# A LETTER OF RECOMMENDATION (WITH CONDITIONS) FOR THE EXEMPTION OF A FULL PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED SACE RANGER PHOTOVOLTAIC (SOLAR) PLANT NEAR UITENHAGE, EASTERN CAPE PROVINCE

Prepared for: CEN Integrated Environmental Management Unit 36 River Road Walmer Port Elizabeth 6070 Tel: 041 5812983/5817811 Fax: 041 5812983 Contact person: Ms Lucille Beherns Cell.: 0829221645 Email: Lucille.beherns@gmail.com

**Compiled by:** Dr Johan Binneman **On behalf of:** Eastern Cape Heritage Consultants P.O. Box 689 Jeffreys Bay 6330 Tel: 042 2960399 Cell: 0728006322 Email: kobusreichert@yahoo.com jnfbinneman@gmail.com

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# A LETTER OF RECOMMENDATION (WITH CONDITIONS) FOR THE EXEMPTION OF A FULL PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED SACE RANGER PHOTOVOLTAIC (SOLAR) PLANT NEAR UITENHAGE, EASTERN CAPE PROVINCE

# **PROJECT INFORMATION**

# The type of development (Maps 1-2)

The development includes the construction of a photovoltaic (solar) plant with a 2.46 MW capacity and associated infrastructure. The total project site is approximately 18.56 hectares in extent, but only an area of approximately 7.85 hectares will be used for the array area. The proposed solar production entails a tracker mounting system, 1000 Volt dc PV system and 11 kV distribution system and transmission line.

## The Applicant

South African Clean Energy Solutions (SACE)

# The Consultant

CEN Integrated Environmental Management Unit 36 River Road Walmer Port Elizabeth 6070 Tel: 041 5812983/5817811 Fax: 041 5812983 Contact person: Ms Lucille Beherns Cell.: 0829221645 Email: lucille.beherns@gmail.com

## **Purpose of the study**

The purpose of the study was to conduct a Phase 1 Archaeological Impact Assessment (AIA) of the proposed construction of the SACE Ranger photovoltaic (solar) plant near Uitenhage, Nelson Mandela Bay Municipality, Eastern Cape Province, to establish;

- the range and importance of possible exposed and *in situ* archaeological sites, features and materials,
- the potential impact of the development on these resources and,
- to make recommendations to minimize possible damage to these resources.

## Site and location

The site for the proposed construction of the SACE Ranger photovoltaic (solar) plant is located within the 1:50 000 topographic reference map 3325CB Uitenhage (noord). The development will take place on Erf 234 Portion 3 near Uitenhage in the Nelson Mandela Bay Municipality. The site is situated approximately 7 kilometres north of Uitenhage and 3 kilometres west of the R75 main road to Jansenville.

The proposed area for development is situated on a relatively flat north facing hilltop with steep gradients towards the west, north and north-east. The terrain is a typical Cape Fold Mountain environment with sandstone outcrops and covered by fynbos vegetation (Figures 1-2). A section of the property is currently used as a dump/storage space for vehicles and other equipment (Figure 3).

# **ARCHAEOLOGICAL INVESTIGATION**

## Methodology and findings

The investigation was conducted on foot by two people. GPS readings were taken with a Garmin and all important features were digitally recorded. Apart from the small area used as a dump yard, the remainder of the property is relatively undisturbed and covered with dense grass, bushes, shrubs and patches of small trees in places. Notwithstanding, the archaeological visibility was good, but only a few isolated weathered quartzite stone tools (most probably of Middle Stone Age origin) were observed in tracks or where the yellowish top soils were disturbed (Figure 3 bottom right insert). These stone tools were in secondary context and not associated with any other archaeological material. They are of low cultural significance and no further action is required. In general it would appear that the area is of low cultural sensitivity and it is highly unlikely that any archaeological remains of any significance will be found *in situ* or exposed during the development. There are no known graves or historical buildings older than 60 years on the site.



Figure 1. General views of the proposed site for the construction of the SACE Ranger photovoltaic (solar) plant. The dump yard is visible in the background (main image).



Figure 2. General views of the proposed site for the construction of the SACE Ranger photovoltaic (solar) plant and the low, dense fynbos vegetation.

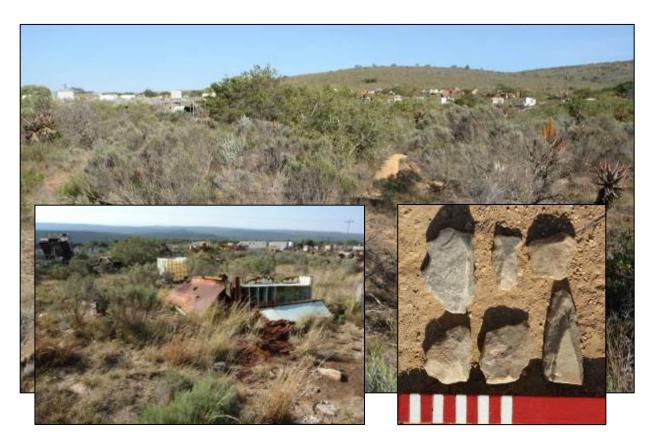


Figure 3. General views of the proposed site for the construction of the SACE Ranger photovoltaic (solar) plant, the dump area and a sample of the stone tools observed on the site (right insert).

### **DISCUSSION AND CONDITIONS**

The site for the proposed construction of the SACE Ranger photovoltaic (solar) plant is of low cultural significance. Although it is unlikely that any significant archaeological heritage remains will be exposed during the development, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development. Such material must be reported to the archaeologist at the Albany Museum (046 6222312) and/or to the Eastern Cape Provincial Heritage Resources Authority (043 6422811) immediately. All work must stop to allow an archaeologist to conduct a systematic and professional investigation. Sufficient time should be allowed to remove/collect such material (See Appendix B for a list of possible archaeological sites that may be found in the area).

### LETTER OF RECOMMENDATION

It is recommended that the proposed construction of the SACE Ranger photovoltaic (solar) plant near Uitenhage, Nelson Mandela Bay Municipality, Eastern Cape Province, is exempted from a full Phase 1 Archaeological Heritage Impact Assessment. The proposed area for development is of low cultural sensitivity and it is unlikely that any significant archaeological remains will be found on the property. The proposed development may proceed as planned.

Note that this letter of recommendation only exempts the proposed development from a full Phase 1 Archaeological Heritage Impact Assessment, but not for other heritage impact assessments. It must also be clear that this letter of recommendation for exemption of a full Phase 1 archaeological heritage impact assessment will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should issue a permit or a formal letter of permission for the destruction of any cultural sites.

The National Heritage Resources Act (Act No. 25 of 1999, section 35) (see Appendix A) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

# **GENERAL REMARKS AND CONDITIONS**

It must be emphasized that this letter of recommendation for exemption of a full Phase 1 archaeological heritage impact assessment is based on the visibility of archaeological sites/material and may not therefore, reflect the true state of affairs. Sites and material may be covered by soil and vegetation and will only be located once this has been removed. In the unlikely event of such finds being uncovered, (during any phase of construction work), it must be reported to the archaeologist at the Albany Museum (046 6222312) or to the Eastern Cape Provincial Heritage Resources Authority (043 6422811) immediately. The developer must finance the costs should additional studies be required as outlined above. The *onus* is also on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999. The consultant is responsible to forward this report to the relevant Heritage Authority for assessment, unless alternative arrangements have been made with the specialist to submit the report.

#### **APPENDIX A: brief legislative requirements**

Parts of sections 35(4), 36(3) and 38(1) (8) of the National Heritage Resources Act 25 of 1999 apply:

#### Archaeology, palaeontology and meteorites

- 35 (4) No person may, without a permit issued by the responsible heritage resources authority—
- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

#### Burial grounds and graves

- 36. (3) (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—
- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b)any excavation equipment, or any equipment which assists in the detection or recovery of metals.

### Heritage resources management

- 38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –
- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of the site
  - (*i*) exceeding  $5000m^2$  in extent, or
  - (ii) involving three or more erven or subdivisions thereof; or
  - *(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
  - *(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;*
- (d) the re-zoning of a site exceeding  $10\ 000m^2$  in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

# APPENDIX B: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers

# Human Skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general human remains are buried in a flexed position on their side, but are also found buried in a sitting position with a flat stone capping. Developers are requested to be on alert for the possibility of uncovering such remains.

## Freshwater mussel middens

Freshwater mussels are found in the muddy banks of rivers and streams and were collected by people in the past as a food resource. Freshwater mussel shell middens are accumulations of mussel shell and are usually found close to rivers and streams. These shell middens frequently contain stone tools, pottery, bone, and occasionally human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds  $1 \text{ m}^2$  in extent, should be reported to an archaeologist.

# Large stone cairns

They come in different forms and sizes, but are easy to identify. The most common are roughly circular stone walls (mostly collapsed) and may represent stock enclosures, remains of wind breaks or cooking shelters. Others consist of large piles of stones of different sizes and heights and are known as *isisivane*. They are usually near river and mountain crossings. Their purpose and meaning is not fully understood, however, some are thought to represent burial cairns while others may have symbolic value.

## **Stone artefacts**

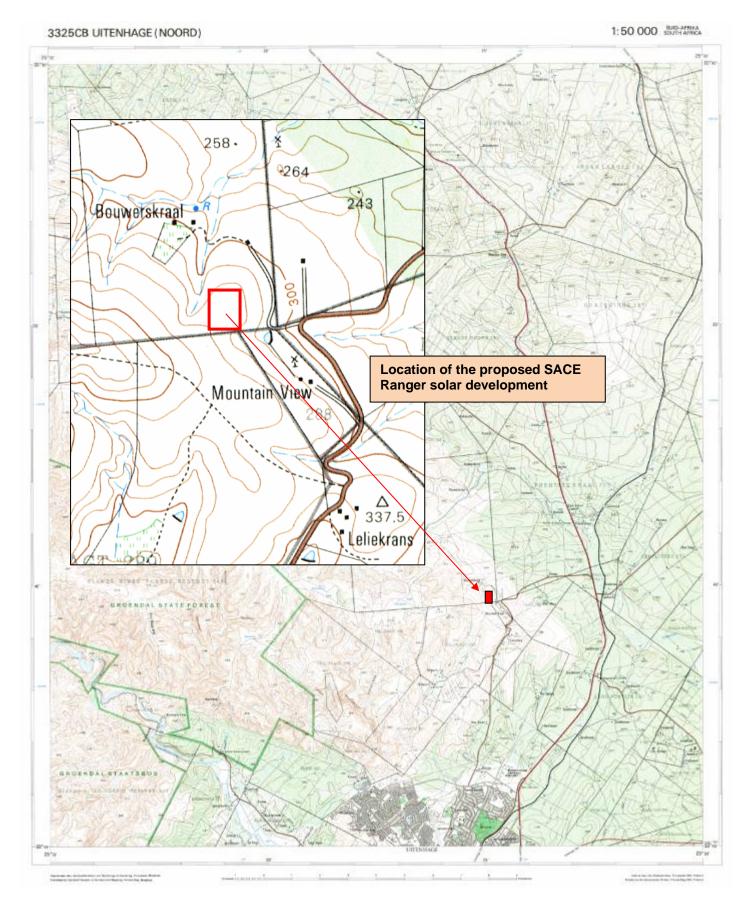
These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

## Fossil bone

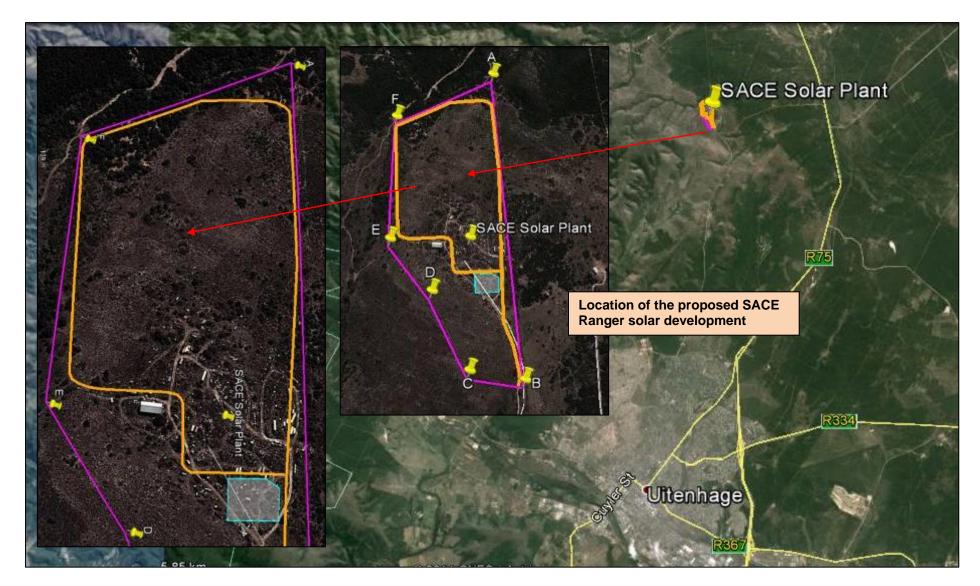
Fossil bones may be found embedded in geological deposits. Any concentrations of bones, whether fossilized or not, should be reported.

## Historical artefacts or features

These are easy to identify and include foundations of buildings or other construction features and items from domestic and military activities.



Map 1. 1:50 000 Maps indicating the location of the proposed SACE Ranger solar development.



Map 2. Aerial images indicating the locations of the proposed SACE Ranger solar development (insert images courtesy CEN Integrated Environmental Management Unit).