



## Heritage Scoping Report

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The Watershed to Sephaku 132kV  
power reticulation line, North West  
Province

Version 1.0

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16 October 2008

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- i. The results of the project;
- ii. The technology described in any report ; and,
- iii. The recommendations delivered to the Client.

## EXECUTIVE SUMMARY

Professional Grave Solutions Heritage Unit was appointed by SSI Engineering and Environmental (Pty) Ltd to undertake a Heritage Impact Assessment (HIA) that forms part of the Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) for the Power Reticulation Project Watershed to Sephaku, North West Province.

The Heritage Scoping Document aims to provide a background for the completion of an HIA for the inclusion in the final EIA document of the Watershed to Sephaku 132kV power reticulation line.

The following types of heritage resources might be found in the area of the proposed alignment:

- Stone Age sites – Although significant sites are mostly found in shelters and caves, the possibility of surface scatters cannot be excluded.
- Late Iron Age sites – The Tswana tribes of the area produced stonewalled sites and such sites can possibly occur on the alignment routes.
- Historical sites – The Lichtenburg area is known for the diamond rush of the 1926 – 27 diamond rush. Possible remnants of that era might occur – however the area for the power line alignment is situated to the south west of the concentration of diamond diggings of Bakerville (Bakers) and Grasfontein.

To comply with the requirements for the HIA as required by Section 38 of the NHRA, it must include:

- (a) The identification and mapping of all heritage resources in the area affected;
- (b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6 (2) or prescribed under section 7;
- (c) an assessment of the impact of the development on such heritage resources;
- (d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- (e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- (f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- (g) plans for mitigation of any adverse effects during and after the completion of the proposed development.

The methodology for the HIA will then be as follows:

### ***Archival Research***

The first phase will comprise of a desktop study which is aimed at compiling as much information as possible regarding the known heritage resources within and surrounding the proposed development area. The desktop study will cover the following:

Archival documents and maps housed at the National Archives will be accessed and studied to provide historical background to the study area as well as the identification of heritage resources located there.

### ***Physical Surveying***

The fieldwork component consists of walking through the proposed development area and is aimed at locating heritage resources falling within (and directly adjacent to) the proposed development footprint. The locations of all heritage resources that are recorded during the survey will be documented using a hand-held GPS. Furthermore, the documentation will reflect a brief qualitative description and statement of significance for each site and includes a photographic record of all the sites.

It is important to also note that informal social consultation (i.e. with local community members, residents and knowledgeable individuals) will be undertaken during the fieldwork component. The aim of social consultation is to identify any tangible and intangible resources (i.e. sacred places, myths and indigenous knowledge systems) that may exist.

### ***Reporting***

A report will be written which would include the following components:

- The identification and mapping of all heritage resources in the affected area;
- An assessment of the significance of such resources in terms of the heritage assessment criteria;
- An assessment of the impact of the development of such heritage resources;
- If heritage resources will be adversely affected by the proposed development, consideration of the alternatives; and
- Proposed mitigation of any adverse effects during and after the completion of the proposed development.

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## **1. INTRODUCTION**

Professional Grave Solutions Heritage Unit was appointed by SSI Engineering and Environmental (Pty) Ltd to undertake a Heritage Impact Assessment (HIA) that forms part of the Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) for the Power Reticulation Project Watershed to Sephaku, North West Province.

The aim of the study is to prepare a baseline for possible finds of archaeological and heritage sites that may occur within the study area. From this, we aim to assist the developer in managing the discovered heritage resources in a responsible manner, in order to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

The report outlines the approach and methodology utilised for the preparation of the scoping report as well as the proposed methodology for the Heritage Impact Assessment that will form part of the Environmental Impact Assessment (EIA).

This report must also be submitted to SAHRA provincial office for scrutiny.

## **2. APPROACH AND METHODOLOGY**

The aim of the study is to do a preliminary database search on the occurrence of heritage resources within the study area by consulting the databases of the Archaeological Resources Management Unit at the University of the Witwatersrand and other locally based resources.

Topographical and aerial photography was also studied to identify possible sensitive areas to be visited during the HIA phase of the study.

### **2.1. PROJECT DESCRIPTION**

Eskom is looking to develop an additional 132kV power reticulation line from the Watershed Substation to Sephaku Substation.

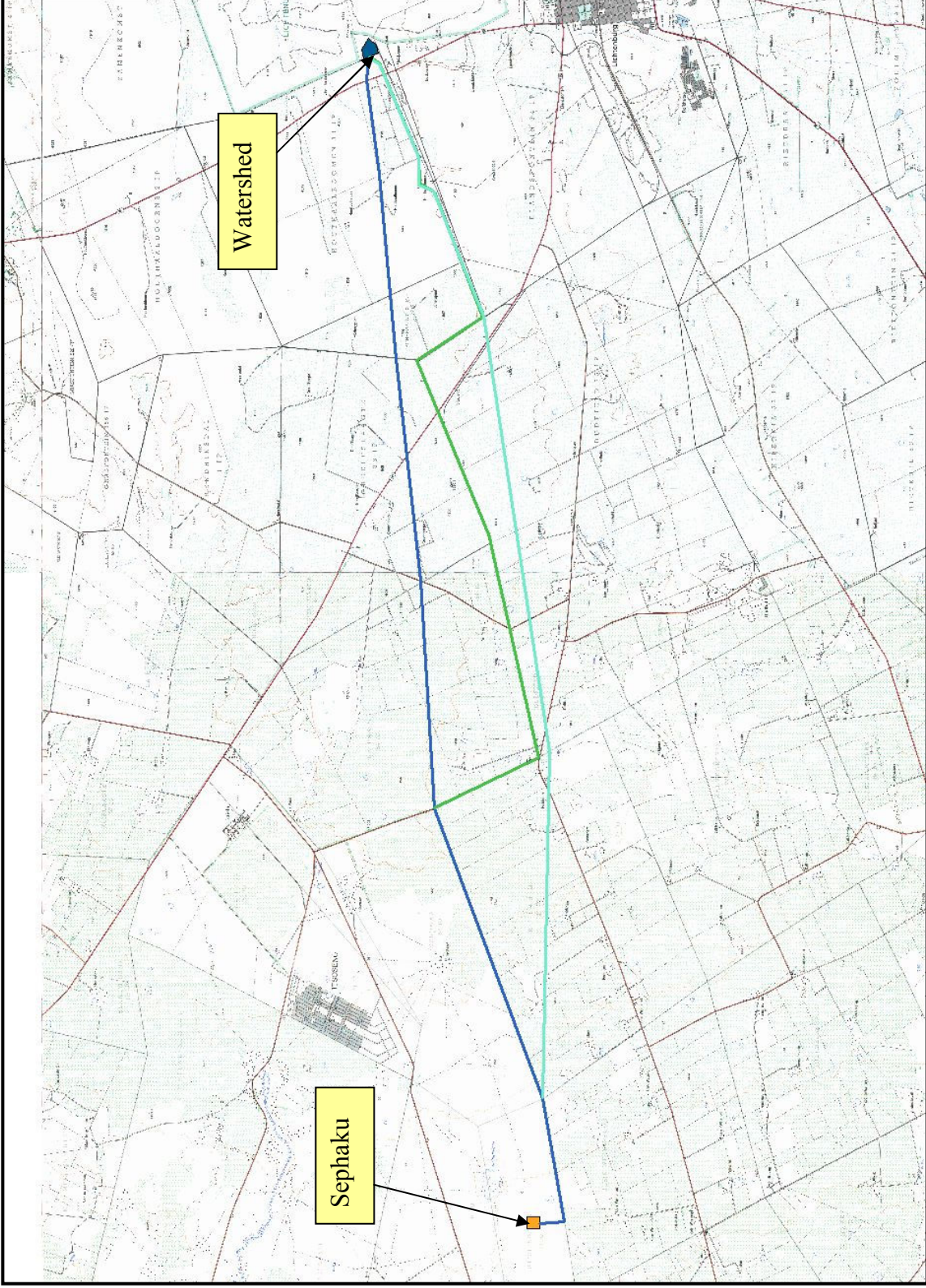


Figure 1 – Locality Map (Three possible alignment)

### 3. LEGISLATIVE REQUIREMENTS AND TERMINOLOGY

#### 3.1 Legislation

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:

- i. National Environmental Management Act (NEMA) Act 107 of 1998
- ii. National Heritage Resources Act (NHRA) Act 25 of 1999
- iii. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
- iv. 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.

- i. National Environmental Management Act (NEMA) Act 107 of 1998
  - a. Basic Environmental Assessment (BEA) – Section (23)(2)(d)
  - b. Environmental Scoping Report (ESR) – Section (29)(1)(d)
  - c. Environmental Impacts Assessment (EIA) – Section (32)(2)(d)
  - d. Environmental Management Plan (EMP) – Section (34)(b)
- ii. National Heritage Resources Act (NHRA) Act 25 of 1999
  - a. Protection of Heritage resources – Sections 34 to 36; and
  - b. Heritage Resources Management – Section 38
- iii. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
  - a. Section 39(3)
- iv. Development Facilitation Act (DFA) Act 67 of 1995
  - a. The GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995. Section 31.

#### 3.2 Terminology

<b>Acronyms</b>	<b>Description</b>
AIA	Archaeological Impact Assessment
ASAPA	Association of South African Professional Archaeologists
CRM	Cultural Resource Management
DEAT	Department of Environmental Affairs and Tourism
DWAF	Department of Water Affairs and Forestry
EIA practitioner	Environmental Impact Assessment Practitioner



EIA	Environmental Impact Assessment
ESA	Early Stone Age
GPS	Global Positioning System
HIA	Heritage Impact Assessment
I&AP	Interested & Affected Party
LSA	Late Stone Age
LIA	Late Iron Age
MSA	Middle Stone Age
MIA	Middle Iron Age
NEMA	National Environmental Management Act
NHRA	National Heritage Resources Act
PHRA	Provincial Heritage Resources Agency
PSSA	Palaeontological Society of South Africa
ROD	Record of Decision
SADC	Southern African Development Community
SAHRA	South African Heritage Resources Agency

### ***Archaeological resources***

This includes:

- i. material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years including artefacts, human and hominid remains and artificial features and structures;
- ii. rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- iii. wrecks, being any vessel or aircraft, or any part thereof which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the republic as defined in the Maritimes Zones Act, and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;
- iv. features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

### ***Cultural significance***

This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance

***Development***

This means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in the change to the nature, appearance or physical nature of a place or influence its stability and future well-being, including:

- i. construction, alteration, demolition, removal or change in use of a place or a structure at a place;
- ii. carrying out any works on or over or under a place;
- iii. subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- iv. constructing or putting up for display signs or boards;
- v. any change to the natural or existing condition or topography of land; and
- vi. any removal or destruction of trees, or removal of vegetation or topsoil

***Heritage resources***

This means any place or object of cultural significance

#### 4. ASSESSMENT CRITERIA

This chapter describes the evaluation criteria used for the sites listed below.

The significance of archaeological sites was based on four main criteria:

- **site integrity** (i.e. primary vs. secondary context),
- **amount of deposit, range of features** (e.g., stonewalling, stone tools and enclosures),
- **uniqueness** and
- **potential** to answer present research questions.

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be expressed 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 of the site; and

D - Preserve site

Impacts on these sites by the development will be evaluated as follows

##### 4.1 IMPACT

The potential environmental impacts that may result from the proposed development activities.

##### 4.1.1 Nature and existing mitigation

Natural conditions and conditions inherent in the project design that alleviate (control, moderate, curb) impacts. All management actions, which are presently implemented, are considered part of the project design and therefore mitigate impacts.

#### 4.2 EVALUATION

##### 4.2.1 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>FIELD RATING</b>	<b>GRADE</b>	<b>SIGNIFICANCE</b>	<b>RECOMMENDED MITIGATION</b>
National	Grade 1	-	Conservation; National Site

Significance (NS)			nomination
Provincial Significance (PS)	Grade 2	-	Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation; Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A (GP.A)	-	High / Medium Significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium Significance	Recording before destruction
Generally Protected C (GP.C)	-	Low Significance	Destruction

#### 4.2.2 Impact Rating

##### *VERY HIGH*

These impacts would be considered by society as constituting a major and usually permanent change to the (natural and/or social) environment, and usually result in **severe** or **very severe** effects, or **beneficial** or **very beneficial** effects.

**Example:** The loss of a species would be viewed by informed society as being of VERY HIGH significance.

**Example:** The establishment of a large amount of infrastructure in a rural area, which previously had very few services, would be regarded by the affected parties as resulting in benefits with a VERY HIGH significance.

##### *HIGH*

These impacts will usually result in long term effects on the social and/or natural environment. Impacts rated as HIGH will need to be considered by society as constituting an important and usually long term change to the (natural and/or social) environment. Society would probably view these impacts in a serious light.

**Example:** The loss of a diverse vegetation type, which is fairly common elsewhere, would have a significance rating of HIGH over the long term, as the area could be rehabilitated.

**Example:** The change to soil conditions will impact the natural system, and the impact on affected parties (in this case people growing crops on the soil) would be HIGH.

### *MODERATE*

These impacts will usually result in medium- to long-term effects on the social and/or natural environment. Impacts rated as MODERATE will need to be considered by society as constituting a fairly important and usually medium term change to the (natural and/or social) environment. These impacts are real but not substantial.

**Example:** The loss of a sparse, open vegetation type of low diversity may be regarded as MODERATELY significant.

**Example:** The provision of a clinic in a rural area would result in a benefit of MODERATE significance.

### *LOW*

These impacts will usually result in medium to short term effects on the social and/or natural environment. Impacts rated as LOW will need to be considered by the public and/or the specialist as constituting a fairly unimportant and usually short term change to the (natural and/or social) environment. These impacts are not substantial and are likely to have little real effect.

**Example:** The temporary change in the water table of a wetland habitat, as these systems are adapted to fluctuating water levels.

**Example:** The increased earning potential of people employed as a result of a development would only result in benefits of LOW significance to people who live some distance away.

### *NO SIGNIFICANCE*

There are no primary or secondary effects at all that are important to scientists or the public.

**Example:** A change to the geology of a particular formation may be regarded as severe from a geological perspective, but is of NO significance in the overall context.

#### **4.2.3 Certainty**

*DEFINITE:* More than 90% sure of a particular fact. Substantial supportive data exist to verify the assessment.

*PROBABLE:* Over 70% sure of a particular fact, or of the likelihood of impact occurring.

*POSSIBLE:* Only over 40% sure of a particular fact or of the likelihood of an impact occurring.

*UNSURE:* Less than 40% sure of a particular fact or likelihood of an impact occurring.

#### 4.2.4 Duration

*SHORT TERM:* 0 to 5 years

*MEDIUM:* 6 to 20 years

*LONG TERM:* more than 20 years

*DEMOLISHED:* site will be demolished or is already demolished

Example

*Evaluation*

<b>Impact</b>	<b>Impact Significance</b>	<b>Heritage Significance</b>	<b>Certainty</b>	<b>Duration</b>	<b>Mitigation</b>
Negative	Moderate	Grade GP.B	Possible	Short term	B

## 5. HISTORICAL BACKGROUND OF AREA

The Stone Age is divided in Earlier; Middle and Later Stone Age and refers to the earliest people of South Africa who mainly relied on stone for their tools.

*Earlier Stone Age:* The period from  $\pm$  2.5 million yrs -  $\pm$  250 000 yrs ago. Acheulean stone tools are dominant.

*Middle Stone Age:* Various lithic industries in SA dating from  $\pm$  250 000 yrs – 22 000 yrs before present.

*Later Stone Age:* The period from  $\pm$  22 000-yrs before present to the period of contact with either Iron Age farmers or European colonists.

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 to can be divided into three periods:

*The Early Iron Age:* Most of the first millennium AD.

*The Middle Iron Age:* 10th to 13th centuries AD

*The Late Iron Age:* 14th century to colonial period.

The Witwatersrand Archaeological Resource Management (Wits ARM) database indicated no major sites in the area of the power lines .

## **6. POSSIBLE SENSITIVE HERITAGE AREAS**

The following types of heritage resources might be found in the area of the proposed alignment:

- Stone Age sites – Although significant sites are mostly found in shelters and caves, the possibility of surface scatters cannot be excluded.
- Late Iron Age sites – The Tswana tribes of the area produced stonewalled sites and such sites can possibly occur on the alignment routes.
- Historical sites – The Lichtenburg area is known for the diamond rush of the 1926 – 27 diamond rush. Possible remnants of that era might occur – however the area for the power line alignment is situated to the south west of the concentration of diamond diggings of Bakerville (Bakers) and Grasfontein.

## **7. ASSUMPTIONS AND LIMITATIONS**

The scoping Report only aims to identify possible impacts on heritage sites by the proposed new reticulation power lines. This scoping report can by no means take the place of the required field survey to be completed for the HIA.

## **8. LEGAL AND POLICY REQUIREMENTS**

### **8.1 General principles**

In areas where there has not yet been a systematic survey to identify conservation worthy places, a permit is required to alter or demolish any structure older than 60 years. This will apply until a survey has been done and identified heritage resources are formally protected.

Archaeological and palaeontological sites, materials, and meteorites are the source of our understanding of the evolution of the earth, life on earth and the history of people. In the new legislation, permits are required to damage, destroy, alter, or disturb them. People who already possess material are required to register it. The management of heritage resources are integrated with environmental resources and this means that before development takes place heritage resources are assessed and, if necessary, rescued.

In addition to the formal protection of culturally significant graves, all graves, which are older than 60 years and are not in a cemetery (such as ancestral graves in rural areas), are protected. The legislation protects the interests of communities that have interest in

the graves: they may be consulted before any disturbance takes place. The graves of victims of conflict and those associated with the liberation struggle will be identified, cared for, protected and memorials erected in their honour.

Anyone who intends to undertake a development must notify the heritage resource authority and if there is reason to believe that heritage resources will be affected, an impact assessment report must be compiled at the developer's cost. Thus, developers will be able to proceed without uncertainty about whether work will have to be stopped if an archaeological or heritage resource is discovered.

According to the National Heritage Act (Act 25 of 1999 section 32) it is stated that:

An object or collection of objects, or a type of object or a list of objects, whether specific or generic, that is part of the national estate and the export of which SAHRA deems it necessary to control, may be declared a heritage object, including –

- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- visual art objects;
- military objects;
- numismatic objects;
- objects of cultural and historical significance;
- objects to which oral traditions are attached and which are associated with living heritage;
- objects of scientific or technological interest;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 ( Act No. 43 of 1996), or in a provincial law pertaining to records or archives; and
- any other prescribed category.

Under the National Heritage Resources Act (Act No. 25 of 1999), provisions are made that deal with, and offer protection, to all historic and pre-historic cultural remains, including graves and human remains.

### **8.1 Graves and cemeteries**

Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the National Department of Health and the



relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning, or in some cases the MEC for Housing and Welfare. Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the South African Heritage Resource Agency (SAHRA). The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation.

If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws set by the cemetery authority must be adhered to.

## **9. ASSESSMENT AND RECOMMENDATIONS**

*A sensitivity map is provided in **Annexure A***

The Heritage Scoping Document aims to provide a background for the completion of an HIA for the inclusion in the final EIA document of the Watershed-Sephaku 132kV power reticulation line.

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**10. LIST OF PREPARES**

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**11. REFERENCES**

Australia ICOMOS. The Burra Charter (The Australian ICOMOS charter for places of cultural significance). 2002.

Standard and Guidance for Archaeological Desk-Based Assessment. 1994.

International Council of Monuments & Site Documents. Conventions, Charters and Guidelines. 2002.

Documents on Cultural Heritage Protection. 2002.

International Council of Monuments & Site Documents. Guidelines to the Burra Charter: Conservation Policy. 1985.

International Council of Monuments & Site Documents. Guidelines to the Burra Charter: Cultural Significance. 1984.

Australian Historic Themes. A Framework for use in Heritage Assessment and Management. Australian Heritage Commission. 2001.