Our Ref:



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: Natasha Higgitt

Tel: 021 462 4502

Email: nhiggitt@sahra.org.za

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Final Comment

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

Attention: Sivest - Gauteng

PO BOX 2921 Rivonia 2128

BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) intends to develop the Tlisitseng 1 132kV Substation and 132kV power line (hereafter referred to as the "proposed development") near Lichtenburg in the North West Province of South Africa. SiVEST SA Pty (Ltd) (hereafter referred to as SiVEST) has been appointed as Independent Environmental Assessment Practitioner (EAP) to undertake the Basic Assessment (BA) for the proposed development. The overall objective of the project is to feed the electricity generated at the Tlisitseng 1 solar photovoltaic (PV) energy facility (part of a separate ongoing process) back into the National Grid by constructing the proposed Tlisitseng 1 substation and power line.

Sivest SA Pty (Ltd) has been appointed by BioTherm Energy (Pty) Ltd to conduct a Basic Assessment Process in support of an Environmental Authorisation Application for the proposed construction of the Tlisitseng 1 and Tlisitseng 2 132kV Substation and Powerline near Lichtenburg, North West Province. A draft Basic Assessment Report (dBAR) has been submitted for each application in terms of the National Environmental Management Act, Act No 107 of 1998 (NEMA) and the NEMA 2014 Environmental Impact Assessment (EIA) Regulations. The proposed development will include the construction of a substation and powerline to connect the proposed Tlisitseng 1 and 2 Solar PV Energy Facility to the existing Eskom Watershed substation. Please note that this comment refers to the separate EA applications, DEA Reference numbers are still pending.

PGS Heritage (Pty) Ltd was appointed to conduct the Heritage Impact Assessment (HIA) for both EA Applications. Dr Gideon Groenewald was appointed to conduct the Palaeontological Impact Assessment (PIA) for the HIA.

Fourie, W. 2016. Tlisitseng Project – Tlisitseng 1 Substation and Power Line: Heritage Impact Assessment.

Fourie, W. 2017. Tlisitseng Project – Tlisitseng 2 Substation and Power Line: Heritage Impact Assessment.

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Groenewald, G. 2016. Tlisitseng Project – Tlisitseng 1 Substation and Power Line: Palaeontological Assessment Report

Groenewald, G. 2017. Tlisitseng Project – Tlisitseng 2 Substation and Power Line: Palaeontological Assessment Report

Six occurrences of out of context stromatolites were identified within the proposed powerline route for Tlisitseng 1 and 11 photographic observations within the proposed powerline route for Tlisitseng 2. The stromatolites were not found to be highly significant however the presence of cave breccias would need to be confirmed after the completion of the geotechnical surveys. No other heritage resources were identified within the proposed development area.

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Recommendations provided in the report include the following:

- Although no significant fossils were recorded in situ in both PV sites as well as the proposed alternative
 route corridors for the power lines, several well-defined micro-stromatolites and possible sites with
 cave breccia have been identified. Depending on the results of the geotechnical investigation and
 where potential excavations for foundations will exceed 1.5m, the ECO must investigate the possible
 presence of stromatolites and/or cave breccia and inform the HIA consultants immediately for
 appropriate action and appointment of a qualified palaeontologist to investigate the site before
 destruction of fossils occurs;
- Monitoring of construction activities by palaeontologist if indicated after completion of geotechnical report;
- Site visits as stipulated in the management tables will include an initial 2-day site visit and then fortnightly during construction; and
- Such mitigation measures will require a permit from SAHRA before mitigation can be done as well as a final destruction permit on completion of the mitigation work.

Final Comment

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the heritage specialist reports and the recommendations contained therein, and has no objection to the proposed development. The recommendations of the heritage specialists and the following conditions must form part of the Environmental Management Programme (EMPr) of the project:

• Palaeontological monitoring reports must be submitted to SAHRA upon completion of the construction

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phase;

• The Final BAR and EMPr must be submitted to SAHRA via the SAHRIS Case application upon final submission to the relevant competent authority;

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- 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/John Gribble 021 462 5402) must be alerted. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (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 archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA; and
- If the development receives an Environmental Authorisation (EA), SAHRA must be informed and all documents pertaining to the EA must be uploaded to the SAHRIS Case file.

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

John Gribble

Manager: Maritime and Underwater Cultural Heritage Unit / Acting Manager: Archaeology, Palaeontology and

Meteorites Unit

Tlisitseng 1 and 2 Power Line and Substation

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tasha Higgitt Date: Monday May 22, 2017

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South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/396995

(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.
- 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.