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**A PHASE 1 AIA REPORT  
FOR THE SYLVANIA MOOINOOI TSF AND PIPELINES PROJECT  
ON PORTIONS 152-154 OF THE FARM ELANDSKRAAL 469JQ  
NEAR MOOINOOI, BOJANALA DISTRICT MUNICIPALITY  
NORTHWEST PROVINCE**

For:

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REPORT: **APAC020/57**

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***July 2020***

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## **SUMMARY**

APelser Archaeological Consulting (APAC) was appointed by Prescali Environmental Consultants (Pty) Ltd to undertake a Phase 1 AIA for the Sylvania Mooinooi TSF & Pipelines Project on Portions 152-154 of the farm Elandskraal 469JQ. The study and development area is located close to the town of Mooinooi in the Bojanala District Municipality of the Northwest Province.

Background research indicated that there are a number of cultural heritage (archaeological & historical) sites and features in the larger geographical area, although nothing is known for the specific parcels of land. Physical fieldwork was undertaken during July 2020 and this document discusses the results of the assessment. No archaeological sites, features or material were identified in the area during the field assessment. Recommendations on the way forward in terms of the required mitigation measures are provided at the end.

Finally it is recommended that, from an Archaeological point of view, the proposed development activities can be allowed to continue, taking the recommended measures into consideration.

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## **1. INTRODUCTION**

APelser Archaeological Consulting (APAC) was appointed by Prescali Environmental Consultants (Pty) Ltd to undertake a Phase 1 AIA for the Sylvania Mooinooi TSF & Pipelines Project on Portions 152-154 of the farm Elandskraal 469JQ. The study and development area is located close to the town of Mooinooi in the Bojanala District Municipality of the Northwest Province.

Background research indicated that there are a number of cultural heritage (archaeological & historical) sites and features in the larger geographical area, although nothing is known for the specific parcels of land. No archaeological sites, features or material were identified in the area during the field assessment.

The client indicated the location and boundaries of the study area and the assessment concentrated on this portion. The Specialist was accompanied in the field by a representative of Sylvania Mooinooi (Western Chrome Mines).

## **2. TERMS OF REFERENCE**

The Terms of Reference for the study was to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
5. Review applicable legislative requirements;

## **3. LEGISLATIVE REQUIREMENTS**

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

### **3.1. The National Heritage Resources Act**

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

**The National Estate includes the following:**

- 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 features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and paleontological importance
- g. Sites of significance relating to the history of slavery
- h. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

**Structures**

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

### **Archaeology, palaeontology and meteorites**

Section 35(4) of the Act deals with archaeology, palaeontology and meteorites. The Act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

**The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.**

### **Human remains**

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant 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 or 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, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

### **3.2. The National Environmental Management Act**

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

## **4. METHODOLOGY**

### **4.1. Survey of literature**

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

### **4.2. Field survey**

The field assessment section of any HIA/AIA is conducted according to generally accepted standards & practices and aims at locating all possible objects, sites and features of heritage



significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed.

#### **4.3. Oral histories**

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

#### **4.4. Documentation**

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

### **5. DESCRIPTION OF THE AREA**

The study area is located on Portions 152-154 of the farm Elandskraal 469JQ, close to the town of Mooinooi in the Bojanala District Municipality of the Northwest Province. A new Tailings Dam Facility and Pipeline from the existing Mine is being planned.

The topography of the area is flat and open with no real rocky outcrops or ridges present. Vegetation cover (grass, small trees, shrubs) in the new Tailings area was fairly dense during the assessment, although there were some open patches present as well. Visibility was therefore difficult although not completely limited. The new TSF is located directly adjacent and east of an existing Tailings Dam. The study area has been disturbed through agricultural activities in the past (ploughing/crop growing and grazing), while recent mining activities in the larger area bordering it has also impacted on the original landscape. If any archaeological sites, features or material did exist here in the past it would have been extensively disturbed or destroyed as a result. The related pipeline route that had to be assessed follows an existing road reserve and will utilize existing connections and this area has also been extensively impacted as a result.



**Figure 1: General location of study area (Google Earth 2020).**



**Figure 2: Closer view of proposed new Tailings (Google Earth 2020). Part of the Pipeline route is also shown (red line).**

6.



**Figure 3: Closer view of study area indicating the Pipeline Route and proposed new TSF location (Google Earth 2020).**

## 6. DISCUSSION

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago

Middle Stone Age (MSA) less than 300 000 – 20 000 years ago

Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

There are no known Stone Age sites or features in the specific study area. The closest known Stone Age sites in the larger geographical area are located in the so-called Magaliesberg Research Area and include rock shelter sites dating to the Middle and Later Stone Age. There is also some rock engraving sites in this area (Bergh 1999: 4-5).

**No Stone Age sites or objects (such as stone tools) were identified in the area during the July 2020 field work. It is believed that if any Stone Age artifacts are to be found in the area then it would more than likely be single, out of context, stone tools.**

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D

Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.

Middle Iron Age (MIA) 900 – 1300 A.D.

Late Iron Age (LIA) 1300 – 1840 A.D.

Late Iron Age sites have been identified in the area around the town of Mooinooi. In a band stretching roughly from Brits in the east to Zeerust in the west many Iron Age sites have been discovered previously (Bergh 1999: 7-8). These all belong to the Later Iron Age (Bergh 1999: 8-9). A copper smelting site was identified along the Hex River to the northwest of the surveyed area (Bergh 1999: 8). The closest Earlier Iron Age site is located at Broederstroom near Brits (Bergh 1999: 6).

During earlier times the area was settled by the Fokeng. In the 19th century this group inhabited this area with other Tswana groups including the Kwena and the Po (Bergh 1999: 9-10). During the difaqane these people moved further to the west, but they returned later on (Bergh 1999: 11).

According to the research of Tom Huffman the following Iron Age traditions could be present in the area: (a) the Mzonjani facies of the Urewe tradition (Broederstroom) dating to AD450 – AD750 (b) Olifantspoort facies of the same tradition AD1500 – AD1700 (c) Uitkomst facies of Urewe AD1650 – AD1820 and (d) Buispoort facies of Urewe dating to around AD1700 - AD1840 (Huffman 2007: 127; 171; 191 & 203).

In 2007 Pelser (as part of Archaetnos then) was requested by International Ferrometals (SA) (Pty) Ltd to investigate a Late Iron Age stone walled settlement located on their Buffelsfontein Chrome Mine. This site was identified by Dr. Julius Pistorius in May 2002 as part of an EIA done on the farm Buffelsfontein 465JQ. Other Iron Age features and sites were also identified by Pelser in the area for the IFMSA Brits Mooinooi Road Extension project (July 2012 – Prescali Environmental). A number of Late Iron Age sites, features and artifacts were located during an assessment in October 2012 for the Phoenix Platinum Mine Tailings Dam on the same farm (Pelser 2012: p.15-21).

**As with the Stone Age, no Iron Age occurrences were identified in the study area during the 2020 site assessment.**

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. Early travelers have moved through this part of the Northwest Province. This included David Hume in 1825, Robert Scoon and William McLuckie in 1829 and Dr. Robert Moffat and Reverend James Archbell in 1829 (Bergh 1999: 12, 117-119).

Hume again moved through this area in 1830 followed by the expedition of Dr. Andrew Smith in 1835 (Bergh 1999: 13, 120-121). In 1836 William Cornwallis Harris visited the area. The well-known explorer Dr. David Livingstone passed through this area between 1841 and 1847 (Bergh 1999: 13, 119-122).

The Battle of Buffelspoort (3 December 1900) was also fought in close vicinity of the development area during the Anglo-Boer War (1899-1902).

**No historical sites, features or remains were identified in the study area during the assessment.**

The oldest map of the farm Elandskraal 469JQ that could be obtained from the Chief Surveyor General's database ([www.csg.dla.gov.za](http://www.csg.dla.gov.za)) dates to 1922 (CSG Document 10G5V01). It is for Portion 1 and shows that the farm was then in the Rustenburg District and Ward of Hex River of the Transvaal Province. It also indicates that the whole of the farm was originally granted by Deed to one Louis van Wijk on the 10<sup>th</sup> of November 1869. Portion 1 was officially surveyed for one M.C. Fourie in November 1922. The maps for Portions 152-153 all date to 1953 (CSG Documents 10G49Y01; 10G4A101 & 10G4A301 respectively) and shows that these portions were all surveyed between November 1949 & June 1950.

**No historical sites or features could be identified from any of these maps.**



SUEDL. DIAGRAM  
 Sect. 24 (3), Act No. 2 of 1927.

S.G. No. A. 1064/53

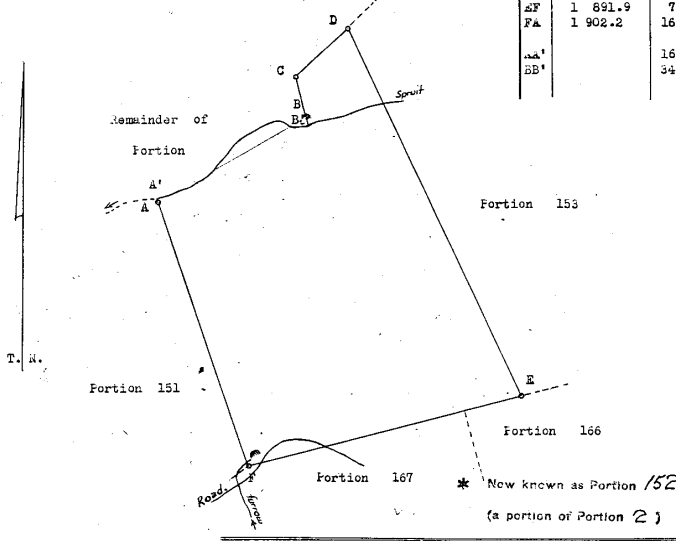
Approved

*[Signature]*  
 Surveyor-General.  
 - 8-6-1953

DESCRIPTION OF BEACONS

- A F : 3" iron pegs 18" long, set in concrete
- B : 2" x 2" lg iron peg and cairn.
- C : hole drilled in large rock.
- D E F : 2" iron pegs 18" long, and cairns.

SIDES Cable Feet	ANGLES OF DIRECTION	CO-ORDINATES.	
		Lo. 27°	X
AB	1 122.7	239 17 10	Const. 6-160 000.0 +9 010 000.0
BC	276.3	167 16 00.	A - 22 953.6 + 30 068.2
CD	488.7	227 01 30	B - 23 918.8 + 29 494.8
DE	2 754.1	334 57 00	C - 23 657.9 + 29 225.3
EF	1 891.9	75 06 10	D - 24 215.4 + 28 892.1
FA	1 902.2	161 37 50.	E - 25 381.5 + 31 387.1
AA'		161 37 50.	F - 23 553.2 + 31 873.5
BB'		347 16 00.	



Tans geregistreer onder:  
 Now registered under:  
 No. 469  
 REGISTRASIE AFDELING  
 REGISTRATION DIVISION JQ

The figure A' mid spirit A' B' C D E F A' represents 45.4358 Morgen of land, being Portion 152 of the farm ELANDSKRAAL No. 321 situate in the DISTRICT of Rustenburg, PROVINCE of TRANSVAAL. Surveyed in Nov. 1949 - June 1950 by me *[Signature]* Land Surveyor.

This diagram is annexed to Deed of *TF* No. *29805/55* dated in favour of Registrar of Deeds.

The original diagram is No. A 4066/27 *rel. no. annexed* to Deed of TRANSFER No. *1889* dated in favour of DE. 428. fol. 9.

S.G. File No. *6478/19/222/53*  
 Survey Records No. *238 53*  
 Compilation No. *JQ-G-C*  
 Lat. South Long. East

Published by authority—Grocott & Tapp P.O. Box 2404, Johannesburg 4407

Figure 5: A 1953 map of Portion 152 ([www.csg.dla.gov.za](http://www.csg.dla.gov.za)).

SUBDL. DIAGRAM  
 Sect. 24 (b), Act No. 9 of 1927.

S.G. No. A. 1065/53

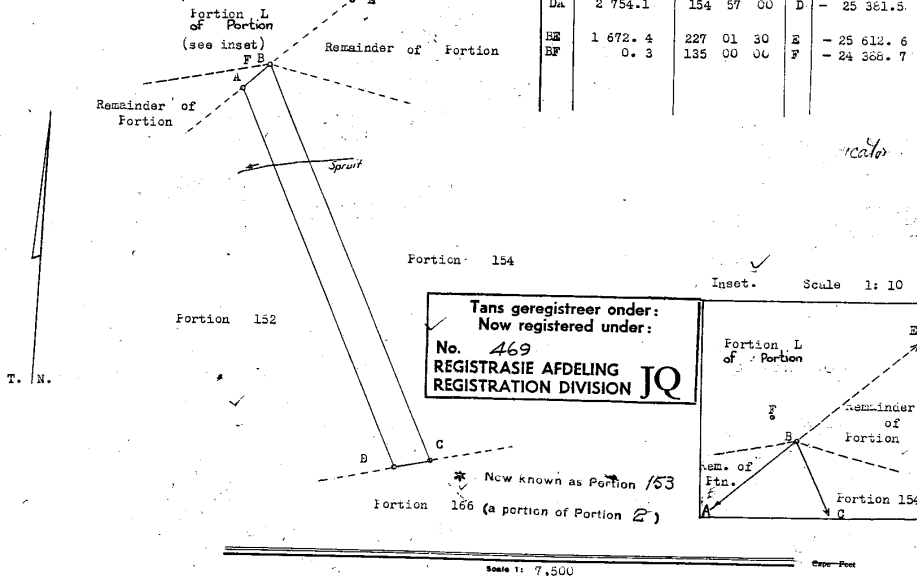
Approved

*[Signature]*  
 Surveyor-General.  
 - 8-6-1953

DESCRIPTION OF BEACONS

- A C D : 3/4" x 1 1/2" iron pegs and cairns.
- E : Hole drilled in rock.
- B : Not beacons.
- F : 1" x 3/4" iron peg and cairn.

SIDES Case Feet	ANGLES OF DIRECTION	SYSTEM	CO-ORDINATES.	
			Lo.	X
AB	227 01 30	Const. - 160 000.0	+ 9 010 000.0	
BC	334 37 10	A - 24 215.4	+ 28 892.1	
CD	229 06 10	B - 24 382.9	+ 28 750.5	
DA	154 57 00	C - 25 602.9	+ 31 328.2	
BE	1 672. 4	D - 25 361.5	+ 31 367.1	
BF	0. 3	E - 25 612. 6	+ 27 590. 5	
		F - 24 386. 7	+ 28 730. 3	



The figure A B C D A represents 7.5377 Morgen of land, being 153 of the farm E L A N D S K R A A L No. 321 situated in the DISTRICT of Austenburg.  
 Surveyed in Nov. 1949 - June 1950 by me [Signature] Land Surveyor.

This diagram is annexed to Deed of TF No. 29792/53 dated            in favour of           .  
 The original diagram is No. A 4056/27 annexed to Deed of TRANSFER No. 81/1975 dated            in favour of DB. 428. fol. 9.  
 S.G. File No. 6278/10/2222/53  
 Survey Records No. 238 53  
 Compilation No. JQ-G-C  
 Lat. South                      Long. East

Published by authority—Grocott & Tapp P.O. Box 2404, Johannesburg 4407

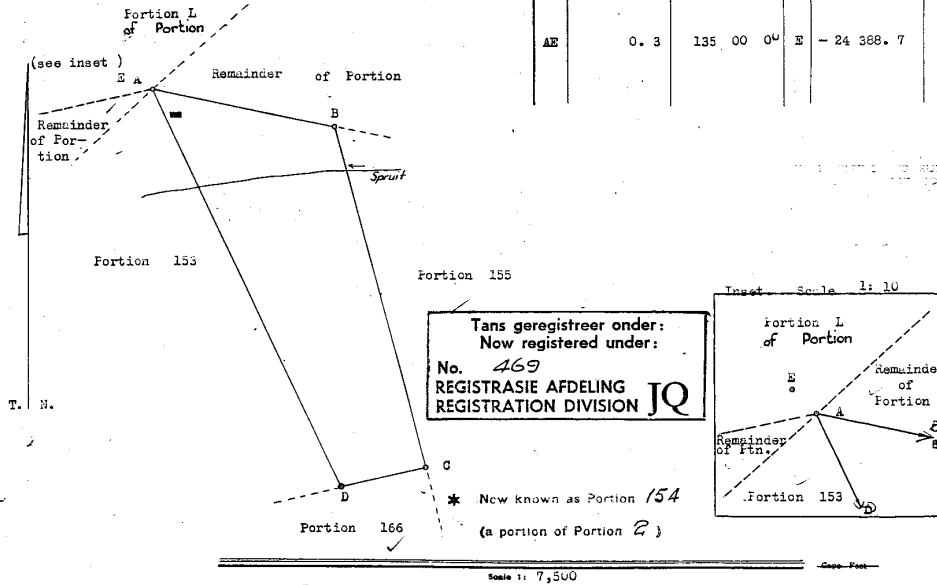
Figure 6: A 1953 map of Portion 153 ([www.csg.dla.gov.za](http://www.csg.dla.gov.za)).



DESCRIPTION OF BEACONS

- A : Not beacons.
- B C D : 1/2" x 1 1/2" iron pegs and cairns.
- E : 1" x 1 1/2" iron peg and cairn.

SIDE Cape Feet	ANGLES OF DIRECTION	CO-ORDINATES.	
		Lo. 27°	x
		Const. - 160 000.0 + 9 010 000.0	
AB	1 179.7	281 38' 10"	A - 24 385.9 + 28 730.5
BC	2 295.4	345 02 40	B - 25 544.3 + 28 968.5
CD	542.4	75 06 10	C - 26 136.7 + 31 186.1
DA	2 867.3	154 57 10	D - 25 602.9 + 31 328.2
AE	0.3	135 00 00	E - 24 388.7 + 28 730.3



The figure ABCDA represents 23.0546 Morgen of land, being Portion 154 of the farm Elandskraal No. 321 situate in the DISTRICT of Rustenburg PROVINCE of TRANSVAAL  
Surveyed in Nov. 1949 - June 1950 by me Christiaan Land Surveyor.

This diagram is annexed to Deed of Transfer No. 29807/53 dated 1953 in favour of ...

The original diagram is No. A 4086/27 annexed to Deed of TRANSFER No. 1925 dated 1927 in favour of DB. 428. fol. 9.

S.G. File No. 64707/19/222/53  
Survey Records No. 298 53  
Compilation No. JQ-G-C  
Lat. South Long. East

Figure 7: A 1953 map of Portion 154 of the farm Elandskraal 469JQ ([www.csg.dla.gov.za](http://www.csg.dla.gov.za)).

Results of the July 2020 assessment

As indicated earlier no sites, features or material of cultural heritage (archaeological and/or historical) origin or significance was identified in the study area during the physical assessment. The area has been fairly extensively disturbed in the recent historical past by agricultural activities such as ploughing/crop growing and cattle grazing, while recent mining-related activities has also impacted. This includes roads, electrical powerlines and servitudes. The area is also characterized by turf soils and large-scale settlement during the Iron Age would not have been favored here. LIA settlements would have been located closer to and on the surrounding ridges and hills.



**Figure 8: A view of a section of the new Tailings Dam area.**



**Figure 9: A view from the new Tailings area with the adjacent existing Tailings visible.**



**Figure 10: Another section.**



**Figure 11: Although the grass cover and vegetation was fairly dense there are some open patches that made visibility on the ground easier.**



**Figure 12: The soil in area is characterized by turf.**



**Figure 13: Roads and powerline servitudes also impacted the study area. This is also the route that a section of the new Pipeline to the Tailings will follow.**



**Figure 14: Earlier mining and other activities also impacted on the area.**



**Figure 15: Another view of a section of the new Tailings area with the existing Tailings next to it visible.**



**Figure 16: A view of a section of the Pipeline route into the new Tailings area.**



**Figure 17: A view of the route or the new Pipeline. It will follow the existing Road reserve to a large extent and make use of existing connections.**



**Figure 18: Another view of the Pipeline route with an existing connection visible.**



**Figure 19: A view of the area of the Pipeline River Crossing.  
Note the existing connection as well here.**

**Finally, it should be noted that although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) in a study area there is always a possibility that some might have been missed as a result of grass cover and other factors.**

## **6. CONCLUSIONS AND RECOMMENDATIONS**

In conclusion it can be said that the Phase 1 AIA for the proposed new Sylvania Mooinooi (WCM) Tailings Facility and Pipeline on Portions 152-154 of the farm Elandskraal 469JQ was conducted successfully. The development & study area is located near the town of Mooinooi in the Bojanala District Municipality of the Norwest Province.

Background research indicated that there are a number of cultural heritage (archaeological & historical) sites and features in the larger geographical area, although nothing is known for the specific parcel of land. The physical assessment work was undertaken during July 2020. No sites, features or material of any archaeological heritage (and/or historical) origin or significance was identified in the study area. The area has been fairly extensively disturbed in the recent historical past by agricultural activities such as ploughing/crop growing and cattle grazing, while recent mining-related activities has also impacted. This includes roads, electrical powerlines and servitudes. The area is also characterized by turf soils and large-scale settlement during the Iron Age would not have been favored here. LIA settlements would have been located closer to and on the surrounding ridges and hills.

**It should be noted that although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) there is always a possibility that some might have been missed as a result of grass cover and other factors. The subterranean nature of these resources (including low stone-packed or unmarked graves) should also be taken into consideration. Should any previously unknown or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.**

Finally, from an Archaeological point of view, the development of the proposed new Sylvania Mooinooi Tailings Facility and associated Pipeline should be allowed to continue, taking the above measurements into consideration.

## **7. REFERENCES**

General and Closer views of study area location & footprint: Google Earth 2020.

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## **APPENDIX A: DEFINITION OF TERMS:**

**Site:** A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

**Structure:** A permanent building found in isolation or which forms a site in conjunction with other structures.

**Feature:** A coincidental find of movable cultural objects.

**Object:** Artifact (cultural object).

(Also see Knudson 1978: 20).

## **APPENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE**

**Historic value:** Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

**Aesthetic value:** Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

**Scientific value:** Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

**Social value:** Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

**Rarity:** Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

**Representivity:** Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

## **APPENDIX C: SIGNIFICANCE AND FIELD RATING:**

### **Cultural significance:**

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

### **Heritage significance:**

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

### **Field ratings:**

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

## **APPENDIX D: PROTECTION OF HERITAGE RESOURCES:**

### **Formal protection:**

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

### **General protection:**

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

## **APPENDIX E: HERITAGE IMPACT ASSESSMENT PHASES**

1. Pre-assessment or Scoping Phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.