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REPORT ON A PHASE 1 HERITAGE ASSESSMENT FOR THE PROPOSED BLOEHOF EXTENSIONS 11, 12 & 13 TOWNSHIP ESTABLISHMENTS ON A PORTION OF THE REMAINING EXTENT OF PORTION 1 & THE REMAINING EXTENT OF PORTIONS 15 & 26 OF THE FARM KLIPFONTEIN 344HO, NEAR BLOEMHOF NORTHWEST PROVINCE

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SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Maxim Planning Solutions to undertake a Phase 1 HIA for proposed Township Establishments (Bloemhof Extensions 11, 12 & 13) on a portion of the Remaining Extent of Portion 1 and the Remaining Extent of Portions 15 & 26 of the farm Klipfontein 344HO, in Bloemhof in the Northwest Province.

The project is conducted under instruction from the Lekwa-Teemane Local Municipality.

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. There are no known sites on the specific land parcel, although some were identified during the physical assessment undertaken. The report will discuss the results of the desktop and field assessment and provide recommendations on the way forward at the end of the document.

From a Cultural Heritage point of view the development actions can continue, taking into consideration the mitigation measures proposed in the report.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Maxim Planning Solutions to undertake a Phase 1 HIA for proposed Township Establishments (Bloemhof Extensions 11, 12 & 13) on a portion of the Remaining Extent of Portion 1 and the Remaining Extent of Portions 15 & 26 of the farm Klipfontein 344HO, in Bloemhof in the Northwest Province.

The project is conducted under instruction from the Lekwa-Teemane Local Municipality.

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. There are no known sites on the specific land parcel, although some were identified during the physical assessment undertaken.

The client indicated the location and boundaries of the Project Area, and the assessment focused on this area and the Alternatives indicated.

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 is 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 detailed 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

APelser Archaeological Consulting (APAC) was appointed by Maxim Planning Solutions to undertake a Phase 1 HIA for proposed Township Establishments (Bloemhof Extensions 11, 12 & 13) on a portion of the Remaining Extent of Portion 1 and the Remaining Extent of Portions 15 & 26 of the farm Klipfontein 344HO, in Bloemhof in the Northwest Province. The project is conducted under instruction from the Lekwa-Teemane Local Municipality.

The development area of Bloemhof Extension 11 is bounded to the north by the main access road to Boitumelong, to the east by the existing township area of Salamat, to the south by the railway line and to the west by the existing township area of Boitumelong Extension 2. Please note that this township establishment will focus on all portions of the relevant farm that have not been subject to township establishment (as reflected on the Google image). The development area of Bloemhof Extensions 12 and 13 is bounded to the south by the township area of Bloemhof Extension 10 (area previously investigated by yourselves), to the east by the Schweizer-Reneke provincial road, to the north by the Eskom power line servitude and to the west by the existing township area of Boitumelong Extension 4. The development area will also include all portions of the relevant farm that have not been subject to township establishment to eliminate intrusive farm between the township areas.

The topography of both study areas are flat and open mostly, with no rocky outcrops or ridges occurring. In some sections the grass cover was fairly dense, making visibility difficult, although there were also some more open stretches. Evidence of recent agricultural activities in the areas (ploughing and other) was visible, while recent urban/rural developments have also impacted (ESKOM Powerlines and railway line, roads and others). Informal residential refuse and building rubble dumping also occurs throughout the areas.

The survey was done on foot, although some access roads were utilized to traverse sections of the study areas. The focus during the assessment was on unnatural looking clumps of trees and vegetation, as well as open patches and eroded areas.



Fig.1: General location of study areas with Extension 11 in red & Extensions 12 and 13 in purple (Google Earth 2016).



Fig.2: Closer view of study areas, showing Extension 11, 12 & 13 locations (Google Earth 2016).



Fig.3: General view of a section of Extensions 12 and 13.



Fig.4: Another view of Extensions 12 and 13 area.



Fig.5: Some areas are more densely vegetated & ESKOM lines have also impacted.



Fig.6: View showing neighboring residential developments to Extension 12.



Fig.7: Another section of Extensions 12 and 13.



Fig.8: Some ongoing development on the edge of Extension 12.



Fig.9: A view of a section of the Extension 11 area. Urban developments are visible on its boundary, as well ESKOM lines crossing parts of it.



Fig.10: Another view showing the flat open nature of the area and evidence of old agricultural fields.



Fig.11: A view of a section of the Extension 11 area showing neighboring urban settlement and the railway line.



Fig.12: Another view of a section of the Extension 11 area. Note the informal dumping that occurs throughout the area.



Fig.13: Recent impact on a section of the Extension 11 area.

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 close to the study area (Bergh 1999: 4). A number of Stone Age stone tool concentrations were found in the Extension 11 area specifically, and will be discussed further on in the document, while a few small scatters were also located in the Extension 12.

The Iron Age is the name given to the period of human history when metal was mainly used to produce 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) indicates that a Middle Iron Age should be included. His dates, which are 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 close to the study area (Bergh 1999: 6-7), although this might just point to a lack of archaeological research in the region. No sites were found during the assessment as well.

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 earliest Europeans to travel through the area were the groups of Broadbent & Hodgson in 1823, Hodgson & Archbell in 1826 and later that of Krebs in 1838 (Bergh 1999:12-13). They were closely followed by the Voortrekkers (p.14).

The area is which Bloemhof was eventually established was initially sparsely populated due to the constant droughts and cattle diseases which made settlement very difficult. Some of the earliest inhabitants of the area were the BaTlaping, BaRolong and the Korannas. These populations were displaced during the *difaqane* of the 1820's – 1830's. Bloemhof was officially founded (or established) on the 28th of 1866 (Van der Walt 2012: 20). According to Wikipedia the town was founded in August 1864 when diamonds were discovered in the area. The town was established on the farm owned by John Barclay, who survived the HMS Birkenhead shipwreck in 1852. The place became known as Bloemhof (flower court) because of the lovely gardens that were planted by Barclay's daughter. In June 1869, the South African Republic's Volksraad created a new district called Bloemhof named after the town itself (www.wikipedia.

The oldest map from the Chief Surveyor General's database for the farm dates to 1920. This is for Portion 3 and shows that the farm was then numbered as 30 and was located in the Bloemhof District and Ward of Bloemhof (CSG document 10LJE501). The whole of the original farm was transferred by deed on 11-5-1858 & 8-7-1867 to J.Barkley. Portion 15 was surveyed between February and November 1963 and again in November 1966 (CSG Document 100R5F01), while Portion 26 was surveyed in August 1981 (CSG Document 10LJ8I01). No cultural heritage sites or features could be discerned on any of these maps however.

SIDES.	ANGLES.	(x) CO-ORDINATES (x)	
18 // 475 10 20 833 11 475 10 833	A 90.0. B 90.0 C 90.0 D 90.0	# - 8717.266 35:8 # - 8716.778 3524 C - #737.392 3855 O - 8738.68 35:82 E - 8907.89 36:82 F - 8905.52 34:3	46 35 89 86

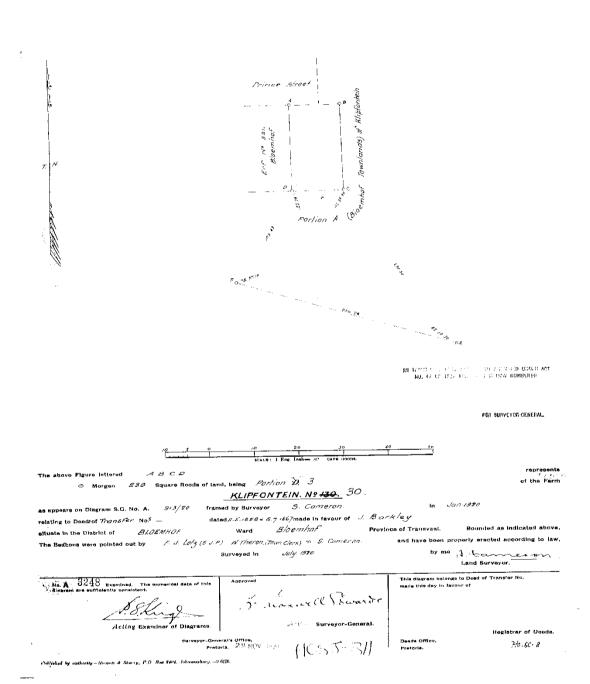


Fig.14: 1920 map of Portion 3 of the farm (www.csg.dla.gov.za).

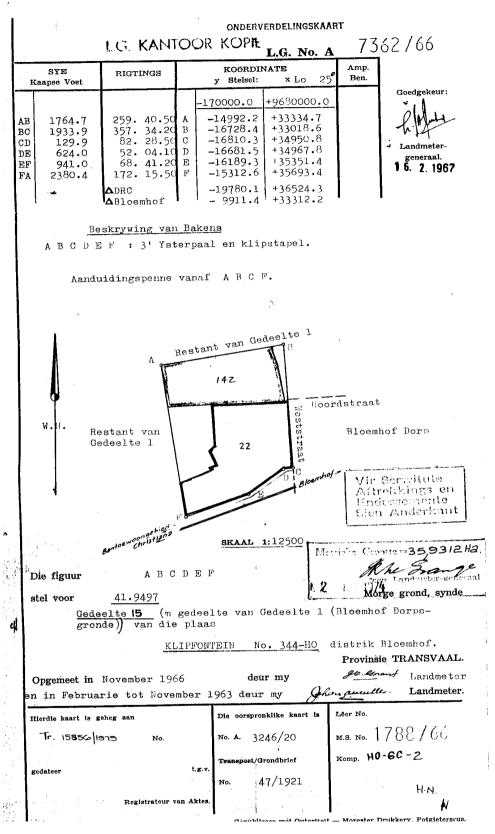


Fig.15: 1966 map of Portion 15 (www.csg.dla.gov.za).

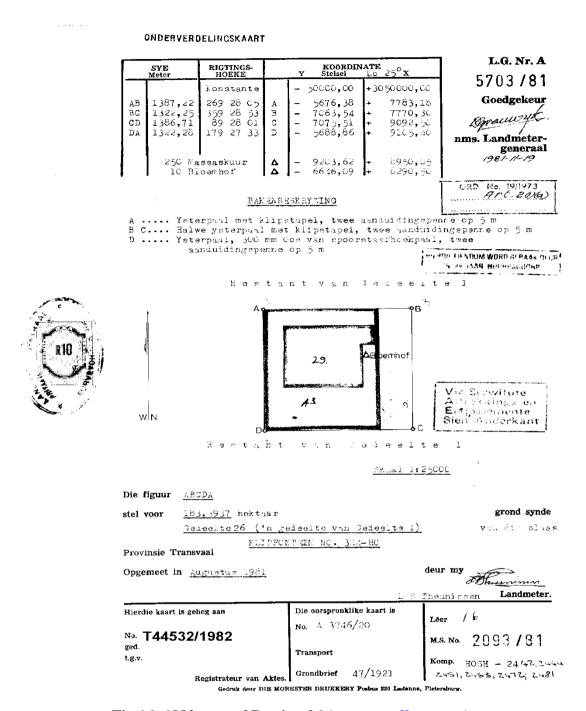


Fig.16: 1982 map of Portion 26 (www.csg.dla.gov.za).

Results of the January 2017 Fieldwork

A total of 8 sites were identified and recorded in the two areas during the January fieldwork, with 6 of these in the Extensions 12 and 13 area and 2 in Extension 11. Two (2) of the sites date to the recent historical period (Site 1 – cemetery and Site 7 – remains of old earthen-walled dams), while the bulk of the sites or finds date to the Stone Age (Sites 2-6 and Site 8). Five of the 6 Stone Age-related sites are situated in the Extensions 12 and 13 area, with many more expected to be present here. The open air Stone Age surface sites in Extensions 12 and 13 contain fairly dense scatters of stone tools located close to piles of stones (origin and

function not known) and although seemingly out of context Phase 2 mitigation measures will be required. The results of the assessment are discussed in more detail below.

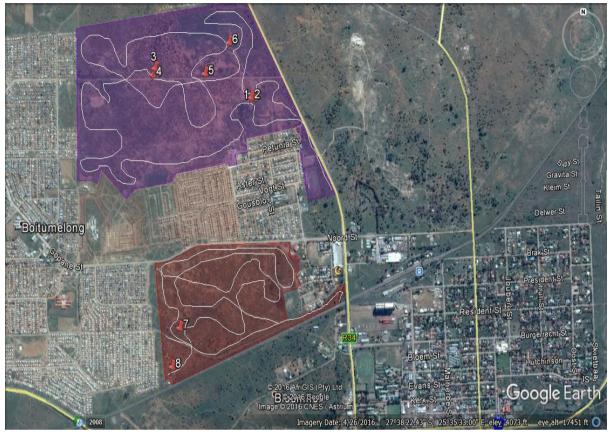


Fig.17: View of study areas showing sites recorded and tracks followed during assessment (Google Earth 2016).

Site 1 - Cemetery

This is the site of a large communal cemetery of recent age and is still being utilized. Parts of it are overgrown and it is not properly fenced. The graves here are more than likely not older than 60 years of age, but the site is still of High Significance and should not be negatively impacted by any development. It is recommended that the site be kept intact and cleaned and fenced in and managed as part of the proposed development of Extension 13.

GPS Location of Site 1: S27.63298 E25.58836

Cultural Significance: High.

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation.

Field Ratings: Local Grade IIIB: Should be included in the heritage register and may be mitigated.

Mitigation: Fence-in, clean and manage as part of the development and avoid any impact on the cemetery and graves. The other option is to exhume and relocate after extensive consultation with the community and the obtaining of permissions to undertake the relocation of the cemetery and the graves contained in it.



Fig.18: View of a part of the Site 1 Cemetery.



Fig.19: Aerial view of Site 1 Cemetery location and extent (Google Earth 2016).

Sites 2 – 6: Stone Age Open-air Surface sites (Extensions 12 and 13) & Site 8 (Extension 11)

The sites on Extensions 12 and 13 are all mostly close to piles of stone/stone cairns, with Stone tools (cores, flakes, scrapers, others) located around these features and sometime on top of these heaps. The origin and function of these stone cairns are unknown, but it is possible that they are the result of recent cleaning of the area and/or during the use of the area for

agricultural purposes (ploughing). Although all possible find-sites on Extensions 12 and 13 were not recorded it is clear that these areas of clearing with stone heaps cover a fairly extensive area (**See Fig.20 below**) and that the Stone Age presence in the area is fairly significant.

It is therefore recommended that Phase 2 mitigation is undertaken before any development commences. This will include detailed mapping of the areas, as well as the sampling of representative material from these sites to determine exactly the time-frame of Stone Age presence in and utilization of the area. Site 8 in the Extension 11 study area is not as extensive as the others in Extensions 12 and 13, and although some individual tools were also identified at Site 7 (old dams) it is believed that the mitigation work on the Extensions 12 and 13 Stone Age sites will be representative for the Stone Age presence in this area.

GPS Locations of Sites: S27.63629 E25.58807 (2); S27.63126 E27.58043 (3); S27.63166 E27.58031 (4); S27.63160 E25.58437 (5); S27.62981 E25.58636 (6) & S27.64875 E25.58177 (8)

Cultural Significance: Medium to High

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation.

Field Ratings: General protection A (IV A): Site should be mitigated before destruction (High/Medium significance).

Mitigation: Detailed mapping of Stone Age sites in Extensions 12 and 13 area before development commences, as well sampling of representative Stone Age material.

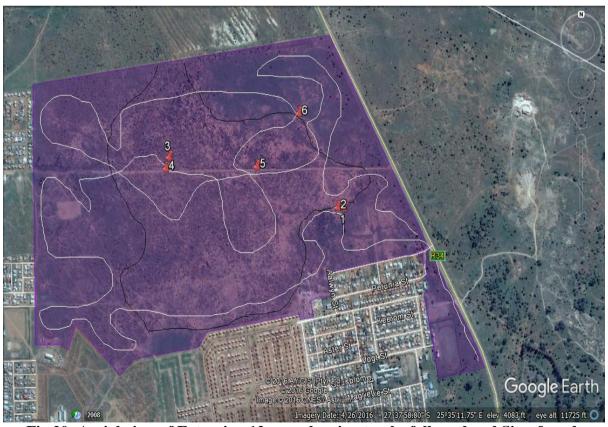


Fig.20: Aerial view of Extension 12 area showing tracks followed and Sites found.

Sites 2-6 is the Stone Age site locations, with the area marked in black indicating the possible extent of Stone Age finds. Open areas and areas with visible stone heaps are located here (Google Earth 2016).



Fig.21: Some stone tools found at Site 1.



Fig.22: View of Site 2 showing one of the stone heaps found at most of these sites.



Fig.23: Another of the sites with stone heaps visible.



Fig.24: More stone tools from the Extensions 12 and 13 area.



Fig.25: Another of the areas where these stone heaps are located. Stone tools are found on top of & all around these heaps.



Fig.26: Stone tools from Site 6.



Fig.27: A few stone tools found at Site 7 (Earthen-walled dams).



Fig.28: Some of the stone tools from Site 8.

Site 7 – Earthen-walled dams (Extension 11).

This site contains the remains of a number of earthen-walled features that look like old dams related to recent agricultural activities in the area. No other features or remains were present. The age of these are unknown but is more than likely less than 60 years of age. It has low cultural heritage significance and development can therefore continue here.

GPS Location of Site 1: S27.64648 E25.58237

Cultural Significance: Low Heritage Significance: None.

Field Ratings: General protection C (IV C): Phase 1 is seen as sufficient recording and it

may be demolished (Low significance).

Mitigation: None required.



Fig.29: Site 7.



Fig.30: Aerial view of Extension 11 area showing Site 7 dam remains (Google Earth 2016).

It should be noted that although all efforts were made to cover the total area 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. The fairly dense grass cover also made visibility in some sections difficult. This aspect should be kept in mind when development work commences and if any sites (incl. graves) are identified then an expert should be called in to investigate and recommend on the best way forward.

7. CONCLUSIONS AND RECOMMENDATIONS

APelser Archaeological Consulting (APAC) was appointed by Maxim Planning Solutions to undertake a Phase 1 HIA for proposed Township Establishments (Bloemhof Extensions 11, 12 & 13) on a portion of the Remaining Extent of Portion 1 and the Remaining Extent of Portions 15 & 26 of the farm Klipfontein 344HO, in Bloemhof in the Northwest Province.

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A total of 8 sites were identified and recorded in the two areas during the January fieldwork, with 6 of these in the Extensions 12 and 13 area and 2 in Extension 11. Two (2) of the sites date to the recent historical period (Site 1 – cemetery and Site 7 – remains of old earthen-walled dams), while the bulk of the sites or finds date to the Stone Age (Sites 2-6 and Site 8). Five of the 6 Stone Age-related sites are situated in the Extension 11 area, with many more expected to be present here. The open air Stone Age surface sites in Extensions 12 and 13 contain fairly dense scatters of stone tools located close to piles of stones (origin and function not known) and although seemingly out of context Phase 2 mitigation measures will be required.

Site 1 (in the Extension 13 area) is a large cemetery currently also in use. It is recommended that the site be fenced-in, cleaned and managed as part of the development and to avoid any impact on the cemetery and graves. The other option is to exhume and relocate after extensive consultation with the community and the obtaining of permissions to undertake the relocation of the cemetery and the graves contained in it.

For the Stone Age sites found in the two areas the following is recommended. Phase 2 mitigation should be undertaken before any development commences. This will include detailed mapping of the areas, as well as the sampling of representative material from these sites to determine exactly the time-frame of Stone Age presence in and utilization of the area. Site 8 in the Extension 11 study area is not as extensive as the others in Extensions 12 and 13, and although some individual tools were also identified at Site 7 (old dams) it is believed that the mitigation work on the Extensions 12 and 13 Stone Age sites will be representative for the Stone Age presence in this area.

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) 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.

From a cultural heritage point of view the development can therefore continue, taking cognizance of the above recommendations.

8. REFERENCES

Aerial views of general study area location, sites and tracks followed: Google Earth 2016 & Maxim Planning Solutions

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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.

Aestetic 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, landuse, 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.