



an agency of the
Department of Arts and Culture

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Enquiries: Sityhilelo Ngcatsha
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CaseID: 15827

Date: Monday May 31, 2021
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Final Comment

In terms of Section 38(4), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Savannah Environmental (Pty) Ltd

PO Box 148
Sunninghill
2157

South Africa Mainstream Renewable Power Developments (Pty) Ltd is proposing the construction and operation of the 100 MWac Vrede Photovoltaic (PV) Solar Energy Facility (SEF) and Battery Energy Storage System (BESS), near the town of Kroonstad in the Moqhaka Local Municipality (Fezile Dabi District) of the Free State Province of South Africa. The proposed development traverses two (2) farm parcels namely: » Farm Vrede, No. 1152, Remaining Extent; » Farm Uitval, No 1104, portion 1

South Africa Mainstream Renewable Power Developments (Pty) Ltd appointed Savannah Environmental (Pty) Ltd to undertake an Environmental Authorisation application for the proposed construction and operation of the 100 MW Vrede Photovoltaic Solar Energy Facility, Battery Energy Storage System (BESS) and associated infrastructure located near Kroonstad in the Moqhaka Local Municipality, Fezile Dabi District in the Free State Province.

A draft Scoping Report (SR) has been submitted in terms of the National Environmental Management Act (NEMA; Act No. 107 of 1998) and the NEMA 2014 EIA Regulations, as amended. The project site has an extent of 538ha and will be located within the Remaining extent of the Farm Vrede No. 1152, and Portion 1 of the farm Uitval No. 1104, It will be connected to the grid via a separately authorised grid connection solution.

The infrastructure associated with the facility includes solar PV array, inverters and transformers, cabling, on-site facility substation, battery energy storage system (BESS), site offices and maintenance buildings, laydown areas and access roads, fencing around the development area and telecommunication infrastructure, stormwater channels; and water pipelines.

CTS Heritage has been appointed to provide heritage specialist input as part of the EA application as required by section 24(4)b(iii) of NEMA and section 38(3) and 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA).



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Lavin, J. 2020. Heritage Screening Assessment for the Proposed development of the Vrede Solar Energy Facilities near Kroonstad, Free State Province.

The study area is underlain by the Adelaide Subgroup (Karoo Supergroup) and Jurassic Dolerite intrusions and overlain by Quaternary Sands (Qs). The areas proposed for development are underlain by sediments of moderate to very high palaeontological sensitivity as per the SAHRIS PalaeoSensitivity Map. Based on other heritage finds in the broader Kroonstad area, potential exists for archaeological resources within the development area.

It is likely that the proposed development will negatively impact on significant archaeological and palaeontological heritage resources. As such, it is recommended that an HIA is required.

An interim Comment dated 15/01/2021 was issued by SAHRA which requested the submission of the Heritage Impact Assessment (HIA) inclusive of an Archaeological and Palaeontological Impact Assessment along with the Final Scoping Report.

The Final Scoping Report was uploaded to the case on the 19/01/2021 which notes the comment from SAHRA. The response on Page 10 and 11 of Appendix C8 states that the Heritage Specialist study will be submitted and the EIA and its appendices will be uploaded to the case at the start of the public review period.

An interim comment dated 26/01/2021 was issued which noted that heritage specialist studies will be submitted along with the EIA report. The EIA, Archaeological Impact Assessment (AIA) and Palaeontological Impact Assessment (PIA) reports along with the Integrated HIA report were submitted to the case on the 30/04/2021.

Chapelle, KJC. 2020. Palaeontological Specialist Study: Proposed development of the Vrede and Rondawel Solar Energy Facilities near Kroonstad, Free State Province

Development area is underlain by the Adelaide Subgroup (Karoo Supergroup) and unfossiliferous Jurassic dolerite intrusions along with Quaternary Sands (Gordonia Formation). The Gordonia Formation is known to contain calcretised insect burrows rhizoliths, ostrich egg shells, shells of land snails, bivalves and gastropods along with ostracods, charophytes, diatoms, stromatolites and mammalian ichnofossils. The Adelaide Subgroup is very highly sensitive for palaeontological heritage and forms part of the *Daptocephalus*, *Dicynodon* and *Lystrosaurus* Assemblage Zones. It is known to include fossils of fish,



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amphibians, reptiles, therapsids and vertebrate burrows as well as freshwater bivalves, trace fossils and sparse to rich assemblages of vascular plants and insects. No fresh fossil bearing outcrop was identified on the property and no fossils were identified.

Recommendations

- All excavations into bedrock are monitored by a suitably qualified palaeontologist and a report on the outcomes of the monitoring activities must be submitted to SAHRA on completion of the development of the facility.
- All other excavation activities are subject to the Palaeontological Chance Finds Procedure (Appendix 1 of this report).

Lavin, J. Stratford, D, 2021, Archaeological Specialist Study: Proposed development of the Vrede and Rondavel Solar Energy Facilities near Kroonstad, Free State Province

No constraints or limitations were experienced in the assessment of the Vrede site. No archaeological material were identified during the field survey. The majority of this property has been disturbed by various farming activities and very limited potential for the preservation of *in-situ* cultural remains.

Final Comment

The following comments are made as a requirement in terms of section 3(4) of the NEMA Regulations and section 38(8) of the NHRA in the format provided in section 38(4) of the NHRA and must be included in the Final EIA report and EMP:

- 38(4)a – The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit has no objections to the proposed development;
- 38(4)b – The recommendations of the specialists are supported and must be adhered to. Further additional specific conditions are provided for the development as follows;
- The monitoring report by the palaeontologist must be submitted upon completion of the construction phase that includes site clearance and excavations.
- 38(4)c(i) – 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

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concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Sityhilelo Ngcatsha/Phillip Hine 021 462 5402) must be alerted as per section 35(3) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;

- 38(4)c(ii) – 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 as per section 36(6) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)d – See section 51(1) of the NHRA;
- 38(4)e – The following conditions apply with regards to the appointment of specialists:
 - i) If heritage resources are uncovered during the course of the development, a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the heritage resource. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA;
 - The Final EIA Report and EMPr must be submitted to SAHRA for record purposes;
 - The decision regarding the EA Application must be communicated to SAHRA and uploaded to the SAHRIS Case application.

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

Yours faithfully

Sityhilelo Ngcatsha
Archaeology, Palaeontology, Meteorite Assistant
South African Heritage Resources Agency

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Phillip Hine
Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <https://sahris.sahra.org.za/node/546559>

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.