

ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE GROOTVLEI-BALFOUR POWERLINE, MPUMALANGA

A Phase I report prepared for Knight Piésold

Professor T N Huffman

School of Geography, Archaeology & Environmental Studies
University of the Witwatersrand
Johannesburg

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EXECUTIVE SUMMARY

The Project area, including the alternative routes, was examined for archaeological sites. Although there were Earlier Stone Age artefacts on the Vaalrand, the Project area does not have sites of high archaeological significance. The only area of significance is the African cemetery on Rietfontein. The cemetery is still used and therefore has high social significance. Rather than damage or reburial, the cemetery should be left undisturbed.

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INTRODUCTION

The new Balfour Gold Mine requires a connection to the Grootvlei Power Plant. ESKOM has proposed three alternatives: the first follows an existing line; the second and third follow existing road networks (Figure 1). Knight Piésold, the environmental coordinators for the project, commissioned a consortium of scientists from the University of the Witwatersrand to examine these alternatives. Archaeological Resources Management (ARM) would be responsible for assessing the impact of the proposed power line on archaeological resources. ARM would also search for graves.

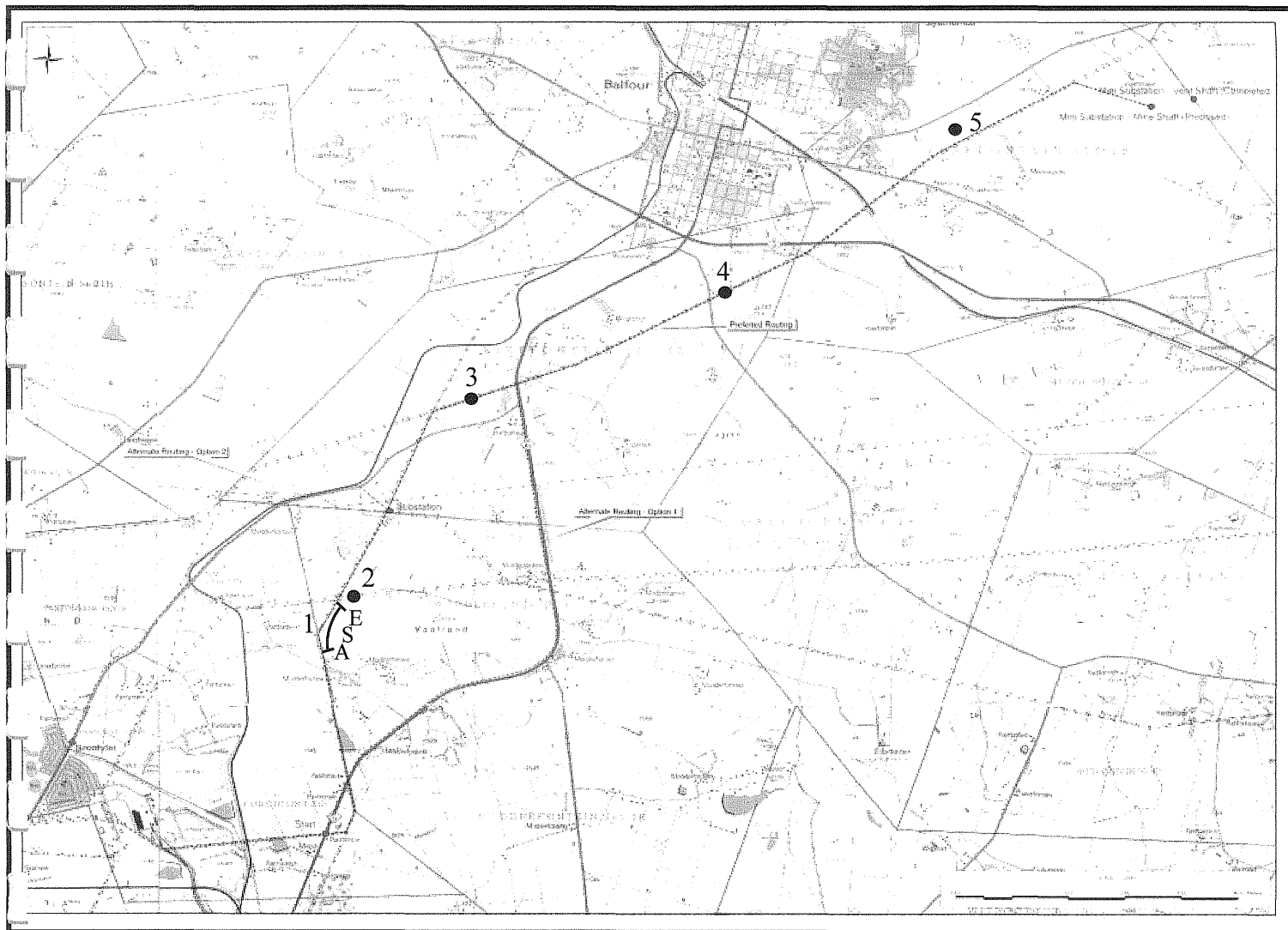


Figure 1. Archaeological and Historical sites found along the preferred route for the Grootvlei-Balfour power line.

METHOD

One ARM staff visited the project area on 16 August 2007 in the company of the Wits team leader. The two road alternatives were examined from the vehicle, while the first route was covered by a foot survey and by vehicle. Because much of the project area was under cultivation, the foot survey concentrated on hills and rocky outcrops, and a random selection of ploughed fields and farm roads. Areas that were highly disturbed, such as the Power Plant, were excluded. Sites were recorded with a hand-held GPS instrument programmed to WGS 84. The sites occur on the 1: 50 000 map sheet 2628AD Balfour.

Site significance was based on five main criteria: site integrity (i.e. primary vs. secondary context), amount of deposit, range of features (e.g., middens, houses and stonewalls), uniqueness and potential to answer present research questions. With these criteria, sites with no significance do not require mitigation, low to medium may require further work before development, sites with high significance must be mitigated, while sites with maximum significance should not be disturbed at all. Graveyards automatically have high social significance regardless of historic value.

BASELINE ASSESSMENT

The present power line crosses over a large hill, known as Vaalrand, on the farm Modderfontein 562 IR. The hill consists of quartzite suitable for the manufacture of stone tools, and several outcrops have been quarried during the Earlier Stone Age. A minor quarry (**Site 1a**) stands in the saddle at 26 44 14S 28 31 37.9E about 50 m from the present line. The most extensive quarry (**Site 1b**) stands at 26 44 29.3E 28 31 32.9E, about 150 m to the southeast. Cores, flakes, bifaces (Figure 2) and other artefacts lay widely scattered over much of the hill, on both sides. All probably belong to the Acheulean, dating to some 500 000 years ago. The deposit on the hillsides is fairly shallow, perhaps no more than 20 cm, but there may be greater depth in the saddle. While interesting, widely scattered surface occurrences such as this have little research potential, and so **Site 1** has *low significance*.

The foundations of an historic house and kraal (**Site 2**) stand at 26 44 00.9S 28 31 46.5E, at the north base of the Vaalrand. This complex appears on the 1974 edition (aerial photography in 1944) of 2628DA Balfour (Figure 3). This appears to have been a manager's house on Modderfontein. **Site 2** is not under threat and in any case has *low significance*.

A large African graveyard (**Site 3**) exists under the present line on the Farm Rietfontein 561 IR (26 41 53.2S 28 32 47.4E). The graveyard was part of a complex of African housing recorded on the 1974 map. The cemetery itself contains over 100 graves, all aligned East/West, and some have headstones (Figure 4). According to the legible dates, the cemetery started in the 1940s, and it still appears to be visited. **Site 3** has *high social significance*.

The remnants of other African housing (**Site 4**) stand under the power line at the east end of Rietfontein (26 41 06S 28 35 29.2E). These households appear on both editions of the Balfour

map. The grass was high in this area, and so ground visibility was low. A few stone flakes suggest that there is also a Later Stone Age site in the vicinity. **Site 4** has *low significance*.

A Later Stone Age micro core lay on the surface of a rocky outcrop (**Site 5**) on the Farm Vlakfontein 586 IR (26 39 31.5S 28 37 45.7). The small outcrop overlooks a stream, and it may have served as a hunting blind. Very little material is apparent. In addition to the stone core, low stonewalling forms a kraal against the base of the outcrop. Presumably, this walling was part of the historic farm complex. The outcrop is not threatened by development, and in any case **Site 5** has *low significance*.



Figure 2. Earlier Stone Age tool found at site 1.

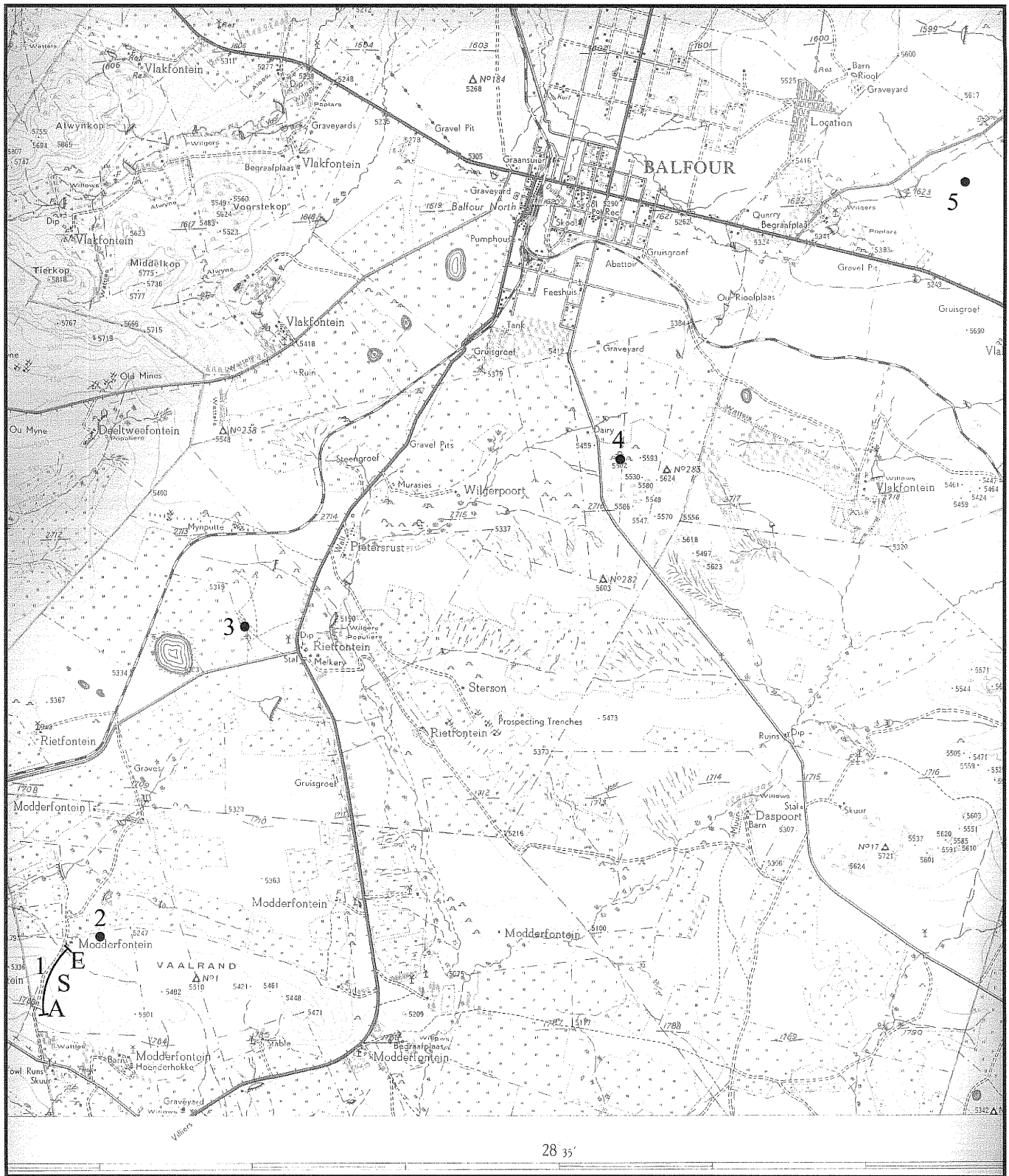


Figure 3. Archaeological sites on the 1974 edition of 2628DA Balfour (aerial photography in 1944).



Figure 4. African cemetery at site 3.

POTENTIAL IMPACTS

Only **Site 3**, the African cemetery, requires attention. Existing legislation prevents the destruction of the cemetery, but graves may be moved. Although physically possible, reburial will be difficult, costly and of great concern to descendent communities.

RECOMMENDATIONS

Because of the difficulties and costs, we recommend that the cemetery should not be damaged. If the proposed route runs south of the present line, it will miss the cemetery completely.

SIGNIFICANCE OF IMPACTS

If legislation is ignored and graves destroyed, the consequences would be huge: the impact would be severe, irreversible, permanent, and of regional concern. If, on the other hand, the cemetery was avoided, there would be no impact at all.

CONCLUSION

The cemetery is the only site of archaeological or historical interest in the Project area. With its avoidance, there are no heritage reasons why the development should not proceed.