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9 SEPTEMBER 2011 Modified 27 November 2012

Revised 18 April 2013

FIRST PHASE ARCHAEOLOGICAL & HERITAGE ASSESSMENT OF THE HOUSING DEVELOPMENTS AT MELKSTROOM 563, UPINGTON, NORTHERN CAPE

EXECUTIVE SUMMARY

Low cost housing developments consisting of about 167 new stands are planned on Portion 5 of Melkstroom 563 near Upington, in the Gordonia district, Northern Cape Province.

The area along the river had been severely damaged by agricultural and irrigation activities in the past. A water pipeline installation and a wide floodwater channel cuts through the land near the river. An electric power line also crosses the site. Towards the N14 main road the land surface is stony and bare with scattered calcrete outcrops. A few *Acacia erioloba* trees and *Prosopis* bushes grow here and there. The rocky outcrops indicate that the top soil is very shallow and unsuitable for agriculture, with the result that the place has become a piece of wasteland. Over the years farm labourers erected informal shelters near the river and squatters are lately settling along the road near the entranceway at an alarming rate.

No other buildings of cultural value exist. The local people refer to a corrugated iron shed at the site as "the Church" (die Kerk). The present development is an attempt by the Municipality to formalise the settlement.

Archaeological material occurs in the form of a small scatter of stone flakes and flaked cores concentrated in a specific area away from the river. The artefacts are made from lithic sources of banded ironstone, chert and agate. No actual tools are found and the flakes can only be identified as Later Stone Age. The flakes appear as a general occurrence over a small part of the area and are considered of minor significance.

A cluster of about twenty-five human graves lies between the eastern border fence and the adjacent water pipeline. Most of the graves are overgrown and some seem to be relatively old, while others date from the 1980s. Caution is needed to avoid damage to the graves or any other human skeletal remains that might be discovered. The graves should be accommodated on a separate stand and will have to be fenced and protected prior to any trenching or excavations.

No other cultural or historical remains were found in the proposed area of development.

I recommend that the planning and development of the site may proceed, provided that the graves should be properly fenced and protected.

Mitigation measures will be needed in case of the human graves.

INTRODUCTION & DESCRIPTION

Scope and Limitations

MDA Environmental Consultants, Bloemfontein, and Stabilis Developments, Upington, on behalf of the //Khara Hais Municipality commissioned the archaeological assessment for Portion 5 of the farm Melkstroom 563 outside Upington, in the Gordonia district, Northern Cape Province.

The investigation provided the opportunity to examine the site proposed for housing developments. The topography of the site is determined by the geology and is dominated by the Orange River on the southern border. In the west along the N14 main road, the soil surface consists of bare rocky outcrops with red sandy soil and calcrete scatters, which changes to alluvial sand near the river. The area contains a short grass cover with scatters of shrubs and bushes on the surface.

No limitations were experienced during site visit.

Methodology

- 1. Standard archaeological survey and recording methods were applied.
- 2. A survey of the literature was done to obtain information about the archaeology and cultural heritage of the area.

- 3. The site was inspected on foot and by vehicle where necessary.
- 4. The layout of the area as well as objects and features were plotted by GPS.
- 5. The surroundings and features were recorded on camera.

INVESTIGATION

Housing developments are planned by the //Khara Hais Municipality for Portion 5 of the farm Melkstroom 563 outside Upington, in the Gordonia district, Northern Cape Province (Maps 1&2). The site has entrance from the N14 main road to Olifantshoek (Fig.10). The property measures 33ha and the development will cover about 12ha, to include 167 residential and institutional erven as well as a stand for the existing graves. Service infrastructure and streets are included in the proposal. Alternative layout plans and the extent of the development formed part of the planning phase (Maps 3&4).

The site was visited on 5 July 2011 with Dr Johan du Preez and Marguerite Cronjé from MDA Environmental Consultants, Bloemfontein. Vivien McPherson from Stabilis Developments, Upington, took us to the site. A second site visit took place on 15 May 2012 in the company of Neil Devenish of MDA Environmental Consultants, Bloemfontein.

Not much is known about the history of the particular piece of land. Extensive wine yards occur along the banks of the Orange River (Map 2). The site shows damage by farming and irrigation activities with a water pipeline installation running along the river (Figs.2&3). A wide floodwater channel cuts through the land (Figs.4-6). An electric power line also crosses the site (Fig.1). Higher up and towards the N14 main road the surface is relatively untouched, but stony and bare (Fig.17). The area has a sterile red sandy soil cover (Fig.12) with calcrete outcrops here and there (Fig.17). The surface has a sparse grass cover with scatters of shrubs (Fig.16) and a few Kameeldoring Trees (*Acacia erioloba*) (Fig.7) and Mesquite bushes (*Prosopis species*) (Fig.18).

The rocky outcrops indicate that the top soil is very shallow and therefore unsuitable for crop farming or other agricultural purposes, with the result that the place has become a piece of wasteland. Farmers allowed their labourers to settle here over the years and new incomers took advantage of the opportunity to build informal shelters and fences down near the river (Fig.7). At present, there is a rapid influx of people, with squatters settling along the road near the entranceway at an alarming rate (Fig.11). There is a sizeable corrugated iron shed without any windows, which is referred to as "the Church" (die Kerk) by the local people (Map 3).

The present project is a venture by the Municipality to formalise the settlement.

The area was examined for possible archaeological and historical material and to establish the potential impact on any cultural material that might be found. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the Environmental Conservation Act, (73 of 1989).

The study aims to locate and evaluate the significance of cultural heritage sites, archaeological material, manmade structures older than 60 years, and sites associated with oral histories and graves that might be affected by the proposed developments. In many cases, planted and self-sown trees and other types of vegetation determine a major part of the historical landscape of human settlements in villages and towns, on farmyards or even deserted places in the open veld. These features should be recognised and taken into consideration during any cultural investigation.

Anglo-Boer War (1900-1902) camping and skirmish sites in the Free State and Northern and Eastern Cape, should be recorded. Distinctive food cans and specific types of fired cartridge cases normally identify these sites. Conflict sites between early White farmers and Bushmen in the Northern and Eastern Cape could contain gunflints and fired cartridge cases and should likewise be noted.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The archaeological environment of the Northern Cape is rich and diverse, representing a long time span of the human past. The area is exceptionally rich in terms of Stone Age material and rock art sites. Some areas are richer than others and not all the sites are equally significant (Beaumont et al. 1995, Beaumont & Morris 1990). For various reasons, there is a relative lack in research records, but certain sites such as the Wonderwerk Cave in the Kuruman Hills, several ancient specularite mines near Postmasburg and a number of significant Stone Age sites near Kathu (Beaumont 1990, 2007), have produced important archaeological information. Beaumont (1990) has indicated the importance of the Early Stone Age lithic material after many seasons of excavations at Kathu Pan and elsewhere near the town.

Other Stone Age sites near Kathu were discovered during previous Archaeological Impact Assessments (AIA) (Dreyer 2006, 2008a). Exceptional hand axes and flakes were found on bare rocky outcrops at Hartsnoll 458. Similar artefacts were discovered on municipal land adjacent to the Kathu Cemetery (site named Uitkoms 4 by Beaumont 2007). Other related material was found at Bestwood 459RD, directly opposite the main entrance from the N14 into Kathu (Dreyer 2008a). According to the technology these artefacts fit in with the later part of the Early Stone Age (Acheulean) (2 million to 150 000 years ago). Beaumont declared that these artefacts resemble the material found in controlled excavation at Wonderwerk Cave, which dated to 500 000 years BP.

Khoi stock farmers moved into this area between AD 400 and AD 1100. Black farming communities followed into the Northern Cape. This phase known as the Later Iron Age (AD 1300 to about 1840 AD), brought people who cultivated crops, kept livestock, produced an abundance of pottery in a variety of shapes and sizes and smelted metals. Extensive stone walled enclosures characterised their semi-permanent settlements. These remnants are known from the prominent Sotho/Tswana settlements at Dithakong, a Bathlaping capital near Kuruman. A number of Korana and Griqua groups, remnants of the Later Stone Age peoples, managed to survive the assimilation by Sotho/Tswana tribes in the region.

Dramatic climate changes resulted in a rapid population growth along the east coast. Increased pressure on natural resources and attempts to control trade during the early 19th century brought the emergence of powerful leaders to the area. The subsequent power struggle resulted in a period of instability in the central parts of Southern Africa. This period of strife or wars of devastation, known as the "difaqane" (Sotho/Tswana) or "Mfecane" (Nguni), affected many of the Black tribes in the interior. Attacks from east of the escarpment initiated by the AmaZulu impis of Chaka in about 1822, were carried on by the AmaNdebele of Mzilikazi and the AmaNgwane of Matiwane into the Free State, thus uprooting among others, the Batlokwa of Sekonyela and Mantatise and various smaller Sotho/Tswana tribes. On their turn, the Batlokwa drove off the Bafokeng of Sebetoane from Kurutlele near Senekal, who, in their effort to escape the pursuit by the AmaNdebele forces, eventually landed up in the Caprivi (Dreyer & Kilby 2003).

This period of unrest also affected the peoples of the Northern Cape, resulting in the displacement of scores of tribesmen, women and children. Many of these refugees became assimilated by the stronger tribal groups such as the AmaNdebele of Mzilikazi.

Early European missionaries and travellers ventured into the inland of the country during the 19th century and reached Dithakong as early as 1801. Several of the marauding hordes affected the lives of the Batswana people living at Dithakong near the mission station of Robert and Mary Moffat near Kuruman.

LOCALITY

The farm Melkstroom 563 is situated about 9km east of Upington along the N14 main road to Olifantshoek (Map 1&2). The land borders on the Orange River in the south (Map 3&4).

The following GPS coordinates (Cape scale) were taken (Map 3) (2821).

C 28°25'16"S. 021°19'49"E Altitude 792m (Fig.1).

V 28°25'13"S. 021°19'49"E Altitude 791m (Figs.2&3).

CK 28°25'13"S. 021°19'49"E Altitude 787m (Figs.4&5).

CHURCH 28°25'08"S. 021°19'47"E Altitude 805m (Map 3).

F 28°25'23"S. 021°19'35"E Altitude 788m (Figs.6&7).

Z 28°25'04"S. 021°19'47"E Altitude 802m (Figs.8&9).

A 28°24'49"S. 021°19'39"E Altitude 813m (Figs.10& 12).

B 28°24'41"S. 021°19'47"E Altitude 814m (Figs.13& 14).

Y 28°24'35"S. 021°19'55"E Altitude 812m (Figs.15& 16).

G 28°25'01"S. 021°19'50"E Altitude 815m (Figs.18- 23).

RESULTS

FINDS

Archaeological material in the form of a small scatter of worked stone flakes, occurred in an area near Point Z (Figs.8&9). The artefacts were made from lithic sources of banded iron stone, chert and agate, which had clearly been carried in from the riverbed. No actual tools occurred and the collection includes core flakes and flaked cores. The artefacts can only be classified as Later Stone Age material. This period is calculated to have lasted over the past 40 000 years.

A cluster of about twenty-five human graves (Figs.18-23) was found between the eastern border fence and the pipeline (Map 3). Most of the graves are grass- and vegetation covered and unmarked and seem to be very old (Fig.22). Others are clearly more recent and according inscriptions on the head stones, date from the 1980s (Figs.19&20). Without actually pointing out the burials, the local people stated that some of the graves belong to "our people" (onse mense), but did not elaborate on any family relationships.

Built structures on the site only include temporary shacks and informal housing (Figs.7, 11, 12). The corrugated iron shed, referred to as "the Church" (die Kerk), is apparently used as a place of worship by the local people (Map 3). No other buildings of cultural value exist.

IMPACT ASSESSMENT

The potential impact by the housing developments on the heritage resources of the site is considered to be of minor significance and mitigation measures will only be needed in the case of the cluster of graves.

The burials should be avoided during the layout of the township. There is always the possibility that more human burials may occur during excavations and the building process. In this case, caution is needed to avoid damage to any human skeletal remains and should immediately be reported to the Archaeology Department at the McGregor Museum in Kimberley and to SAHRA in Cape Town.

The scatter of stone artefacts described above appears as an isolated occurrence in the area near the road, with no association to other relevant archaeological material. These finds are considered of minor significance.

The new housing developments will have no major impact on the archaeological or any cultural remains at the site.

The informal housing and the corrugated iron shed appear not to be of any heritage significance.

RECOMMENDATIONS

The impact resulting from the residential developments at the site on the archaeological and heritage resources are considered to be of minor significance.

There are no obvious reasons to delay further planning of the developments at the specific site.

I recommend that the planning of the proposed developments may proceed.

MITIGATION

Mitigation measures will only be required in the case of the grave cluster. The cluster of burials should be allocated to a separate stand. The graves should be fenced and protected prior to any trenching or excavations at the site.

In case of the discovery of other human skeletal remains, work should stop in the area and the McGregor Museum in Kimberley and SAHRA in Cape Town should be notified.

ACKNOWLEDGEMENTS

I thank Dr Johan du Preez, Neil Devenish and Marguerite Cronjé from MDA Environmental Consultants, Bloemfontein, for taking me to the site.

SELECT BIBLIOGRAPHY:

BEAUMONT, P.B., SMITH, A.B. & VOGEL, J.C. 1995. Before the Einiqua: the archaeology of the frontier zone. In Smith, A.B. (Ed.). Einiqualand: Studies of the Orange River Frontier. Cape Town: University of Cape Town Press.

BEAUMONT, P.B. & VOGEL, J.C. 1989. Patterns in the age and context of rock art in the Northern Cape. South African Archaeological Bulletin 44(150):73-81.

Beaumont, P.B. & Morris, D. 1990. Guide to archaeological sites in the Northern Cape. Kimberley: McGregor Museum.

BEAUMONT, P.B. 1990. Kathu Pan. pp. 75-100 In: Beaumont, P.B. & Morris, D. Guide to archaeological sites in the Northern Cape. Kimberley: McGregor Museum.

BEAUMONT, P.B. 2007. Supplementary archaeological impact assessment report on sites near or on the farm Hartnolls 458, Kgalagadi District Municipality, Northern Cape Province. Kimberley: McGregor Museum, Archaeology Department, Report 17 January 2007.

DEACON, J. 1992. Archaeology for Planners, Developers and Local Authorities. Cape Town: National Monuments Council.

DE JONG, R.C. 2008. Heritage scoping report: proposed residential development and associated infrastructure on a 200ha Portion of the farm Bestwood 429 RD at Kathu, Northern Cape Province. Report for Rock Rowan Environmental Consulting, Pretoria.

DREYER, J. & KILBY, S. E. 2003. Sebetoane's long march: a history of the Makololo (1823-1851). Anthropology Southern Africa 26(1&2):1-15 (formerly South African Journal of Ethnology).

DREYER, J. 2005. Archaeological investigation of the proposed alterations to the Telkom lattice mast at Gamsberg (Ghaamsberg) near Aggeneys, Northern Cape. EIA Report for CEBO/MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2006. First phase archaeological and cultural heritage assessment of the proposed concentrated solar thermal plant (CSP) at the farms Olyvenhouts Drift, Upington, Bokpoort 390 and Tampansrus 294/295, Groblershoop, Northern Cape. EIA Report for Bohlweki Consultants, Johannesburg.

DREYER, J. 2006. First phase archaeological and cultural heritage assessment of the proposed residential developments at the farm Hartsnoll 458, Kathu, Northern Cape. MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2008a. First phase archaeological and cultural heritage assessment of the proposed residential developments at a portion of the remainder of the farm Bestwood 459RD, Kathu, Northern Cape. EIA Report for Cultmatrix cc (Heritage Consultants) Pretoria and Rock Environmental Consulting, Pretoria.

DREYER, J. 2008b. First phase archaeological and cultural heritage assessment of the proposed Bourke Project, ballast site and crushing plant at Bruce Mine, Dingleton, near Kathu, Northern Cape. EIA Report for MILNEX 189 cc, Schweizer Reneke.

DREYER, J. 2010. First phase archaeological & heritage assessment of the residential developments at Pabalello, Upington, Northern Cape. MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2012. First phase archaeological and cultural heritage assessment of the proposed water pipeline from Sanddraai 391 to Bokpoort 390, Groblershoop, Northern Cape. EIA Report for SSI Engineers, Sandhurst.

HUMPHREYS, A.J.B. 1986. Searching for the past. Cape Town: David Philip.

MORRIS, D. 1988. Engraved in place and time: a review of variability in the rock art of the Northern Cape and Karoo. South African Archaeological Bulletin 43(148):109-121.

MORRIS, D. 1990a. 'Etchings' and 'Intaglios' in the Upper Karoo: Part 1: The engravings at Springbok Oog. In Beaumont, P.B. & Morris, D. Guide to archaeological sites in the Northern Cape. Kimberley: McGregor Museum.

MORRIS, D. 1990b. 'Etchings' and 'Intaglios' in the Upper Karoo: Part 2: Engravings on Jagtpan and adjacent farms. In Beaumont, P.B. & Morris, D. Guide to archaeological sites in the Northern Cape. Kimberley: McGregor Museum.

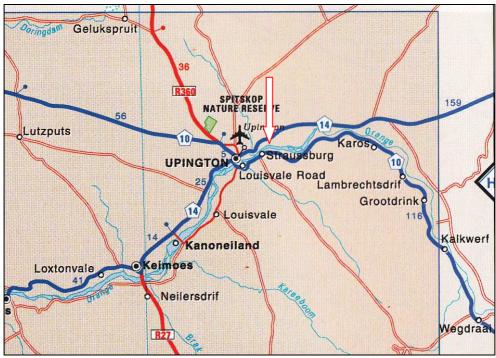
PISTORIUS, J.C.C. 1994. Eskom Archaeological Site Identification Guide. Johannesburg: Eskom.

ROSENTHAL, E. (n.d.). The River of Diamonds. Cape Town: Howard Timmins.

SMITH, A.B. (Ed.). 1995. Einiqualand: Studies of the Orange River Frontier. Cape Town: UCT Press.

SOHNGE, P.G. VISSER, D.J.L. AND VAN RIET LOWE, C. 1937. The geology and archaeology of the Vaal River Basin. Pretoria: Government Printer.

LIST OF ILLUSTRATIONS



Map 1 Upington and other towns along the Orange River. Note locality of the site.



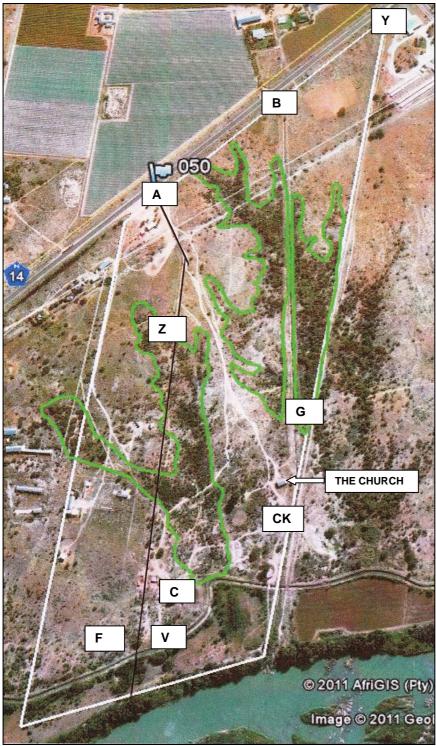
Fig.1 Point C at Melkstroom 563, Upington.



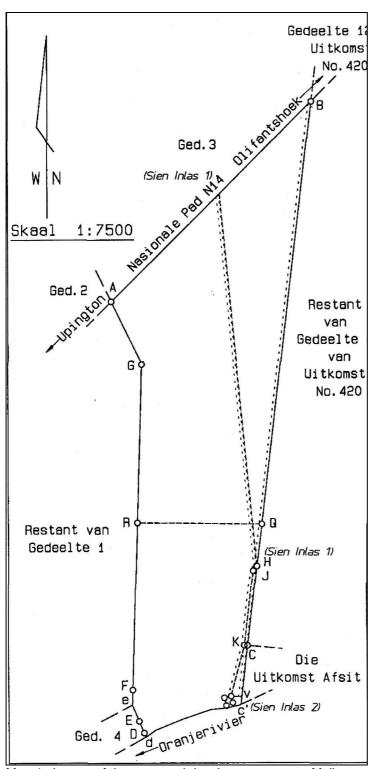
Map 2 Locality of Melkstroom 563, Upington, along the Orange River.



Fig.2 Point V at Melkstroom 563, Upington.



Map 3 Layout of Melkstroom, Upington (2821). Position of GPS coordinates indicated.



Map 4 Layout of the proposed development area at Melkstroom, Upington (2821).



Fig.3 Point V at Melkstroom 563, Upington.



Fig.4 Point CK at Melkstroom 563, Upington. Note the wide irrigation ditch.



Fig.5. Flood water ditch at Point CK, Melkstroom 563, Upington.



Fig.6 Flood water ditch at Point F, Melkstroom 563, Upington.



Fig.7 Kameeldoring Tree (*Acacia* e*rioloba*) at Point F, Melkstroom 563, Upington.



Fig.8 Stone flakes at Point Z, Melkstroom 563, Upington (Pocket knife = 84mm).





Fig.10 Entrance from the N14 at Point A, Melkstroom 563, Upington.



Fig.11 Informal housing at Point A, Melkstroom 563, Upington.



Fig.12 Informal housing at Point A facing towards the river, Melkstroom 563, Upington.



Fig.13 Point B at Melkstroom 563, Upington.



Fig.14 Point B at Melkstroom 563, Upington.



Fig.15 Point Y at Melkstroom 563, Upington, facing south.



Fig.16 Point Y at Melkstroom 563, Upington.



Fig.17 Calcrete on the surface at Point Z, Melkstroom 563, Upington.



Fig.18 Grave cluster at Point G, Melkstroom 563, Upington.



Fig.19 Grave of Lorein Van Wyk (1985-1987) at Point G, Melkstroom 563, Upington.



Fig.20 Grave of JP Olyn at Point G, Melkstroom 563, Upington.



Fig.21 Unnamed grave at Point G, Melkstroom 563, Upington.



Fig.22 Heap of soil on a grave at Point G, Melkstroom 563, Upington.



Fig.23 Wooden marker on a grave at Point G, Melkstroom 563, Upington.