

T. N. Huffman

**ARCHAEOLOGICAL ASSESSMENT OF THE
PLATINUM TOLL HIGHWAY**

A Phase-1 Report Prepared for Bohlweki Environmental

Professor T N Huffman

Archaeological Resources Management
Archaeology Department
University of the Witwatersrand
Johannesburg

July 2000

ARCHAEOLOGICAL ASSESSMENT OF THE PLATINUM TOLL HIGHWAY

INTRODUCTION

The South African National Roads Agency selected the Bakwene Platinum Corridor Consortium (BPCC) to develop, operate and maintain the Platinum Toll Highway. The project involves 380km of road between Pretoria and the Botswana border, most of which will be improved with the existing road servitude. BPCC will also build two new sections, as well as a few new intersections and toll plazas.

In accordance with environmental and heritage legislation, Bohlweki Environmental (the environmental coordinators of the project) commissioned Archaeological Resources Management (ARM) to conduct an archaeological impact assessment of the route. During the scoping phase, ARM assessed the potential impact of the proposed route on archaeological resources (Huffman and Calabrese 1998). For the next stage we concentrated on the new sections, intersections and toll plazas.

METHOD

One ARM staff joined a Bohlweki team led by JoAnne Thomas on 2 June to examine the N1 portion between Pretoria and Warmbaths. Staff then returned on 15 June to investigate more closely the area designated for the Hammanskraal Mainline Toll Plaza.

Later, on 12 July, one ARM staff joined Mr A Hutchinson and Mr S van Wyk of BPCC to examine the new route between the Kameldrif Toll Plaza and the P160-1 Interchange near Brits. BPCC has demarcated the servitude of this new section. ARM staff returned on 14 July to examine more closely portions where this route crosses open veld. On the same visit, staff examined the new section from Buffelpoort past Rustenberg and the new bridge areas at Groot Marico.

RESULTS

N1 between Pretoria and Warmbaths

The original construction of interchanges, such as Wallmansthal Murrayhill and

Hammandskraal, impacted on a wider area than the present servitude. As a consequence, archaeological sites that may have been present have been destroyed, such as the Early Stone Age artefact concentration at the Zambezi Interchange (Wits Site No. 2).

The intensive survey of the Hammandskraal Mainline Toll Plaza did not reveal any site of archaeological interest. Similar terrain at the other intersections on this route suggest that archaeological sites were probably not present when the N1 was originally constructed.

Kameeldrift to Brits

Artefacts in a private collection from the farm encompassing the Kameeldrift N4 Toll Plaza (Doompoort 295 JR) date to the Middle Stone Age and Late Iron Age, but they were all found in the hilly area well north of the new road alignment. Much of this new section passes through low lying ground away from the hills. As a result, the terrain is often wet, especially during the rainy season. Although the grass cover is thick and archaeological visibility low, it is unlikely that Iron Age farming settlements were present. Furthermore, other parts of the new route pass through ploughed fields, and so surface sites would have been destroyed. Stone Age sites could be present, but they would have to be deeply buried.

Buffelspoort to Rustenberg

Much of this new section also passes through ploughed fields and low land. One Late Iron Age potsherd and one weathered Middle Stone Age flake lay on an eroded surface next to a donga at about km 195. These two isolated finds suggest that any surviving sites will have to be buried. No intact sites were noted along the route.

Groot Marico

Middle Stone Age and Late Iron Age artefacts occur in the large donga area on the farm Wonderfontein 258 JP northwest of the bridge over the Groot Marico River. This donga lies outside the project area. The project area itself was severely impacted when the bridge over the river and railway line were constructed. Consequently, no archaeological sites were noted.

Barrow Area

According to Mr van Wyk, the extension of Barrow Area 22 on Doompoort 295 JR will

endanger a Late Iron Age stone-walled settlement. Many similar sites are on record in the range of hills extending westward.

CONCLUSION

The results of this assessment, along with the original scoping report, show that the Platinum Highway will not negatively impact sites of archaeological significance. The stone-walled settlement at Barrow Pit 22, however, needs to be recorded in detail before it is destroyed.

REFERENCES

- Huffman, T.N. & J.A. Calabrese 1998. Archaeological Overview of the N4 Platinum Toll Road. A scoping report prepared for Corporate Image. Johannesburg: Archaeological Resources Management.

CHAPTER 4: HISTORICAL/ARCHAEOLOGICAL ASSESSMENT

This chapter records the impacts of the route on the historical/archaeological environment as it traverses Highway Sections 1 to 10, 11 to 20 and 21 to 30.

Findings as a result of this historical/archaeological assessment, and their implications for each portion of the highway will be separately discussed as Section A, Section B, and Section C respectively. Sites of archaeological interest for the study area are shown in Figure 7.

4.1 SECTION A: HIGHWAY SECTIONS 1 TO 10 - PRETORIA TO WARMBATHS

4.1.1 HISTORY OF THE STUDY AREA

An overall history of the entire study area, including this section of the proposed road is contained in Appendix A.

4.1.2 ARCHAEOLOGICAL FINDINGS

An Early Stone Age site lies at the intersection of Zambezi Drive and the N1, near the 9 km point, but it has already been destroyed.

I. OPPORTUNITIES

- None.

II. CONSTRAINTS

- None.

III. RECOMMENDATIONS

- Further archaeological work will not be necessary.

4.2 SECTION B: HIGHWAY SECTIONS 11 TO 20 - BOTSWANA BORDER TO RUSTENBURG

4.2.1 HISTORY OF THE STUDY AREA

An overall history of the entire study area, including this section of the proposed road is contained in Appendix A.

4.2.2 ARCHAEOLOGICAL FINDINGS

The road passes through the Kleinfontein battle field (83,7 km), and there are a few buildings apparently older than 50 years within 50 m of the road west of Zeerust (at about 44,5 km), in Zeerust (52 km - 54 km), east of Zeerust (69,9 km), at Vaalkop (72,7 km and 73,4 km), in Swatruuggens (123 km - 125 km) and Moedwil (150 km - 151 km).

The Old Lutheran Church at Kroondal is about 60 m from the proposed intersection at the junction of Highway Sections 19 and 20, near the 188 km mark.

One should also note the close proximity of graves to the road in Zeerust (53,4 km and 55 km), Groot Marico (88,5 km), Vaalkop (71,6 km) and Swatruuggens (125 km - 126 km). In addition, stone walling on the hill side at Kraathoek (166 km) may mark the hut platforms of previous residents of this small settlement.

Finally, new sites may occur at the base of hills and along valleys.

I. OPPORTUNITIES

- Some sites along the road and in the general area have tourist potential.

These include Livingstone's Mission at Mobotsa, the Church of St John the Baptist in Zeerust, the late Iron Age site of Molokwane west of Rustenburg and the Old Lutheran Church at Kroondal. The potential contribution that the road development can make to this kind of tourism, however, should be investigated in further detail because archaeotourism needs a regional infrastructure.

II. CONSTRAINTS

- Construction activities may disturb the National Monuments and grave sites in close proximity to the road.
- The road construction may uncover new archaeological sites.

III. RECOMMENDATIONS

- A detailed search of the proposed route should be undertaken to record heritage sites threatened by development. This search should include all new intersections, as well as the new Rustenburg bypass.
- Furthermore, all drainage crossings should be examined for Stone Age material, while red soil patches at the base of hills and wide river valleys such as that of the Groot Marico and Selons rivers should be examined for Iron Age sites.
- The original roadway is part of the historic landscape of towns such as Zeerust. Houses, shops and so on were therefore built in relation to the road. As part of a full environmental impact assessment, the history and architectural details of the old buildings should be recorded.

- Some historic sites may need special fencing during the construction period.
- In order, to satisfy the National Monuments Act (No. 28 of 1969), developers must report all heritage sites 50 years or older that are damaged during construction. An impact assessment and appropriate mitigation measures by a professional archaeologist will satisfy these legal requirements.

4.3 SECTION C: HIGHWAY SECTIONS 21 TO 30 - RUSTENBURG TO PRETORIA

4.3.1 HISTORY OF THE STUDY AREA

An overall history of the entire study area, including this section of the proposed road is contained in Appendix A.

4.3.2 ARCHAEOLOGICAL FINDINGS

There are no known sites of archaeological significance in the direct vicinity of this portion of the route.

I. OPPORTUNITIES

- There are heritage sites of every major time period in the surrounding area, and some of them have tourist potential. This potential would have to be carefully planned since these sites are not directly in the area of the N4.

II. CONSTRAINTS

- None currently identified.

III. RECOMMENDATIONS

- For the next phase of the environmental impact assessment, an archaeologist needs to survey the entire new alignment. Particular attention should be paid to the base of hills, for several Late Iron Age stone-walled and pre stone-walled sites are known in this region.
- The new route should also be examined for buildings and associated deposits older than 50 years.
- For the existing portion of the N4, all river crossings and new intersections should be examined for Stone Age sites in particular.