



PHASE 1 HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED KENDAL POWER STATION CONTINUOUS ASH DISPOSAL FACILITY AND ASSOCIATED INFRASTRUCTURE (LOW-PRESSURE SYSTEM (LPS) PIPELINE; 11KV POWERLINE) IN MPUMALANGA



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DECLARATION OF INDEPENDENCE

This report has been compiled by Makhosazana Mngomezulu, principal archaeologist and heritage consultant. The views expressed in this report are independent of the author and no other interest was displayed during the decision-making process of the proposed Kendal Power Station Continuous Ash Disposal Facility and associated infrastructure (Low Pressure System (LPS) pipeline; 11KV powerline)

SIGNATURE:

A handwritten signature in blue ink, appearing to read "M. Mngomezulu", is written over a horizontal line.

TERMINOLOGY

BP	Before Present
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EIA	Early Iron Age
ESA	Early Stone Age
HIA	Heritage Impact Assessment
Ibid	<i>Ibidem</i> , Latin word meaning same as the previous source
LIA	Late Iron Age
LSA	Late Stone Age
MIA	Middle Iron Age
MPHRA	Mpumalanga Provincial Heritage Resources Authority
MSA	Middle Stone Age
NHRA	National Heritage Resources Act
SAHRA	South African National Resources Agency
SAHRIS	South African Heritage Resources Information System
SAPS	South African Police Services
ya	years ago

DEFINITIONS

In situ: In the original place. No disturbance.

Chance finds: Archaeological and historical artefacts, features, structures and formal or informal burial of human remains that are found accidentally in context not previously identified during the site survey. Such findings are usually exposed by activities such as excavation.

ESA dates between 2 million ya to 2 00 000 BP. Industries associated with this time period includes Oldowan, Acheulean and Fauresmith. ESA stone tools include hammer stones, flakes, cores, handaxes and cleavers (Pelser 2009).

MSA dates between 2 00 000 and 25 000 to 20 000 BP, this varies with location. Industries associated with this time period includes the Howieson's Poort. The stone tools which characterise this period include scrapers, blades, points and flake.

LSA which dates between 25 000 and 20 000 to 2 000 BP. Stone tools of this period are characterised by their small size; this includes backed knives and borers (Pelser 2009).

Iron Age (IA) refers to a period of time where agropastoral (mixed farming) way of life began and grew as opposed to Stone Age hunter-gathering.

EIA dates to AD 200 – 900 (Huffman 2007).

MIA dates to AD 900 – 1300 (ibid).

LIA dates to AD 1300 – 1840 (ibid).

EXECUTIVE SUMMARY

Eskom Holdings SOC Limited is proposing an installation of a Low-Pressure System (LPS) pipeline and an 11KV powerline within the Kendal Power Station continuous ash disposal facility. Vungandze Projects has been appointed to undertake a Phase 1 Heritage Impact Assessment in terms of the heritage significance on the proposed site.

During the physical survey conducted on 16 August 2022 and 09 December 2022, no other heritage resources were found on the proposed route; however, a possible grave was noted 160m west of the proposed route. The proposed site is viable for the proposed project in terms of heritage; provided the proposed mitigation measures are adhered to.

The report will be submitted to the Relevant Heritage Resources Authority through SAHRIS (South African Resources Information System) for comments and for a decision as per the National Heritage Resources Act (Act No 25 of 1999). The proposed project can proceed from a heritage perspective pending a decision from SAHRA.

Project Structure

Introduction	<ul style="list-style-type: none">• Report background• Methodology• Assumptions & limitations
Project locality	<ul style="list-style-type: none">• Location (include mapping)• Heritage Background
Findings	<ul style="list-style-type: none">• Types of findings• Mapping of findings• Assessment of findings• Level of significance• Possible impacts
Recommendations & conclusion	<ul style="list-style-type: none">• Mitigation measures
Additional Information	<ul style="list-style-type: none">• Applicable Legislation

Contents

1. Introduction	9
2. Terms of Reference (ToR)	9
3. Methodology	10
3.1 Assumptions	14
3.2 Limitations	14
4. Locality Area	14
5. Images of the study area	18
6. Historical Background of the study area	21
6.1 Stone Age Archaeology:	21
6.2 Iron Age Archaeology	22
6.3 History of Kandal Power Station	22
7. Findings	23
8. Impact Assessment	24
8.1 Construction Phase	27
8.1.1 Impact	27
8.1.2 Mitigation measure	27
8.2 Operational Phase	27
8.2.1 Impact	27
8.2.2 Mitigation measure	27
8.3 Decommissioning Phase	27
8.3.1 Impact	27
8.3.2 Mitigation measure	27
8.4 Site Significance	28
9. Recommendations and Chance findings	28
10. Conclusion	29
11. References	30
12. Legislation	32
12.1 Section 3 of the NHRA 25 of 1999	32
12.2 Section 36 of NHRA 25 of 1999	34
12.3 Section 38 of NHRA 25 of 1999	36

LIST OF FIGURES

Figure 1: Locality map of the study area	15
Figure 2: Close aerial view of the proposed study area.	16
Figure 3: Tracklog Map.	17
Figure 4: Kendal Ash Dam.	18
Figure 5: Vegetation on site.	18
Figure 6: Dam 2 view facing Kendal power station.	19
Figure 7: Dam 2 view.	19
Figure 8: Dam 3 view with current construction.	20
Figure 9: Dam 5 view next to a wetland area.	20
Figure 10: Dam 4 view	21
Figure 11: Map depicting possible grave in relation to the route.	23
Figure 12: Possible grave and vegetation around it.	24

LIST OF TABLES

<i>Table 1: Site significance rating according to SAHRA.</i>	10
Table 2: The significance weighing for each potential impact are as follows:	13
Table 3: Evaluation of the impacts of the project on the heritage resource WITHOUT mitigation measures.	25
Table 4: Evaluation of the impacts of project on the structures WITH mitigation measures.	26

1. INTRODUCTION

Eskom Holdings SOC Limited is proposing an installation of a Low-Pressure System (LPS) pipeline and an 11KV powerline within the Kendal Power Station continuous ash disposal facility. An Integrated Environmental Authorisation (IEA) for the Kendal Continuous Ash Disposal Facility (ADF) project was received on 28 July 2015 from the Department of Environmental Affairs (DEA). The Water Use Licence (WUL) for the Kendal Continuous ADF project was received on 8 August 2015 from the Department of Water and Sanitation (DWS). The licences excluded the Low-Pressure System (LPS) and the 11KV powerline that is being applied for in this project (Kendal Power Station Continuous Ash Disposal Facility and associated infrastructure (Low-Pressure System (LPS) pipeline; 11KV powerline) in Mpumalanga.

According to the National Heritage Resources Act (Act 25 of 1999), any person who intends to undertake a development must conduct a Heritage Impact Assessment to determine if there are any heritage resources along and within the proposed project; and if any resources are found, mitigation measures and recommendations for the protection of such resources need to be adhered to. Below is the heritage act with reference to the proposed project and why a heritage impact assessment should be conducted:

Based on Section 38 under Heritage Resources Management of the National Heritage Act 25 of 1999 the heritage resources in South Africa should be managed in the following:

“(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length”.

The aim of this report is to outline anticipated impacts of the proposed Low-Pressure System (LPS) pipeline; 11KV powerline on the proposed site and; if whether or not the chosen site is suitable for such a development in terms of heritage; and provide recommendations/mitigation measures as a way forward.

2. TERMS OF REFERENCE (TOR)

The approach used for this report was:

- Undertake a Phase 1 HIA in accordance with the NHRA.
- Identify and map all heritage resources in the proposed area and its surroundings, as defined in Section 3 of the NHRA, including archaeological sites on or close (within a 100m boundary of the site) to the proposed area.
- Assess the significance of any identified resources in terms of the heritage assessment criteria as set out in the South African Heritage Resources Agency (SAHRA) regulations.
- Provide mitigation measures to safeguard heritage resources identified on study area; and
- Comply with specific requirements and guidelines of MPHRA and SAHRA.
- Submit final report to SAHRIS for comments and decision making.

3. METHODOLOGY

The physical survey was conducted and completed on 16 August 2022 and 09 December 2022. This report is prepared according to the NHRA. Background research of the study area was conducted using literature such as books, journals, previously conducted HIA's on the study area and the internet before and after the site visit. The purpose of the research prior to the physical survey was to acquire information as to what to expect in the study area, the site visit was completed to identify heritage resources that may be impacted due to a construction of the proposed LPS pipeline and 11KV powerline.

A heritage resource means any place or object of cultural significance [NHRA1999 (Act No. 25 of 1999)]. The NHRA was used as a source of reference to identify what is known as a heritage resource (see Appendix A Section 3 for list of heritage resources).

The survey was conducted on foot with the assistance of Eskom ECO in order to record and locate any heritage resources within the study areas. The table from SAHRA Regulations will be used to grade the significance and evaluate the level of impact on the heritage resources identified.

Table 1: Site significance rating according to SAHRA.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade I	High Significance	Conservation; National Site nomination

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
Provincial Significance (PS)	Grade II	High Significance	Conservation; Provincial Site nomination
Local Significance (LS)	Grade IIIA	High Significance	Conservation: Mitigation not advised
Local Significance (LS)	Grade IIIB	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.A)	-	Low Significance	Destruction

The determination of the effects of environmental impact on an environmental parameter is determined through a systematic analysis of the various components of the impact. This is undertaken using information that is available from the Environmental Assessment Practitioner (EAP) through the process of the Environmental Impact Assessment (EIA). The impact evaluation of predicted impacts was undertaken through an assessment of the significance of the impacts. This is in line with specialist requirements as required by the client. For example, the request that:

The impact methodology (should) concentrate on addressing key issues. The methodology employed in the report thus allows for the evaluation of the efficiency of the process itself.

The following Assessment Criteria is used for Impact Assessment

Impacts can be defined as any change in the physical-chemical, biological, cultural and or socio-economic environmental system that can be attributed to humans. The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the

impacts.

The significance of the impacts will be determined through a synthesis of the criteria below:

Probability: describes the likelihood of the impact actually occurring

- **Improbable:** the possibility of the impact occurring is very low, due to the circumstances, design or experience.
- **Probable:** there is a probability that the impact will occur to the extent that provision must be made therefore.
- **Highly probable:** it is most likely that the impact will occur at some stage of the development.
- **Definite:** the impact will take place regardless of any prevention plans and there can only be relied on mitigation measures or contingency plans to contain the effect.

Duration: the lifetime of the impact

- **Short Term:** the impact will either disappear with mitigation or will be mitigated through natural processes in a time span shorter than any of the phases.
- **Medium Term:** the impact will last up to the end of the phases, where after it will be negated.
- **Long Term:** the impact will last for the entire operational phase of the project but will be mitigated by direct human action or by natural processes thereafter.
- **Permanent:** the impact is non-transitory. Mitigation either by man or natural processes will not occur in such a way or in such a time span that the impact can be considered transient.

Scale: the physical and spatial size of the impact

- **Local:** the impacted area extends only as far as the activity, e.g. footprint
- **Site:** the impact could affect the whole or measurable portion of the abovementioned property.
- **Regional:** the impact could affect the area including the neighbouring residential areas.

Magnitude/Severity: Does the impact destroy the environment, or alter its function

- **Low:** the impact alters the affected environment in such a way that natural processes are not affected.
- **Medium:** the affected environment is altered, but functions and processes continue in a modified way.
- **High:** function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

Significance: This is an indication of the importance of the impact in terms of both

physical extent and time scale, and therefore indicates the level of mitigation required.

- **Negligible:** the impact is non-existent or unsubstantial and is of no or little importance to any stakeholder and can be ignored.
- **Low:** the impact is limited in extent, has low to medium intensity; whatever its probability of occurrence is, the impact will not have a material effect on the decision and is likely to require management intervention with increased costs.
- **Moderate:** the impact is of importance to one or more stakeholders, and its intensity will be medium or high; therefore, the impact may materially affect the decision, and management intervention will be required.
- **High:** The impact could render development options controversial or the project unacceptable if it cannot be reduced to acceptable levels; and/or the cost of management intervention will be a significant factor in mitigation.

The significance is calculated by combining the criteria in the following formula:

Sum (Duration, Scale, Magnitude) x Probability (*Table -2*)

S = Significance weighting; Sc = Scale; D = Duration; M = Magnitude; P = Probability

Table 2: The significance weighing for each potential impact are as follows:

Aspe	Description	Weight
Probability	Improbable	1
	Probable	2
	Highly Probable	4
	Definite	5
Duration	Short term	1
	Medium term	3
	Long term	4
	Permanent	5
Scale	Local	1
	Site	2
	Regional	3

Magnitude/Severity	Low	2
	Medium	6
	High	8
Significance	Sum (Duration, Scale, Magnitude) x Probability	
	Negligible	≤20
	Low	>20≤40
	Moderate	>40≤60
	High	>60

3.1 Assumptions

It was assumed based on the aerial view from Google Earth and literature review that the study area might not yield heritage resources as it seemed severely disturbed.

3.2 Limitations

No limitations were encountered on site during the survey.

4. LOCALITY AREA

The proposed Kendal Power Station Continuous Ash Disposal Facility and associated infrastructure (Low Pressure System (LPS) pipeline; 11KV powerline) is situated within Ogies town under Kendal. The site is boarded by R555 and R545, the 11KV powerline is proposed within the Ash dam vicinity on the farm Schoongezicht 218 IR under eMalahleni Local Municipality, Nkangala District Municipality, Mpumalanga (figure 1-3). The project site is situated on GPS Co-ordinates 26° 04' 58.45"S; 28° 56' 04.11"E, these were taken mid north LPS pipeline and 11 KV powerline. The site is an open veld with grass varying from small to long with trees, and some portions have been disturbed whereby soil has been removed (figure 4-10).

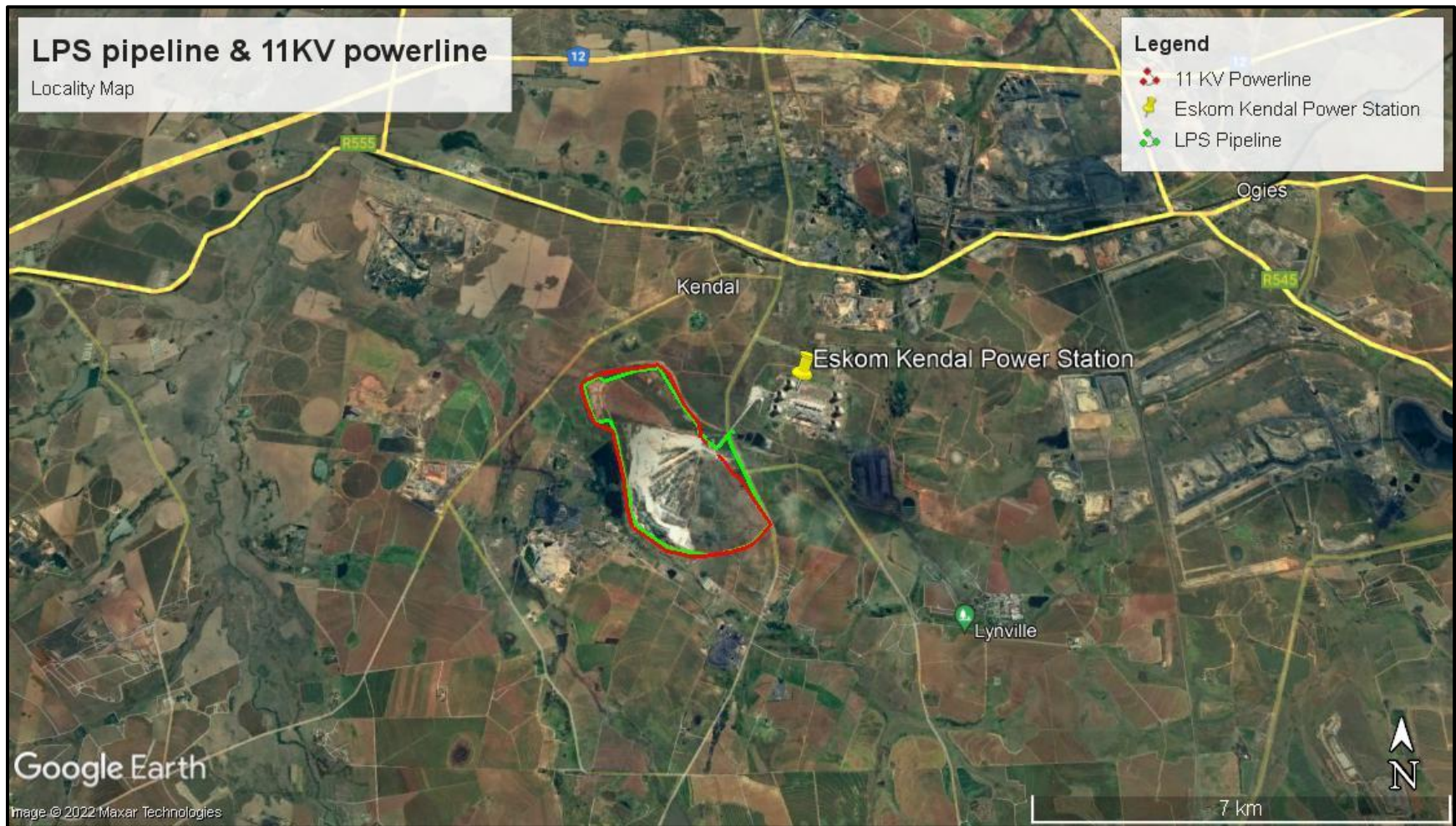


Figure 1: Locality map of the study area

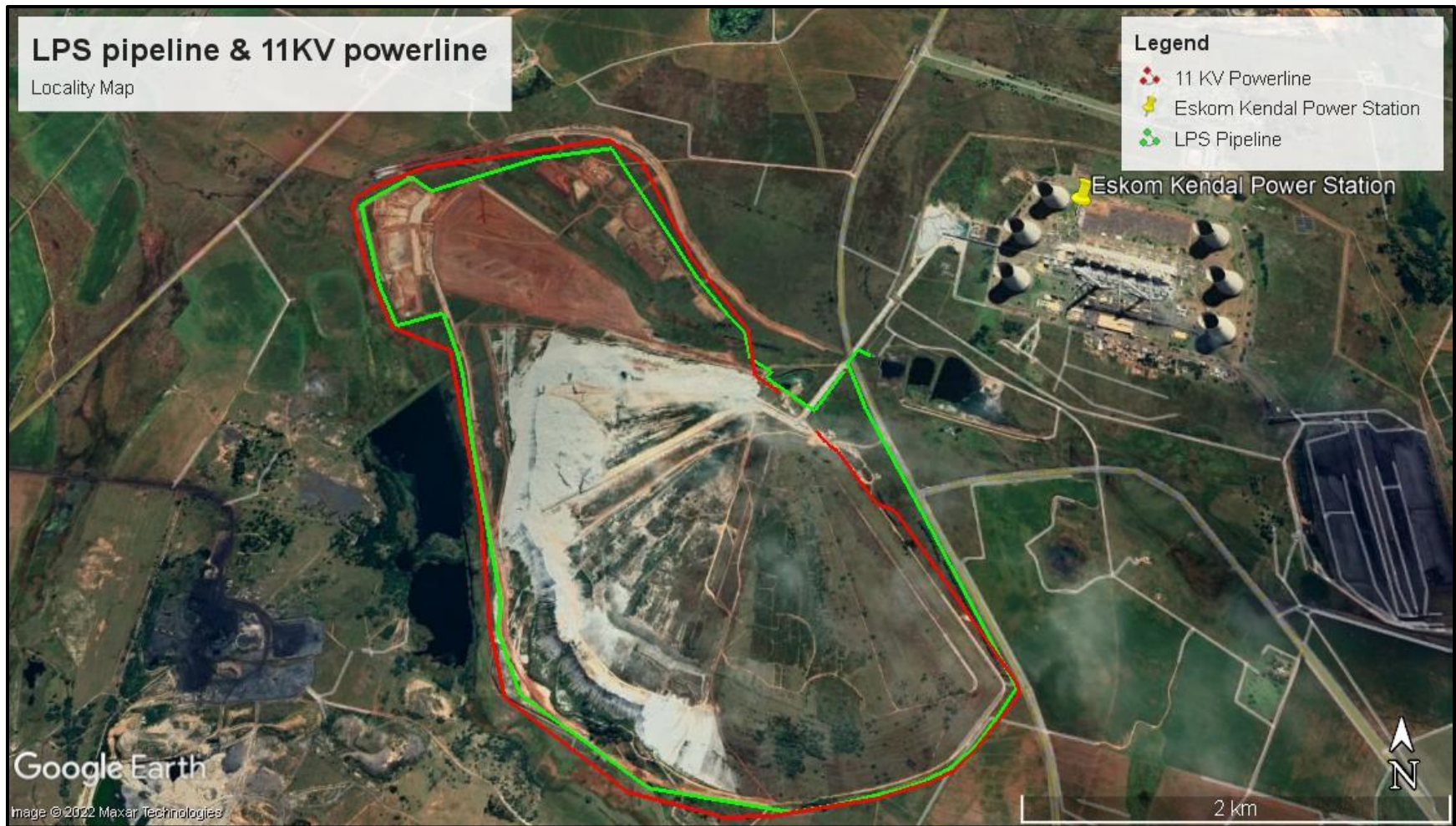


Figure 2: Close aerial view of the proposed study area.

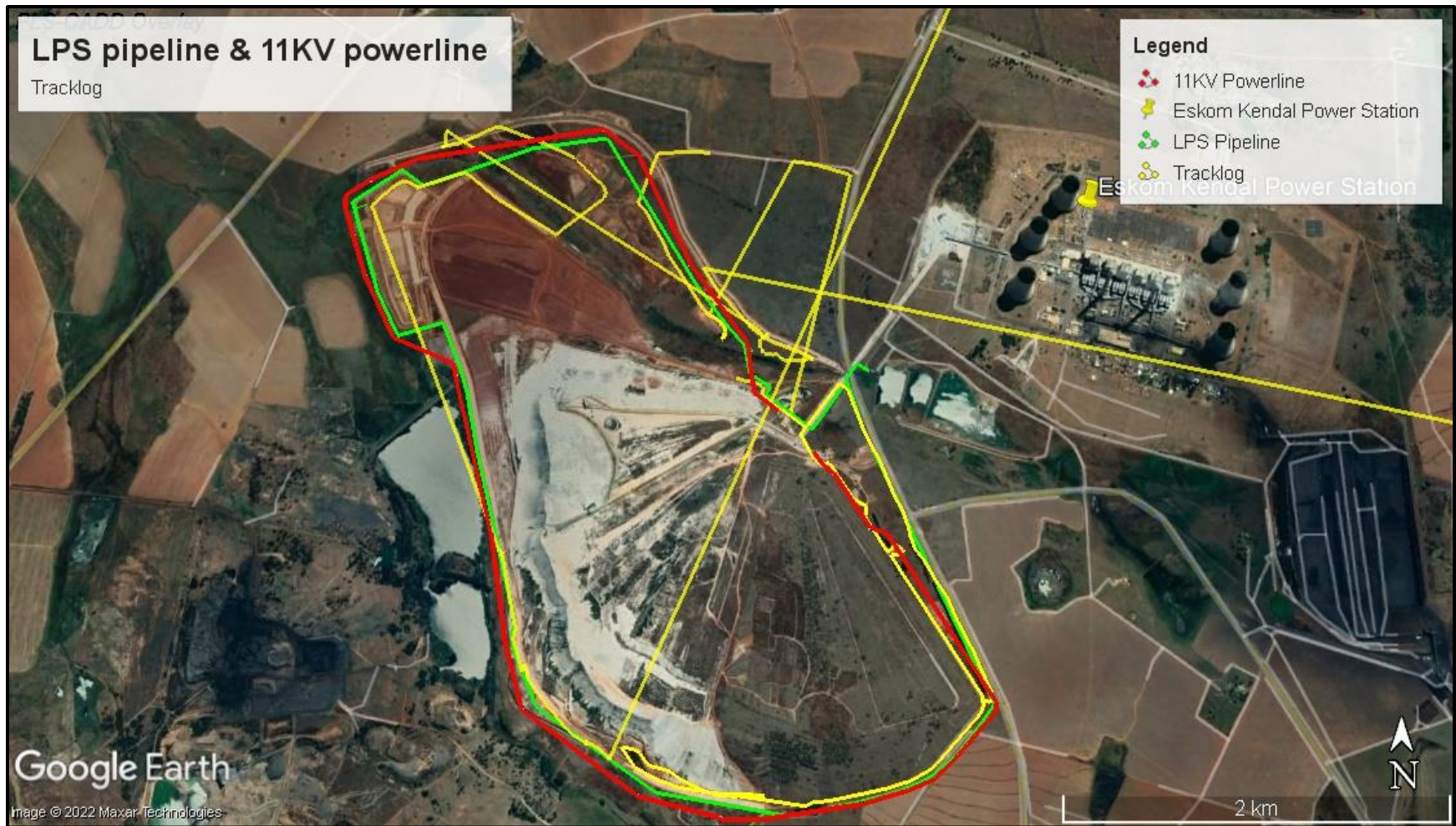


Figure 3: Tracklog Map.

5. IMAGES OF THE STUDY AREA

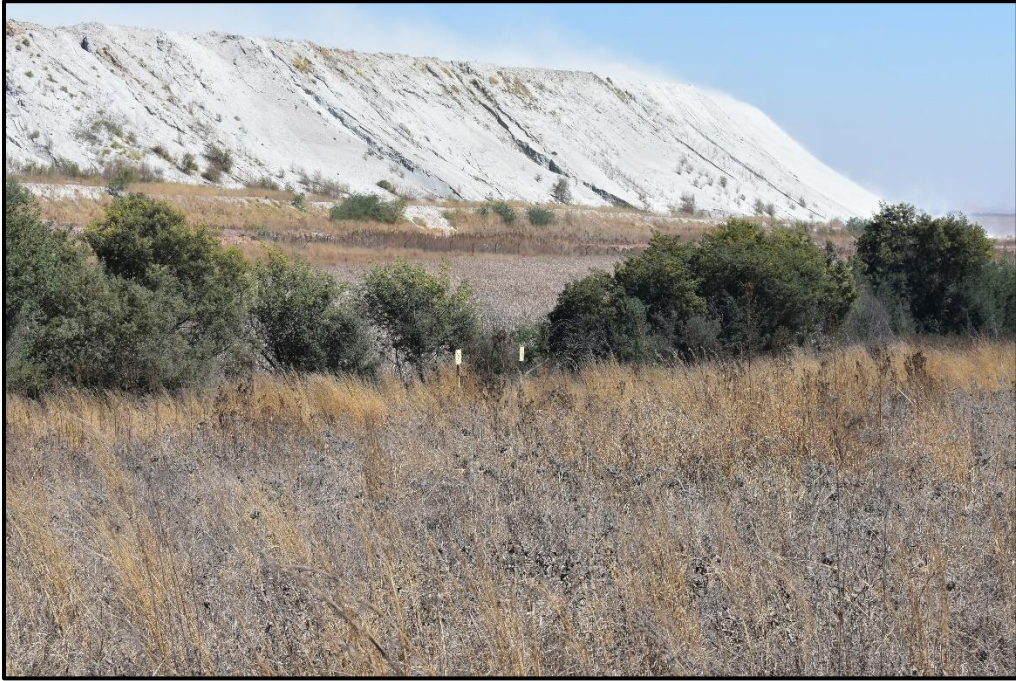


Figure 4: Kendal Ash Dam.



Figure 5: Vegetation on site.



Figure 6: Dam 2 view facing Kendal power station.



Figure 7: Dam 2 view.



Figure 8: Dam 3 view with current construction.



Figure 9: Dam 5 view next to a wetland area.



Figure 10: Dam 4 view

6. HISTORICAL BACKGROUND OF THE STUDY AREA

History of human activity in South Africa, as in all parts of the world, dates to millions of years. It is important to elaborate as far back in time to enable the reader to understand what is meant by archaeological material and why is it declared a heritage resource. Archaeological materials are divided into two periods, the Stone Age, and the Iron Age. Late Iron Age marks the transition between prehistory and history, a period of colonial era until recent. Archaeological sites have been reported in the Northern, especially Early Stone Age and Middle Stone Age; this however does not exclude Iron Age sites. Furthermore, Heritage assessments that have been conducted due to different developments have also contributed vastly in identifying sites that are of heritage significance.

6.1 Stone Age Archaeology:

The Stone Age is a period that dates between 2 million years ago (ya) to 2000 ya. Due to the vast character found within stone tools of this period, it was then divided into three phases: Early Stone Age (ESA), Middle Stone Age (MSA) and the Late Stone Age (LSA). ESA dates between

2 million ya and 200 000 Before Present (BP). Industries associated with this time includes Oldowan, Acheulean and Fauresmith. ESA stone tools include hammer stones, flakes, cores, hand axes and cleavers (Pelser 2009). The more refined stone tools appeared during the MSA. MSA dates between 200 000 and 25 000 to 20 000 BP, this varies with location. Industries associated with this period includes the Howieson's Poort. The stone tools which characterise this period include scrapers, blades, points, and flake. Lastly is the LSA which dates between 25 000 and 20 000 to 2 000 BP. Stone tools of this period are characterised by their small size; this includes backed knives and borers (Pelser 2009).

No Stone Age sites were found on the proposed site.

6.2 Iron Age Archaeology

According to Huffman (2007) Iron Age marks the early evidence of farming community in Southern Africa. Animal husbandry, crop farming, pottery and metal working were introduced which in due time liberated hunter gatherers to change their way of life which is less mobile (Carruthers 1990). Due to vast technological discrepancies and settlement pattern within this period, it was divided into three. The Early Iron Age (EIA) dates to AD 200 – 900, Middle Iron Age (MIA) dates to AD 900 – 1300, and the Late Iron Age (LIA) dates to AD 1300 – 1840 (Huffman 2007).

No Iron Age sites were found on the proposed site.

6.3 History of Kendal Power Station

In the early 1980s ESCOM planners were predicting electricity demand to grow at 7 to 8% a year. At that rate thanks to the nature of compounded growth you have to double capacity every decade or so. To meet the expected demand, ESCOM started plans on three large power stations, Matimba, Majuba and Kendal. Even though things were slowing down in the early 1980s. ESCOM Chairman Jan H Smith saw it as temporary and so carried on full steam ahead with building large power stations. The early 1980s saw construction begin on Lethabo, Matimba, and Kendal power stations. In 1993 Kendal power station was completed. Kendal was the world's largest indirect dry-cooled power station, boasting chimneys 275m high.

7. FINDINGS

During the survey, no other heritage resources were found on the proposed route; however, a possible grave was noted 160m west from the proposed route on coordinates 26° 05' 30.98"S; 28° 56' 49.81"E (figure 11). This possible grave was also noted on study conducted by PGS Heritage in 2014. The size of the grass varied from small to long making it difficult to locate any other heritage resources that might be found on site. Other portions of the site have been severely disturbed with the existing ash dam, existing structures, and ongoing construction on site.

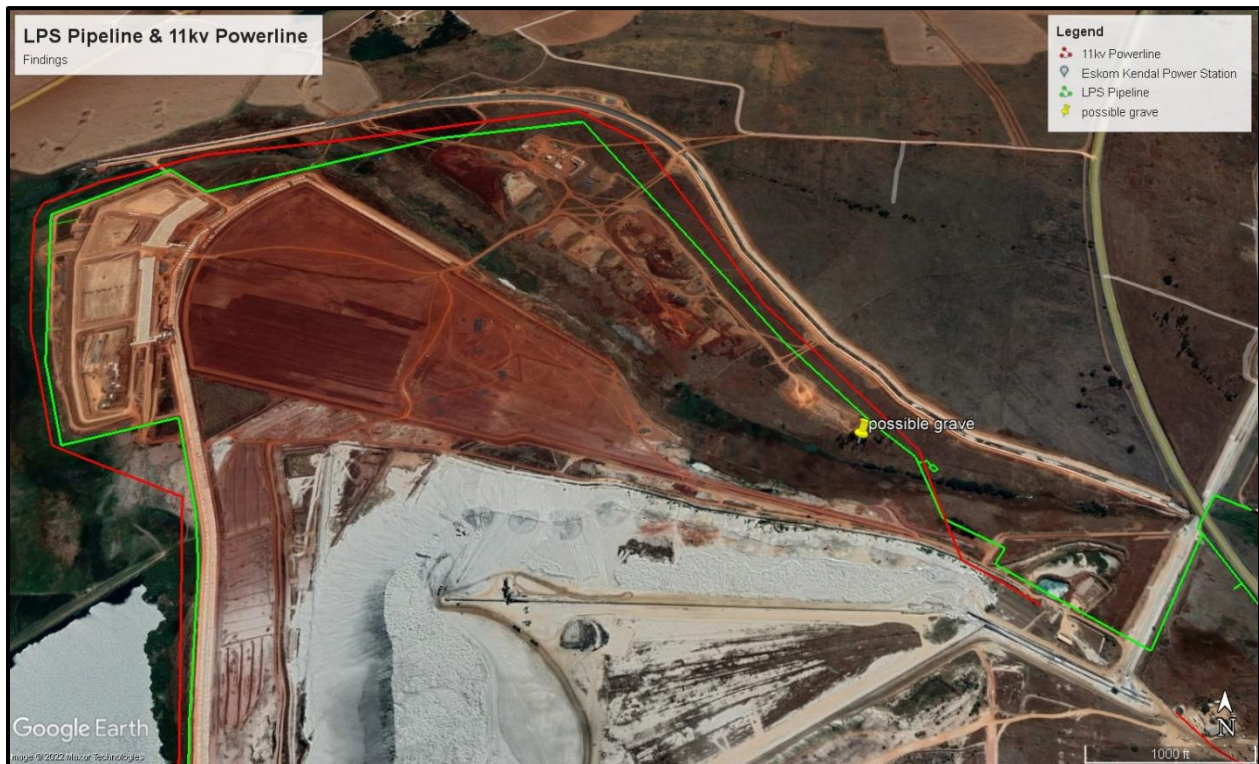


Figure 11: Map depicting possible grave in relation to the route.



Figure 12: Possible grave and vegetation around it.

8. IMPACT ASSESSMENT

The proposed LPS pipeline and 11KV powerline will impact the proposed site during the construction phase due to disturbance of the ground. Should any heritage resources be discovered apart from the possible grave noted, the proposed recommendations should be used

as reference on how to handle and protect heritage resources. This section evaluates the extent of the impact WITH and WITHOUT mitigation measures in relation to the project under study.

Table 3: Evaluation of the impacts of the project on the heritage resource **WITHOUT** mitigation measures.

Aspect	Description	Weight
Probability	Improbable	1
	Probable	2
	Highly Probable	4
	Definite	5
Duration	Short term	1
	Medium term	3
	Long term	4
	Permanent	5
Scale	Local	1
	Site	2
	Regional	3
Magnitude/Severity	Low	2
	Medium	6
	High	8
Significance	Sum (Duration, Scale, Magnitude) x Probability	
	Negligible	≤20
	Low	>20≤40
	Moderate	>40≤60
	High	>60

Results: $5+3+8 \times 5 = 80$ i.e >60

This means without mitigation measures; the impact could render development options controversial or the project unacceptable if it cannot be reduced to acceptable levels; and/or the cost of management intervention will be a significant factor in mitigation.

Table 4: Evaluation of the impacts of project on the structures **WITH** mitigation measures.

Aspect	Description	Weight
Probability	Improbable	1
	Probable	2
	Highly Probable	4
	Definite	5
Duration	Short term	1
	Medium term	3
	Long term	4
	Permanent	5
Scale	Local	1
	Site	2
	Regional	3
Magnitude/Severity	Low	2
	Medium	6
	High	8
Significance	Sum (Duration, Scale, Magnitude) x Probability	
	Negligible	≤20
	Low	>20≤40
	Moderate	>40≤60
	High	>60

Results: (3x1x6) x2 = 36 i.e. >20≤40

The site significance is low. Therefore, the impact is limited in extent, has low to medium intensity; whatever its probability of occurrence is, the impact will not have a material effect on the decision and is likely to require management intervention with increased costs.

8.1 Construction Phase

8.1.1 Impact

Discovery of heritage resources such as burial grounds and graves and archaeological material is a probability and/or cannot be ruled out in the construction phase, due to ground disturbance as a result of excavations.

8.1.2 Mitigation measure

Should potential human remains and/or archaeological material such as stone tools and iron age material be found on site, the contractor should cease construction immediately and the South African Police Service and the client should be contacted for human remains, and a professional archaeologist for the archaeological material.

8.2 Operational Phase

8.2.1 Impact

No heritage impacts are anticipated during the operational phase.

8.2.2 Mitigation measure

No mitigation measure proposed.

8.3 Decommissioning Phase

8.3.1 Impact

No heritage impacts are anticipated during the operational phase.

8.3.2 Mitigation measure

No mitigation measure proposed.

8.4 Site Significance

The level of significance of the site and the cultural resources varies between social, historical, spiritual, scientific and aesthetic value.

Social value is when a place has become a focus of spiritual, political, national, or other cultural sentiments to a majority or minority group. This may be because the site is accessible and well known, rather than particularly well preserved or scientifically important (SAHRA Regulations). The proposed site has no social value.

Historical value refers to areas where historical events took place, and such events have high significance either locally, regionally, provincially, or nationally. The proposed site has no historical value.

Scientific value refers to the importance of the study area for research purposes. The study area has no scientific value.

Aesthetic value refers to the unique beauty of the site. The study area has no aesthetic value.

Based on the level of significance, Kendal Ash Dam Facility has low heritage significance.

9. RECOMMENDATIONS AND CHANGE FINDINGS

- During the construction phase, the contractor should keep within the proposed parameters of the proposed site.
- The contractor should induct all employees on the importance of heritage sites and resources that they should not be impacted in any way. This is to ensure that even if any heritage resources are found during the construction phase or exposed due to construction activities, should by no means be impacted or destroyed.
- A professional archaeologist should be appointed to be on standby should any heritage remains be found on site during construction.
- The site needs be cleared to allow visibility on the ground. A test excavation should then be conducted to confirm if the possible grave is indeed a grave. If the testing shows positive results, the following is recommended:

- Given that the grave is outside the proposed route, it must be left *in situ* and be incorporated into the development by barricading/fencing off with an entrance to ensure that they are protected while allowing access for the family (should they be located).
- Should the developer choose to relocate the grave, the following is recommended:
 - A Phase 2 HIA whereby a process of relocation will be conducted which include tracing the families (full public participation) and reburial of the remains to another place as recommended by relevant family. All of which will be under the expense of the client.
- Should heritage resources be found on site during excavation apart from the possible grave; be it archaeological artefacts such as stone tools and/or pottery; burial grounds and graves; the contractor should cease construction immediately and contact the client. The appointed archaeologist should be called to site to assess the significance of the archaeological material and the impacts of the proposed activities on such materials, and then provide mitigation measures.
- The possibility of uncovering unearthed human remains and shallow grave(s) should not be ruled out. Should potential human remains be found on site, the contractor should cease construction immediately and the South African Police Service and the client should be contacted. Should the remains be below 60 years old since time of death, it is considered a forensic case and further investigations should be conducted by the police and should the remains be above 60 years old since time of death, it becomes a South African Heritage Resources Agency case. This means the appointed archaeologist should be called on site to remove the remains at the expense of the client.
- It should be noted that no heritage resources should be removed on site without a permit application from SAHRA.

10. CONCLUSION

In conclusion, no other heritage resources were found on the proposed route; however, a possible grave was noted in close proximity. The route has been previously disturbed with the existing road and ongoing construction in some areas. As such the proposed route has low significance

from a heritage perspective. Chances of finding burial grounds and graves and/or any other archaeological material on the proposed route should not be ruled out especially during construction phase. The proposed project may proceed provided mitigation measures and recommendations provided are adhered to and implemented.

The final report will be uploaded on SAHRIS to the relevant heritage authority for review and for a decision. Furthermore, subject to approval from SAHRA we recommend the approval to proceed with the proposed Kendal Ash Dam LPS pipeline; 11KV powerline in terms of the NHRA.

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<https://www.eskom.co.za/>

APPENDIX A

LIST OF LEGISLATION APPLICABLE TO THE SITE

12. LEGISLATION

National Heritage Resources Act 25 of 1999

12.1 Section 3 of the NHRA 25 of 1999

According to Section 3 under **National Estate** of the National Heritage Act 25 of 1999 the heritage resources in South Africa includes the following:

“(1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.

(2) Without limiting the generality of subsection (1), the national estate may include –

(a) places, buildings, structures and equipment of cultural significance;

(b) places to which oral traditions are attached or which are associated with living heritage; (c) historical settlements and townscapes;

(d) landscapes and natural features of cultural significance;

(e) geological sites of scientific or cultural importance;

(f) archaeological and paleontological sites;

(g) graves and burial grounds, including—

(i) ancestral graves;

(ii) royal graves and graves of traditional leaders;

(iii) graves of victims of conflict;

(iv) graves of individuals designated by the Minister by notice in the Gazette;

(v) historical graves and cemeteries; and

(vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

(h) sites of significance relating to the history of slavery in South Africa;

(i) movable objects, including:

(i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;

(ii) objects to which oral traditions are attached or which are associated with living heritage;

(iii) ethnographic art and objects;

(iv) military objects;

(v) objects of decorative or fine art;

(vi) objects of scientific or technological interest; and

(vii) books, records, documents, photographic positives and negatives, graphic, film or video material 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).

(3) Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of –

(a) its importance in the community, or pattern of South Africa's history;

(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;

(c) its potential to yield information that will contribute to an understanding of

South Africa's natural or cultural heritage;

(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;

- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- (i) sites of significance relating to the history of slavery in South Africa”.

12.2 Section 36 of NHRA 25 of 1999

According to Section 36 under **Burial grounds and graves** of the National Heritage Act 25 of 1999 the graves in South Africa are protected as follows:

- (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.
- (2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.
- (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.
- (4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.
- (5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority—
 - (a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
 - (b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.
- (6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—
 - (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
 - (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.
- (7)(a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security

forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.

- (b) The Minister must publish such lists as he or she approves in the Gazette.
- (8) Subject to section 56(2), SAHRA has the power, with respect to the graves of victims of conflict outside the Republic, to perform any function of a provincial heritage resources authority in terms of this section.
- (9) SAHRA must assist other State Departments in identifying graves in a foreign country of victims of conflict connected with the liberation struggle and, following negotiations with the next of kin, or relevant authorities, it may re-inter the remains of that person in a prominent place in the capital of the Republic.

12.3 Section 38 of NHRA 25 of 1999

According to Section 38 under Heritage resources management of the National Heritage Act 25 of 1999 the heritage resources in South Africa should be managed in the following:

“(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised 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 50 m in length;
- (c) any development or other activity which will change the character of a site—
 - (i) exceeding 5 000 m² in extent; or
 - (ii) involving three or more existing 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 heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m² in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at 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.

(2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection (1)—

(a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or

(b) notify the person concerned that this section does not apply.

(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

(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.

(4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development, decide—

- (a) whether or not the development may proceed;
 - (b) any limitations or conditions to be applied to the development;
 - (c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
 - (d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
 - (e) whether the appointment of specialists is required as a condition of approval of the proposal.
- (5) A provincial heritage resources authority shall not make any decision under subsection (4) with respect to any development which impacts on a heritage resource protected at national level unless it has consulted SAHRA.
- (6) The applicant may appeal against the decision of the provincial heritage resources authority to the MEC, who—
- (a) must consider the views of both parties; and
 - (b) may at his or her discretion—
 - (i) appoint a committee to undertake an independent review of the impact assessment report and the decision of the responsible heritage authority; and
 - (ii) consult SAHRA; and
 - (c) must uphold, amend or overturn such decision.
- (7) The provisions of this section do not apply to a development described in subsection (1) affecting any heritage resource formally protected by SAHRA unless the authority concerned decides otherwise.
- (8) The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage

resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.

(9) The provincial heritage resources authority, with the approval of the MEC, may, by notice in the Provincial Gazette, exempt from the requirements of this section any place specified in the notice.

(10) Any person who has complied with the decision of a provincial heritage resources authority in subsection (4) or of the MEC in terms of subsection (6) or other requirements referred to in subsection (8), must be exempted from compliance with all other protections in terms of this Part, but any existing heritage agreements made in terms of section 42 must continue to apply.