



21 February 2023

Ms N. Higgitt
Manager: Development Applications Unit
South African Heritage Resources Agency
111 Harrington Street
Cape Town

**RE: FINAL WALKDOWN REPORT FOR THE APPROVED KARREEBOSCH WEF NEAR SUTHERLAND
SAHRIS CASE 19361**

In August 2022, CTS Heritage completed a Final Walkdown Report for the above approved development. As noted in the Walkdown Report;

“The Karreebosch WEF was previously referred to as Phase 2 of the Roggeveld WEF. SAHRA has made numerous comments on both the Roggeveld WEF HIA (Hart and Webley, 2013) and the Karreebosch WEF HIA (Hart and Kendrick, 2014) with the last comment issued on 26 September 2018 as part of the 2018 Part 2 EA Amendment process (14/12/16/3/3/2/807/AM2) for the Karreebosch WEF. As such, section 38(8) of the NHRA has been complied with.

On 26 September 2018, SAHRA issued a Final Comment on the Karreebosch WEF development in terms of section 38(8) of the NHRA. In this comment, SAHRA endorsed and supported the recommendations made in the Heritage Impact Assessment and made a number of recommendations (see attached Annexure A). SAHRA’s Final Comment stated:

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit notes the proposed amendment and is satisfied that the proposed changes to the project will not impact significant heritage resources. The comments provided in the Final Comment for Case ID 4503 with regards to turbines 28 and 29 are still valid and must be adhered to. The following additional conditions must be included in the Environmental Management Programme (EMPr):

- The final Amendment Report must be submitted to the SAHRIS Case application for record purposes;
- The condition provided in SAHRIS Case ID 473 with regards to the 3 km buffer from the R354 for the original Roggeveld WEF is amended to 1 km so that Phase 2 (Karreebosch) is aligned with the condition provided for Phase 1 of the project as per the Final Comment issued on SAHRIS Case ID 4503;
- If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Natasha Higgitt/Phillip Hine 021 462 5402) must be alerted. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Thingahangwi Tshivhase/Mimi Seetelo 012 320 8490), must be alerted immediately. A professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of



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archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA;

- Should the project be granted the amended Environmental Authorisation, SAHRA must be notified and all relevant documents submitted to the case file.”

A Palaeontological Assessment was conducted by Almond (2015) for the Karreebosch WEF (Figure 2, Appendix to the ACO Report 2015, SAHRIS Ref 183350). According to Almond (2015), “*The fluvial Abrahamskraal Formation (Lower Beaufort Group, Karoo Supergroup) that underlies almost the entire wind farm study area is known for its diverse fauna of Permian fossil vertebrates - notably various small- to large-bodied therapsids and reptiles - as well as fossil plants of the Glossopteris Flora and low diversity trace fossil assemblages. However, desktop analysis of known fossil distribution within the Main Karoo Basin shows a marked paucity of fossil localities in the study region between Matjiesfontein and Sutherland where sediments belonging only to the lower part of the thick Abrahamskraal Formation succession are represented.*”

Bedrock exposure levels in the Karreebosch WEF study area are generally very poor due to the pervasive cover by superficial sediments (colluvium, alluvium, soils, calcrete) and vegetation. Nevertheless, a sufficiently large outcrop area of Abrahamskraal Formation sediments, exposed in stream and riverbanks, borrow pits, erosion gullies as well as road cuttings along the R354, has been examined during the present fieldwork to infer that macroscopic fossil remains of any sort are very rare indeed here. Exceptions include common trace fossil assemblages (invertebrate burrows) and occasional fragmentary plant remains (horsetail ferns). Levels of tectonic deformation of the bedrocks are generally low and baking by dolerite intrusions (Early Jurassic Karoo Dolerite Suite) is very minor. It is concluded that the Lower Beaufort Group bedrocks in the study area are generally of low palaeontological sensitivity and this also applies to the overlying Late Caenozoic superficial sediments (colluvium, alluvium, calcrete, soils *etc.*)”

Summary of heritage recommendations from the completed reports (Hart and Kendrick 2014):

The Palaeontological Impact Assessment recommended:

- Field inspection of borrow pits, turbine footing excavations and cable tranches.
- Mitigation normally involves recording and/or collection of fossil material with a permit issued by SAHRA and/or Heritage Western Cape;
- It seems unlikely that any infrastructure will have to be repositioned;
- Selective monitoring of substantial excavations may be required.

The recommendations emanating from the PIA listed above have been pulled through into the EMP for the project and so these recommendations will be applied during the construction phase of the development.

As far as can be determined from the correspondence, SAHRA has indicated no concerns with the palaeontological assessment completed by Almond (2015). At no point in the history of this project with SAHRA, including for the amendment applications for which submissions to SAHRA were made, were there any additional requirements made in terms of assessing impacts to palaeontology, nor did the PIA that was



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completed by Almond (2015) recommend a pre-construction walkdown. Furthermore, it must be reiterated that the conclusion of the PIA is that **“the Lower Beaufort Group bedrocks in the study area are generally of low palaeontological sensitivity and this also applies to the overlying Late Cenozoic superficial sediments (colluvium, alluvium, calcrete, soils etc).”**

As such, it is with great surprise that SAHRA’s Final Comment on the Walkdown Report completed for the Karreebosch WEF required that:

“A field-based PIA must be conducted following the approval of the EA amendment, before construction starts to assess potential impacts and to propose site-specific mitigation measures. The PIA must be submitted to SAHRA for review prior to construction,”

To date, the applicant has complied with all of SAHRA’s comments and requirements, but is however concerned with this additional requirement. To this end, please advise regarding the following:

- Reasons why a new field-based PIA is required at this late stage of the development application
- Reasons why the PIA completed by Almond (2015) and the recommendations contained therein are insufficient to manage any anticipated impacts to palaeontological heritage resources, especially considering the conclusion of the PIA report that the study area is generally of low palaeontological sensitivity

In light of the above, we kindly request that SAHRA reassess the requirement for an additional field-based PIA for this project as communicated in the letter dated 6 December 2022.

We look forward to your urgent response to these queries. Please feel free to contact me should you have any further questions or concerns in this regard.

Yours sincerely

Jenna Lavin

Accredited member of AHP

Member of ASAPA