Our Ref:



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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: Natasha Higgitt Date: Wednesday June 29, 2016

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Email: nhiggitt@sahra.org.za

CaseID: 9461

Final Comment

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

Attention: Perception Heritage Planning

PO Box 9995 GEORGE 653

PROPOSED DEVELOPMENT OF HUMANSRUS SOLAR PV FACILITY 4 ON THE FARM HUMANSRUS 147, PRIESKA DISTRICT AND PIXLEY KA SEME DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE

Cape Environmental Assessment Practitioners (Pty) Ltd has been appointed by Humansrus Solar 4 (Pty) Ltd to conduct an Environmental Impact Assessment (EIA) process in support of an Environmental Authorisation Application for the proposed Humansrus Solar 4 PV Facility, on Farm Humansrus 147, Prieska, Northern Cape Province. A draft EIA was conducted in terms of the National Environmental Management Act, 1998 (NEMA) and the EIA Regulations, 2014. The proposed 75MW solar park will consist of solar photovoltaic panels, on-site switching station/substation, inverter stations, transformers and internal electrical reticulation (underground cabling), grid connection to existing Kronos Substation, rainwater tanks, laydown area, control centre, office, warehouse, access and internal roads, and perimeter fencing. The development footprint will cover approximately 270 ha and there are two alternative locations for the proposed solar park with second covering an area of 250 ha. Perception Planning was appointed to conduct an Integrated Heritage Impact Assessment (HIA), which comprised an Archaeological Impact Assessment (AIA), Visual Impact Assessment (VIA) and a Palaeontological Letter of Exemption (LoE).

Webley, 2016. Archaeological Impact Assessment: Proposed Construction of Humansrus Solar 4 on a portion of the farm Humansrus 147, near Copperton, Northern Cape.

Early Stone Age (ESA) and Middle Stone Age (MSA) stone artefacts surface scatters of low significance were identified throughout the proposed Humansrus 3 development footprint.

Recommendations provided in the report include the following:

- Either layout (Alternative 1 and Alternative 2) is acceptable,
- If during ground clearance or concentration, any dense accumulations of stone tools, particular if they are associated with ostrich eggshell fragments, are uncovered then the Environmental Control Officer (ECO) should report this to SAHRA;



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 If any human remains are uncovered during construction, the ECO should have the area fenced off and contact SAHRA.

Almond, 2016. Recommended Exemption from Further Palaeontological Studies: Proposed construction of Humansrus Solar 4 Alternative Energy Facility on Farm 147, Humansrus near Copperton, Siyathemba Municipality, Northern Cape.

The author concluded that the project area is underlain by igneous and metamorphic Precambrian basement rocks which are unfossiliferous. The overlying sediments of the Dwyka Group may contain a minimal record of fossils such as stromatolites, while the calcretes and Aeolian sands of the Kalahari Group may contain mammalian bone and teeth; however, this is a rare occurrence. The impact to palaeontological resources is considered to be low and no further mitigation or studies are recommended.

De Kock & Narainne, 2016. Integrated Heritage Impact Assessment in terms of section 38(8) of the National Heritage Resources Act, 1999 (Act 25 of 1999): Proposed Development of Humansrus Solar PV Facility 4 on the farm Humansrus 147, Prieska District and Pixley Ka Seme District Muncipality, Northern Cape Province.

The Integrated HIA took into account the results from the AIA and the Palaeontological LoE as discussed above as well as an archival background study and results from the VIA conducted for the EIA.

The HIA describes the location for the proposed development as a typical Karoo stock farming landscape and defined by flat, open space with sparse, low-growing vegetation. The VIA concluded that the proposed development would not cause a significant visual impact to the characteristic landscape as it is in close proximity to the Copperton mine and tailings storage facility, and an old railway and borrow pits have degraded the landscape. The R357 road has not been identified as a scenic route and the impact to the road will be medium to low during the construction phase after mitigation. The HIA reiterated the results of the AIA and Palaeontological LoE and noted their recommendations.

Additional recommendations provided in the HIA include the following:

- The proposed layout should maintain a 75 m buffer from the R357;
- The power lines should follow existing transmission line corridors;
- Dust control measures should be implemented when required;
- Night-time light pollution should be reduced;
- Should any substantial fossil remains be encountered during excavation, these should be safeguarded, preferably in-situ, and reported by the ECO to SAHRA as soon as possible so that appropriate action

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can be taken by a professional palaeontologist, at the developer's expense. Mitigation would normally involve the scientific recording and judicious sampling or collection of fossil material as well as associated geological data by a professional palaeontologist.

Final Comment

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the recommendations provided in the AIA, Palaeontological LoE and HIA. The recommendations noted above and the following additional conditions must be included in the Final EIA and Environmental Management Programme (EMPr):

• 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 (e.g. trace fossils or stromatolites) 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 012 320 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 at the expense of the developer. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required at the expense of the developer.

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

Humansrus Solar PV Facility 4

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CaseID: 9461

Phillip Hine

SAHRA Head Archaeologist (Acting)

South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/362315

(DEA, Ref: 14/12/16/3/3/2/887)

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.