

Our Ref:



an agency of the  
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town  
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CaseID: 10183

Date: Monday March 13, 2017  
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## Interim Comment

### In terms of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Ms Jasandra Nyker  
BioTherm Energy  
BioTherm Energy (Pty) Ltd  
PO Box 69408  
BRYANSTON  
2021

**BioTherm Energy (Pty) Ltd has proposed the development of three Wind Energy Projects within the Western Cape and a portion of the Northern Cape. The wind energy developments will have a capacity of up to 250 MW. This application is specific to the Maralla West Wind Energy Facility. The facility is located on Portion of Farm Drie Roode Heuvels RE/180, Farm Annex Drie Roode Heuvels RE/181, Farm Wolven Hoek 1/182, NS Farm Wolven Hoek 2/182. This project is located within the Northern Cape Province.**

WSP| Parsons Brinckerhoff was appointed by BioTherm Energy (Pty) Ltd to conduct an Environmental Impact Assessment Process for the proposed Maralla West Wind Energy Facility near Sutherland, Northern Cape Province. A Draft Scoping Report was completed in term of the National Environmental Management Act, 1998 (NEMA) and the Environmental Impact Assessment (EIA) Regulations 2014. The proposed development will comprise the construction of a 250MW wind energy facility of up to 125 turbines covering approximately 200 ha. Turbines will be up to 120 m high and the foundations will be 20 m in diameter by 3 m deep. Associated infrastructure will include turbine transformers, operations and maintenance building assessment site, construction camp, laydown area, cement batching plant, internal roads (60 km), fencing, sewage systems, on-site substation, underground cables, powerlines, access roads, administration, control and warehouse buildings. The powerlines will be assessed through a separate Basic Assessment Processes.

ACO Associates cc: Archaeology and Heritage Specialists and Natura Viva cc were appointed to conduct the Heritage Impact Assessments and Palaeontological Impact Assessment (PIA) for the project respectively.

*Halkett, D and Webley, L. 2017. Heritage Impact Assessment: Proposed Construction of the Maralla West Wind Energy Facility near Sutherland in the Northern Cape*

A total of 37 heritage resources were identified within the proposed Maralla West WEF. These sites include several Later Stone Age sites, a large late 19<sup>th</sup> century settlement include graves, historic farmhouses, 19<sup>th</sup>



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century vernacular cottage, and isolated graves were identified. The overall landscape has been rated as a landscape of Grade IIIa cultural significance.

The following recommendations were provided in the HIA:

- Highly sensitive areas have been identified and must be declared no-go areas during construction: The vernacular cottage on the farm Wolven Hoek; the River Settlement – LSA sites with pottery along a river bed; Road Settlement – Remains of a later 19<sup>th</sup> century settlement (including graveyard) on both sides of the public gravel road on Drie Roode Heuvels (Die Kom) on Maralla West;
- No-Go areas must be avoided;
- If there are any significant changes to the layout of the wind turbines, then a walk down of the proposed facility is recommended as part of the EMPr;
- It is recommended that there is a walk down of all river crossings during the EMP phase of the project, once the final location of the access roads and cable crossings has been finalised of the EMPr, to ensure that no heritage resources are destroyed;
- If any archaeological remains, including human remains, are uncovered during construction, then work must stop in that area and the responsible heritage authorities (SAHRA or Heritage Western Cape) must be notified;
- The potential visual impacts of the proposed facility on the heritage resources of the area (i.e. the results of the VIA), must be integrated with the heritage study. It is assumed that a buffer will be required along the R354, as the road between Matjiesfontein and Sutherland is considered a scenic tourism route;
- The access road and underground cabling which run within a few metres of the Wolven Hoek farmhouse must be relocated. This will require careful placement, since there is a stone kraal on the opposite side of the road;
- Since heritage resources (in particular LSA sites with pottery) are concentrated in the river valleys, it is important that access roads and underground cabling is carefully placed to avoid negative impacts to heritage sites along rivers. This will require a final walk down during the EMP phase, of all river crossings;
- The gravel farm road which bisects Drie Rode Heuvels, has cut through an historic ruined settlement, separating the ruins from the graveyard. Any widening of the gravel road will result in the destruction of the graves. Avoid widening the access road;
- If any human remains are uncovered during the excavations for the Wind Farm, work must stop in that area and SAHRA must be alerted immediately; and
- Any abandoned farm buildings (such as Wolven Hoek) should be protected from vandalism during the operational phase of the wind farm. If there are any proposals for adaptive re-use of the building during



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the operational phase of the wind farm, then the provisions of the NHRA must be complied with regarding any restoration or renovation of the building.

*Almond, J. 2016. Maralla Wind Energy Facility near Sutherland, Northern Cape and Western Cape: Palaeontological Heritage Assessment.*

The proposed project area is underlain by the Abrahamskraal Formation which are overlain by Late Caenozoic superficial deposits.

A two day site visit was conducted and no fossils were recorded within the project area, however impression casts of reedy plant stems, burrows and wave rippled sandstone bedding were identified. The overall impact significance of the proposed project is rated as low. Cumulative impacts are the various wind energy development projects in the area are assessed as medium without mitigation. It is noted that borrow pit sites will only be identified during the preferred bidder process. Separate palaeontological assessments of all borrow pit sites will be necessary in the pre-construction phase.

The following recommendations were provided in the PIA:

- The Environmental Control Officer (ECO) responsible for the WEF development should be made aware of the potential occurrence of scientifically-important fossil remains within the development footprint;
- During the construction phase all major clearance operations (e.g. for new access roads, turbine placements) and deeper (> 1 m) excavations should be monitored for fossil remains on an on-going basis by the ECO;
- Should substantial fossil remains -such as vertebrate bones and teeth, or petrified logs of fossil wood -be encountered at surface or exposed during construction, the ECO should safeguard these, preferably in situ. They should then alert the relevant provincial heritage management authority as soon as possible -i.e. SAHRA. This is to ensure that appropriate action (i.e. recording, sampling or collection of fossils, recording of relevant geological data) can be taken by a professional palaeontologist at the developer's expense;
- All South African fossil heritage is protected by law (South African Heritage Resources Act, 1999) and fossils cannot be collected, damaged or disturbed without a permit from SAHRA or the relevant Provincial Heritage Resources Agency (in this case SAHRA);
- The palaeontologist concerned with potential mitigation work will need a valid fossil collection permit from SAHRA and any material collected would have to be curated in an approved depository (e.g. museum or university collection);

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- All palaeontological specialist work should conform to international best practice for palaeontological fieldwork and the study (e.g. data recording fossil collection and curation, final report) should adhere as far as possible to the minimum standards for Phase 2 palaeontological studies developed by SAHRA (2013); and
- These mitigation recommendations should be incorporated into the Environmental Management Programme (EMPr) for the Maralla West WEF alternative energy project.

### Interim Comment

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit cannot provide comment on the proposed development as not all documents have been submitted for review. The HIA references an Archaeological Impact Assessment (the HIA stated that it had been attached to the document), however no such document was submitted.

Please upload the AIA to the case application so that an informed comment can be issued.

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

Yours faithfully

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Natasha Higgitt  
Heritage Officer  
South African Heritage Resources Agency

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

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**ADMIN:**

Direct URL to case: <http://www.sahra.org.za/node/373748>  
(DEA, Ref: 14/12/16/3/3/2/693)