
HERITAGE IMPACT ASSESSMENT OF THE REMAINDER OF PORTION 1 OF THE FARM STRATHEARN NO 2154, BLOEMFONTEIN, FREE STATE PROVINCE, FOR PROPOSED RESIDENTIAL DEVELOPMENT.

Location	Remainder of Portion 1 of the Farm Strathearn 2154
Local and District Municipality	Mangaung Metro Municipality
Magisterial District	Bloemfontein 445
Province	Free State

Relevant reference numbers:	
DESTEA	Not available
SAHRIS Case ID	Not available
Type of Development	Residential

Developer	EAP	Heritage consultant
Nunes Properties (Pty) Ltd	Hanri van Jaarsveld Lefatse Environmental Planning Services (Pty) Ltd	Loudine Philip National Museum



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August 2019

DECLARATION OF INDEPENDENCE AND CV

This Phase 1 Heritage Impact Assessment was undertaken and reported on by Loudine Philip of the Archaeological Contracts Unit of the National Museum, Bloemfontein, for, and contracted by Lefatse Environmental Planning Services (Pty) Ltd.

I declare that I am a qualified professional archaeologist (ASAPA Reg No 187) with CRM accreditation in Iron Age and Historical Archaeology. In addition I also hold an M.Phil Degree in Conservation of the Built Environment.

The views stipulated in this report are objective, independent of any views the client might have, and no other interests are displayed during the decision-making processes.

Report Version	Final v1.0		
Title	Phase I Heritage Impact Assessment report for the proposed residential development on the farm Remainder of portion 1 Strathearn 2154, Bloemfontein, Free State Province		
Author	Loudine Philip		27 August 2019

EXECUTIVE SUMMARY

PURPOSE OF THE STUDY

This report was prepared in request of Lefatse Environmental Planning Services (Pty) Ltd, who was contracted by Nunes Property (Pty) Ltd, in support of a Section 38(8) application in terms of the National Heritage Resources Act, no 25 of 1999 (NHRA). A Heritage Impact Assessment (HIA) is required in terms of the National Environment Act (NEMA) as part of a Basic Assessment Report (BAR) as the project triggers NEMA Listing Notice 1, Nos. 19, 27, 28 and 32 of GNR 327 (2017); NEMA listing Notice 3 Nos. 2 & 12 of GNR 324 (2017) as well as Section 21 of the National Water Act, No 36 of 1998.

PROJECT DESCRIPTION

The project entails the residential development of 28 erven for group housing with associated infrastructure within the north-eastern urban edge of Bloemfontein where similar residential development has already taken place, with others already having received approval for similar development, and two more being in the process of receiving approval.

METHODOLOGY

The research started with a desktop study using, inter alia, popular as well as academic articles, books, archival resources, historic photographs, maps (both historic and current), title deeds and survey diagrams, municipal records and documents including the current Spatial Development Framework, newspapers (archived as well as current), consultation with local historians and topic related museums, and so forth. The focus is to obtain a history of the land use of the area from the earliest time to date, in order to make an informed decision on its potential historic value and to inform the physical reconnaissance of the development area. The field inspection was done on foot by two people walking transects and using two GPSs and cameras for recording the general environment for any potential finds.

FINDINGS

No evidence of any prehistoric archaeological material (Stone Age material or evidence of Iron Age material/structures); surface indications of archaeological middens; surface indicators of graves; rock art on rock face surfaces; evidence of military activities; or buildings older than 60 years, were found on the subject property, with the exception of the remains of a corrugated iron dam and associated structures (stone platform for a water tank, a wind pump, and a roughly constructed cement trough) that could potentially be older than 60, but due to the common occurrence of similar structures at the majority of farms in South Africa, is not sufficiently significant to warrant any formal grading or protection.

The study area can accordingly not be assigned a heritage grade of significance.

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List of acronyms used in this report:

ABW	Anglo-Boer War
ASAPA	Association for Southern African Professional Archaeologists
BAR	Basic Assessment Report
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Report
FS-DESTEA	Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs
HIA	Heritage Impact Assessment
IDP	Integrated Development Program
I&AP	Interested and Affected Party
NEMA	National Environmental Management Act (no 107 of 1998)
NHRA	National Heritage Resources Act (no 25 of 1999)
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System

REPORT

INTRODUCTION

This report is the result of a desktop analysis for an assessment of the potential impact the proposed residential development might have on existing tangible/intangible cultural heritage on and in the immediate environs of the site of the new development, followed by a field survey to record all potential heritage effects and assess its value. The report was commissioned by Lefatse Environmental Planning Services (Pty) Ltd.

TERMS OF REFERENCE

The development area is located within the north-eastern urban edge of Bloemfontein, east of the R700 road leading to Bultfontein, and two kilometres from the N1/R700 intersection. The access road to the development area leads from the R700 in an easterly direction. Adjacent to proposed development area is the Trendenham farm which has already been developed into a residential area, including the Trendenham Hotel. At the southern side of the R700 is the developed Summertown Estates as well as the farm The Kloof 2165 which is also in the process of being developed as a residential area.

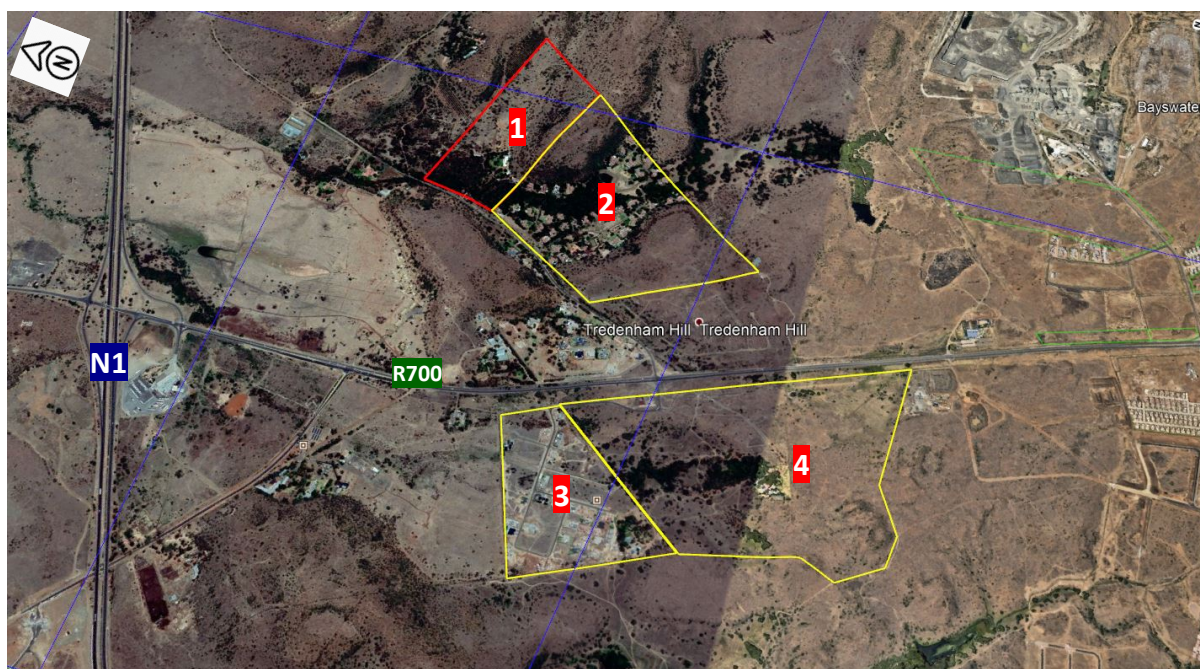


Figure 1: Proposed new development location in relation to existing developed areas as well as approved new development not yet started. 1=current proposed development area; 2=Trendenham; 3=Summertown Estate; 4=The Kloof

The total size of the subject property is approximately 20 hectares.

As a requirement of both the NEMA and NHRA, one of the various specialist studies required is the identification of existing cultural heritage on the subject property and an assessment of the proposed development on any identified heritage by a suitably qualified professional and the author of this report was contracted for this. The brief for the heritage report is to provide a full history of the subject property in order for the stakeholders and any other registered interested and affected parties, as well as statutory bodies, to make an informed decision regarding the impact the proposed development might have on any cultural heritage identified during the field assessment as well as provide a professional assessment of the importance thereof with recommendations for its preservation or mitigation to both SAHRA, as the commenting authority on heritage aspects, as well as for the developers to incorporate any recommendations should it be required.

PROJECT DESCRIPTION

General Project Area:

Remainder of Portion 1 of the farm Strathearn 2154 situated in the Magisterial District of Bloemfontein within the urban edge of Bloemfontein	Size: \pm 20 ha Zoning: earmarked as future residential development area
Magisterial District	Bloemfontein 445
Local Authority	Mangaung Metropolitan Municipality
1:50 000 map sheet number	2926AA Bloemfontein
Central co-ordinate of the development	29° 02'50.70"S; 26°14'10.89"E

Development Detail:

Type of development	Residential
Proposed components	28 erven with associated services
Proposed activities	<ol style="list-style-type: none"> 1. Clearance of vegetation will be limited to areas proposed for the development as far possible. 2. Controlled access gate and proposed construction of an access road while maintaining the natural drainage of the area. 3. Phased earthworks during the construction of houses on the proposed 28 erven. 4. Construction of a backup reservoir with a capacity of 330kl for storage of potable water for household use and fire-fighting purposes.

	<ol style="list-style-type: none"> 5. Implementation of storm water management to divert storm water into the natural drainage lines of the surrounding area. 6. Bulk services (e.g. sewage line) for the proposed development will be incorporated into the existing municipal services of Mangaung. 7. Construction of an 11kV miniature electricity substation with installation of underground electricity cables to feed the proposed development. 8. Installation of streetlights on the internal access road. 9. Continuous environmental management throughout all the phases of the operation.
Applicable legislation	National Environmental Management Act (107 of 1998) EIA Regulations (R327 dd 7 April 2017)
	National Heritage Resources Act (25 of 1999) Sections 38(3) – Provisions for information to be included in a heritage report should Section 38(8) be triggered Section 38(8) – The heritage impact assessment is required in terms of the National Environmental Management Act (107 of 1998)
	National Water Act (36 Of 1998)

Layout of development area:

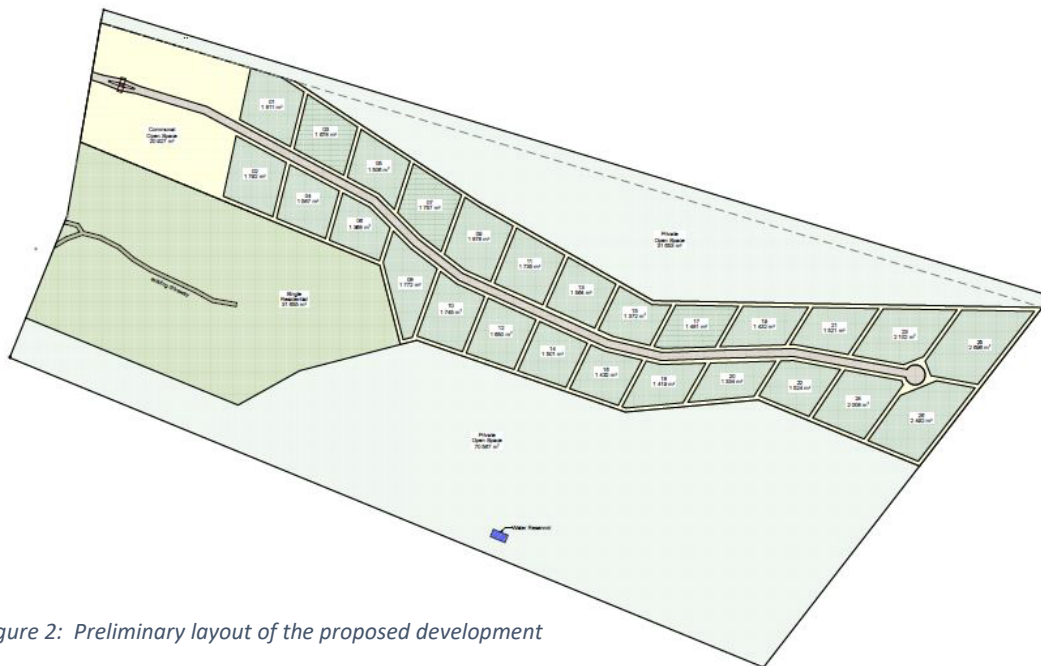
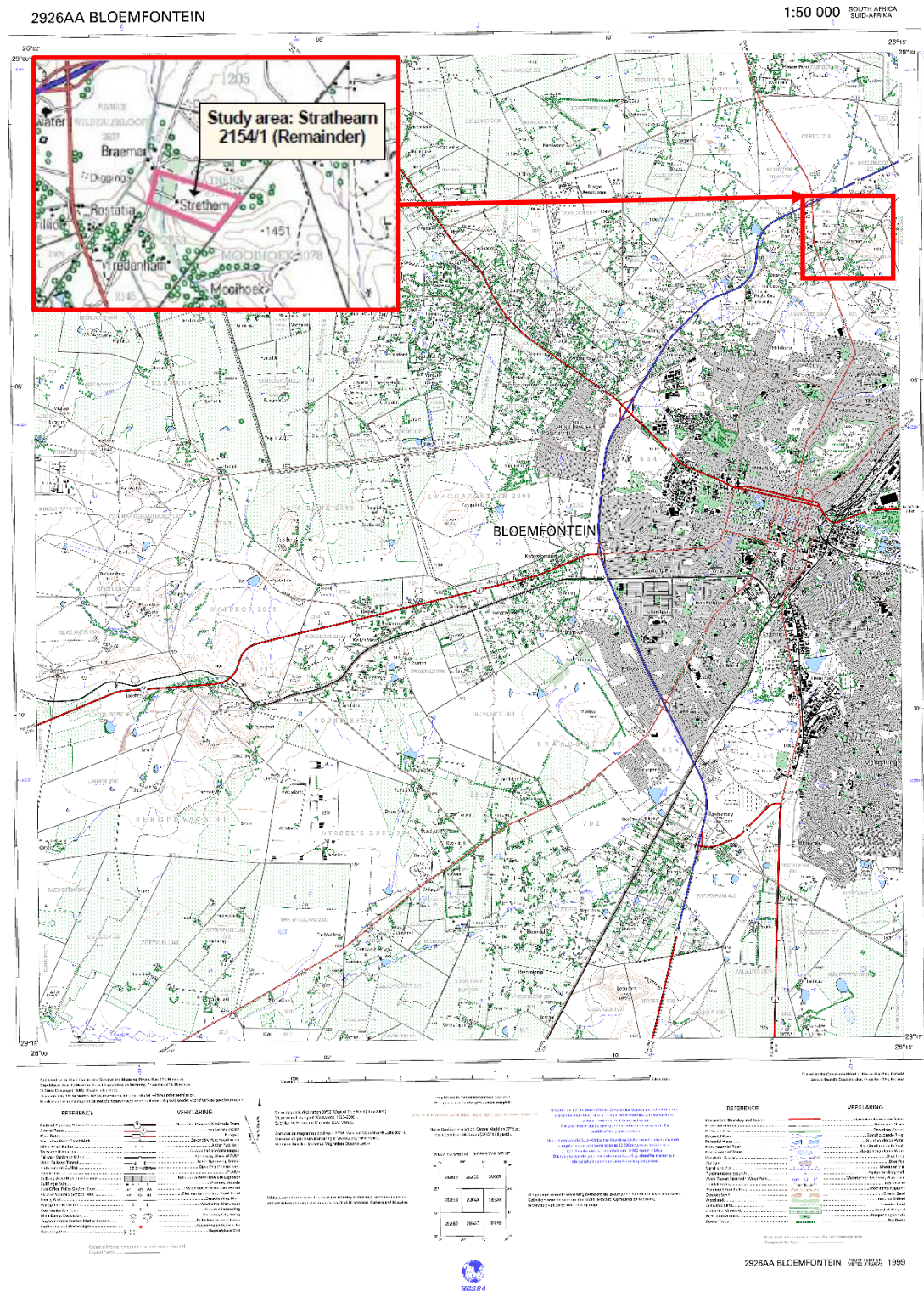


Figure 2: Preliminary layout of the proposed development

Bloemfontein 2926AA 1:50 000 map (development area outlined section in insert)



LEGISLATIVE REQUIREMENTS

National Environment Management Act, no 107 of 1998 (NEMA) and NEMA 2014 Environmental Impact Assessment Regulations, as amended (Government Notice R327 of 7 April 2017)

Proposed Activity: Establishment of 28 erven with associated services

Listing Notice 1:

Activity 27

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –

- (i) the undertaking of a linear activity; or
- (ii) Maintenance purposes undertaken in accordance with a maintenance management plan

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –

- (i) the undertaking of a linear activity; or
- (ii) Maintenance purposes undertaken in accordance with a maintenance management plan

Activity 28

Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:

- (i) Will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or
- (ii) Will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;

excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.

Activity 32

The continuation of any development where the environmental authorisation has lapsed and where the continuation of the development, after the date the environmental authorisation has lapsed, will meet the threshold of any activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 [or Listing Notice 4] of 2014.

Proposed activity: Establishment of an access gate with access road traversing the 1:100 year flood line

Listing Notice 1:

Activity 19

The infilling or depositing of any material of more than [5] 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than [5] 10 cubic metres from [–(i)] a watercourse; [...] but excluding where such infilling, depositing, dredging, excavation, removal or moving –

- (a) will occur behind a development setback
 - (b) is for maintenance purposes undertaken in accordance with a maintenance management plan (or)
 - (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies
- ...

Listing notice 3:

Activity 12:

The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

(b)(iv) Areas within a watercourse or wetland; or within 100 meters from the edge of a watercourse or wetland

Proposed activity: Construction of a reservoir (capacity 330 kl) for 48 hour storage capacity of potable water for household use and to provide for emergency firefighting capacity

Listing Notice 3:

Activity 2

The development of reservoirs, excluding dams, with a capacity of more than 250 cubic meters.

National Water Act, no 36 of 1998

Triggered by the proposed establishment of an access road traversing the 1:100 year flood line as well as the construction of a reservoir.

Section 21: Water use

For the purpose of this Act, water use includes –

- (a) Taking water from a water resource;
- (b) Storing water;
- (c) Impeding or diverting the flow of water in a watercourse;
- (d) Engaging in a stream flow reduction activity contemplated in section 36;
- (e) Engaging in a controlled activity identified as such in section 37(1) or declared under section 38(1)
- (f) Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit
- (g) Disposing of waste in a manner which may detrimentally impact on a water resource;
- (h) Disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process;
- (i) Altering the bed, banks, course or characteristic of a watercourse;
- (j) Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and
- (k) Using water for recreational purposes.

National Heritage Resource Act, no 25 of 1999 (NHRA)

Section 35(3):

No person may, without a permit issued by SAHRA or a provincial 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, 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 equipment, or any equipment which assists in the detection or recovery of metals.

Section 35(4)(a):

No person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb an archaeological or palaeontological site or any meteorite.

Section 38(3):

The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection 2(a) [*also a requirement if Section 38(8) is triggered*]: Provided that the following must be included:

- a) The identification and mapping of all heritage resources in the area affected;
- b) An assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7 [*Heritage assessment criteria and grading*];
- c) An assessment of the impact of the development on such heritage resources;
- d) An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- e) The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- f) If heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- g) Plans for mitigation of any adverse effects during and after the completion of the proposed development.

Section 38(8):

The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 199 (Act No. 50 of 1991), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.

Physical Planning Act, No 125 of 1991**Section 27(1)(b):**

no person shall use any land in the area to which the regional structure plan or the urban structure plan, as the case may be, applies for a purpose other than the purpose for which it -

- i. was being used immediately before that date; or
- ii. is zoned in terms of a town planning scheme which is or may become binding in that area;

Provided that land to which no such scheme applies may with the consent of, in the case of the regional structure plan, the Administrator concerned or, in the case of the urban structure plan, the responsible authority be used for any purpose determined in the relevant plan or for any other purpose which in the opinion of that Administrator or responsible authority is consistent with the relevant plan;

Municipal Systems Act, No 32 of 2000

Section 23:

the Integrated Development Planning (IDP) is defined as one of the core functions of a municipality in the context of its developmental orientation.

Section 35(2):

A Spatial Development Framework (SDF) contained in a council approved IDP prevails over a plan as defined in section 1 of the Physical Planning Act, 125 of 1991.

Section 27(1)(b):

Land use should be in accordance with the applicable regional or urban structure plan and can only be used for the purpose it was used immediately before that date or the purpose for which it is zoned in terms of a town planning scheme which is or may become binding in that area. *See below.*

Mangaung SDF as reflected in the council approved draft of the Mangaung IDP of 2018/2019

The proposed development area is earmarked for future residential development.

METHODOLOGY

Literature review

The proposed development area falls within the urban edge of Bloemfontein and the literature review is focused on historic events related to the establishment of Bloemfontein and subsequent effect of certain historic periods on Bloemfontein and surrounding farms.

Public Consultation and Stakeholder Engagement:

Not yet done at the time of completion of this report.

Physical Survey

The field survey took place on 14 August 2019, prior to the start of the rainy season in the Free State. The pedestrian survey was undertaken by one professional archaeologist and one assistant with a combined 30 years' experience of archaeological fieldwork. All relevant sites

or features were recorded using Garmin GPSMAP64s and Garmin GPSmap60CSx handheld devices as well as a Sony Cyber-shot DSC-H7 camera.

Visibility in the survey area was fair to good with the exception of the dense wooded area along the western border of the property which also has a stream transecting the property, parallel with the western border.

Site Description:

The proposed development area covers the entire remainder of subdivision 1 of the farm Strathearn 2154, incorporating the existing farmstead and associated buildings and area surrounding it, indicated as ‘Single Residential – 31 656 m²’ on the development layout plan in Figure 2 on page 3.

The proposed new residential area is flanked by two private open space areas, respectively 31 653 m² (north) and 70 567 m² (south) in size –refer to site-plan as provided on page 3 (Figure 2). A communal open space (20 927 m²) is planned at the western entrance to the residential area and is situated within the wooded section. The residential units are situated on the natural plateau that is formed by a steep hill on the southern side (it falls within the larger private open space), and a hill situated on the adjacent property on the northern side, with the fence at the foot of the hill.



Figure 3: View from southern hill over plateau – dashed line indicates northern border of the property

Site significance and field-rating:

Cultural significance or special value because of:	Applicable or not	Rating: Negligible / Low / Low-Medium / Medium / Medium-High / High / Very High
a. Its importance in the community, or pattern of South Africa's history	No	
b. Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage	No	
c. Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	No	
d. Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	No	
e. Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group	No	
f. Its importance in demonstrating a high degree of creative or technical achievement at a particular period	No	
g. Its strong or social association with a particular community or cultural group for social, cultural or spiritual reasons	No	
h. Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa	No	
i. Sites of significance relating to the history of slavery in South Africa	No	

Reasoned assessment of significance using appropriate indicators outlined above:

There is no evidence, both in the literature and from the field assessment, that the development area was used for any activity other than farming (the introduction of game). No prehistoric (Stone and Iron Age) evidence, graves, any evidence of military activities, or any other archaeological material was observed. Existing buildings (farmstead and stables) are less than 60 years old. The dam and associated structures might potentially be older than 60 years although, if so, would be by a very narrow margin. Due to its poor condition and common occurrence throughout South Africa, it is not considered to be of sufficient significance to warrant a field rating.

A detailed record of all the observed structures/features with its associated co-ordinates can be found in the Results of the Survey section.

Field rating: None

ASSUMPTIONS, GAPS, RESTRICTIONS AND LIMITATIONS

Ground visibility was fair to good on the plateau area where residential units 5 – 26 are situated. Visibility within the wooded area on the western side of the property (where the remainder of residential areas are situated) was very poor due to the dense undergrowth and trees. Visibility on the hill ranged between fair to good.

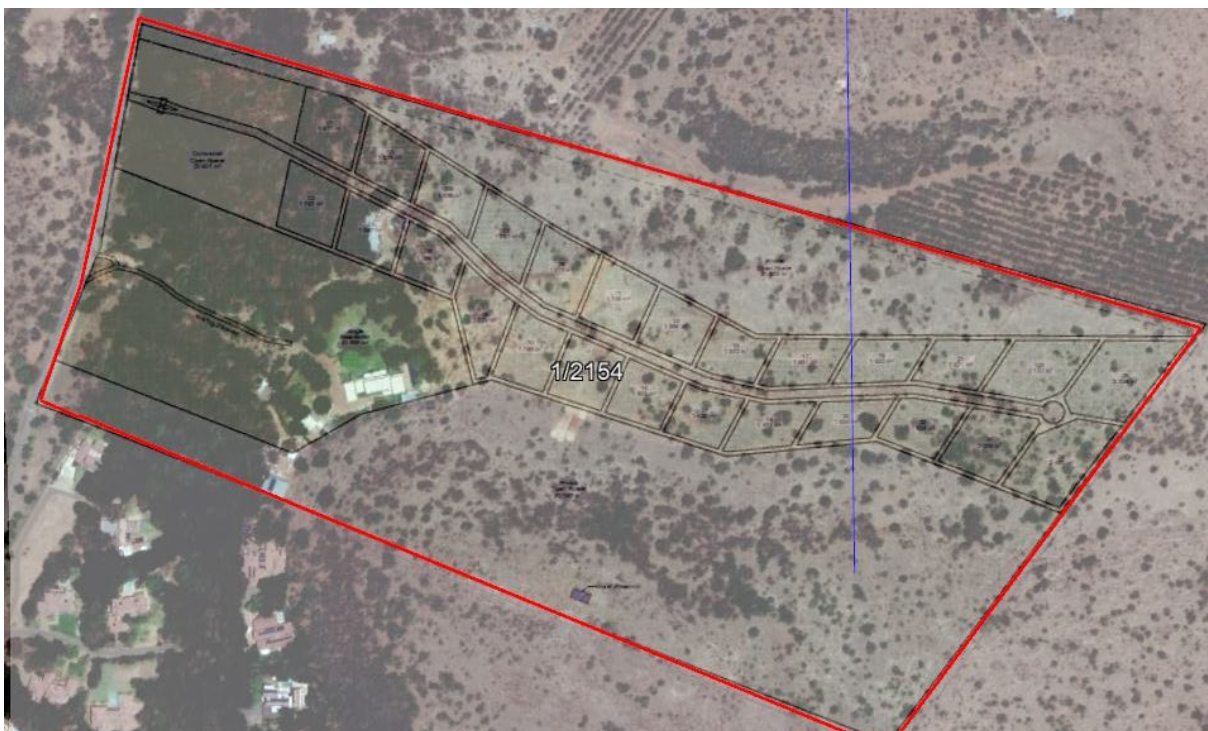


Figure 4: Google overlay of planned development



Figure 5: Ground surface visibility in wooded area



Figure 6: Ground visibility on hill

DESCRIPTION OF THE SOCIO-ECONOMIC ENVIRONMENT

The Mangaung Metropolitan Municipality (MMM) includes Bloemfontein, Botshabelo, Thaba Nchu, Soutpan/Ikgomotseng, Dewetsdorp, Wepener and Vanstadensrus of which Bloemfontein is the economical hub of the municipal area. According to the 2016 Community Survey, MMM has a population average of 787 929.¹

Bloemfontein is located on the N1 route between Gauteng and the Western Cape and on the N8 between Kimberley in the west and Lesotho to the east. It is the sixth largest city in South Africa and also the judicial capital of the country.

Agriculture, mining and manufacturing sectors cover a relatively small share in the Mangaung Metropolitan area compared to the province and country. Tertiary sector services (service providing in community services, trade, finance and transport) of the local economy is very significant within the context of the province.

The most important primary impact on the economy are the temporary effects caused by the construction phase. Not only does this phase generate construction jobs, but will also generate business for the suppliers of the construction companies and public investments and income.

DESCRIPTION OF THE PHYSICAL ENVIRONMENT

Zoning of the development area:

According to the Mangaung Metropolitan Municipality Spatial Development Framework it is earmarked as 'Future Residential Development Zone'.

Effects of predominant economic activities on the environment:

No information or proof of any economic activities could be found other than small-scale farming (game). According to the ecological report by DPR Ecologists & Environmental Services, the vegetation on the site is overall considered as largely natural but with a low level of modification evident which is mostly attributed to trampling and overgrazing by the introduced game.

¹ Mangaung IDP 2018/2019



Figure 7: A small herd of free-roaming impala can be found on the subject property which is fenced in with game fencing.

Description of vegetation and of landscape features:

[Information in this section is sourced from the ecological report submitted by DPR Ecologists & Environmental Services]

“Almost the entire site still consists of natural vegetation but with a large homestead situated in the south western corner and transforming the vegetation in the immediate surroundings. The topography of the site is quite varied and includes a plain, hill, plateau as well as a small but prominent stream system transecting the site along the western border. [...]

No rare or endangered species could be identified on the site and it is considered unlikely that any such species would occur here since none such species are known to occur in this area within this habitat type. The site does however support several protected species, especially the prominent hill. [...]

The site contains numerous exotic weeds and invaders with a few forming moderate infestations. [...]

The vegetation on the site is overall considered as largely natural but with a low level of modification evident, mostly attributed to trampling and overgrazing by introduced game. [...] the area consists of Bloemfontein Karroid Shrubland and Winburg Grassy Shrubland. Both are listed as being Least Concern (LC) but with the former considered to be of high conservation value. The Bloemfontein Karroid Shrubland vegetation is however confined to the prominent hill on the site [...].

In terms of general ecology and vegetation types the site does not have a high conservation value but do contain a few elements which are considered to be of high conservation value. Firstly, the Bloemfontein Karroid Shrubland occurring on the prominent hill contains numerous protected species and is considered to have a high conservation value. The small drainage line and significant stream system are both important in terms of the water cycle and their continued functioning is considered important to downstream areas as well. The riparian thicket along the stream system forms part of the floodplain of the stream, contains protected tree species and is considered a unique habitat with a high conservation value. [...]

[...] The small drainage line is both devoid of wetland soil indicators and obligate wetland vegetation, clearly indicating the absence of wetland conditions. Riparian vegetation and a small channel must however still be regarded as a natural watercourse. The wetland conditions associated with the small stream can be characterised as a channel wetland system [...].

The stream is a first order watercourse. This is due to the site being situated near its origin. The quaternary catchment of this area is C52G. The largest impact on the stream is considered the upstream impoundment with several road- and low water crossings also being considered as significant. These impacts have altered the flow and flooding regime of the stream to a significant extent. An Index of Habitat Integrity (IHI) was conducted for the stream on the site. The results of the IHI indicated that the stream has an Instream IHI of category C: Moderately Modified and Riparian IHI of category C: Moderately Modified. This is largely due to the change in flow and flooding regime.

The EI&S of the small stream has been rated as being Moderate: Floodplains that are considered to be ecologically important and sensitive on a provincial or local scale. The biodiversity of these floodplains are not usually sensitive to flow and habitat modifications. They play a small role in moderating the quantity and quality of water of major rivers.”

Fieldwork season and visibility

Fieldwork was conducted on the 14th of August 2019 during the dry season in the Free State. Visibility was moderate to fair in the majority of the development area, with the exception of the dense woodland area.

Description of soil and basic geology

The area between the Orange and Vaal Rivers are known as the southern Highveld. This area, with exception of the Vredefort Dome in the north, small outcrops of the Ventersdorp System in the west, and outliers of the Stormberg lavas in the Caledon Valley, is covered by the sedimentary series of the Karoo System (Maggs 1976: 11).

The primary study area falls within the Mangaung Metro Municipality which is located within the Karoo Super Group geology. The Bloemfontein geology consists of sandstone, shale and mudstone of the lower stage of the Beaufort Group. The north western side of Bloemfontein sedimentary geology has been intensively intruded by magmatic dolerite intrusives such as sills and dykes (DWA, 2012).

Prior activities in the proposed development area

The development area is a largely undisturbed natural area of a small farm with prior activities centred on and around the main dwelling area at the western side of the farm. This includes the farmstead and associated buildings, stables, a clay pigeon shooting range, feeding area for game (impalas), and a dam with associated structures – all situated in the western third of the property.

LITERATURE/BACKGROUND STUDY

The area between the Orange and Vaal Rivers, initially known as the Trans Gariep and later as the Trans Orangia, was at the beginning of the 19th century the hunting grounds of groups of wandering Bushmen. The Free State has its roots in the growing disputes over territory as various population groups in the early nineteenth century almost simultaneously began to penetrate the region. These population groups, inter alia, included trekboers from the Cape, Griquas led by Adam Kok II and the Basotho headed by King Moshoeshoe (1st) (Schoeman 1980).

The first British period (Orange River Sovereignty 1846-1854)

During the period 1846 to 1854, the Free State was under British control and known as the Orange River Sovereignty. In 1846 Henry Douglas Warden was appointed as British Resident in the Trans Orangia with the task to keep the peace between the different population groups and to establish a British Residency at a central location. In March 1846 Warden settled with his band of soldiers, the Cape Mounted Riflemen, on the farm 'Bloem Fontein' where one of the aforementioned early trekkers, Johan Nicolaas Brits, already established himself on the current site of the Old Presidency in Bloemfontein near a strong, permanent fountain and a large spruit. Bloemfontein was chosen because of its central location in the disputed area and had plenty of water and grazing areas for the horses. During this period a small town developed around the *spruit*. (Schoeman 1980)

Several farms, however, were also surveyed around Bloemfontein, to include Douglas Valley 38 (the parent farm of the subject property) which belonged to Major Henry Douglas Warden and after his dismissal as British Resident in 1852 he retired to this farm.

Republic of the Orange Free State (1854-1900):

The British, however, found it increasingly difficult to keep the peace between the Griqua and other indigenous groups as well as the White farmers who had settled in this region and decided to withdraw their forces back to the Cape Colony. After their withdrawal, the Boer Republic of the Orange Free State (OFS) was established by the signing of the Bloemfontein Convention on 23 February 1854.

With the withdrawal of the British, Warden sold Douglas Valley to a Mr W.C. Bouver. The first farms surveyed in the area immediately surrounding Bloemfontein were very large and over the years they have been subdivided into several smaller farms. Although some subdivisions took place before this time, a section of Douglas Valley was surveyed in 1895 as the farm Wildealskloof No 1205 (SG Diagram 1224/1895). Wildealskloof in turn was also in the succeeding years subdivided into various smaller farms of which Strathearn 2154 was surveyed in 1921. In 1962 Strathearn was subdivided into more or less three equal sized farms of which the current subject property is the greater part of portion 1 of Strathearn 2154. A small section at the western end was since then removed (2018) for the current property to be known as the Remainder of Portion 1 of Strathearn 2154.

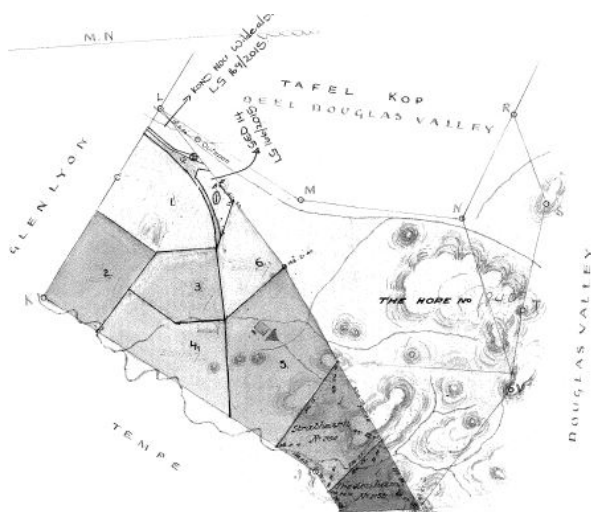


Figure 8: Wildealskloof surveyed in 1895 – Strathearn second farm bottom left – surveyed 1921

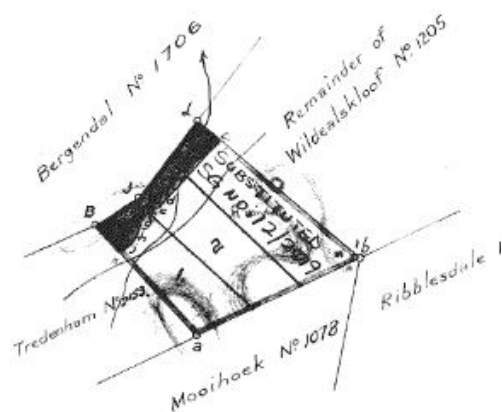


Figure 9: Strathearn surveyed in 1921 – subdivided into portion 1 (1965) and portion 2 and remaining section (1971)

In 1889 the Bloemfontein townlands, Bloemfontein No 654, was surveyed and secured by title deed G00/1890 to the Bloemfontein Council. Right up to the time of the Anglo-Boer War the development of the town remained centred around the original settlement area and extended to the north-east up to what would later become known as Signal Hill and Naval Hill. Black residents settled on the southern side of the town which became known as

Waaioek. This was the closest black settlement area of Bloemfontein to Thaba Nchu (a Twana settlement) and the Kingdom of the Basotho, today known as Lesotho.

The Anglo-Boer War 1899-1902 (ABW)

By the time the Anglo-Boer War broke out in October 1899, both the Transvaal and Orange Free State were two independent Boer Republics – with the Transvaal known as the Zuid-Afrikaanse Republiek (ZAR). The trouble started more than ten years earlier with the Cape Colony interfering with the governance of the ZAR and although the Republic of the Orange Free State initially decided on a position of strict neutrality, it was eventually obliged to side with its fellow Boer republic.

The June 1899 negotiations in Bloemfontein failed, and in September 1899 British Colonial Secretary Joseph Chamberlain demanded full voting rights and representation for the Uitlanders residing in the Transvaal. Paul Kruger, the President of the South African Republic, issued an ultimatum on 9 October 1899, giving the British government 48 hours to withdraw all their troops from the borders of both the Transvaal and the Orange Free State, failing which the Transvaal, allied to the Orange Free State, would declare war on the British government. The British government rejected the Transvaal's ultimatum, resulting in the ZAR and Orange Free State declaring war on Britain.

The Orange Free State was defeated and occupied by the British on 13 March 1900 and placed under military administration and on 20 April 1900 the whole Orange Free State was annexed and became the Orange River Colony. Bloemfontein became the new British headquarters for this war. Although mainly stationed in the area that would later become the Tempe military base, evidence of military activities can be found on the surrounding proclaimed farms such as, for example, Lilyvale 2313, Hillandale 249 and Bayswater 2865.

The war ended in May 1902 with the last of the Boers surrendering and formally concluded with the signing of the Treaty of Vereeniging signed on 31 May 1902.

Post ABW – present:

By the end of the ABW the military base at Bloemfontein, still in existence today, was firmly established on the farm Tempe which bordered the townlands and subsequent military events were focused in this area. As the subsequent world wars were not centred in South Africa, the neighbouring farms in Bloemfontein was not as effected as it was during the Anglo-Boer War. The last historic event, therefore, that could possibly have impacted on Douglas Valley, was the ABW. The hill at Strathearn, in particular, was searched for any possible stone walling that could have served as hangars or lookout points, or any other evidence of the presence of a military presence.

RESULTS OF THE FIELD SURVEY

The results of the field survey indicates that the study area cannot be linked to any past activities other than having been used as small farm. With one possible exception, the dam complex, none of the identified heritage resources below are older than 60 years.

Description of Identified Heritage Resources

This area was surveyed on the 14th of August 2019 and finds are limited to the following:

- *The farmstead and associated outbuildings:* not earmarked for demolition.
- *A clay pigeon shooting range:*



Figure 10: Clay pigeon shooting range. Adjacent to this area (right in the picture) is the feeding area for the game

- *Stables/Barnyard:*



Figure 11: The stables/barn, constructed of stones and tarred poles. Currently used as storage facility.

- *Quarry:*



Figure 12: A small scale quarry

- *Borehole:*

Single elements indicating a borehole



Figure 13: *Indications of a borehole*

Dam, trough, tank pedestal, wind pump (grouped):



Figure 14: *Corrugated iron walling of the dam rests on a course aggregate cement mix base*



Figure 15: Wind pump



Figure 16: Round packed stone pedestal (in foreground) - presumably for a water tank



Figure 17: Small trough constructed of stones and cement

Google map and list of co-ordinations of finds:

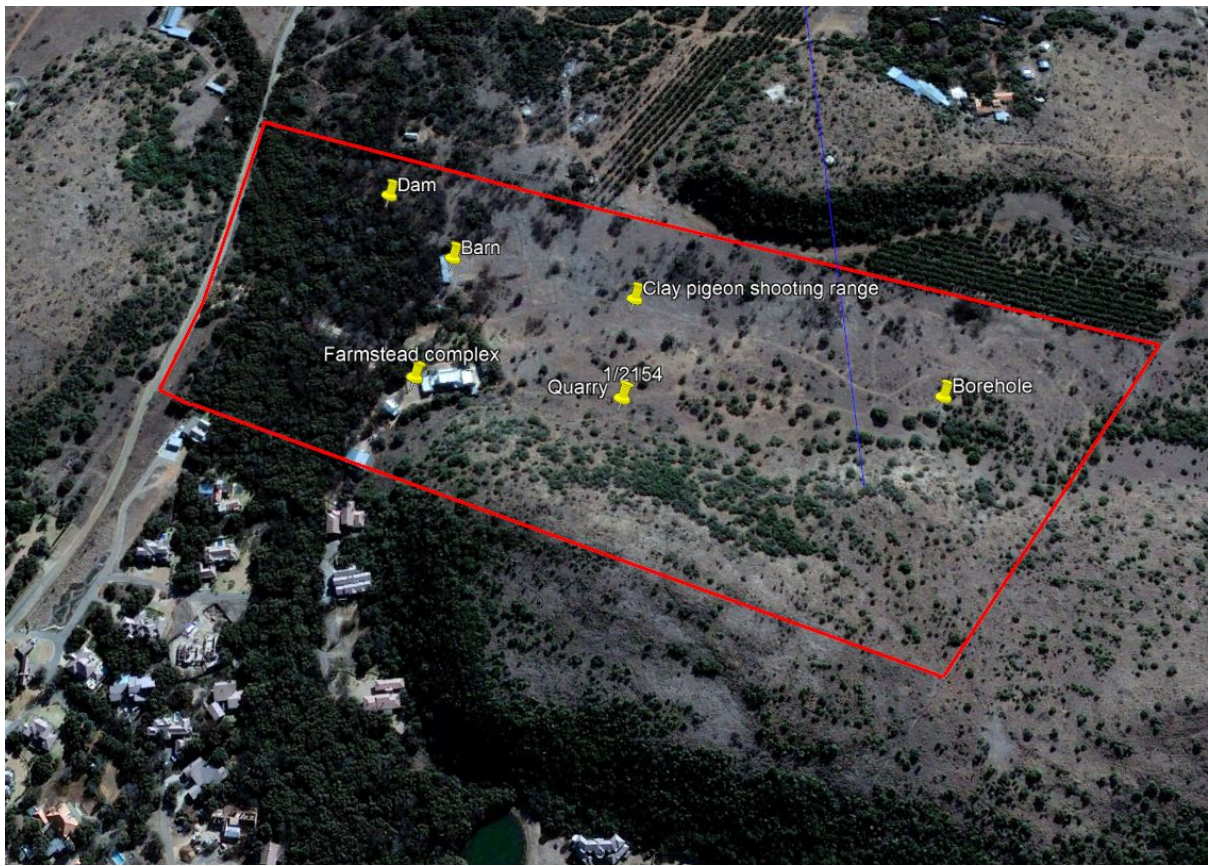


Figure 18: Google map of features

Description	Co-ordinates
<i>Farmstead complex</i>	<i>29° 2'52.14"S; 26°14'3.98"E</i>
<i>Borehole</i>	<i>29° 2'52.78"S; 26°14'19.21"E</i>
<i>Stables/barn</i>	<i>29° 2'48.50"S; 26°14'5.09"E</i>
<i>Clay pigeon shooting range</i>	<i>29° 2'49.74"S; 26°14'10.55"E</i>
<i>Quarry</i>	<i>29° 2'52.83"S; 26°14'9.97"E</i>
<i>Dam/windmill</i>	<i>29° 2'46.50"S; 26°14'3.11"E</i>

IMPACT ASSESSMENT

The field survey revealed no archaeological material and the observations reported in the field report above are all less than 60 years old, with the possible exception of the dam complex. Observations include the farmstead and associated buildings – not earmarked for demolition; a clay pigeon shooting range; a stables/barn structure; evidence of earlier quarrying at a small scale – clearly by mechanical means; remains of an earlier borehole and a dam complex which includes a dam constructed of corrugated iron (container wall) resting on a coarse aggregate cement base, a round stone-packed pedestal (presumably a water tank), a small stone/cement trough and a wind pump. If the latter is older than 60 years, it would be by a very small margin. It is likely that it was constructed post the period this particular portion was divided from the original Strathearn farm, i.e. 1965, which would make it less than 60 years old. This type of dam is common throughout South Africa and new dams are often still constructed in the same manner as it is a cheap and quick way to build a dam.

The study area accordingly contains no heritage material worthy of conservation.

PALAEONTOLOGY:

A separate palaeontological impact assessment report has been commissioned by the developer.

CONCLUSIONS & RECOMMENDATIONS

No evidence of any prehistoric archaeological material (Stone Age material or evidence of Iron Age material/structures); surface indications of archaeological middens; surface indicators of graves; rock art on rock face surfaces; evidence of military activities; or buildings older than 60 years, were found on the subject property, with the exception of the remains of a corrugated iron dam and associated structures (stone platform for a water tank, a wind pump, and a roughly constructed cement trough) that could potentially be older than 60, but due to the common occurrence of similar structures at the majority of farms in South Africa, is not sufficiently significant to warrant any formal grading or protection.

In light of the above, it is recommended that SAHRA approves the development with the following proviso:

- That the developer agrees to and signs the attached Chance Find Procedure (CFP) document and in turn ensure that once a project manager has been appointed, they too (including site managers) sign the CFP and commit to the implementation thereof. The developer's signed copy should be uploaded to SAHRIS.
- That the following conditions be adhered to and incorporated into the final Environmental Management Programme (EMPr) for implementation:

- In the event that any objects of archaeological or palaeontological remains be found during construction activities, work in the area of the find(s) must cease with immediate effect, and the Environmental Control Officer (ECO) be informed.
- The ECO must inform SAHRA and, depending on the nature of the find, contact an archaeologist and/or palaeontologist to assess the importance and determine the actions required. Work can only be resumed once permission to do so has been obtained from SAHRA.
- The Chance Finds Procedures (CFP) in the draft EMPr and Environmental Awareness Plan must be adhered to in order to ensure that standard protocols and steps are followed in the event of the accidental uncovering of any heritage and/or fossils during all phases of the project.
- Should the project be granted Environmental Authorisation, SAHRA must be notified and all relevant documents submitted to the SAHRIS case file.

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 <p>NATIONAL MUSEUM BLOEMFONTEIN</p> <p>an agency of the Department of Arts and Culture</p>	<p>Department of Archaeology and Anthropology National Museum 36 Aliwal Street Bloemfontein</p> <hr/> <p>ARCHAEOLOGICAL/PALAEONTOLOGICAL CHANCE FIND PROCEDURE (CFP)</p>
<i>Prepared for</i>	
<p>EAP: Hanri van Jaarsveld Developer: Nunes Properties (Pty) Ltd Project co-ordinator for construction: Development Project: Heritage Road, Bloemfontein</p>	
<p>Date: August 2019</p>	

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1. SUMMARY

The purpose of this document is to address the possibility of archaeological and/or palaeontological deposits becoming exposed during ground altering activities within the project area and to provide protocols to follow in the case of a chance find to ensure that such sites are documented and protected as required.

Archaeological sites are protected by the National Heritage Resources Act, No 25 of 1999 and these procedures are accordingly to ensure compliance with laws and regulations related with cultural heritage in South Africa. Archaeological/palaeontological sites are non-renewable, very susceptible to disturbance and are finite in number. Archaeological sites are an important resource that is protected for their historical, cultural, scientific and educational value. Impacts to archaeological sites must be avoided or managed by development proponents. The objectives of this Chance Find Procedure (CFP) are to promote preservation of archaeological data while minimizing disruption of construction scheduling. All on-site personnel and contractors are required to be informed of the Archaeological Chance Find Procedure and have access to a copy while on the construction site.

2. POTENTIAL IMPACT ACTIVITIES

Activities that involve excavation, movement, or disturbance of soils have the potential to impact archaeological materials, if present. Activities such as road construction, land clearing, and excavation of foundations or for any other purpose, are all examples of activities that may adversely affect archaeological deposits.

A permit is required for any subsurface investigation of an archaeological site or investigation with the intent to locate a site. Disturbance and/or removal of artefacts from an archaeological site may result in penalties.

3. RELEVANT LEGISLATION

The National Heritage Resources Act (NHRA) automatically protects all archaeological and palaeontological sites, whether on government or private land.

Archaeological means:-

- material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
- rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

Palaeontological means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace.

In terms of this particular development Sections 35 and 36 of the NHRA are applicable of which the relevant sections are quoted herewith:

Section 35(3): (Archaeology, palaeontology and meteorites)

Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

Section 36(6): (Burial grounds and graves)

Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—

- (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and*
- (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.*

4. CHANCE FIND PROCEDURE EXECUTION

In the event of the accidental exposure of previously subsurface archaeological material as per description in section 3 above, the following applies:

- All construction activity in the vicinity of the remains are to cease immediately.
- The find location must be recorded, and all remains must be left in place.
- The South African Heritage Resources Agency (SAHRA) should be informed.
- An archaeologist and/or palaeontologist should be contacted to investigate.
- Potential significance of the remains will be assessed and mitigative options will be identified.
- If the significance of the remains is judged to be sufficient to warrant further action and they cannot be avoided, then the investigating archaeologist in consultation with the Archaeology, Palaeontology and Meteorite (APM) unit of the South African Heritage Resources Agency (SAHRA) will determine the appropriate course of action.
- In the case of human remains, the SA Police pathologist must be contacted to determine if it is of an archaeological nature. If not, the remains will be dealt with by the SAP.
- If the remains are assessed to be archaeological, an archaeologist with experience in archaeological burial sites should be contacted who will in consultation with the Graves and Burial unit of SAHRA determine the course of action to be taken. Options could include avoidance or respectful removal and reburial.

For the CFP to be effective, the site manager must ensure that all personnel on the development site understand the CFP and the importance of following it if cultural heritage resources and/or

palaeontological material are encountered. Additionally, training on cultural heritage resources that might potentially be found on site should be provided to key on-site personnel.

5. RESPONSIBILITIES

Developer	The developer must undertake to ensure the project-coordinator assigned for this project (if different to the developer) signs this document and consequently takes responsibility for implementing this Chance Find Procedure
Project coordinator	The top level person who has ultimate responsibility for the implementation of this plan and who will be legally responsible to ensure the proper execution thereof. This is typically the firm that subcontracts all the various service providers.
Project manager(s)	The person responsible for supervising all site teams and has the responsibility that all site members are aware of the archaeological chance find procedures.
Archaeology/palaeontology consultant	The consultant is referred in the event of a chance find for his/her advice and for reporting and recording found items according to applicable legislation.

The following people hereby acknowledge receipt of a copy of the CFP and upon signature agrees to implement the CFP if and when required:

DEVELOPER:

.....

Name

.....

ID Number

.....

Company/Employer

.....

Signature

PROJECT COORDINATOR: (To be completed and signed once such person has been appointed)

.....
Name

.....
ID Number

.....
Company/Employer

.....
Signature

PROJECT MANAGER: (to be completed and signed once such a person has been appointed)

.....
Name

.....
ID Number

.....
Company/Employer

.....
Signature

ARCHAEOLOGIST/PALAEONTOLOGIST: (to be completed and signed once such a person has been appointed)

.....
Name

.....
ID Number

.....
Company/Employer

.....
Signature

Please note a copy of this document, signed by the developer, must be uploaded to SAHRIS at the same time SAHRA is notified of this project by means of registering the case for statutory commenting.