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

**PHASE 1 HIA REPORT FOR THE MARNITZ KRAAL
BOREHOLES ON PORTIONS OF THE FARMS COCHIN-CHINA 46LR,
BRISTOL 17LR & NAPLES 35LR
NEAR MARNITZ IN THE LIMPOPO PROVINCE**

For:

De Beers

REPORT: **APAC019/96**

by:

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October 2020

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SUMMARY

APelser Archaeological Consulting (APAC) was appointed by De Beers to conduct a Phase 1 HIA for a number of exploration Boreholes on portions of the farms Cochin-China 46LR, Bristol 17LR & Naples 35LR. The 6 borehole locations and study area is situated near Marnitz in the Limpopo Province.

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls, but that there no known sites on the specific land parcel. The assessment of the borehole location did not identify any sites, features or material of cultural heritage (archaeological and/or historical) origin or significance. This report discusses the results of both the background research and physical assessment.

It is recommended that the proposed exploration borehole activities be allowed to continue taking into consideration the recommendations provided at the end of the report.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by De Beers to conduct a Phase 1 HIA for a number of exploration Boreholes on portions of the farms Cochin-China 46LR, Bristol 17LR & Naples 35LR. The 6 borehole locations and study area is situated near Marnitz in the Limpopo Province.

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls, but that there no known sites on the specific land parcel. The assessment of the borehole location did not identify any sites, features or material of cultural heritage (archaeological and/or historical) origin or significance.

The client indicated the location and boundaries of the study area and the assessment concentrated on this portion. A representative of the client accompanied the Heritage Specialist during the assessment and indicated the position of each proposed borehole.

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 palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, 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 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 this 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 of 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 was 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.

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 and six borehole locations are situated on portions of the farms Cochin-China 46LR (the Remaining Extent), Bristol 17LR (Portion 5) and Naples 35LR (the Remaining Extent). The area is located near Marnitz in the Limpopo Province.

The topography of the study area and six borehole positions are generally flat with no rocky ridges or outcrops and are characterized by sandy bushveld. Although the vegetation was fairly dense during the fieldwork visibility on the ground was not difficult.

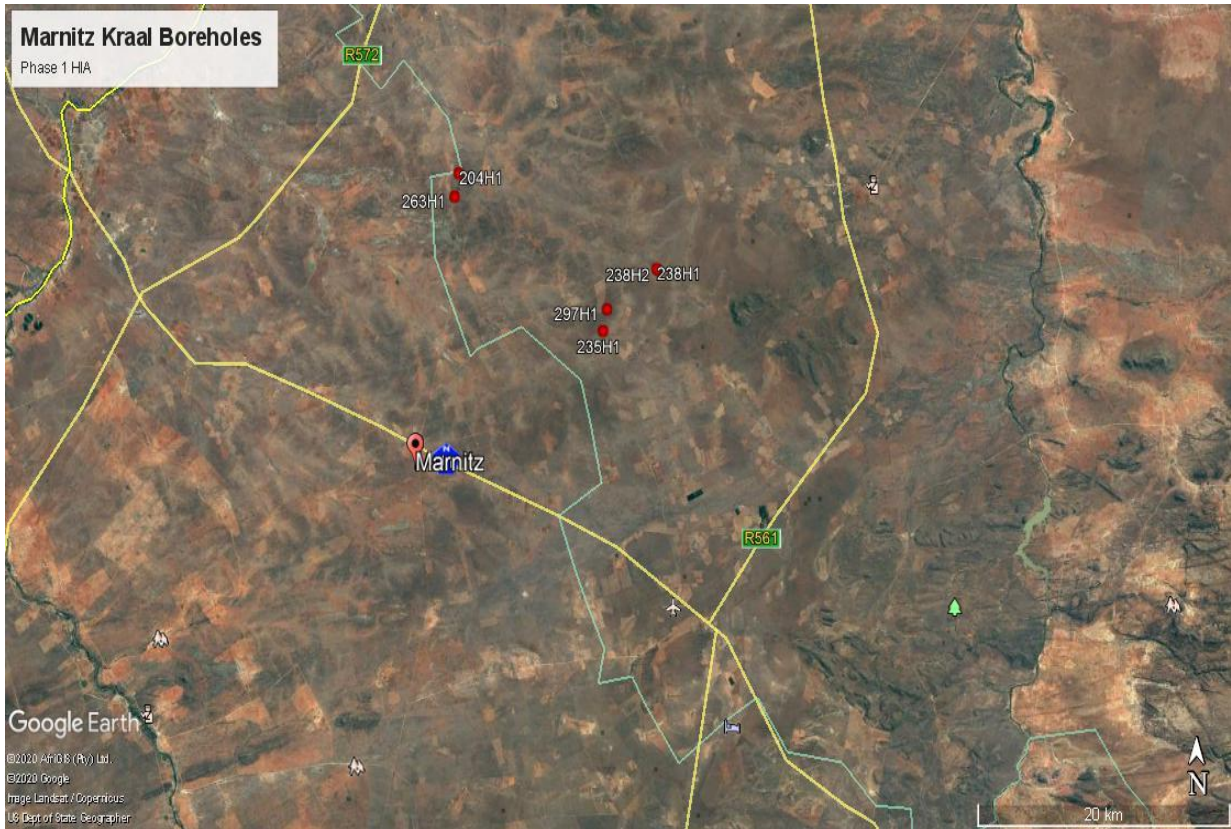


Figure 1: General location of the study area & the 6 borehole positions (Google Earth 2020).



Figure 2: Closer view showing the study area & location of each of the boreholes (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 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).

No Stone Age sites (including rock art) are known to occur in the immediate study area. The closest known Stone Age sites are located near Blouberg on the Makgabeng Plateau dating to the Later Stone Age (Bergh 1999: 4). A very large number of significant rock art sites (numbering in their hundreds) are located on the Makgabeng Plateau and on farms north and east of the study area. These rock art sites are representative of San, Khoi and Northern-Sotho rock art traditions (Eastwood et.al 2004; 2005).

No Stone Age sites or occurrences where recorded during the field assessment.

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.

There are no known Iron Age sites in the immediate study area. Once again a large number of EIA and LIA sites are known to exist to on the Makgabeng Plateau (J.van Schalkwyk Pers.Comm. 2013-10-15).

Tom Huffman's research work shows that EIA, MIA and LIA sites, features or material could possibly be found in the area. This could include the so-called Happy Rest facies of the Kalundu Tradition dating to between AD500 and AD750 (Huffman 2007: 219); Diamant facies of the same tradition dating to between AD750 and AD1000 (p.223); Eiland facies of Kalundu dating to between AD1000 and AD1300 (p.227); the Icon facies of the Urewe Tradition dating to

between AD1300 & AD1500 (p.183) and finally the Letsibogo facies of the same tradition dating to between AD1500 and AD1700 (Huffman 2007: 187).

Once again no Iron Age sites, features or objects were identified during the field work.

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 European group to pass close by the area was that of Coenraad de Buys in 1821 and again 1825, followed by the Voortrekkers after 1844 (Bergh 1999: 12; 14).

No recent historical sites, features or material were identified in the study area or close to and at the six borehole locations.

The oldest map for Cochin-China 46LR (Portion 1) obtained from the Chief Surveyor General's Database (www.csg.dla.gov.za) dates to 1906 (CSG Document 10DNIT01). It shows that the farm was then numbered as No.840 and was located in the Koedoesrand Ward of the Waterberg District of the Transvaal. The whole of the original farm was granted by deed of transfer to one Herman Cochino on the 21st of February 1870. Portion 1 of the farm was surveyed in June and July 1905. For Portion 5 of the farm Bristol 17LR (CSG Document 10E75L01) the map dates to 1955 and shows that the farm was then numbered as No.223 and that it was located in the Potgietersrust District. Portion 1 was surveyed in October 1948 & February 1955. For Portion 1 of the farm Naples the oldest map date to 1906 (CSG Document 10DNHD01). The farm was then numbered as No.1560 and was also located in the Koedoesrand Ward of the Waterberg District of the Transvaal. The whole of the original farm was granted to one John O. Ross on the 11th of October 1871. Portion 1 was surveyed in June and July 1905.

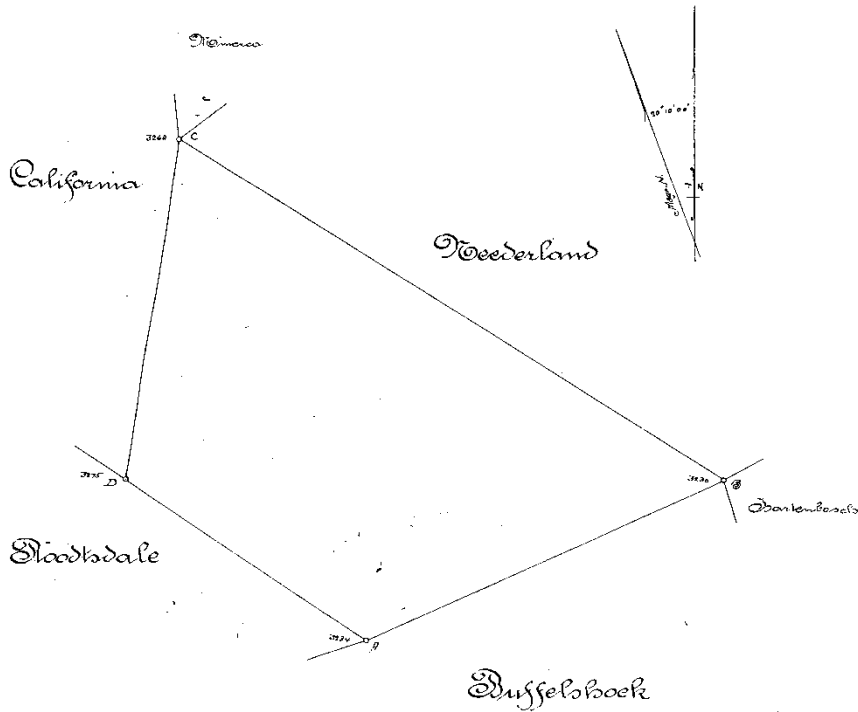
Form A.—Diagram Form for an Original Farm Survey

SIDES		ANGLES		(V; CO-ORDINATES (x))	
P.A.				P.A.	
A.B.	1007.24	A	71° 07' 00"	A	4470.11
B.C.	1669.95	B	56° 30' 10"	B	4878.38
C.D.	890.49	C	66° 19' 00"	C	8772.65
D.A.	747.05	D	116° 22' 30"	D	4898.96
					4891.29

No. 82 Examined. The numerical data of this Diagram are sufficiently consistent.
A. Lawrence
 Examiner of Diagrams
 Surveyor-General's Office,
 Pretoria 19 JAN. 1906

No protest. Confirmed.
A. Lawrence
 Surveyor-General
 Surveyor-General's Office,
 Pretoria 18 JUN 1906
 Published in Government Gazette
 No. 376 dated 18 MAR 1906

Note: Distance between Railway Station 4126 (approx)



Farm registered under :
 Now registered under :
 No. 46
 COCHIN-CHINA 46LR

THIS FARM BELONGS TO DISTRICT OF... UNDER TOWNSHIP 840



The above Diagram lettered A, B, C, D represents the Farm
Cochin China 46LR
 in extent 1662 Morgen 94 Square Rods of Land, situate in the District of Waterberg
 Ward Noedoo Strand Transvaal Colony, and bounded as indicated above.
 The whole Farm was originally granted to *Everman Cochin* by Deed of Grant No. 4625
 dated the 21st day of Feb. 1870
 The Beacons were pointed out by *Surveyor C. C. Daleman*
 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 *Overland (Transvaal) Land Co. Ltd* June & July 1905 by me *C. C. Daleman*
 Government Land Surveyor

Figure 3: 1906 map of Portion 1 of Cochin-China 46LR (www.csg.dla.gov.za).

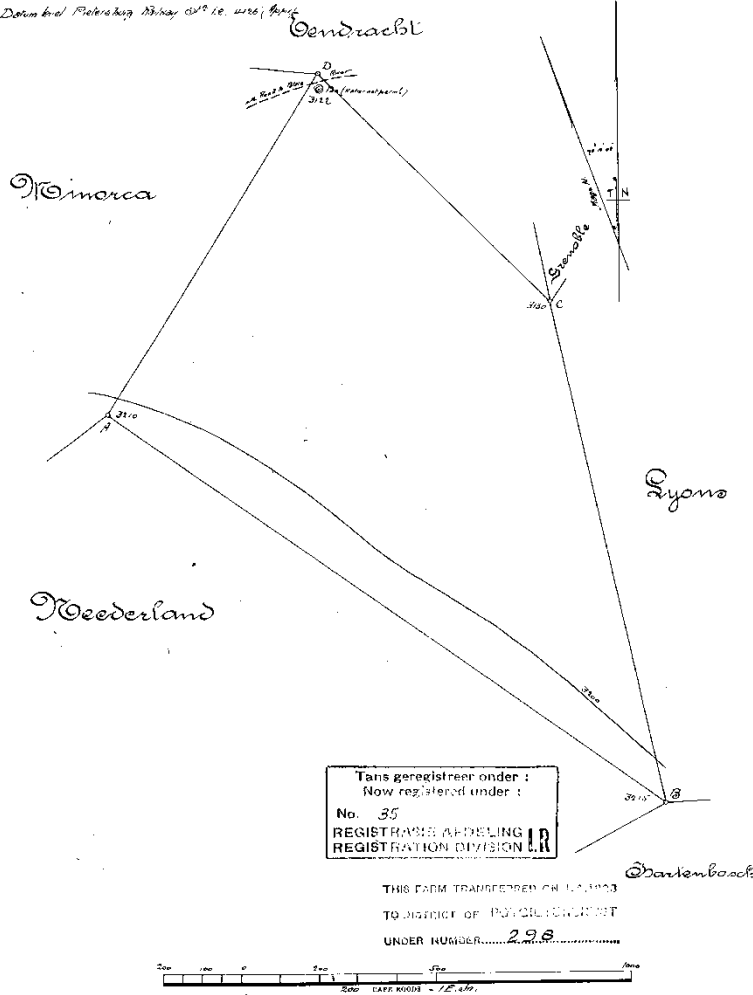
Form A.—Diagram Form for an Original Farm Survey

SIDES	ANGLES	(Y) CO-ORDINATES (X)
A-B 1750.34	A 98 32 00	A 6287.84
B-C 1326.98	B 41 52 50	B 2676.68
C-D 338.78	C 147 43 00	C 6564.81
D-A 1028.04	D 76 50 10	D 7159.64
		X 4061.02
		X 2924.78
		X 3576.18

No. 112 Examined. The numerical data of this Diagram are sufficiently consistent.
H. Hazell
 Examiner of Diagrams
 Surveyor-General's Office,
 Pretoria
 19 JAN. 1906

No protest. Confirmed.
H. Hazell
 Surveyor-General
 Surveyor-General's Office,
 Pretoria
 Published in Government Gazette
 No. 376 dated 18 JAN. 1906

Note: Dumbbell Petersburg Mining Co. is. 1886, 1894



The above Diagram lettered *A, B, C, D* represents the Farm *Naples 35LR* in extent 1991 Morgen 433 Square Rods of Land, situate in the District of *Watersberg* Ward *Woeedoo Strand* Transvaal Colony, and bounded as indicated above. The whole Farm was originally granted to *De B. de Waas* by Deed of Grant No. 9001 dated the 11th day of *Oct.* 1871. The Beacons were pointed out by *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 *Simon Strauch* in *June & July 1905* by me *C. C. Bateman* Government Land Surveyor

Figure 5: 1906 map of Portion 1 of Naples 35LR (www.csg.dla.gov.za).

Results of the study area assessment

As indicated earlier no sites, features or material of cultural heritage (archaeological and/or historical) origin or significance were identified in the study area during the physical assessment.

Six exploration borehole locations located on the three farms were physically inspected during the fieldwork. An impact area of 20m x20m surrounding each borehole was assessed.

The natural environment at the six boreholes is fairly homogenous and can be described as follows:

- The borehole locations are generally flat and covered in natural vegetation;
- The borehole locations are characterized by quaternary surface sand without raw material suitable for knapping;
- No standing structures were noted at these locations;
- No surface indicators of grave sites like headstones were noted, although Marula trees etc. do occur at the borehole locations and are sometimes known to mark grave sites without other surface indicators;
- Archaeological visibility was fair although clusters of vegetation covered some borehole locations;
- No Iron Age material like ceramics or stone walling was noted;
- No fatal flaws were identified although access routes to the exploration boreholes were not available at the time of the survey and therefore not physically surveyed. The area is generally speaking of low archaeological significance and it is not expected that access routes will have a significant impact on the archaeology of the area.

The six borehole locations are numbered as follows (each with its approximate GPS Coordinates):

204H1: S23.001859998330474 E28.240286037325859
235H1: S23.093341011554003 E28.354371031746268
238H1: S23.056372040882757 E28.395609995350242
238H2: S23.057092968374491 E28.39711002074182
263H1: S23.013202976435423 E28.23968899436295
297H1: S23.080368004739285 E28.357395976781845



Figure 6: A view of the vegetation around the 204H1 borehole.



Figure 7: Another view of the 204H1 location.



Figure 8: A general view around 235H1.



Figure 9: Another view of the area around 235H1.



Figure 10: General view of area at 238H1.



Figure 11: Another view of the environment around 238H1.



Figure 12: A view of the area around 238H2. Note the sand which is one of the characteristics of the environment in the study area.



Figure 13: Another view around 238H2.



Figure 14: General view of the area around 263H1.



Figure 15: A view of the area around 297H1.

It should be noted that although all efforts are made to cover a total area during any assessment and therefore to identify all possible sites or features of cultural (archaeological and/or historical) heritage origin and significance, that there is always the possibility of something being missed. This will include low stone-packed or unmarked graves. This aspect should be kept in mind when development work commences and if any sites (including graves) are identified then an expert should be called in to investigate and recommend on the best way forward.

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Phase 1 HIA for a number of exploration Boreholes on portions of the farms Cochin-China 46LR, Bristol 17LR & Naples 35LR was conducted successfully. The 6 borehole locations and study area is situated near Marnitz in the Limpopo Province.

As indicated earlier no sites, features or material of cultural heritage (archaeological and/or historical) origin or significance were identified in the study area during the physical assessment. Six exploration borehole locations located on the three farms were physically inspected during the fieldwork. An impact area of 20m x20m surrounding each borehole was assessed.

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- No fatal flaws were identified although access routes to the exploration boreholes were not available at the time of the survey and therefore not physically surveyed. The area is generally speaking of low archaeological significance and it is not expected that access routes will have a significant impact on the archaeology of the area.

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.

It is recommended that the proposed exploration borehole activities be allowed to continue taking into consideration the recommendations given above.

8. REFERENCES

General and closer views of study area location and Borehole positions: Google Earth 2020.

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. Pretoria: J.L. van Schaik.

Eastwood, E.B. & Tlouama. N.J. 2004. **The Rock Art of the Makgabeng Plateau: Volume 7. Groenepunt, Kirstenspuit and Bayswater**. Louis Trichardt: Palaeo-Art Field Services.

Eastwood, E.B. & Tlouama. N.J. 2005. **The Rock Art of the Makgabeng Plateau: Volume 8. Rosamond and Disseldorp**. Louis Trichardt: Palaeo-Art Field Services.

Huffman, T.N. 2007. Handbook to the Iron Age: **The Archaeology of Pre-Colonial Farming Societies in Southern Africa**. Scottsville: University of KwaZulu-Natal Press.

Knudson, S.J. 1978. **Culture in retrospect**. Chicago: Rand McNally College Publishing Company.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. **South African and Lesotho Stone Age Sequence Updated (I)**. South African Archaeological Bulletin 67 (195): 120–144, 2012.

Republic of South Africa. 1999. **National Heritage Resources Act (No 25 of 1999)**. Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act (no 107 of 1998)**. Pretoria: The Government Printer.

Chief Surveyor General Database (www.csg.dla.gov.za): Documents (1) 10DNIT01 (2) 10E75L01 (3) 10DNHD01.

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.