

29/09/2011

# **Heritage Impact Assessment**

Heritage Impact Assessment for the Proposed Brits Solar  
Park in Brits Extension 50, North West Province.

## **Compiled for:**

Africa Geo-Environmental Services (AGES)

## **Survey conducted & Report compiled by:**

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**September 2011**

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## Executive Summary

**Site name and location:** Proposed development of the Brits Solar Park on Erven 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042 and on a portion of “Commercial Street” in Brits Extension 50 in the North West Province.

**Local Authority:** Bojanala District Municipality.

**Developer:** Firefly Investments 229 (Pty) Ltd.

**Date of field work:** 12 September 2011.

**Date of report:** September 2011.

**Findings:** No site-specific actions or any further heritage mitigation measures are recommended as no heritage resource sites or finds of any value or significance were identified in the indicated study area. The proposed development of the Brits Solar Park at the indicated area can continue from a heritage point of view

**Disclaimer:** *Although all possible care is taken to identify all sites of cultural importance during the investigation of study areas, it is always possible that hidden or sub-surface sites and/or graves could be overlooked during the study. Hutten Heritage Consultants and its personnel will not be held liable for such oversights or for costs incurred as a result of such oversights.*

## **1. Introduction**

Hutten Heritage Consultants was contracted by Africa Geo-Environmental Services (AGES) to conduct a Heritage Impact Assessment (HIA) on the proposed development of the Brits Solar Park on Erven 3034 to 3042 and on a portion of "Commercial Street" in Brits Extension 50, in the North West Province.

The aim of the study was to identify all heritage sites, to document and to assess their significance within Local, Provincial and National context. The report outlines the approach and methodology implemented before and during the survey, which includes in Phase 1: Information collection from various sources and social consultations; Phase 2: Physical surveying of the area on foot and by vehicle; and Phase 3: Reporting the outcome of the study.

This HIA forms part of the Environmental Impact Assessment (EIA) as required by various Acts and Laws as described under the next heading and is intended for submission to the provincial South African Heritage Resources Agency (SAHRA) for peer review.

Minimum standards for reports, site documentation and descriptions are set by the Association of Southern African Professional Archaeologists (ASAPA) in collaboration with SAHRA. ASAPA is a legal body representing professional archaeology in the Southern African Development Community (SADC) region. As a member of ASAPA, these standards are tried to be adhered to.

The extent of the proposed development sites were determined as well as the extent of the areas to be affected by secondary activities (access routes, construction camps, etc.) during the development.

## **2. Legislative Requirements**

The identification, evaluation and assessment of any cultural heritage site, artefact or find in the South African context is required and governed by the following legislation:

National Environmental Management Act (NEMA) Act 107 of 1998

National Heritage Resources Act (NHRA) Act 25 of 1999

Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002

Development Facilitation Act (DFA) Act 67 of 1995

The following sections in each Act refer directly to the identification, evaluation and assessment of cultural heritage resources.

National Environmental Management Act (NEMA) Act 107 of 1998

Basic Environmental Assessment (BEA) – Section (23)(2)(d)

Environmental Scoping Report (ESR) – Section (29)(1)(d)

Environmental Impacts Assessment (EIA) – Section (32)(2)(d)

Environmental Management Plan (EMP) – Section (34)(b)

National Heritage Resources Act (NHRA) Act 25 of 1999

Protection of Heritage resources – Sections 34 to 36; and

Heritage Resources Management – Section 38

5). This canal was a more recent development as it was not indicated on the 1943 and 1968 editions of the Brits 2527 DB 1:50 000 topographical maps.

The property was previously exposed to intensive agricultural activities and most of it was bush cleared in order to open fields for ploughing (photo 1 and topographical maps). Currently the properties are not being farmed and are being earmarked to be developed as part of the industrial district. Parts of the properties were also exposed to illegal dumping activities (photo 6).

Most of the property was relatively flat and consisted of turf soils.

The proposed development will be situated on the Brits 2527 DB 1:50 000 topographical map (See Appendix B: Location Maps).

## **5. Archaeological History of the Area**

As heritage surveys deal with the locating of heritage resources in a prescribed cartographic landscape, the study of archival and historical data and cartographic information can represent a very valuable supporting tool in finding and identifying such heritage resources.

The first edition of Brits 2527 DB topographical map (1943) and the second edition of Brits 2527 DB topographical map (1968) were also consulted. Both these maps indicated that the proposed area was previously exposed to agricultural activities. It also indicated the presence and location of the presently disused railway line on the southern side of the proposed area (See Appendix B: Location Maps).

After researching the National Archive records as well as the SAHRA records it was determined that previous archaeological or historical studies have been performed in the demarcated study area or nearby areas.

A report by Dr. J.C.C. Pistorius:

- Pistorius, J.C.C. 2007. **A Phase 1 Heritage Impact Assessment (HIA) study for Eskom's Proposed New 400kV Power Line Route Between the Matimba B Power Station and the Marang Substation near Rustenburg.** (Unpublished report),

was consulted during this study. This report commented on cultural heritage finds and sites identified during the Heritage Impact Assessments performed for the nearby and relative power lines and substations. These sites, however, will not be affected by the proposed development of the Solar Park. No other sites or finds of heritage value or significance were mentioned in this report regarding the study area.

The geographical area surrounding the town of Brits is well known for its archaeological sites dating to the Stone Age, Iron Age and Historical Age. These sites will be discussed briefly in order to provide the reader with background knowledge of the archaeological history of the immediate area surrounding Brits. The historical background and timeframe of the study area and other areas in Southern Africa can be divided into the Stone Age, Iron Age and Historical period. These can be divided as follows:

geographical areas situated between Rustenburg and Brits. One rock painting site was also identified near the confluence of the Crocodile and Elands Rivers (Berg, 1999).

### **Iron Age**

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic Periods. Similar to the Stone Age it can be divided into three periods:

*The Early Iron Age (EIA):* Most of the first millennium AD. (e.g. Happy Rest, Silver Leaves).

*The Middle Iron Age (MIA):* 10th to 13th centuries AD. (e.g. K2, Mapungubwe, Thavhatsena).

*The Late Iron Age (LIA):* 14th century to colonial period. (e.g. Icon, Letaba, Mutamba).

Several Early Iron Age sites could be identified in the area surrounding Brits. These sites represent two pottery traditions. The oldest tradition dates back to AD 150 – AD 650 and is represented by the Bambata facies associated with the Kulundu tradition (Huffman, 2007). Sites like Jubilee Shelter presented with Bambata pottery. The second EIA tradition dates to AD 450 – AD 750 and is represented by the Mzonjani facies of the Urewe tradition (Huffman, 2007). Broederstroom, situated to the south-west of Brits next to the Crocodile River presented with Mzonjani style pottery (Berg, 1999; Huffman, 2007).

The only pottery tradition associated with the Middle Iron Age that could be identified in area dates to AD 1000 – AD 1300 and represents the Eiland facies of the Kulundu tradition (Huffman, 2007).

Several Late Iron Age sites could however be identified in the areas surrounding the town of Brits. These include sites dating to AD 1500 – AD 1700 represented by the Olifantspoort and Madikwe facies of the Urewe tradition (Huffman, 2007). Other LIA sites in the area date to AD 1650 – AD 1840 and include the Uitkomst, Rooiberg, and Buispoort facies of the Urewe tradition (Huffman, 2007).

From AD 1600 to AD 1800 various Sotho-Tswana speaking communities settled in and around the area of Brits (Berg, 1999; Pistorius, 2009). These communities included the Kwena, Kgatla, Fokeng and Po and had small farm style settlements throughout the area (Berg, 1999). The Fokeng was very active in this area during the early 19<sup>th</sup> century and also built their capital, Phokeng, just north-west of where Brits is situated today.

Various Sotho-Tswana sites in the district of Brits have been excavated and yielded faunal remains. These sites include Boitsemagano, Molokwane and Mabjanamatshwana (Plug and Baderhorst, 2006). Rescue excavations in the vicinity of Brits have also yielded graves associated with Sotho-Tswana speaking communities. These include Hoekfontein (Nienaber and Steyn, 2005) and Malle (Pistorius *et. al*, 2002).

### **Restrictions**

Vegetation proved the major restriction in accessibility to some of the areas and also contributed to poor surface visibility after the spate of recent good rains.

### **Documentation**

All sites/findspots located during the foot surveys were briefly documented. The documentation included digital photographs and descriptions as to the nature and condition of the site and recovered materials. The sites/findspots were plotted using a Global Positioning System (GPS) (Garmin GPSmap 60CSx) and numbered accordingly.

## **7. Assessment Criteria**

This chapter describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The significance of archaeological and heritage sites were based on the following criteria:

- The unique nature of a site
- The amount/depth of the archaeological deposit and the range of features (stone walls, activity areas etc.)
- The wider historic, archaeological and geographic context of the site
- The preservation condition and integrity of the site
- The potential to answer present research questions.

### **Site Significance**

Site significance classification standards prescribed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used for the purpose of this report.

<b><i>FIELD RATING</i></b>	<b><i>GRADE</i></b>	<b><i>SIGNIFICANCE</i></b>	<b><i>RECOMMENDED MITIGATION</i></b>
National Significance (NS)	Grade 1	-	Conservation; National Site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; Provincial Site nomination
Local Significance	Grade 3A	High Significance	Conservation; Mitigation not

**Duration**

<i>SHORT TERM:</i>	0 – 5 years
<i>MEDIUM:</i>	6 – 20 years
<i>LONG TERM:</i>	more than 20 years
<i>DEMOLISHED:</i>	site will be demolished or is already demolished

**Mitigation**

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be classified as follows:

- **A** – No further action necessary
- **B** – Mapping of the site and controlled sampling required
- **C** – Preserve site, or extensive data collection and mapping required; and
- **D** – Preserve site

**8. Assessment of Sites and Finds**

This section will contain the results of the heritage site/find assessment.

**Brits Solar Park**

The proposed development of the Brits Solar Park will be situated on Erven 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042 and on a portion of “Commercial Street” in Brits Extension 50 in the North West Province.

The properties were situated in Brits Extension 50 which formed part of the Industrial district of the town of Brits. Existing industries were situated on the southern and eastern sides of the proposed properties.

The property was previously exposed to intensive agricultural activities and most of it was bush cleared in order to open fields for ploughing (photo 2 and topographical map). Currently the properties are not being farmed and are being earmarked to be developed as part of the industrial district. Parts of the properties have also been exposed to illegal dumping.

After intensive investigations, no sites or finds of any heritage value or potential were identified.

Field Rating:	None
Heritage Significance:	None
Impact:	None
Certainty:	None
Duration:	None
Mitigation:	A – No further action necessary

## 10. References

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# **APPENDIX A**

## **Photographs**

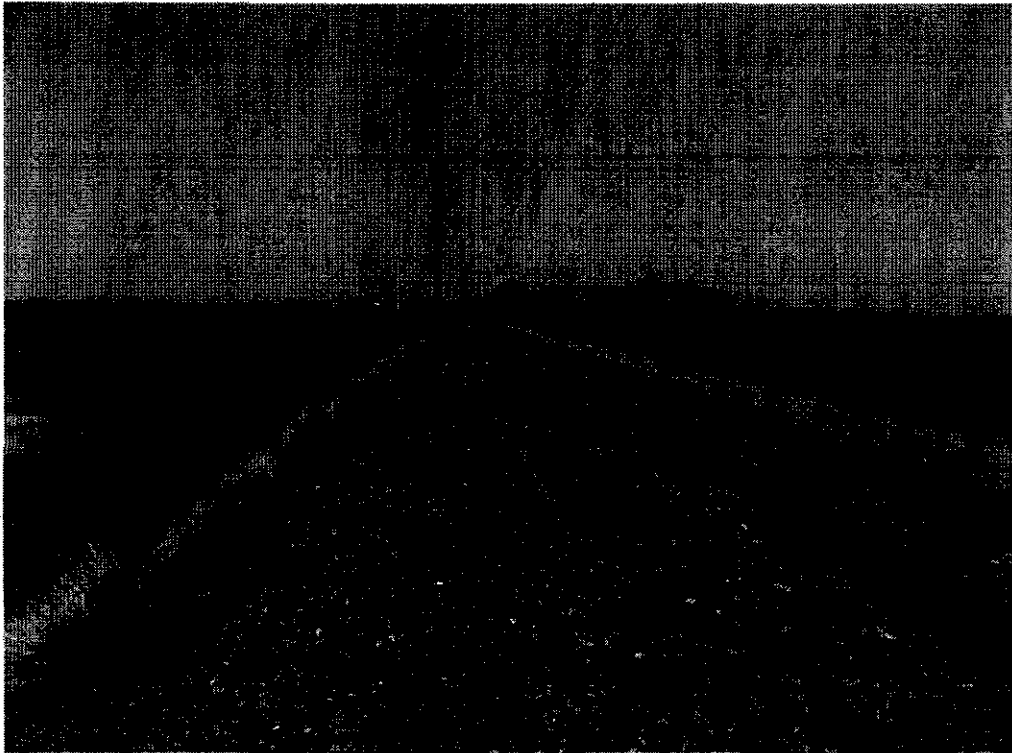


Photo 3: View of the railway line on the northern side.

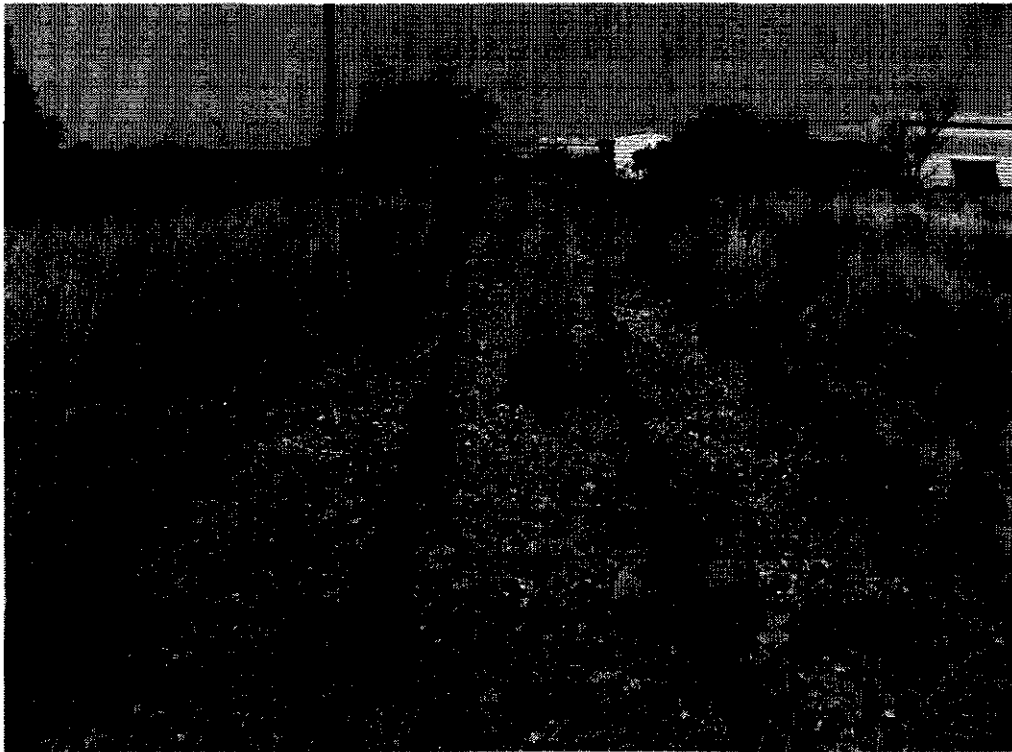
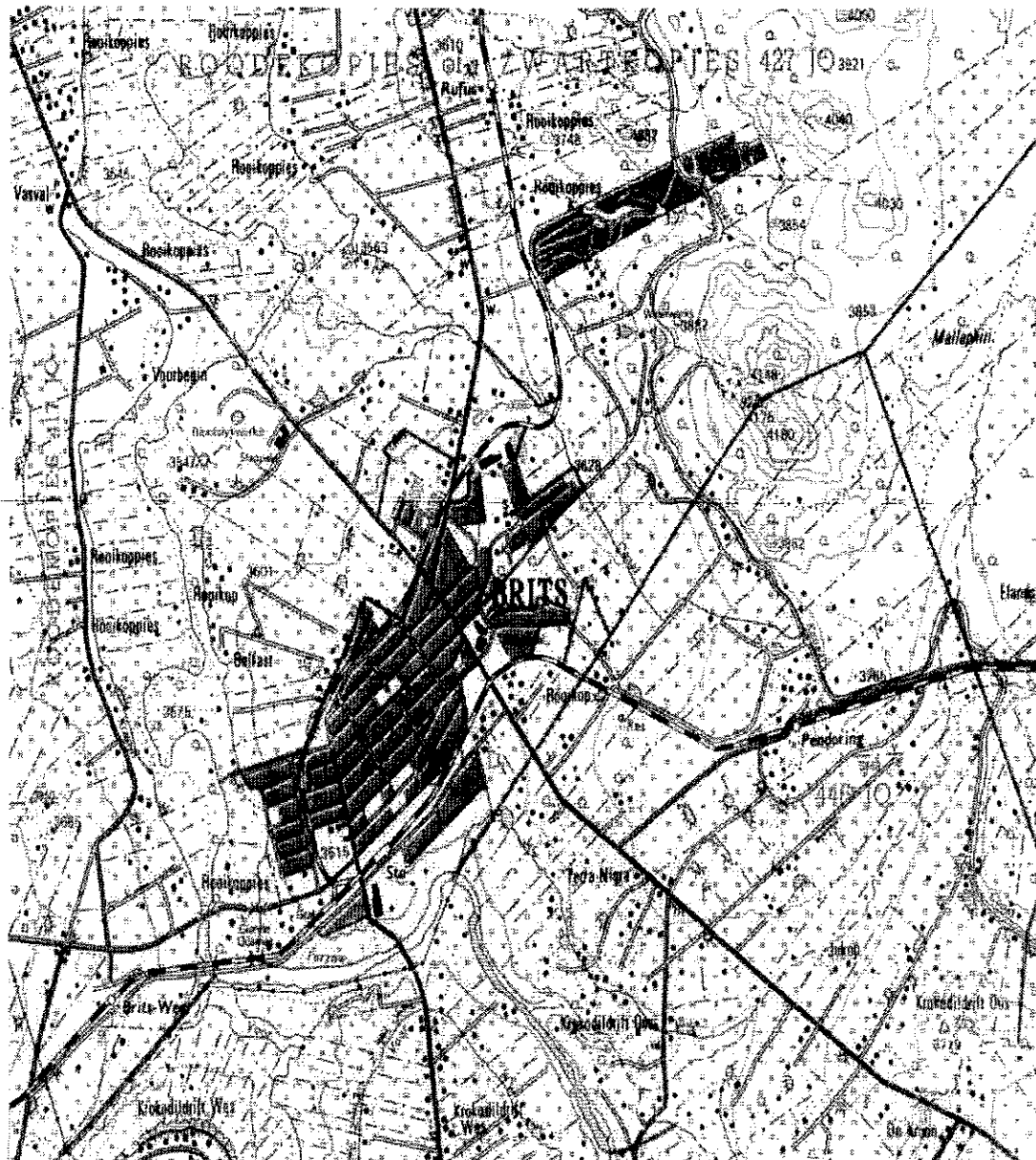


Photo 4: View of the disused railway line on the southern side.

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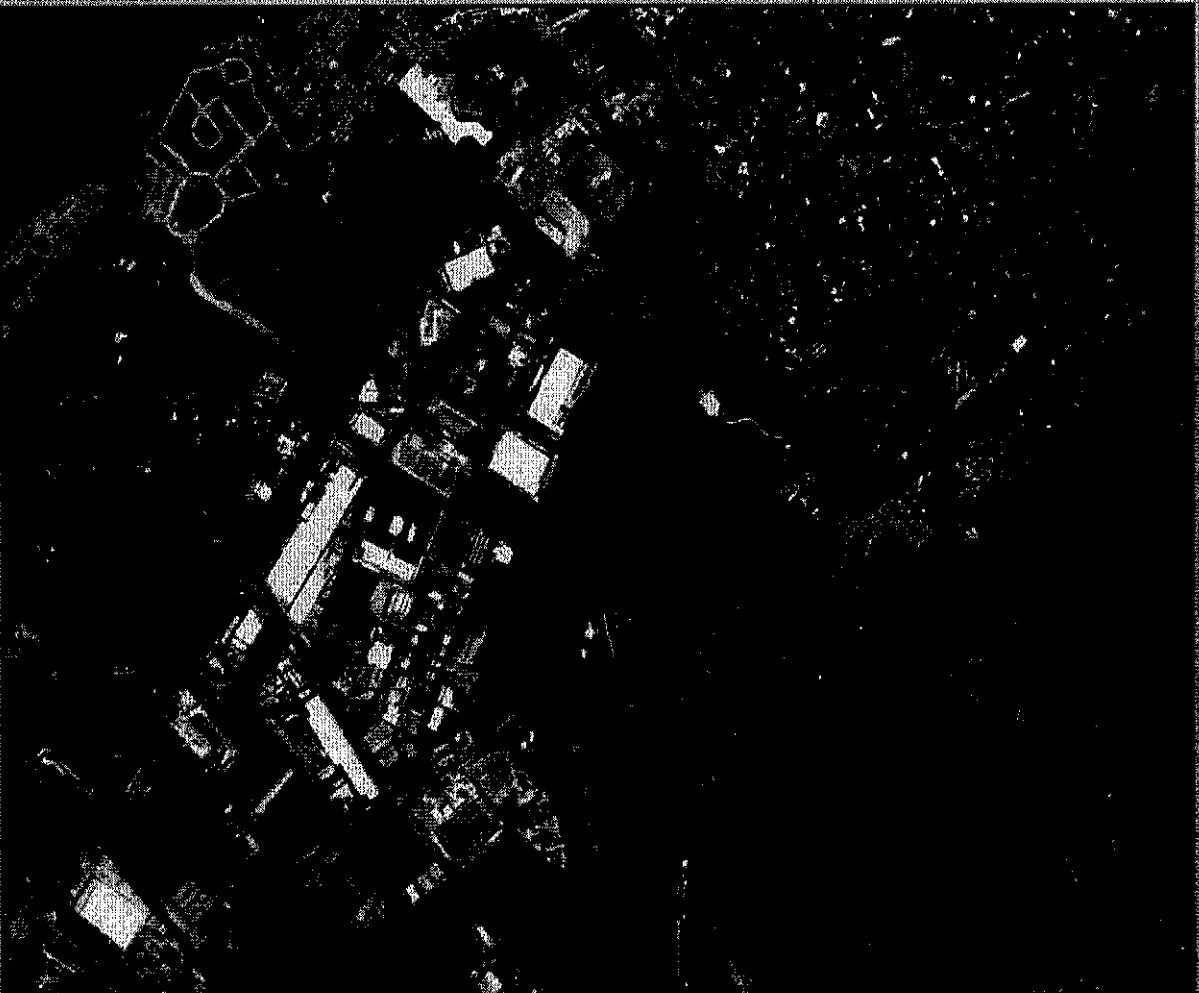
# **APPENDIX B**

## **Location Maps**



2527 DB Topographic Map, Second Edition; Surveyed in 1968 and drawn in 1970.

**Erlis Solar Park  
Spot 5 National Mosaic: 2627D**



**Legend**  
□ Study Area

0 0.5 1  
Kilometres

