



# HERITAGE

Contracts and Archaeological Consulting

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***Ref: Upgrade to the R545 towards Kusile Power Station***

28 November, 2013

SAHRA - APM Unit

PO Box 437

Cape Town

8000

Attention: Mr. Phillip Hine

Dear Phillip

**RE: APPLICATION FOR EXEMPTION FROM AN ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE PROPOSED ROAD UPGRADE TO THE R545 TOWARDS KUSILE POWER STATION, MPUMALANAGA PROVINCE**

***Background***

Eskom Holdings (SOC) Limited would like to expand (add lanes) the R545 from the N4 to the intersection with the D686 (new Kusile Road) for easy flow of traffic.. The proposed project requires a Basic Assessment (BA) in terms of the National Environmental Management (NEMA), No 107 of 1998 and the EIA regulations (Government Notice R.543 to 546, published in June 2010). As part of the BA process HCAC was asked to evaluate and identify potential impacts of the proposed road upgrade from a Heritage point of view.

The following infrastructure and activities will be undertaken for the project and can have a negative impact on heritage resources in the area:

- Site clearing;
- Saw cutting of 200mm (width) of the existing asphalt road;
- Adding an additional asphalt lane 3.5m wide with a 1000mm shoulder on each side and adding the required road layer works as per the drawings;
- Removal of material on the existing shoulder and replacing it with the proper road layerworks;
- Cut and/ or fill necessary to build these additional lanes and shoulders;
- Relocate or replace when necessary any traffic signs;
- Remove any unnecessary traffic lines and paint the replacements markings in the locations described on the drawings;
- Remove and install prefabricated kerb as per drawings;
- Extension of the existing culverts (RCP and Precast Portal Culvert) including pipe and portal culvert bedding and backfill;
- Demolition of the existing concrete headwalls on the Precast Portal Culvert;
- Cast-in-place of the transition section for extension of Precast Portal Culvert as per drawings;
- Construction of the culvert headwalls for RCP and Precast Portal Culvert as per drawing;
- Stone pitching;
- Installation of the storm drain manhole;
- Guardrail installation;
- Traffic management.

### ***The study area***

The proposed upgrade of the existing road will be conducted within the shoulder of the road reserve that is extensively disturbed and this would have destroyed any surface evidence of heritage sites or features (Figure 1- 2). The proposed road upgrade consists of the R545 (approximately 1.4km) on the Farm Eensaamheid 534 JR.

The only known site close to the proposed upgrade section of the R545 is the well-known concentration camp of Balmoral, located approximately 1 km to the north of the upgraded section.



**Figure 1: Road reserve of the R545 to be expanded (Photo courtesy of Martin Ferreira)**



**Figure 2: Road reserve of the R545 to be expanded (Photo courtesy of Martin Ferreira)**

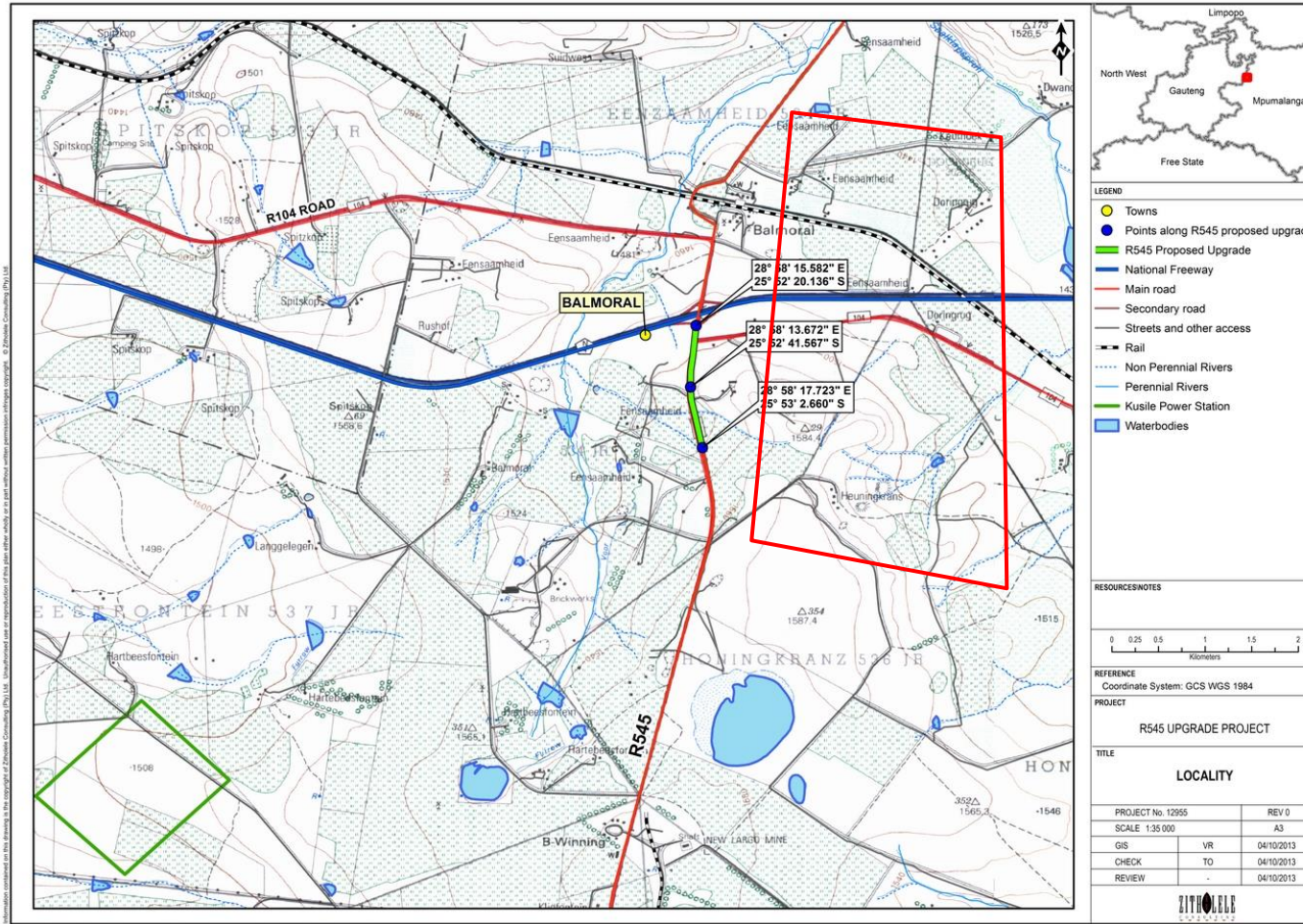
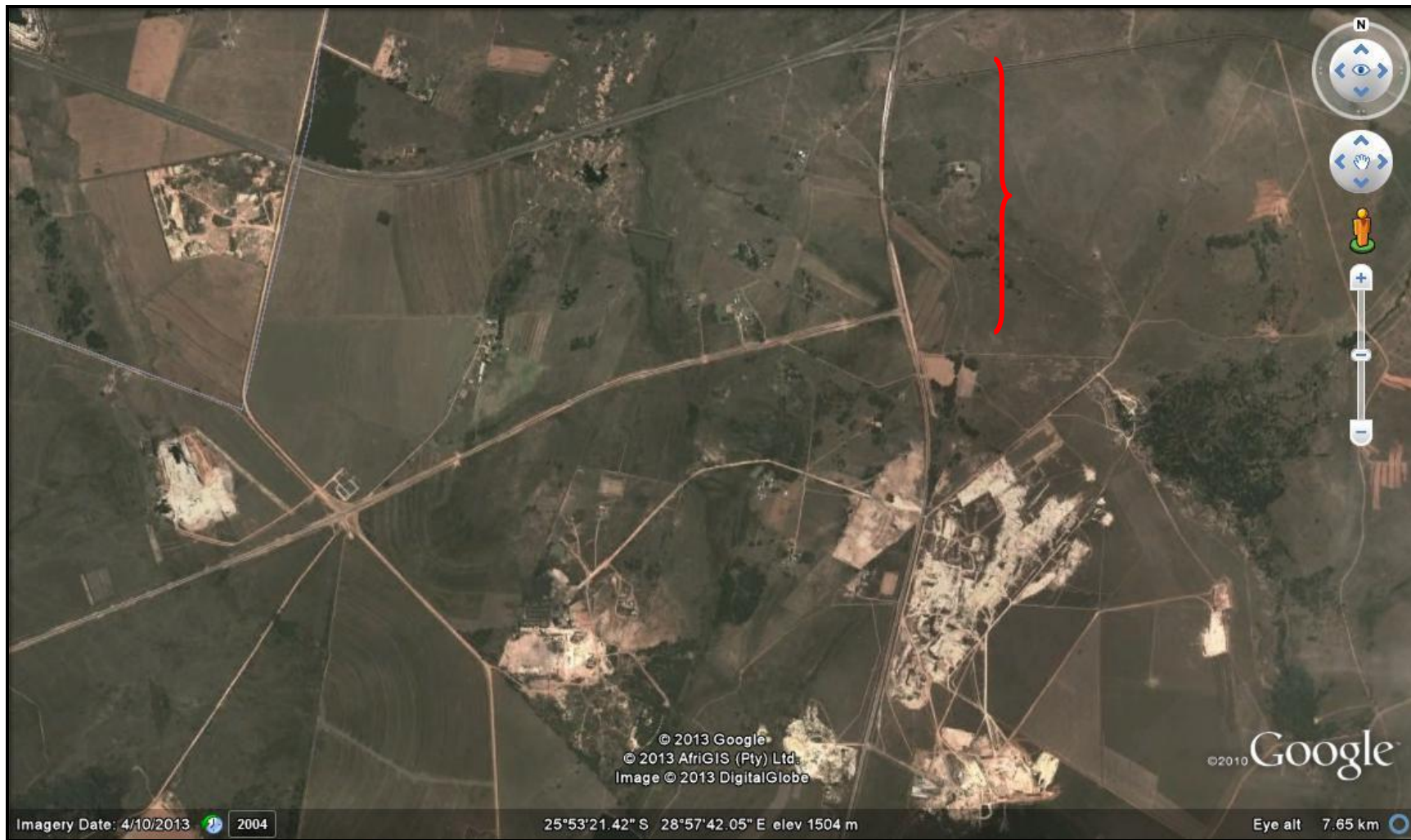


Figure 3: Locality Map





**Figure 4: Google image of the study area with the R545 indicated in red**

Potential archaeological impacts within the current road reserve is considered to be non-existent. Similarly the likelihood of palaeontological impact by the proposed road upgrade on bedrock sediments is considered to be extremely low.

### **Conclusion**

Zitholele Consulting has been appointed as the independent environmental consultants, to undertake the required Basic Assessment process for the project to identify and assess potential environmental impacts, and to propose appropriate mitigation and management measures as part of an Environmental Management Programme (EMP). They subsequently requested heritage input to identify potential impacts.

From a heritage perspective the disturbed character of the road reserve does not warrant a full Phase 1 study as it is anticipated that there is no archaeological sites, cultural heritage sites, historic structures, burial grounds or isolated artefacts likely to be present on the affected landscape, due to the disturbed nature of the site. As such, we support the recommendation that the project be exempted from any archaeological assessment studies or palaeontological studies. In the unlikely event that any sites might occur within the road reserve the following recommendations are to be included in the EMP and are the responsibility of the ECO of the project to implement these:

- If during construction any possible finds such as stone tool scatters, artefacts or bone and fossil remains are made, the operations must be stopped and a qualified archaeologist must be contacted for an assessment of the find.

If the above mentioned recommendations are adhered by we support the application for exemption from a Phase 1 Archaeological Impact Assessment and Palaeontological study.

Any further queries can be forwarded to Jaco van der Walt on Cell: +27 82 373 8491 or to [jaco.heritage@gmail.com](mailto:jaco.heritage@gmail.com)



Jaco van der Walt  
Archaeologist  
Heritage Contracts and Archaeological Consulting CC (HCAC)