



an agency of the
Department of Arts and Culture

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Enquiries: Natasha Higgitt

Date: Wednesday June 08, 2016

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Email: nhiggitt@sahra.org.za

CaseID: 8724

Final Comment

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

Attention: Genesis Woodhouse Solar 2 (Pty) Ltd

WOODHOUSE SOLAR 2 PV FACILITY AND ASSOCIATED INFRASTRUCTURE, NORTH WEST PROVINCE Project Names: Woodhouse Solar 2 PV Facility Applicant: Genesis Woodhouse Solar 2 (Pty) Ltd Location: The facility is planned on the Remaining Extent of the Farm Woodhouse 729, ~10km south east of Vryburg within the Naledi Local Municipality, North West Province. Proposed Activity: The construction of two solar photovoltaic (PV) facilities, with a contracted capacity of up to 100MW each. The development footprint for each facility will be ~300ha in extent and will include the following infrastructure: » Arrays of PV panels with a capacity of up to 100MW » Mounting structures to support the PV panels. » On-site inverters and substation » A new 132kV power line between the on-site substation and the Eskom grid connection point. Three alternative grid connection options include the authorised Eskom Bophirima Substation, the existing Mookodi 400/132KV Substation and the existing Woodhouse 88/22KV Substation. » Cabling between the project components, to be laid underground where practical. » Offices and workshop areas for maintenance and storage. » Temporary laydown areas. » Internal access roads and fencing around the development area.

Savannah Environmental (Pty) Ltd was appointed by Genesis Woodhouse Solar 2 (Pty) Ltd to conduct an Environmental Impact Assessment (EIA) process in support of an Environmental Authorisation Application for the proposed Woodhouse Solar 2 PV Facility, near Vryburg, North West Province. A draft EIA was conducted in terms of the National Environmental Management Act, 1998 (NEMA) and the EIA Regulations, 2014. The proposed Woodhouse Solar 2 project will cover an area of approximately 240 ha with infrastructure such as PV panel arrays, on-site inverters, on-site sub-station, four alternatives for a 132kV grid connection, cabling between project components, temporary laydown areas, internal access roads, site office and workshop areas. Two alternative locations are being considered for this project. Heritage Contracts and Archaeological Consulting was appointed to conduct the Archaeological Impact Assessment (AIA) and Elize Butler of the Bloemfontein National Museum was appointed to conduct the Palaeontological Impact Assessment (PIA).

Van der Walt, 2016. Archaeological Impact Assessment Report for the Proposed Woodhouse Solar 2 PV Facility close to Vryburg North West Province.

A total of 21 heritage resources were identified in Alternative 1 and 5 heritage resources were identified in



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Alternative 2. All of the identified sites consist of Middle Stone Age (MSA) and some Late Stone Age (LSA) lithics. Site no. 385-386, 397-398, 417-419 consist of a higher concentration of Stone Age material and are more significant than the surface find spots.

Recommendations provided in the report include the following:

- If Site Alternative 1 is decided by the developer, and the stone age sites (385-386, 397-398, 417-419) cannot be preserved in situ, it is recommended that a surface sample is collected and that the site is dated prior to applying for a destructive permit from SAHRA;
- All ground works should be monitored and where any stratigraphic profiles in context with Stone Age material are exposed, these should be sampled and dated;
- The footprint of Alternative 2 was subjected to a high level scan. If this option is decided on by the developer the impacts to heritage resources are considered to be lower compared to Site Alternative 1. The development footprint will however have to be subjected to a walk-through and some mitigation will be required based on the outcome of the walk-through;
- A Chance Finds Procedure should be included in the EMP. If during the pre-construction phase, construction, operations or closure phases of the project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or rock engraving, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager. It is the responsibility of the senior on-site manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area. The senior on-site manager will inform the ECO of the change find and its immediate impact on operations. The ECO will then contact a professional archaeologist for an assessment of the finds who will notify the SAHRA; and
- If during the pre-construction phase or during construction, any archaeological finds are made (e.g. graves, stone tools, and skeletal material), the operation must be stopped, and the archaeologist must be contacted for an assessment of the finds. Due to the subsurface nature of archaeological material and graves the possibility of the occurrence of unmarked or informal graves and subsurface finds cannot be excluded.

Butler, 2016. Palaeontological Impact Assessment of the proposed Woodhouse Solar 2 PV Facility and associated infrastructure on the remaining extent of farm Woodhouse 729, near Vryburg, North West Province.

The proposed development is underlain by the Schmidtsdrift and Vryburg Formation of the Ghaap Group, and the Dwyka of the Karoo Supergroup. Trace fossils and fossilized plant remains may be present within the Dwyka group formation located in small outcrops in the north-western and south-eastern section of the



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development footprint, however the likelihood is low. The central section is underlain by the Vryburg formation which is entirely unfossiliferous, while the Schmidtsdrift subgroup is located in the south-western margin of the project footprint. Stromatolites assemblages have been recorded in this subgroup and represent some of the oldest examples of microbial fossils in South Africa. Several stromatolites were identified within the development footprint and are highly sensitive.

Recommendations provided in the report include that a qualified palaeontologist should survey, record and describe fossil heritage located within the development footprint before construction commences. Excavation of fossil heritage will require a permit from SAHRA and the material must be housed in a permitted institution.

Final Comment

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the submitted AIA and PIA promotes the recommendations included in the reports. The following additional conditions must be included in the Environmental Management Programme (EMPr):

- A buffer of 20 m should be maintained around sites 385-386, 397-398, 417-419. A Conservation Management Plan (CMP) should be developed for the in-situ conservation of these sites and submitted to SAHRA upon completion;
- Should it not be possible to maintain the above mentioned buffer throughout the construction and operational phase, a permits in terms of section 35 of the National Heritage Resources Act, 1999 (NHRA) must be applied for mitigation. The archaeological material must be mitigated by a qualified archaeologist. Mitigation can include excavations, surface collection and sub-surface testing. An agreement with a recognized repository must be sought for the long term curation of excavated and collected material. The results of the mitigation must be collated in a Permit Report that must be submitted to SAHRA upon completion;
- The identified stromatolites must be mitigated through excavation and collection prior to the construction phase. A permit in terms of section 35 of the National Heritage Resources Act, 1999 (NHRA) must be applied for mitigation by a qualified palaeontologist. An agreement with a recognized repository must be sought for the long term curation of excavated and collected material. The results of the mitigation must be collated in a Permit Report that must be submitted to SAHRA upon completion; and
- 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 (Itumeleng Masiteng/Mimi Seetelo 012

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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 archaeological or palaeontological significance, a Phase 2 rescue operation may be required.

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

Yours faithfully

Natasha Higgitt
Heritage Officer
South African Heritage Resources Agency

Phillip Hine
SAHRA Head Archaeologist (Acting)
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/343614>
(DEA, Ref:)

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.

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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.