



SOUTH AFRICAN HERITAGE RESOURCES AGENCY
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FOR ATTENTION: **PHRA: Northern Cape**

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SAHRA Contact Person: **Ms Katie Smuts**
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REVIEW COMMENT ON ARCHAEOLOGICAL AND PALAEOLOGICAL IMPACT ASSESSMENTS

BY ARCHAEOLOGY, PALAEOLOGY AND METEORITES UNIT OF THE SOUTH AFRICAN HERITAGE
RESOURCES AGENCY

South Africa has a unique and non-renewable archaeological and palaeontological heritage. Archaeological and palaeontological sites are protected in terms of the National Heritage Resources Act (Act No 25 of 1999) and may not be disturbed without a permit. Archaeological Impact Assessments (AIAs) and Palaeontological Impact Assessments (PIAs) identify and assess the significance of the sites, assess the potential impact of developments upon such sites, and make recommendations concerning mitigation and management of these sites. On the basis of satisfactory specialist reports SAHRA or the relevant heritage resources agency can assess whether or not it has objection to a development and indicate the conditions upon which such development might proceed and assess whether or not to issue permission to destroy such sites.

AIAs and PIAs often form part of the heritage component of an Environmental Impact Assessment or Environmental Management Plan. They may also form part of a Heritage Impact Assessment called for in terms of section 38 of the National Heritage Resources Act, Act No. 25, 1999. They may have other origins. In any event they should comply with basic minimum standards of reporting as indicated in SAHRA Regulations and Guidelines.

This form provides review comment from the Archaeologist of the relevant heritage resources authority for use by Heritage Managers, for example, when informing authorities that have applied to SAHRA for comment and for inclusion in documentation sent to environmental authorities. It may be used in conjunction with Form B, which provides relevant peer review comment.

- A. PROVINCIAL HERITAGE RESOURCES AUTHORITY: **Northern Cape**
- B. AUTHOR(S) OF REPORT: **Mr Wouter Fourie**
- C. ARCHAEOLOGY CONTRACT GROUP: **PGS Heritage and Grave Relocation Consultants**
- D. CONTACT DETAILS: **PO Box 14706, Hatfield, 0028, Tel: 012 333-7142, wouter@gravesolutions.co.za**
- E. DATE OF REPORT: **March 2012**
- F. TITLE OF REPORT: **PROPOSED 132kV POWER LINE CONNECTION TO THE HUMANSRUS SOLAR THERMAL ENERGY POWER PLANT, POSTMASBURG**
- G. AUTHOR(S) OF REPORT: **Dr John Almond**
- H. ARCHAEOLOGY CONTRACT GROUP: **Natura Viva**
- I. CONTACT DETAILS: **PO Box 12410, Mill St, Cape Town, 8010, email: naturaviva@universe.co.za**
- J. DATE OF REPORT: **May 2012**
- K. TITLE OF REPORT: **RECOMMENDED EXEMPTION FROM FURTHER PALAEOLOGICAL STUDIES: PROPOSED CONCENTRATED SOLAR POWER**

**DEVELOPMENT ON FARM 469 (HUMANSRUS), NEAR POSTMASBURG,
NORTHERN CAPE PROVINCE**

- L. Please circle as relevant: Archaeological and Palaeontological components of EIA / EMP / HIA / CMP/ Other (Specify) **DRAFT BASIC ASSESSMENT REPORT**
- M. REPORT COMMISSIONED BY (**CONSULTANT OR DEVELOPER**): **SiVest, Ms Mabel Qinsile, email: MabelQ@sivest.co.za**
- N. CONTACT DETAILS: **SiVEST Environmental Division, PO Box 2921, Rivonia 2128**
- O. COMMENTS:

REVIEW COMMENT ON HERITAGE IMPACT ASSESSMENT (ARCHAEOLOGICAL AND PALAEOLOGICAL COMPONENTS)

Mr W. Fourie

Dated and Received: March 2012

PROPOSED 132kV POWER LINE CONNECTION TO THE HUMANSRUS SOLAR THERMAL ENERGY POWER PLANT, POSTMASBURG

Dr J. Almond

Dated and Received: May 2012

RECOMMENDED EXEMPTION FROM FURTHER PALAEOLOGICAL STUDIES: PROPOSED CONCENTRATED SOLAR POWER DEVELOPMENT ON FARM 469 (HUMANSRUS), NEAR POSTMASBURG, NORTHERN CAPE PROVINCE

INTRODUCTION

Solar Reserve (Pty) Ltd has proposed the creation of a 132kV overhead power line to link the proposed Humansrus Solar Thermal Energy Power Plant to the existing Eskom power line near Owendale in the Northern Cape Province. The power line will traverse a portion of the remainder of Farm 469 and Portion 1 of Lemoenkloof and consist of steel monopole towers approximately 200m apart. This project will also entail the construction of a substation on a portion of the remainder of the Farm 469, Humansrus, and switch yard near the proposed power plant and access roads. Three alternative routes are proposed for the power line, northern 5.8km long Option 1A (preferred), central 5.2km long Option 1B and southern 8.3km long Option 1C. Only one location site was considered for the construction of the substation.

The study area is currently used as grazing and is vegetated with typical local scrub and bushes. The topography is largely flat with undulating land to the west and rocky ridges to the east. A stream to the south and south west has created a pan area that is flooded during high rainfall.

DISCUSSION AND RECOMMENDATIONS

Mr Fourie conducted a literary review as well as a two day field survey on foot. The literary review revealed that most archaeological finds in the Northern Cape occur close to water sources such as rivers and pans, as well as on hills and in rock shelters. Early, Middle and Later Stone Age material may be represented within the study area, while rock engravings are also present locally. The area was settled by Sotho-Tswana people in the seventeenth century who were then displaced by the Korana in the eighteenth century. On a survey diagram of 1878, the Humansrus farm is identified only by its farm number and no farm buildings are depicted. A wagon route established in 1816 is shown to traverse the alignment alternatives 1B and 1C.

The field assessment yielded only one heritage site (Site HR1), which was a small informal cemetery (10m by 15m) with four graves aligned east to west. The cemetery was 350m east of the current farmhouse and was fenced, although the fence was in disrepair and the graves were overgrown. One grave was outlined in brick and cement with a cement headstone; two were indicated by mounds of stone, one rectangular with a stone marker, the other oblong with no marker. The final grave was marked only with an upright rock as headstone. The cemetery falls within the alignment of Option 1A, the preferred alignment.

The palaeontologist noted that the study area is underlain by Late Precambrian Transvaal Subgroup sediments of the Ghaap Group (Asbestos Hills Supergroup) that are sparsely fossiliferous, containing occasional microbial assemblages. Most of the area is mantled by Quaternary calcretes and downwasted rubble of the Gordonina Formation, all of which are of low to very low palaeontological significance, although they can contain fossil rhizoliths, termitaria, ostrich eggshell and land snails. The palaeontologist recommends no further palaeontological studies for this development.

SAHRA RECOMMENDATIONS

SAHRA supports the recommendations of the author and requires that:

- The fence around the cemetery should be repaired and the cemetery should be avoided by at least 15m by altering the alignment of Option 1A. An archaeologist should be notified of the new alignment of the power line. The graves should be restored where these are dilapidated, protected and conserved in perpetuity. For this purpose, a proper fence must be built around them including entry gates to allow visits from relatives and family friends. The fence must be placed 2 meters away from the perimeter of the graves. No development is allowed within 15 meters from the fence line surrounding the graves.
- Should substantial fossils be uncovered, these should be left *in situ*, safeguarded by the Environmental Control Officer and reported to SAHRA and a professional palaeontologist.

CONCLUSION

Decisions on Built Environment and associated Living Heritage must be made by the Provincial Heritage Resources Authority of the Northern Cape (Mr. Andrew Timothy, ratha.timothy@gmail.com) to whom this Archaeological Review Comment will be copied.

SIGNATURE OF ARCHAEOLOGIST PROCESSING REPORT:

EMAIL: ksmuts@sahra.org.za.....

SIGNATURE OF SAHRA HEAD ARCHAEOLOGIST: 

EMAIL: cscheermeyer@sahra.org.za

NAME OF HERITAGE RESOURCES AGENCY: SAHRA.....

PLEASE NOTE THAT THE COMMENT (ABOVE OR APPENDED) CONSTITUTES THE COMMENT OF THE HERITAGE RESOURCES AGENCY ARCHAEOLOGIST AND THAT ANY DEVELOPMENT THAT INVOLVES DESTRUCTION OF ANY ARCHAEOLOGICAL/PALAEONTOLOGICAL SITE IS STILL SUBJECT TO A PERMIT/PERMISSION FOR DESTRUCTION OF SUCH SITE GIVEN TO THE DEVELOPER BY THE RELEVANT HERITAGE RESOURCES AGENCY ARCHAEOLOGICAL AND PALAEONTOLOGICAL PERMIT COMMITTEE (THIS WILL BE SUBJECT TO APPROVAL OF THE PHASE 2 OR ARCHAEOLOGICAL/ PALAEONTOLOGICAL MITIGATION AS NECESSARY). THIS REPORT MAY BE TAKEN ONLY AS APPROVAL IN TERMS OF SECTION 35 OF THE NATIONAL HERITAGE RESOURCES ACT. THE PROVINCIAL MANAGER OF THE HERITAGE RESOURCES AUTHORITY MUST ADVISE AS TO APPROVAL IN TERMS OF HERITAGE ISSUES ENCOMPASSED BY OTHER ASPECTS OF THE LEGISLATION, SUCH AS ISSUES OF THE BUILT ENVIRONMENT (STRUCTURES (E.G. FARM HOUSES), OVER 60 YEARS), INDIGENOUS KNOWLEDGE SYSTEMS OR OF CULTURAL LANDSCAPES AS THIS IS NOT WITHIN THE SCOPE OF THE ARCHAEOLOGIST.

PLEASE NOTE THAT SAHRA IS NOW RESPONSIBLE FOR GRADE I HERITAGE RESOURCES (AND EXPORT) AND THE PROVINCIAL HERITAGE RESOURCES ARE RESPONSIBLE FOR GRADE II AND GRADE III HERITAGE RESOURCES, EXCEPT WHERE THERE IS AN AGENCY ARRANGEMENT WITH THE PROVINCIAL HERITAGE RESOURCES AUTHORITY.

APPENDIX 1

Protection of Graves

In terms of the National Heritage Resources Act (No. 25 of 1999) graves older than 60 years (not in a municipal graveyard) are protected. Human remains younger than 60 years should be handled only by a registered undertaker or an institution declared under the Human Tissues Act.

Anyone who wishes to develop an area where there are graves older than 60 years is required to follow the process described in the legislation (section 36 and associated regulations). The specialist will require a permit from the heritage resources authority:

1. Determine/ confirm the presence of the graves on the property. Normally the quickest way to proceed is to obtain the service of a professional archaeologist accredited to undertake burial relocations. The archaeologist will provide an estimate of the age of the graves. There may be a need for archival research and possibly test excavations (permit required).
2. The preferred decision is to move the development so that the graves may remain undisturbed. If this is done, the developer must satisfy SAHRA that adequate arrangements have been made to protect the graves on site from the impact of the development. This usually involves fencing the grave(yard) and

setting up a small site management plan indicating who will be responsible for maintaining the graves and how this is legally tied into the development. It is recommended that a distance of at least 2 m is left undisturbed between the grave and the fence around the graves and another 15 m between the fence of the grave and the development.

3. If the developer wishes to relocate or disturb the graves:
 - a. A 60-day public participation (social consultation) process as required by section 36 (and regulations), must be undertaken to identify any direct descendants of those buried on the property. This allows for a period of consultation with any family members or community to ascertain what their wishes are for the burials. It involves notices to the public on site and through representative media. This may be done by the archaeologist, who can explain the process, but for large or sensitive sites a social consultant should be employed. Archaeologists often work with undertakers, who rebury the human remains.
 - b. If as a result of the public participation, the family (where descendants are identified) or the community agree to the relocation process then the graves may be relocated.
 - c. The archaeologist must submit a permit application to SAHRA for the disinterment of the burials. This must include written approval of the descendants or, if there has not been success in identifying direct descendants, written documentation of the social consultation process, which must indicate to SAHRA's satisfaction, the efforts that have been made to locate them. It must also include details of the exhumation process and the place to which the burials are to be relocated. (There are regulations regarding creating new cemeteries and so this usually means that relocation must be to an established communal rural or formal municipal cemetery.)
 - d. Permission must be obtained before exhumation takes place from the landowner where the graves are located, and from the owners/managers of the graveyard to which the remains will be relocated.

Other relevant legislation must be complied with, including the Human Tissues Act (National Department of Health) and any ordinances of the Provincial Department of Health). The archaeologist can usually advise about this.