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CK 2006/014630/23 **VAT NO.: 4360226270**

**A DESKTOP HERITAGE IMPACT ASSESSMENT REPORT
FOR THE MADITSE INVESTMENTS (PTY) LTD
MINING RIGHTS APPLICATION ON THE FARMS
TABANA 133LR, BOEKENHOUTFONTEIN 108LR & PRAIRIE 107LR
LEPHALALE LOCAL MUNICIPAL AREA, LIMPOPO PROVINCE**

For:

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REPORT: **APAC022/68**

by:

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July 2022

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APELSE ARCHAEOLOGICAL CONSULTING

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SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Gudani Consulting Environmental & Social Scientists to conduct a Desktop-based Heritage Impact Assessment for the Maditswe Investments (Pty) Ltd Mining Rights Application on the farms Tabana 133LR, Boekenhoutfontein 108LR & Prairie 107LR. The study & application area is located in the Lephalale Local Municipal area of the Limpopo Province.

Background research indicates that there are several known cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. None is known for the specific study area. This report discusses the results of the background research and provides recommendations on the way forward at the end.

It is recommended that the proposed Mining Rights Application be allowed, taking into consideration the measures and recommendations put forward at the end of the report.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Gudani Consulting Environmental & Social Scientists to conduct a Desktop-based Heritage Impact Assessment for the Maditswe Investments (Pty) Ltd Mining Rights Application on the farms Tabana 133LR, Boekenhoutfontein 108LR & Prairie 107LR. The study & application area is located in the Lephalale Local Municipal area of the Limpopo Province.

Background research indicates that there are several known cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. None is known for the specific study area.

The client indicated the location and boundaries of the study area and the assessment concentrated on this portion.

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;

It should be noted that No Field-Based Assessment was conducted as part of this Appointment and that the results and recommendations made in this report are based on the scrutiny of previous research and assessments in the larger area, as well as archival research and aerial images of the study area.

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 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. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. 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 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the 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 and 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 paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological 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 paleontological material or object, or any meteorite;
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological 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 the study is normally conducted according to generally accepted HIA practices and aimed 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.

No field work was undertaken as part of this assessment.

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 & PROJECT

The study and Mining Rights Application Area (MRA) is located on the farms Tabana 133LR, Boekenhoutfontein 108LR & Prairie 107LR, in the Lephalale Local Municipal Area of the Limpopo Province. It is situated west of the town of Baltimore. The area covers a total of 5644 hectares.

The topography and general landscape of the study area can't be described in detail from a personal observation perspective as no physical fieldwork was undertaken for this study. However, based on aerial images (Google Earth) of the area it is clear that in general it is flat and open with little or no rocky outcrops, ridges and hills present in the area. There are some pans and small streams in the area that could contain some archaeological sites and finds (Stone Age).

The area has been used in the past (and presently) for agricultural purposes (ploughing/crop growing and livestock keeping/grazing) which have had some impact on the natural and historical landscape. Over and above the various farmsteads & associated infrastructure occurring in the area, there have not been any extensive developments. Dirt roads/access roads and & servitudes have also had an impact in the past, although large sections have not been altered from its original natural landscape. Dense vegetation seems to cover parts of the study & application area footprint as well which would make identifying archaeological and/or historical sites and features from aerial images very difficult.



Figure 1: General location of the study & Mining Rights Application area footprint (marked as points A-H). Google Earth 2022.



Figure 2: Closer view of study & MRA area footprint (Google Earth 2022).

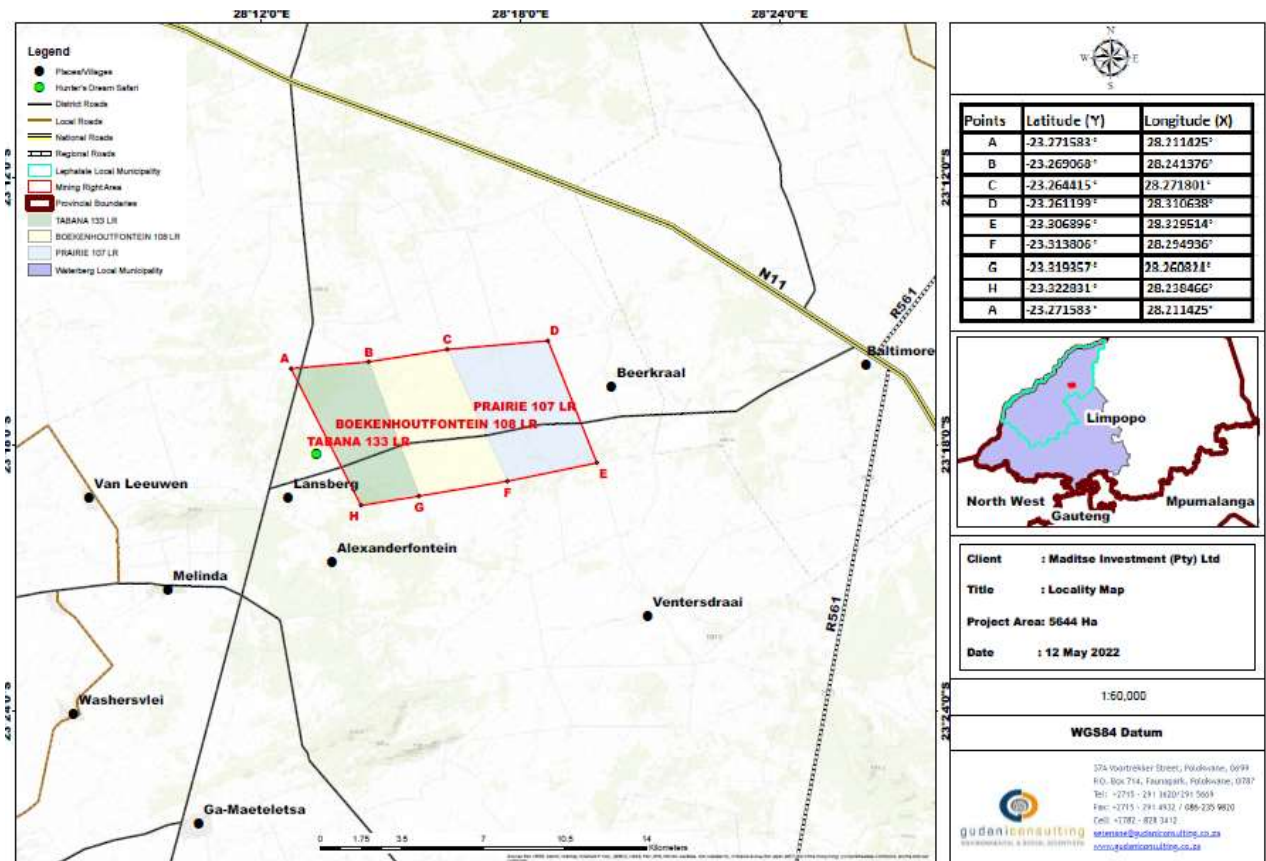


Figure 3: Locality Map (courtesy Gudani Consulting Environmental & Social Scientists).

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 in 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).

According to Bergh (1999: 4-5) no Stone Age sites or occurrences are known in the area, including rock art (paintings and engravings). Hunter gatherers from the Stone Age, including a few who left rock paintings during the last 20 000 years in the mountainous Waterberg lived in the Bushveld from as early as the Middle Stone Age (MSA), 200 000 years ago. MSA and Later Stone Age (LSA) tools were observed during investigations for other projects along the banks of the Mokolo (Mogol) River and on other farms in the larger geographical area. At Nelsonskop, a small protrusion north-east of Matimba Power Station, engravings of animal spoor, cupules and other incisions were found on a face of this hill (de Jong 2010).

Scattered stone tools were found during an archaeological assessment for the Lephalale Bulkwater Supply pipeline (Pelser 2010), while similar finds were made during a Heritage Walkdown for the ESKOM Medupi-Massa Powerline development (Pelser 2012). **It is therefore possible that stone tools could be present in the area, but that these would be low density, scattered and mostly individual stone tools in open-air contexts close to the pans and streams in the area. There are also no hills or outcrops where any shelters close-by would have been present.**

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.

As with the Stone Age, Bergh (1999) does not indicate any known Early or Late Iron Age sites in the specific study area. Hunter-gatherers were followed by the first agro-pastoralists who lived in semi-permanent villages and who practiced metal working during the last two millennia, the so-called Iron Age. No Iron Age sites were recorded during the 2007 HIA by Pistorius for the Power Line between the Matimba B Powerstation and the Dinaledi Substation (Brits) or during the walk-down for the Medupi-Massa Line by Pelsler in 2012. Some pottery was found during a 2010 Archaeological Impact Assessment (AIA) by Pelsler in the area for the Lephhalale Bulk Water Supply Pipeline.

Also, no large tribal groupings such as the Ga-Seleka and Shongwane, living to the northeast of Lephhalale, lived in the study area during the LIA or the historical period. Small groups known as the Vaalpense (Kattea, Malesa, Masarwa, etc.) of mixed descent (Negroid and San) lived across the area from as early as 1875, and probably earlier as well. These impoverished people were nomadic hunters and herders who did not occupy permanent settlements that have left traces on the landscape. They became subordinate to the Seleka, Langa Ndebele and colonial farmers who employed them as laborers. The absence of surface water, low annual rainfall, high evaporation rates, soils which lacked nutrients and the absence of all year round grazing did not encourage mixed farming towards the interior of the study area (Pistorius 2007).

Based on Tom Huffman's research it is possible that Early Iron Age, Middle Iron Age and Late Iron Age sites, features or material could be present in the larger area. This will include the Letsibogo facies of the Urewe Tradition, dating to between AD1500 and AD1700 (Huffman 2007: 187); the Madikwe facies of the Kalundu Tradition also dating between AD1500 and AD1700 (p.199); the Diamant facies of the same tradition dating between AD750 and AD1000 (p.223), as well as the Eiland facies of Kalundu, dating to AD1000 – AD1300 (p.227).

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. The first Europeans to move through this area were the early travelers Cowan & Donovan in 1808, Hume in 1836 & 1830 (Bergh 1999: 13) and Harris in 1836 (Bergh 1999: 12-13).

The first colonial hunters and traders were followed by the first colonial settlers (farmers) who arrived in the study area from the second half of the 19th century. The first generation of homesteads, or 'hartbeeshuise', constructed with sun-dried brick walls covered with pitched thatched roofs have all by now disappeared and with them cultural landscapes of small proportions, namely farm residences, outbuildings, cattle kraals and grazing fields. These cultural landscapes and infrastructure have been replaced with second and third generation farm residences. Only a small number of family graveyards and single historical dwellings have survived. Two historical graveyards close to the Limpopo River as well as those in Steenbokpan rural village suggest that occupation of the banks of the river and the central part of the larger area was favored by colonists from the earliest times. Changing subsistence patterns, the gradual replacement of cattle-ranching and crop-planting with game farming and eco-tourism, is changing the traditional man-made landscape in the project area. Odd historical buildings which have survived has either been renovated or abandoned to fall into ruins.

The larger geographical region was located in a border area plagued by drought, lack of access and services and the presence of animal diseases (tsetse flies), which all contributed to it being a marginal farming region. It was frequented during the winter months when farmers brought their livestock to graze. Some farms were only given out by farmers in the 1870s, but once the tsetse flies had become less of a threat due to the rinderpest (1896), more farmers began settling permanently. The Grootestryd region remained a marginal farming region until coal was discovered in 1920 while drilling for water on the neighboring farm Grootegeluk (de Jong 2010). A few historical homesteads and grave sites have been recorded in the larger geographical area (Pistorius 2007; Pelser 2012).

There are no known historical sites, features or remains in the study & application area, but there is always a possibility that such could be located in the area. This would include previously unknown or unmarked grave sites or graves. A number of farmsteads and related infrastructure are situated here as is evident from aerial images, and these sites need to be assessed for the possible presence of historical structures and informal farm graves and graveyards.

The Chief Surveyor General Database (www.csg.dla.gov.za) was scrutinized for old maps of the farms that form part of the Mining Rights Application area. All the maps date to 1905 (**CSG Documents 10DODK01, 10DNAX01 & 10DNAW01 respectively**). The farms were at the time located in the Waterberg District, Ward of Koedoesrand and Transvaal Colony. Tabana was originally granted by deed to one F.Weilert on the 29th of February 1872 and was surveyed on behalf of The Transvaal Consolidated Land Exploration Co. Ltd in 1904 & 1905; Boekenhoutfontein was originally granted to one H.J.Nagel on the 2nd of July 1870 and was surveyed for the Government in 1904 & 1905 and Prairie was originally granted to one H.P.Beukes on the 7th of February 1870 and surveyed on behalf of The Transvaal Consolidated Land Exploration Co. Ltd in 1904 & 1905. No historical sites or features are indicated on any of these maps, although some pans are indicated on Boekenhoutfontein.

Form A.—Diagram Form for an Original Farm Survey

SIDES C.P.	ANGLES	(X) CO-ORDINATES (Y)
A-B 809.38	89 02 10	X 4173.30 Y 1213.80
B-C 1870.59	102 47 00	X 4251.64 Y 168.22
C-D 613.62	79 09 30	X 2779.16 Y - 77.64
D-A 1671.24	101 01 20	X 2677.90 Y 497.57

No. 4086 Examined. The numerical data of this Diagram are sufficiently consistent.
Maxwell R. Edwards
 Examiner of Diagrams
 Surveyor-General's Office,
 Pretoria 29 JUL 1905

No protest. Confirmed.
R. S. Schodt
 Surveyor-General
 Surveyor-General's Office,
 Pretoria 11 DEC 1905
 Published in Government Gazette
 No. 1945 dated 8 SEP 1905

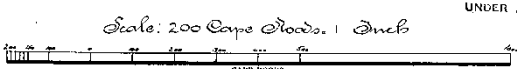
Datum level Waterberg Railway Station No. 4126 (Report)

Doonlight



This farm transferred under:
 Now registered under:
 No. 133
 REGISTRASIE AFDELING
 REGISTRATION DIVISION LR

THIS FARM TRANSFERRED ON 1.4.1903
 TO DISTRICT OF THE REGISTRAR OF
 UNDER NUMBER..... 346



The above Diagram lettered A, B, C, D, represents the Farm
Tabana No. 133
 in extent 1841 Morgen 179 Square Roads of Land, situate in the District of Waterberg
 Ward Hoedoesland Transvaal Colony, and bounded as indicated above.

The whole Farm was originally granted to *F. Weiler* by Deed of Grant No. *1376*
 dated the *29th* day of *Feb* 1872 *1872*
 The Beacons were pointed out by the Surveyor *C. C. Bateman*
 Due notice of this Survey has been given to all adjoining land owners, and the beacons have been erected according to law.
 Surveyed on behalf of *the Government* in 1904 & 1905 by me
The Transvaal Consolidated Exp. Co. Ltd *C. C. Bateman*
 Government Land Surveyor

Figure 4: 1905 map of Tabana 133LR (www.csg.dla.gov.za).

Form A.—Diagram Form for an Original Farm Survey

SIDES C.P.	ANGLES	(Y) CO-ORDINATES (X)
A-B 847.95 A	79 11 20	X 4251.64 Y 468.92
B-C 1881.28 B	103 37 40	X 4392.00 Y 368.03
C-D 935.76 C	76 00 20	X 2442.12 Y 999.10
D-A 1870.39 D	100 19 40	X 2779.16 Y 77.64

Datum level Pretoria Railway Station, 10.4126 (Ayer)

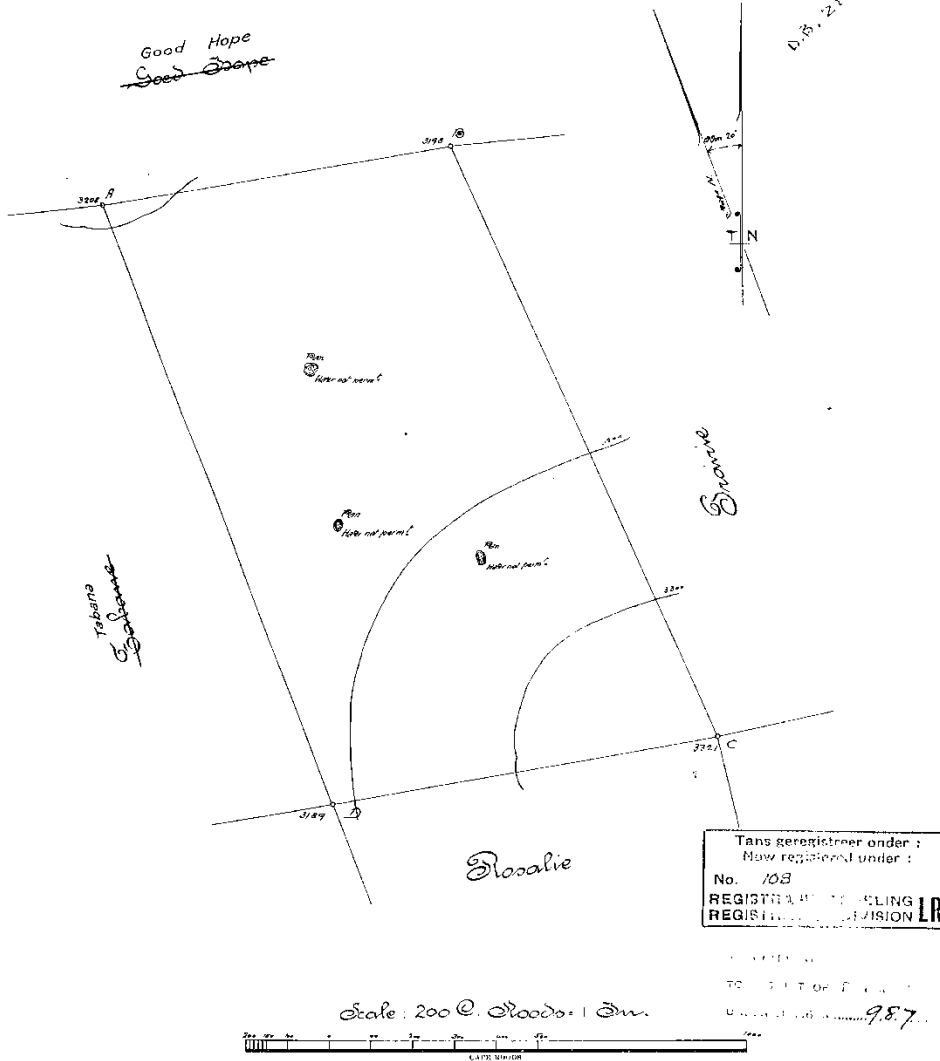
No. 11451 Examined. The numerical data of this Diagram are sufficiently consistent.

H. Maxwell Edwards
Examiner of Diagrams
Surveyor-General's Office,
Pretoria 29 JUL 1905

No protest. Confirmed.

R. H. Schoon
Surveyor-General's Office,
Pretoria
Published in Government Gazette
No. 3410 dated 15 AUG 1905

D.B. 243/11



Tans geregistreer onder :
Naw geregistreer onder :
No. 108
REGISTRAR GENERAL'S DIVISION LR

The above Diagram lettered A, B, C, D, represents the Farm
Boekenhoutfontein ~~108LR~~ 108LR
in extent 2289 Morgen 12 Square Roods of Land, situate in the District of Waterberg
Ward Sloedoes Land Transvaal Colony, and bounded as indicated above.
The whole Farm was originally granted to H.J. Nagel by Deed of Grant No. 5772
dated the 2 day of July 1870
The Beacons were pointed out by the Surveyor C. Bateman
Due notice of this Survey has been given to all adjoining land owners, and the beacons have been erected according to law.
Surveyed on behalf of the Government in 1904 & 1905 by me C. van Bateman
General Survey Government Land Surveyor

Figure 5: 1905 map of Boekenhoutfontein 108LR (www.csg.dla.gov.za).

Form A.—Diagram Form for an Original Farm Survey

SIDES C/P	ANGLES	(v) CO-ORDINATES (x)
A-B 1063.94	71° 33' 20"	A + 4792.00 - 168.03
B-C 1431.89	125° 50' 30"	B + 4436.16 - 1027.70
C-D 982.23	81° 28' 30"	C + 3143.13 - 1273.76
D-A 1531.28	101° 07' 30"	D + 2045.72 - 590.10

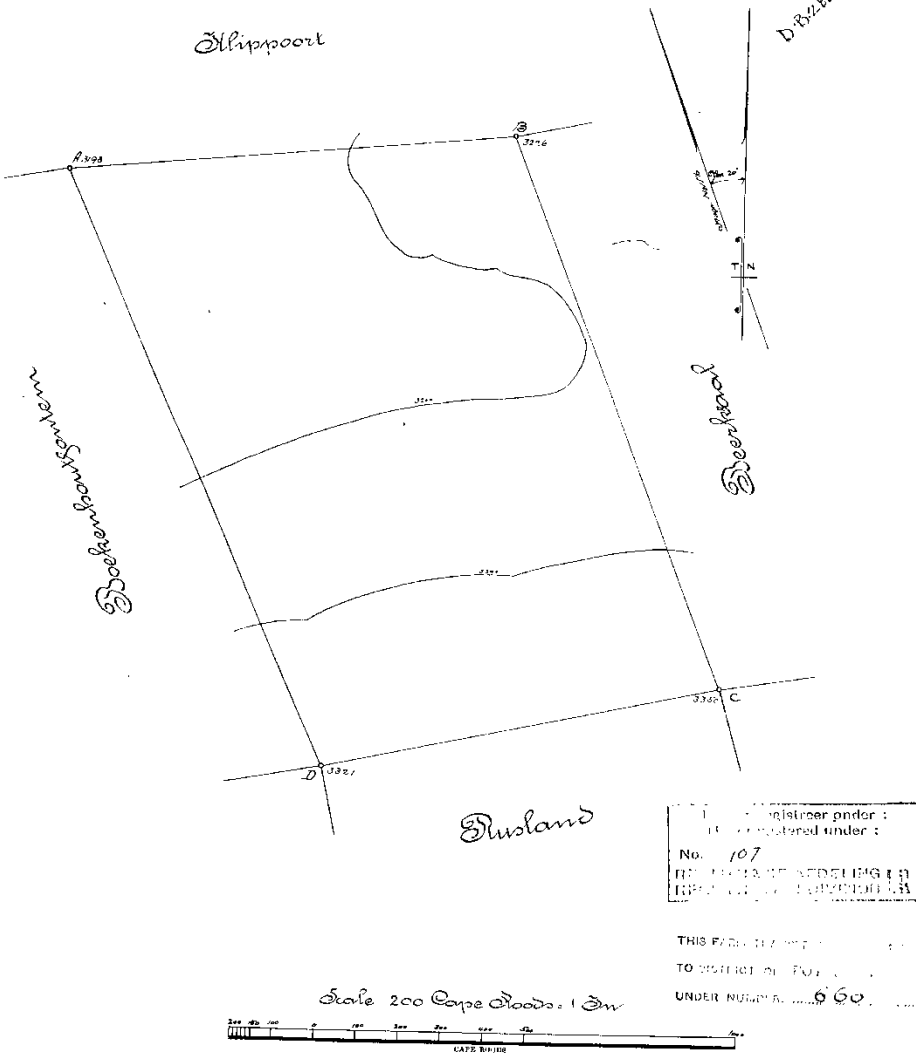
Datum level Pieterburg Railway Station, i.e. 4126' (1900)

No. 4022 Examined. The numerical data of this Diagram are sufficiently consistent.

Maxwell Edwards
 Examiner of Diagrams
 Surveyor-General's Office,
 Pretoria 28 JUL 1905

No protest. Confirmed.

A. J. J. Jordens
 Surveyor-General
 Surveyor-General's Office, 11 DEC 1905
 Pretoria
 Published in Government Gazette
 No. 2471 dated 8 SEP 1905



The above Diagram lettered A, B, C, D, represents the Farm *Prairie 107LR* in extent 2465 Morgen .300 Square Rods of Land, situate in the District of *Ward Hoedoes Land* Transvaal Colony, and bounded as indicated above.

The whole Farm was originally granted to *H P Beukes* by Deed of Grant No. 4403 dated the 7th day of *Feb* 1870.

The Beacons were pointed out by the Surveyor *C. C. Balemant* in 1902 & 1905. Due notice of this Survey has been given to all adjoining land owners, and the beacons have been erected according to law.

Surveyed on behalf of *the Government* in 1902 & 1905 by me *C. C. Balemant* Government Land Surveyor.

The Transvaal Consolidated Land Exp. Co Ltd

Figure 6: 1905 map of Prairie 107LR (www.csg.dla.gov.za).

With no physical field assessments conducted in the study and Mining Rights Application Area it is difficult to determine if any sites, features or material of cultural heritage origin or significance are located here and if there will be any impacts on such sites as a result of

planned future mining/quarrying. It is clear from the desktop study that archaeological/historical sites and finds do occur in the larger landscape within which the specific study and Application Area is located.

Google Earth images of the area were scrutinized to see if any possible cultural heritage (archaeological and/or historical) sites or features are visible. Although no Stone Age or Iron Age sites were visible on these, there is always a possibility that sites might be present, especially scatters or individual stone tools around the pans and small streams in sections of the study area. A number of farmsteads & related infrastructure are located in the area (as seen on the aerial images) and it is possible that there might be some historical (older than 60 years of age) structures and possibly informal farm graves and graveyards located around these areas. The impacts of future mining activities related to the MRA should therefore be assessed at these locations in more detail.



Figure 7: Farmstead and related infrastructure in the western section of the study area (Google Earth 2022).



Figure 8: Farmstead and related infrastructure in the north-western section (Google Earth 2022).



Figure 9: Farmstead and related infrastructure in the central section to the north (Google Earth 2022).



Figure 10: Farmstead and related infrastructure in the central section to the south (Google Earth 2022).



Figure 11: Farmstead and related infrastructure in the eastern section to the south (Google Earth 2022).

Based on the desktop study and scrutiny of aerial images (Google Earth) of the area the following is recommended on the way forward:

That the Mining Rights Application be allowed to continue, but that a detailed field assessment needs to be conducted in the area where any proposed future quarrying/mining activities (including prospecting) in the Maditse Investments (Pty) Ltd MRA Area will be undertaken. The field assessment will focus on determining the location of possible archaeological and historical sites, features or material that could be negatively impacted by any related mining activities. Once this has been done and the way forward in terms of possible required mitigation measures have been presented the proposed future mining can continue.

7. CONCLUSIONS AND RECOMMENDATIONS

APelser Archaeological Consulting (APAC) was appointed by Gudani Consulting Environmental & Social Scientists to conduct a Desktop-based Heritage Impact Assessment for the Maditswe Investments (Pty) Ltd Mining Rights Application on the farms Tabana 133LR, Boekenhoutfontein 108LR & Prairie 107LR. The study & application area is located in the Lephhalale Local Municipal area of the Limpopo Province.

With no physical field assessments conducted in the study and Mining Rights Application Area it is difficult to determine if any sites, features or material of cultural heritage origin or significance are located here and if there will be any impacts on such sites as a result of planned future mining/quarrying. It is clear from the desktop study that archaeological/historical sites and finds do occur in the larger landscape within which the specific study and Application Area is located, although none is known for the specific study & application area.

Google Earth images of the area were scrutinized to see if any possible cultural heritage (archaeological and/or historical) sites or features are visible. No Stone Age or Iron Age sites were visible on these, but there is always a possibility that sites might be present, especially scatters or individual stone tools around the pans and small streams in sections of the study area. A number of farmsteads & related infrastructure are located in the area and it is possible that there might be some historical structures and possibly informal farm graves and graveyards located around these areas. The impacts of future mining activities related to the MRA should therefore be assessed at these locations in more detail.

Finally, from a Cultural Heritage point of view, it is recommended that the Mining Rights Application be allowed to continue, but that a detailed field assessment needs to be conducted in the areas where any proposed future quarrying/mining activities (including prospecting) will be undertaken. The field assessment will focus on determining the location of possible archaeological and historical sites, features or material that could be negatively impacted by any related mining activities. Once this has been done and the way forward in terms of possible required mitigation measures have been presented the proposed future mining can continue.

8. REFERENCES

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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.