upgrade of the National Route R37 between km 117.0 and km 143.87 from Modikwa Mine to Burgersfort

Our Ref: 12142



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Nokukhanya Khumalo

Tel: 021 462 4502

Email: nkhumalo@sahra.org.za

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Final Comment

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: SANRAL

Private Bag X 17 Lynnwood Ridge 0040

upgrade of the National Route R37 between km 117.0 and km 143.87 from Modikwa Mine to Burgersfort. The total extent of the project is 25.87 km. The project is located in the Mpumalanga Province within the Tubatse Local Municipality.

Chameleon Environmental Consultants (Pty) Ltd were appointed by SANRAL (SOC) Ltd to undertake a Basic Assessment process, for the upgrading of the R37 road from Modikwa Mine to Burgersfort. The extent of the upgrades will be 25.87 km, consisting of storm water drains and sub-surface drains, the widening of the road at certain locations, widening a bridge within the current road reserve and the replacement of culverts.

A Final Basic Assessment report has been compiled in support of an Environmental Authorisation, in terms of the National Environmental Management Act, 107 of 1998, as amended (NEMA). A Heritage Impact Assessment has been submitted to SAHRA, in terms of section 38 (8) of the National Heritage Resources Act, 25 of 1999 (NHRA). SAHRA issued an interim comment dated 06/03/2018, based on the HIA report and requested a PIA to process the development application further. A Palaeontological desktop study by Dr H. Fourie, in fulfilment of the interim comment requirements, has been submitted to the case for commenting.

Fourie, H. March 2018. Palaeontological Impact Assessment: Desktop Study. Proposed Improvement of the National Route R 37 Section 2 from Modikwa Mine to Burgersfort Fetakgomo –Tubatse Local Municipality, Sekhukune District Municipality, Limpopo Province Farm: Road reserve.

The author undertook a desktop study of the region which the National Route 37 crosses and assessed the underlying geology. The area has a moderate sensitivity for Cenozoic aged mammalian fossils that occur in the Quartenary Alluvium. A small section of the road expansion activities will come close to the Vermont Formation, Pretoria Group, Transvaal Supergroup, which has a High palaeontological sensitivity. The author recommends that the ECO monitors all excavations into the overburden and interburden, as fossils maybe uncovered. If any fossils are uncovered then they must be mitigation, after obtaining permission from SAHRA. Further recommendations include:

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- a. There is no objection (see Recommendation B) to the development, it is not necessary to request a Phase 1 Palaeontological Impact Assessment: Field study to determine whether the development will affect fossiliferous outcrops as the palaeontological sensitivity is MODERATE. A Phase 1 Palaeontological Field Study may be required if a fossiliferous formation (for example breccia) or fossils are found.
- b. This project may benefit the economy, the growth of the community and social development in general.
- c. Preferred choice: The impact on the palaeontological heritage is MODEARTE for the Quaternary. Care must be taken during the grading of roads, digging of foundations and removing topsoil, subsoil and overburden (see Executive Summary) or blasting of bedrock. A small section of the R 37 upgrade near Burgersfort is close to the Vermont Formation, this Formation has a HIGH palaeontological sensitivity, caution is recommended (see geological map).
- d. The following should be conserved: if any palaeontological material is exposed during digging, excavating, drilling or blasting SAHRA must be notified. All construction activities must be stopped and a palaeontologist should be called in to determine proper mitigation measures. A palaeontologist / archaeozoologist should visit the site once a month during digging and excavation.

Final Comment

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the HIA and PIA reports and the recommendations contained within the reports. The following additional recommendations must be included in the EMPr:

- The Buffer zone area around the identified cemetery must be increased to 30 m and demarcated with danger tape throughout the construction phase.
- The ECO must monitor all excavations in the Vermont Formation, if any fossils are uncovered then Appendix 2 Protocol for Finds procedure must be implemented.
- The following should be conserved: if any palaeontological material is exposed during digging, excavating, drilling or blasting SAHRA must be notified. All construction activities must be stopped and a palaeontologist should be called in to determine proper mitigation measures. A palaeontologist / archaeozoologist should visit the site once a month during digging and excavation.

As the Final BAR has been completed, this comment must be forwarded directly to the competent authority for their decision-making process and a proof of the submission of SAHRA's comment must be provided to SAHRA

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

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Enquiries: Nokukhanya Khumalo

Tel: 021 462 4502

Email: nkhumalo@sahra.org.za

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Yours faithfully

Nokukhanya Khumalo Heritage Officer

South African Heritage Resources Agency

Phillip Hine

Acting Manager: Archaeology, Palaeontology and Meteorites Unit

South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/488049

(DEA, Ref: 14/12/16/3/3/3/1873)

Terms & Conditions:

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.