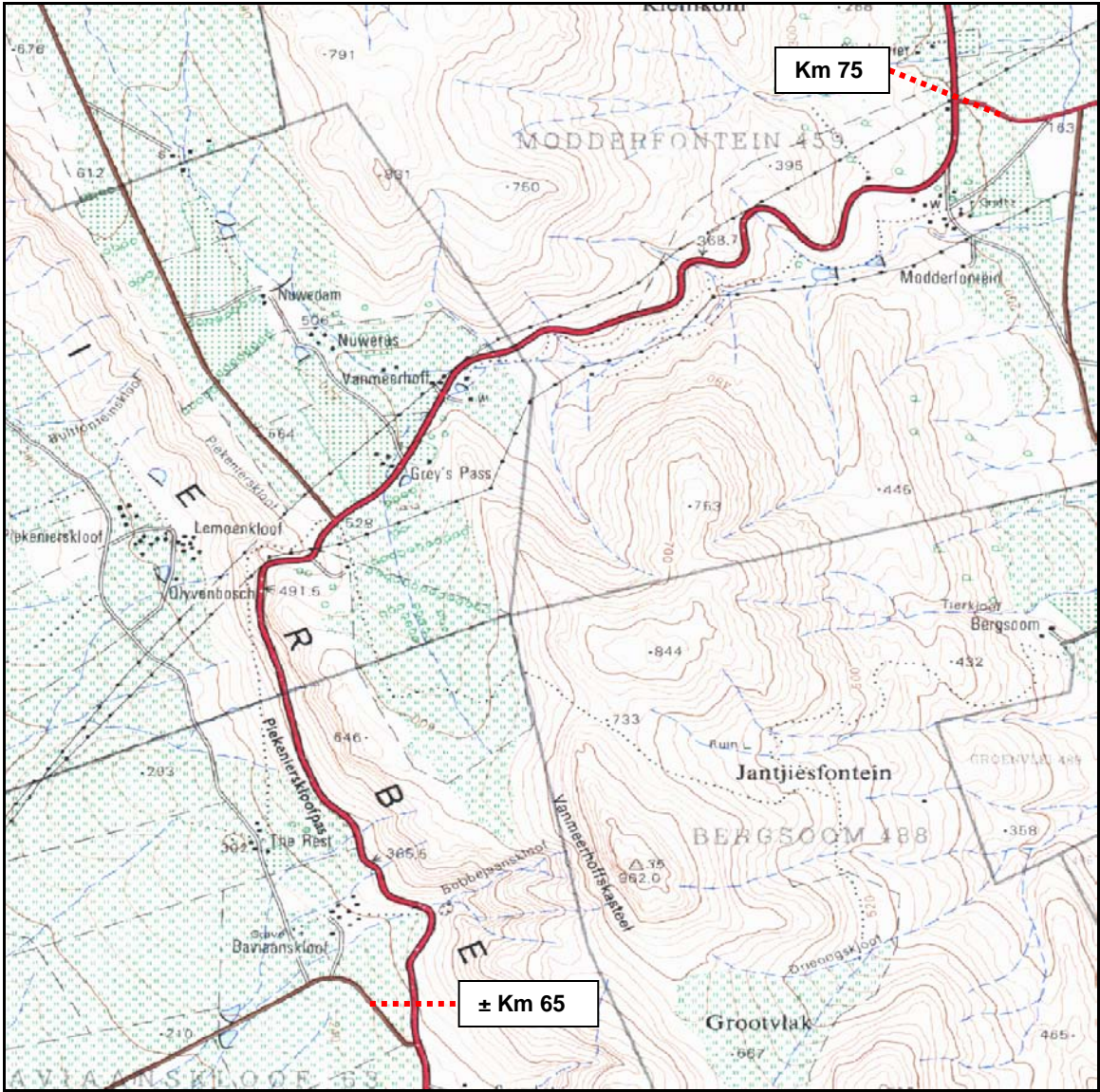


Figure 1:50 000 locality map (3218DB Eendekuil)