

INTEGRATED HERITAGE IMPACT ASSESSMENT IN TERMS OF SECTION 38 OF THE NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT 25 OF 1999): PROPOSED RESIDENTIAL DEVELOPMENT ON ERF 3122 (HARTENBOS), MOSSEL BAY DISTRICT AND MUNICIPALITY



ON BEHALF OF: HARTENBOS HILLS PROPCO (PTY) LTD

NOVEMBER 2022



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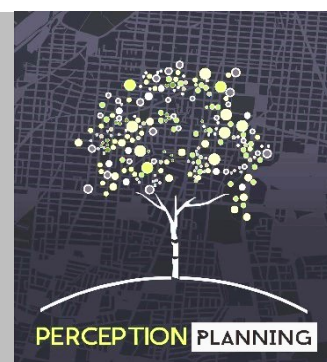
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ABBREVIATIONS:

AIA – Archaeological Impact Assessment
 APM – Archaeology, Palaeontology and Meteorites Committee of Heritage Western Cape
 DEA&DP – Department of Environmental Affairs and Development Planning (WCG)
 EA – Environmental Authorisation
 ECO – Environmental Control Officer
 EMPr – Environmental Management Programme Report
 ESA – Early Stone Age
 HIA – Heritage Impact Assessment
 HWC – Heritage Western Cape
 Ka/kyr – Thousand years ago
 LSA – Later Stone Age
 MSA – Middle Stone Age
 NCW – Not Conservation Worthy
 NGL – Natural Ground Level
 NGSI – National Geo-Spatial Information, Department of Rural Development and Land Reform
 NHRA – National Heritage Resources Act, 1999 (Act 25 of 1999)
 NID – Notice of Intent to Develop
 PHS – Provincial Heritage Site
 SAHRA – South African Heritage Resources Agency
 SAHRIS – South African Heritage Resources Information System
 WCG – Western Cape Government

COVER: Collage of images of the study area, taken and compiled by the author.

1. INTRODUCTION

PERCEPTION Planning was appointed by AJ Kruger (SA ID 5002155021083) on behalf of Hartenbos Hills Propco (Pty) Ltd, holding proxy on behalf of ATKV Sake (Pty) Ltd (the Registered Landowner) to compile and submit an integrated Heritage Impact Assessment (HIA) to Heritage Western Cape as required with HWC's Interim comments dated 16 May 2022. A copy of the Power of Attorney, Proxy as well as copies of the relevant Title Deed and SG Diagram are attached as part of **Annexure 1** to this report.

The cadastral land unit subject to this application is (hereafter referred to as "the study area"):

- Erf 3122 (Hartenbos), Mossel Bay District and Municipality, measuring 60.5190 ha, registered to Afrikaanse Taal en Kultuur Vereniging and held under title deed T 24075/1995.

1.1 Brief background to administrative process

Following submission of a Notice of Intent to Develop in respect of the proposed development of the property during April 2021, HWC on 20th May 2021 (**Annexure 2**) responded as follows [sic]:

"You are hereby notified that, since there is reason to believe that the proposed development on Erf 3122 off Louis Fourie Drive Hartenbos, Mossel Bay will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of Section 38(3) of the NHRA be submitted. Section 38(3) of the NHRA provides (3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): 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;*
- (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.*

(Our emphasis)

This HIA must in addition have specific reference to the following:

- Archaeological Impact Assessment*
- Palaeontological impact assessment*
- Visual impact on the Cultural landscape impact assessment*
- Social historical study.*

The HIA must have an overall assessment of the impacts to heritage resources which are not limited to the specific studies referenced above. The required HIA must have an integrated set of recommendations. The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied."

This Integrated HIA report focusses on addressing the aspects mentioned in the Interim comment dated 20th May 2021 whilst adhering to the requirements specified in terms of Section 38(3) of the NHRA.

2. DESCRIPTION OF THE STUDY AREA

The subject property (60,5190 ha in extent) forms part of a higher lying plateau situated 1km west of the N2 National Road, ±2.5km west of the oldest part of Hartenbos and ±8.5km northwest of the historic centre of Mossel Bay town. Existing vehicular access is negotiated via Geelhout Avenue, Kameeldoring or Boekenhout Avenues and Louis Fourie Road.

Existing land use within the direct proximity includes the established Hartenbos Heuwels residential suburb to the northeast, the established (recently expanded) Sonskynvallei residential area ±700m to the north and numerous residential estates to the southeast and south, which are either established or currently under construction. The extensive industrial yards/ mining areas of a construction and earthmoving company are ±1.1km to the northwest, while lands to the east remains predominantly rural/ agricultural (**Figures 1, 2**).

A number of narrow gravel tracks traverse the property, one of which leads to a municipal water reservoir situate on the northernmost portion (also location of trig survey beacon 257 Mos 33 at 136.9m amsl). Save for said reservoir, security fencing and associated infrastructure the property remains vacant and devoid of any structures. Despite the impact of a veld fire, which affected the portions of the property during 2010, natural vegetation has recovered to some extent. Portions of the property had formerly been used as dumping ground for building material and as such, access to the site is restricted.



Figure 1: Location of the study area within current urban context (GoogleEarth, 2022, as edited)



Figure 1: Subject property within surrounding rural/ natural landscape context (GoogleEarth, 2022, as edited)

The property forms part of a partly eroded, undulating rural landscape set upon a higher lying plateau overlooking the coastline and surrounding rural areas yet bound by existing and approved urban development to the west. It is traversed by a number of natural valleys. Evident on earlier aerial imagery, a small, abandoned airfield was located on the easternmost portion of the property though it could not be accessed or photographed during recent fieldwork on account of dense vegetation growth (Figure 3). Photographs of the site and environs are attached to this report as Annexure 3.

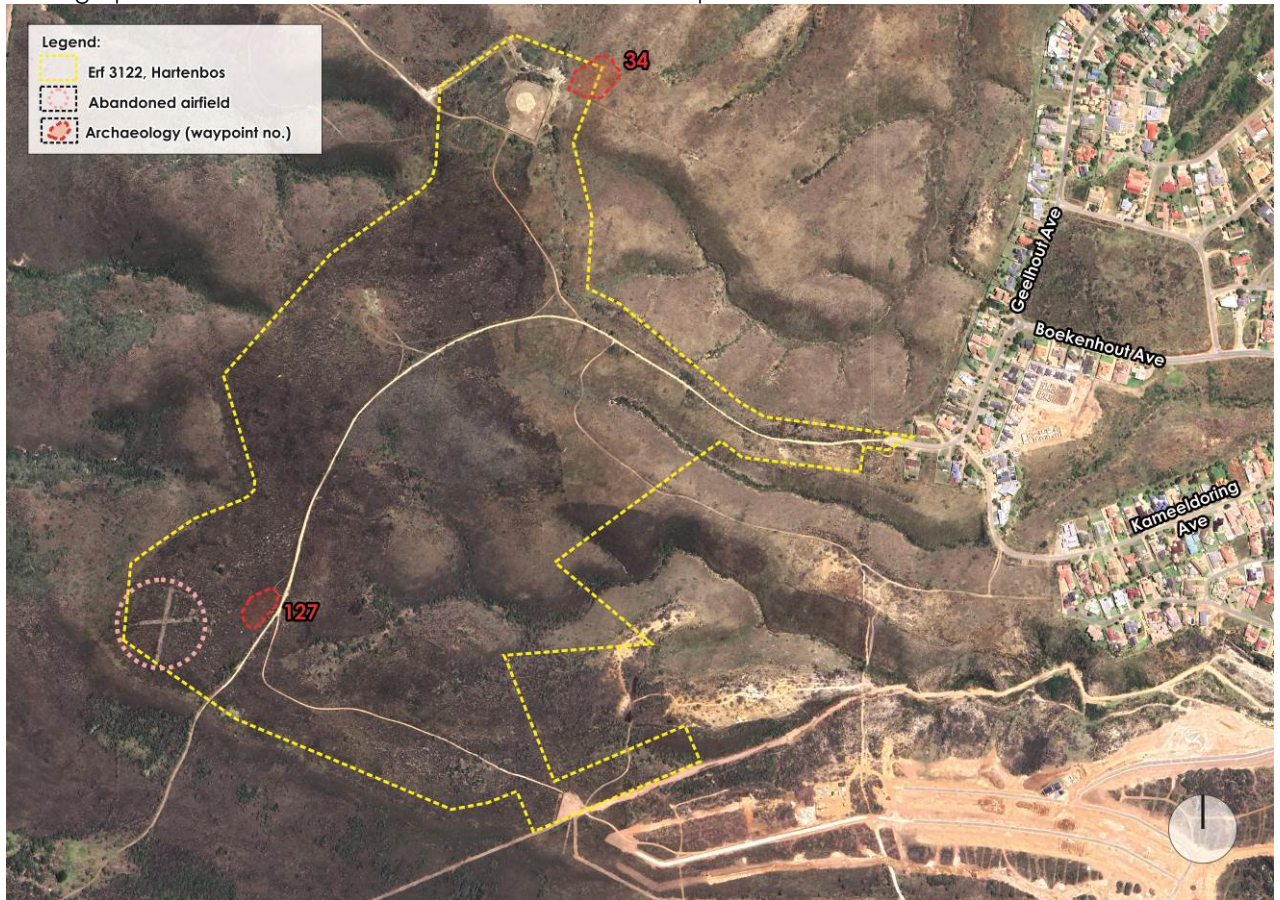


Figure 3: Current aerial view of the property within context of existing municipal water reservoir. Note new urban development under construction, archaeological occurrences as recorded by Nilssen, 2022 (Google Earth, 2022 as edited)

3. HERITAGE STATUTORY FRAMEWORK

3.1 Grading

References to grading as meant within the context of this Integrated Heritage Impact Assessment are based on the categories as prescribed by HWC¹ and summarised in Table 1 below. Gradings presented are (a) aimed at formulating responses with relation to the perceived provincial and/ or local cultural significance of heritage resources identified and (b) assigning the appropriate level of management responsibility applicable to such heritage resources.

Grading	Description of resource	Examples of possible Management Strategies	Cultural Significance
II	Heritage resources with special qualities which make them significant in the context of a province or region, but do not fulfil the criteria for Grade I status.	May be declared as a Provincial Heritage Site by HWC	Exceptionally High Significance
III A	Such a resource must be an excellent example of its kind or must be sufficiently rare. These are heritage resources which are significant in the context of an area.	This grading is applied to buildings and sites that have sufficient intrinsic significance to be regarded as local heritage resources; and are significant enough to warrant that any alteration, both internal and external, is regulated. Such buildings and sites may be representative, being excellent examples of their kind, or may be rare. In either case, they should receive maximum protection at local level.	High Significance
III B	Such a resource might have similar significances to those of a Grade III A resource, but to a lesser degree. These are heritage resources which are significant in the context of a townscape, neighbourhood, settlement or community.	Like Grade IIIA buildings and sites, such buildings and sites may be representative, being excellent examples of their kind, or may be rare, but less so than Grade IIIA examples. They would receive less stringent protection than Grade IIIA buildings and sites at local level.	Medium Significance

¹ Grading: Purpose and Management Implications, Heritage Western Cape, 16th March 2016

III C	Such a resource is of contributing significance to the environs. These are heritage resources which are significant in the context of a streetscape or direct neighbourhood.	This grading is applied to buildings and/or sites whose significance is contextual, i.e. in large part due to its contribution to the character or significance of the environs. These buildings and sites should, as a consequence, only be regulated if the significance of the environs is sufficient to warrant protective measures, regardless of whether the site falls within a Conservation or Heritage Area. Internal alterations should not necessarily be regulated.	Low Significance
NCW	A resource that, after appropriate investigation, has been determined to not have enough heritage significance to be retained as part of the National Estate.	No further actions under the NHRA are required. This must be motivated by the applicant and approved by the authority. Section 34 can even be lifted by HWC for structures in this category if they are older than 60 years.	No research potential or other significance

Table 1: Summary of grading and possible mgmt. strategies for Grade II and III heritage resources (Source: HWC, 2016)

3.2 Methodology

This Integrated HIA process is undertaken in terms of Section 38(8) of the NHRA and in accordance with relevant HWC policies and guidelines and international practice principles. A flow diagram illustrating a normal, non-retrospective HIA process pertaining to development being proposed is as shown in **Figure 4**.

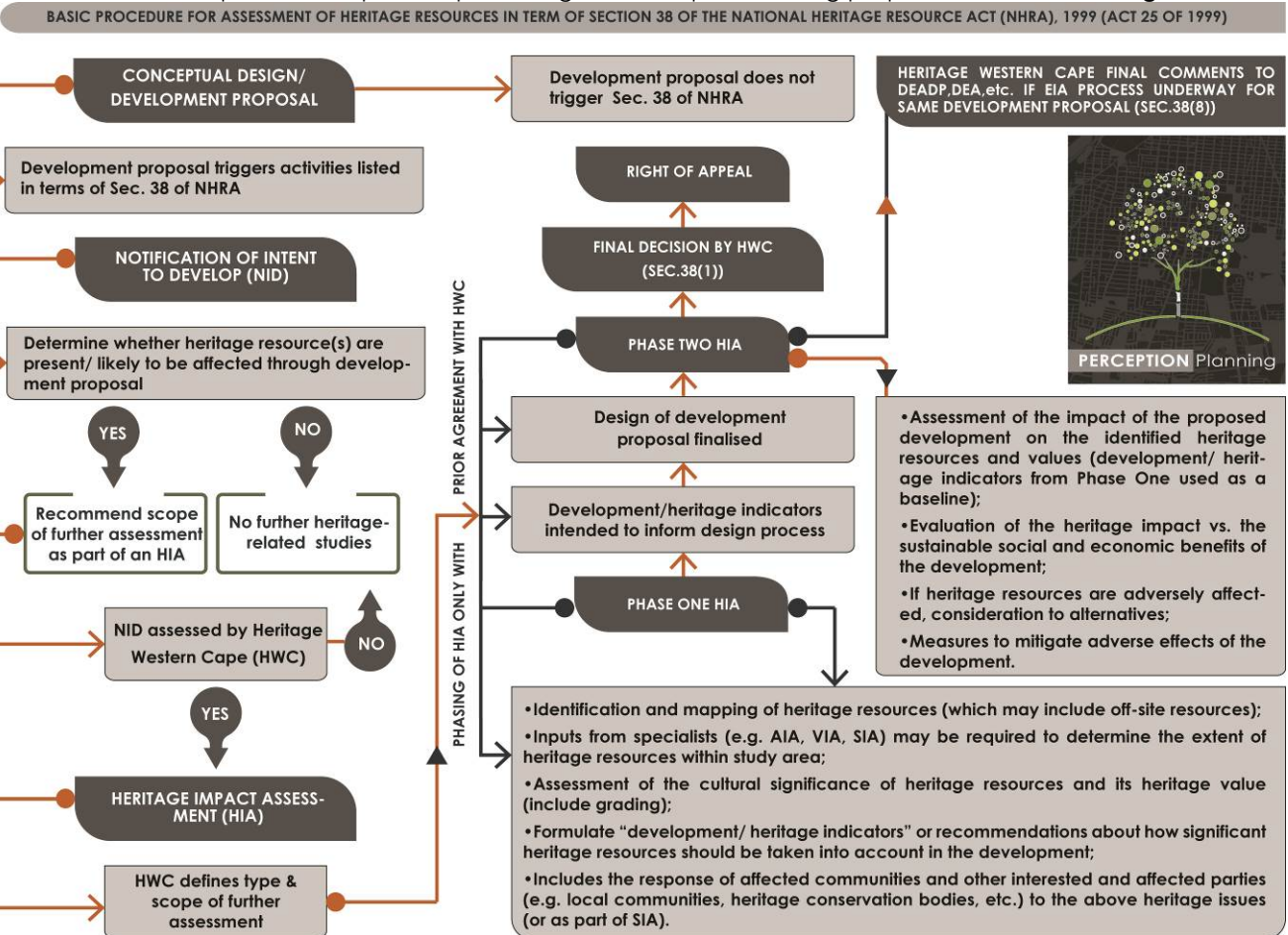


Figure 4: Flowchart illustrating a typical HIA process in terms of Section 38 of the NHRA (Act 25 of 1999).

Tasks undertaken during the compilation of this **Integrated HIA** included, *inter alia*, the following:

- Liaise with project team including the project team, contributing specialists, environmental assessment practitioner (CapeEAPrac) and the local planning authority (Mossel Bay Municipality);
- Field work undertaken by the author on 5th August 2022;
- Historic background research;
- Assimilate findings from heritage-related specialist inputs: Desktop Palaeontological Assessment (Dr. John Pether), Archaeological Impact Assessment (Dr. Peter Nilssen), Visual Impact Assessment (Bapela Cave Klapwijk), Social history (Kathleen Schulz);
- Contextual analysis of the site and its direct environs, identification and mapping of spatial informants;
- Identification of possible heritage-related issues and concerns;
- Establishing cultural significance and recommending grading based on criteria set out in NHRA;
- Identification of heritage informants for decision making and input to the planning process;
- Undertake focussed public participation process with registered conservation body, local planning authority and other stakeholders as requested by HWC in the Interim Response to the NID and in accordance with the HWC Public Consultation Guidelines, June 2019;
- Incorporate outcomes emanating from public participation process and formulate appropriate response to comment received – to be included in the Final Integrated HIA report;

- Submission of Final Integrated HIA to HWC for adjudication.

4. PROPOSED DEVELOPMENT

According to the proposed site development plan (DWG No. H 10-113 SUB 1-REV 11 dated November 2021) made available by the developer/ registered property owner, the proposal is for development of the property as a new residential estate comprising of the following components:

- 280 x Single residential erven;
- 3 x General Residential Zone III erven, total area ±0.84 ha (Terraced apartments)
- 8 x Private open spaces (Open Space Zone II) incl. tearooms, telecom station and maintenance shed, total area ±12.1 ha
- 1 x Public open space (Open Space Zone III) incl. nature conservation area, tearoom and utilities, total area ±39.6ha
- 1 x Public open space (Open Space Zone III) incl. sport facilities, clubhouse, restaurant, bar, offices and utilities, total area ±0.6ha
- Village precinct, flats, clubhouse, frail care, recreation (General Residential Zone III), total area ±2.4ha
- Private Roads (Transport Zone III), total area ±14.4ha
- Existing municipal reservoir (Utility Zone), total area ±1.5ha
- Entrance and ancillary engineering services and infrastructure.

The development is proposed to be implemented in four phases as also illustrated through the site development plan (Drawing No. H 10-113 SUB 1-REV 11, dated November 2021) attached to this report as part of **Annexure 4**. The proposed Landscape Site Plan, compiled by JdV Landscape Studio (dated 22nd November 2021) is also attached as part of Annexure 4.

5. SPATIAL PLANNING CONTEXT

The Mossel Bay Municipality Spatial Development Framework (MSDF), 2022 earmarks Erf 3122, Hartenbos as a “New Development Area (No. 41)” situated inside the urban and with a potential yield of approximately 400 Medium density residential and Retirement units (2022:86,89). Portions of the property are noted as being part of a Critical Biodiversity Areas (Terrestrial)², which designation will be considered through the environmental impact assessment currently underway.

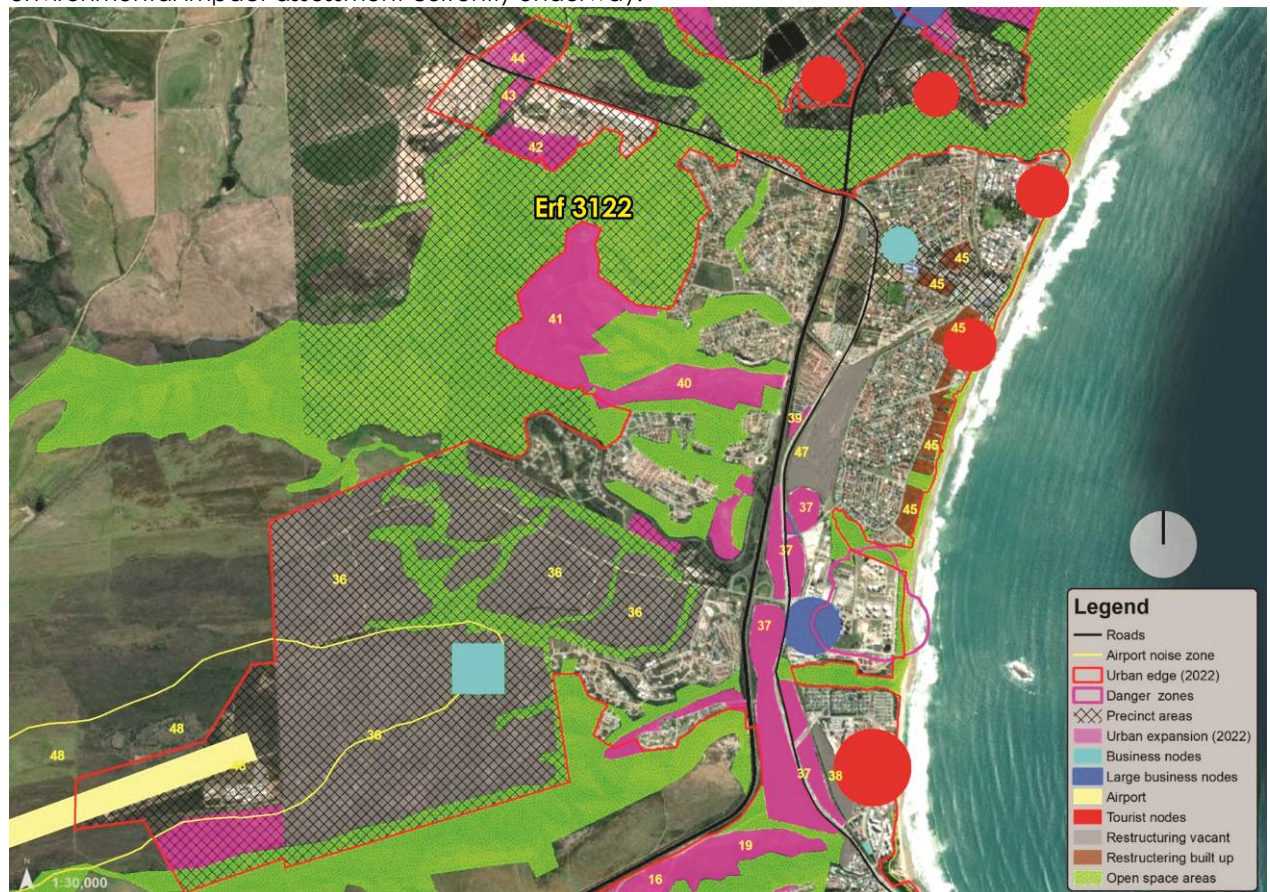


Figure 5: Study area within the context of the Mossel Bay Municipality SDF, 2022 (MB Mun, 2022:86).

² MBMSDF, 2022:85

The (2022) alignment of the urban edge and development potential of the property does not deviate from said designations assigned in the former (2018) MB MSDF. The proposed development therefore appears to be consistent with the spatial proposals and policies pertinent to the subject property.

6. HERITAGE RESOURCES AND ISSUES

This section of the report adherences to HWC's interim comments dated 20th May 2021 as well as the requirements specified in terms of Section 38(3) of the NHRA.

6.1 Historic Background

Historic background research undertaken by historian Kathleen Schulz was undertaken as a specialist input into this HIA and focussed primarily on ownership and social history but also included inputs from other relevant primary and secondary sources obtained from the Cape Town Archives, Deeds Office, and Surveyor General's Office.

6.1.1 Introduction

Hartenbosch was one of the earliest freehold land parcels to be granted in the Mossel Bay district. In 1734 Governor Jan de le Fontaine awarded freehold title of the farm Hartenbosch to Cape burger Esais Engelbrecht Meyer³. The award was bestowed on Esias Meyer for the part he played in assisting the distressed Dutch East India ship *t' Huis te Marquette* which had put into Mossel Bay for necessary storm damage repairs. It was recorded that Esais Meyer rode on horseback to Cape Town within a period of seven days in order to deliver letters to the Governor from the distressed ship's official. In addition Esais provided much needed fresh meat and provisions to the ship's crew.

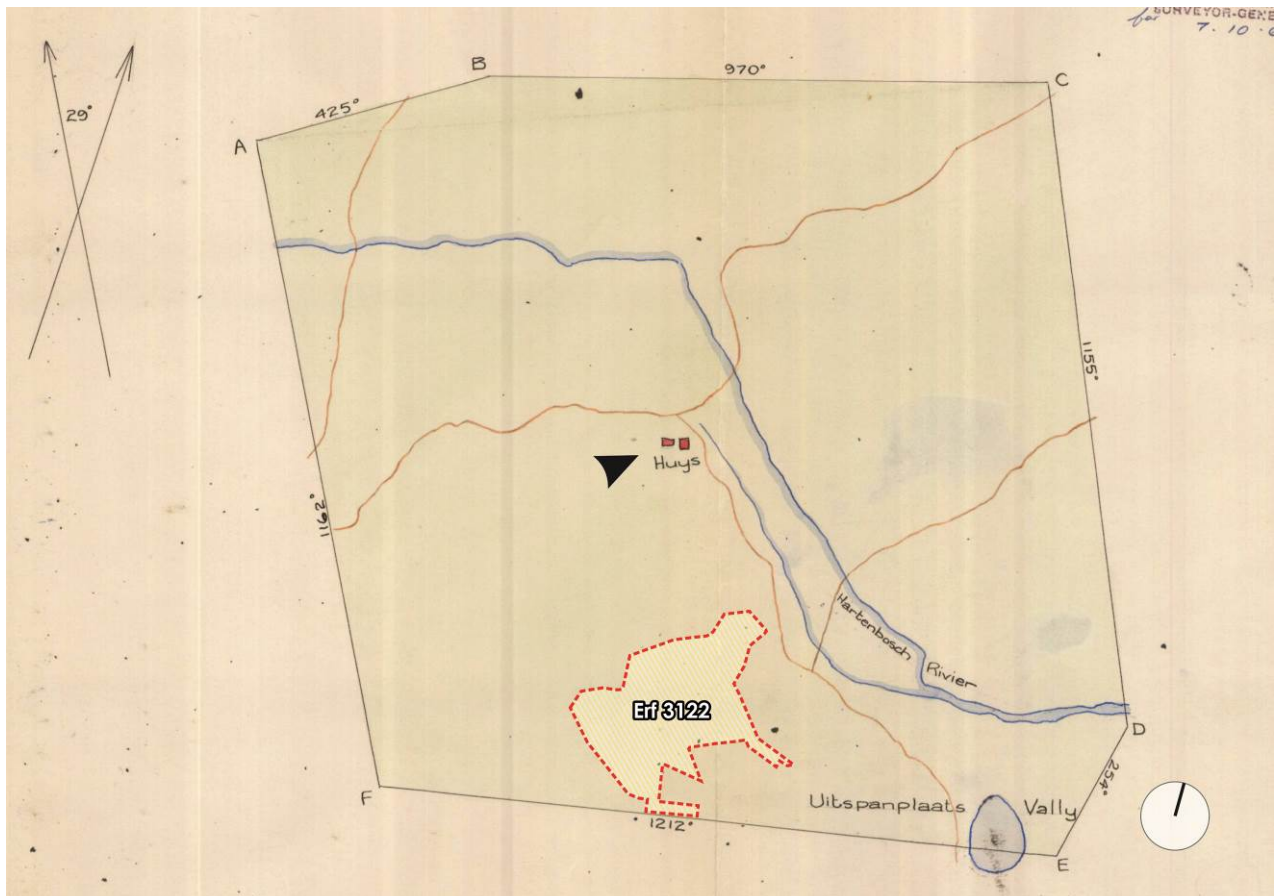


Figure 6: Approximate location Erf 3122, Hartenbos as transposed onto 1821 diagram for the early farm Hartenbosch (SGO as edited)

Other farmers in the Mossel Bay area who received grants of land for assisting with provisions were Johannes Kruywagen (Esais Meyer's brother-in-law) who received the farm Hartebeestkraal and Jan Christoff Beck who received Welbedacht. These farms are situated north of and west of Hartenbosch respectively⁴. The first recorded diagram was drawn up in 1821. The grant stated that E.E. Meyer had occupied Hartenbosch for several years before the freehold was awarded and this would account for his ability to provide sufficient provisions for the crew's needs. English translation of the grant deed from Dutch as follows⁵:

³ Cape Town Deeds Office (CTDO); Stellenbosch Freeholds II 203, dated 7th September 1734

⁴ Cape Archives (CA); C96pp 14-36 (Tanap Transcription Project)

⁵ Translation acknowledgement: Maureen Rall

"In favour of Esaias Meyer

...consideration that he not only brought the first report of the arrival of the ship 'T Huis te Marquette to Mossel Bay, but that furthermore much help was provided by him to this ship, both by the provision and delivering of fresh water, bread, meat and other necessities, and that he in addition went to much trouble to fetch and deliver to said Mossel Bay the Company's letters, so that it is reasonable that the Company owes him some recognition for this, in order to encourage others to act thus in similar cases of danger and necessity to the safety of the Company's wellbeing. For these reasons, at his request, the Honourable Permission of our Lords and Masters has allowed, granted, and given him according to [bestheid?] as on the 1st of the past month July was allowed, granted and given him by this, a certain stock farm which he has already had on loan for a considerable time, named Hartenbosch, situated at Mossel Bay and this with absolute power, authority and ownership to sow, plant and stock with livestock, and, if he later wishes to sell, renew or else after communication with the authorities here, to transfer to another person, [he may do so] being held, however, to use the cornfields which he may have planted for his own as well as other inhabitants' use, as well as to build a wagon road and a ford at least as wide as [?] Roods and further be under obligation to always plant, in the place of trees chopped down on his land, young oak or other trees and furthermore with the proviso that he will deliver one tenth of the grain he may reap to the Lord or the Honourable Company or else stand to lose this land if he does not act properly and according to the Proclamations, and in which case the Authorities will be entitled to take it away from him and give it to someone else, the same being subject to such impositions and entitlements which the Authorities here, on behalf of the Lords, have instituted or which may be instituted in the service of the Honourable Company and the common weal.

*Signed: Jan de la Fontaine
7th Sept. 1734*

By order of the Honourable Lord Governor and the Council, R. Tulbagh."

Following Esias' passing in 1767 the farm was transferred to his son Nicolaas, also nicknamed "Swart Klaas" owing to this complexion (Kaljee, 1993:3) and his wife Anna. Their only son, Esias (II) took control of the farm after their passing. During the eighteenth and nineteenth centuries travellers to the Southern Cape district recorded staying at the Meyer residence. Esias' son is Descendants of the Meyer family continued residing on the farm Hartenbosch until the twentieth century and possibly some are still living on portions of the extensively sub-divided farm.

6.1.2 Census Records

Census records examined in the Cape Town Archives confirm that Hartenbosch was predominantly utilized for raising livestock. Livestock included 10 horses, 80 cattle and 500 sheep⁶. Importantly, the **1741** census record states that Esais also owned 4 male slaves and 1 female slave.

In **1786** farmers in the Mossel Bay district entered into a private contract with Messrs. Duminy, van Rheenen and Bergh to supply wheat to the Cape. The Contractors undertook to transport the wheat by ship to Cape Town. This contract was abolished in 1795 after the first British occupation of the Cape, after which new arrangements were made by Government for the transport, sale and distribution of dry grain products to the Cape⁷.

A memorial or 'petition' submitted to the British Authorities in **1795**, signed by grain farmers, stated that many farmers had employed Hottentot families at great expense to assist with grain production and were now unsure of how to dispose of their crops. This document is significant in that the information provides an insight into when indentured Hottentot labour was taken on and also when agrarian activities were expanded.

The **1805** census recorded so called Hottentot employees or residents, enumerated as six adult males, three adult females and five children. Names of slaves and Hottentots were never recorded in the general census. Slave enumerations were listed as 4 male adults, 2 female adults and 4 male children. Livestock was taxed on the following:

- 10 riding horses
- 21 horses
- 80 trek ossen
- 252 cattle
- 696 sheep
- 270 goats
- Wheat and oats were also being grown.

The **1816** census record is revealing and interesting to look at for the following reasons:

- Firstly, the formal registration of slaves became compulsory in 1816. The number of slaves listed on the Hartenbosch census record differs considerably with those registered with the Slave Office, indicating perhaps some 'negligence' when submitting information for census purposes.

⁶ CA; A2250. Accession from census records lodged in the Hague archive.

⁷ CA; BO.61, (1795 Memorial from inhabitants)

- Secondly, the record reveals that farmers pursued growing grain in the Mossel Bay district following the concerns raised in 1795.

The 1816 census records for the early farm Hartenbosch record the following number of slaves⁸:

- 4 Adult Male Hottentots
- 4 Child Male Hottentots
- 6 Adult Female Hottentots
- 8 Child Female Hottentots
- 3 Adult Male Slaves
- 1 Adult Female Slave
- 3 Child Female Slaves.

Livestock and produce recorded were:

- 4 Riding or Wagon horses
- 24 Other Horses
- 56 'Trek' oxen (used for drawing wagons)
- 160 Cattle
- 20 Hamels (*Stef are these oxen?*)! sorry.
- 230 Sheep
- 25 Goats
- 10 Pigs
- 140 Muids of Wheat Reaped
- 145 Muids of Barley Reaped⁹

The owners are listed as Esias Engelbrecht Meyer, (Nicolaas's son) and Maria Magdalena Cronier. The couple were also in possession of a loan farm named Bartelsfontein (vicinity of current PetroSA site, west of Mossel Bay town, see **Figure 7**).

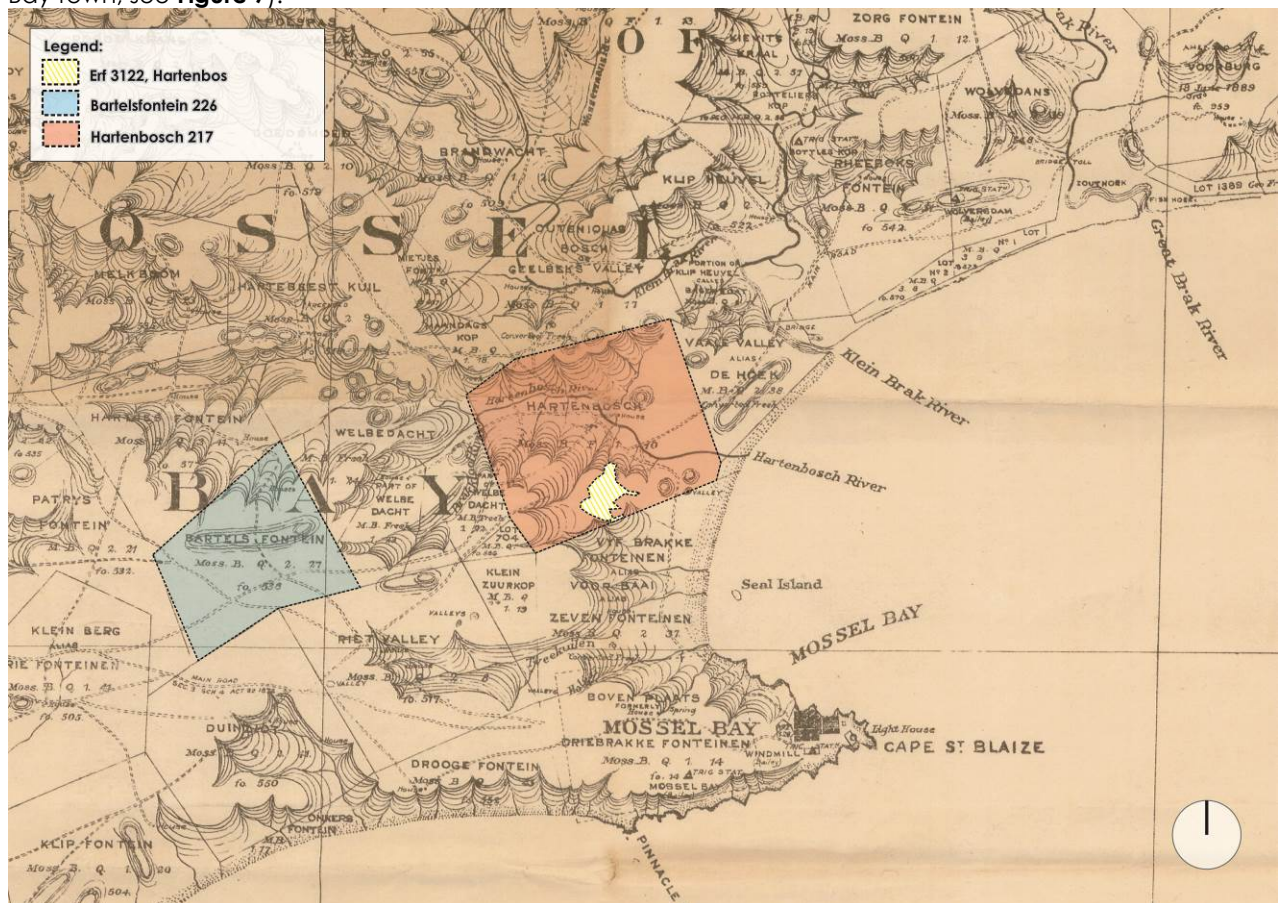


Figure 7: Location of subject property in relation to early farms Hartenbosch, Bartelsfontein as transposed onto 1880-1890 SG mapping of the area (NGSI as edited).

6.1.3 Slave Office Records

By the year 1816 when legislation dictated that slaves be registered with the Slave Office, Esais Meyer (Esais's son) enregistered ten adult male slaves, nine adult female slaves and four children. The children were all born to adult female slaves living on the farm¹⁰. The record confirmed that E. Meyer was resident at Hartenbosch. As mentioned above, these numbers differ vastly from those listed on the 1816 census record.

⁸ CA; J97

⁹ 1 muid = 2600 lbs or 1179 kilograms

¹⁰ CA; SO 7/9

Date of En – registerment ¹¹	Name	Sex	Age, or if an infant date of birth	Mother's Name	Country	Occupation	Remarks
25/05/1816	Baatjoe	Male	70 about		Batavia	Herdsmen	
25/05/1816	July	Male	68 about		Bengale	Gardener	
25/05/1816	Jephtha	Male	40 about		Bengale	Gardener	
25/05/1816	February	Male	37 about		Mozambique	Gardener	
25/05/1816	August	Male	35 about		Mozambique	Labourer	
25/05/1816	Japhet	Male	31 about		Cape of Good Hope	Labourer	
25/05/1816	Abraham	Male	17 ½ about		Cape of Good Hope	Labourer	
25/05/1816	Jacob	Male	4 about	Kamsa	Cape of Good Hope		
25/05/1816	Kamsa	Female	40 about		Batavia	Housemaid	
25/05/1816	Fransina	Female	25 about		Mozambique	Washer	
25/05/1816	Spaas	Female	23 about	Kamsa	Cape of Good Hope		
25/05/1816	Delina	Female	22 about		Cape of Good Hope	Cook	
25/05/1816	Rachel	Female	15 about		Cape of Good Hope	Sempstress	
25/05/1816	Serina	Female	2 ½ about	Delina	Cape of Good Hope		
17/10/1818	Daniel	Male	07/10/1816	Delina	Cape of Good Hope		
25/08/1818	Floris	Male	30/07/1818	Delina	Cape of Good Hope		Reported: died 15/09/1817
27/05/1816	Fortuin	Male	50 about		Bengale	Herdsmen	
27/05/1816	Damon	Male	50 About		Mozambique	Herdsmen	
27/05/1816	Bam	Male	23 about		Cape of Good Hope	Labourer	
27/05/1816	Regina	Female	48 about		Mozambique	Housemaid	
27/05/1816	Caatje	Female	28 about		Cape of Good Hope	Housemaid	
27/05/1816	Spaas	Female	23 about		Cape of Good Hope	Housemaid	
27/05/1816	Joemat	Male	1 year about		Cape of Good Hope		
08/08/1817	Dina	Female	1817 11 th July	Spaas	Cape of Good Hope		

Table 2: Slaves belonging to Esaias Engelbrecht Meyer Esaias Son – Hartenbosch (1816 census records)

6.1.4 Deeds Office Records

As mentioned above, Hartenbosch was granted in freehold in 1734. The farm was passed down from generation to generation to members of the Meyer family. Consequently Deeds Office records were extremely difficult to follow, particularly relating to the shareholding and variety of portions acquired by numerous family members. The extent of Hartenbosch in 1864, the year of a re-grant, was 3,376 morgen (2,892 hectares)¹².

Erf 3122 was registered as such in 1995¹³. The Surveyor General diagram attached to the Title Deed informs us that the property was surveyed between the years 1967 and 1977 and is described as "Uitbreiding Nr.4" (Extension No. 4). The measured extent of Erf 3122 is given as 60,5190 hectares. In order to accommodate Extension 4, Portion 26 Hartenbos was created in 1967¹⁴. No ownership changed hands, all portions already belonging to The Trustees of "Die Afrikaanse Taal en Kultuurvereniging (Suid-Afrikaanse Spoorweë en Hawens) who acquired the property from the Estate W.E. Eedes in 1936¹⁵. The parent portion of Erf 3122 was deducted from Hartenbosch in 1874 and named 'Portion 4, Hartenbosch'; transferred to Wilhelmina Elizabeth Meyer who was married out of community of property to Matthew Eedes¹⁶. The approximate location of Erf 3122 within the context of the 1874 diagram is shown in **Figure 8**.

6.1.5 Hartenbos Holiday village

Land from the farms Voorbaai and Hartenbos was acquired by the Afrikaanse Taal en Kultuurvereniging (Suid-Afrikaanse Spoorweë en Hawens) in 1936 with a view to establishing holiday homes for South African Railway and Harbour (SAR&H) employees. The Voorbaai portion of land was owned by Nicolas Meyer who

¹¹ Ref. SO.7/9 1816/17

¹² CTDO; Mossel Bay Freeholds 1.1 fol.10

¹³ CTDO; Title Deed 24075/1995

¹⁴ CTDO; Certificate of Consolidated Title 19822/1977

¹⁵ CTDO; Title Deed 11974/1936

¹⁶ CTDO; Title Deed 200/1875 dated 8th March

wrote the following letter to New Cape Central Railway Limited in 1913¹⁷. The letter informs us that campers were utilizing land at Hartenbosch during the holiday season.

"Dated; 24th January 1913
 To: The General Manager: New Cape Central Railway Limited.
 From: N. Meyer & Son, General Dealers, Importers, Tanners, Curriers, Boot Manufacturers, Hartenbosch.

Dear Sir

We beg to ask you to kindly assist us with the following request.

You are no doubt aware that the inland people are patronizing the camping grounds more & more every year, on every available place along the coast. Our place at the Hartenbosch River is filled up with campers now, several parties being pitched on the hill side close by the Railway, having no gates to go through when crossing the railway to the sea, they of course have to get through the railway fence or climb over it, in either case damage may be done.

We are cleaning a large piece of ground on the above mentioned hill for building purposes, & intend to dispose of some camping plots. It would therefore be in the interests of the general public that suitable provision be made for crossing the line.

We ask you if you would kindly approach the Union Government to put up two gates, one on our side & another on Mr. Foster's side of the railway; the most convenient spot being about 130 yards from the Hartenbosch railway bridge which is just opposite the present & proposed camping ground. We suggest that gates be used which would allow carts & wagons to pass through.

.....
 Signed Meyer & Son."

Nicolaas Meyer dropped the idea when informed, "that if he wanted the gates, he would have to pay for them." He also requested that a railway siding be built at Hartenbosch, which would have been beneficial for his business. This application was also rejected due to lack of funds. Hartenbosch township plans were submitted for approval in 1937 after which the railway siding was constructed to accommodate holidaymakers. It was at this time that the name Hartenbos was adopted for the holiday village name as opposed to Hartenbosch¹⁸. Archival records relating to the Afrikaanse Taal en Kultuurvereniging (Suid-Afrikaanse Spoorweë en Hawens) are not housed in the Cape Town Archives. It was therefore not possible to obtain detail about the planning intentions or other activities of the organization. No archival information could be found relating to occurrence of an airfield on the property.

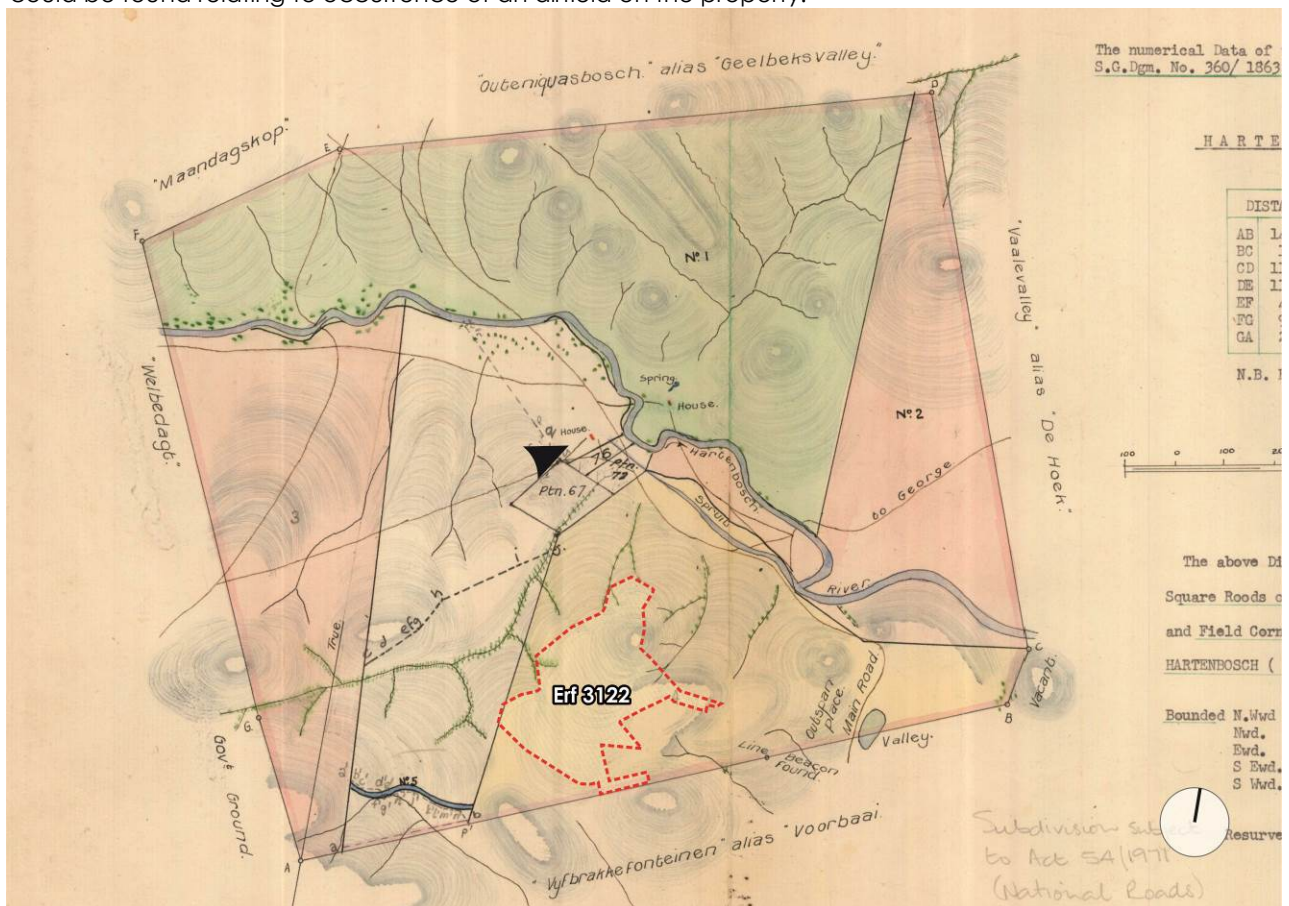


Figure 8: Approximate location Erf 3122, Hartenbos as transposed onto 1863 diagram for the early farm Hartenbosch (SGO as edited)

¹⁷ CA; SMC 1/1/61

¹⁸ CA; PAA 510. AF 74/1/1

6.1.6 Conclusions

While no archival records were found that related directly to Portion 4 (from which Erf 3122 was deducted), a broader picture of activities on the farm and its development through the centuries has been acquired. None of these activities appear to have impacted directly on Erf 3122. The earliest diagrams, namely 1821 (Figure 6) and 1863 (**Figure 8**) depicts the location of the original homestead along the Hartenbos River, well northeast of Erf 3122.

Early Census and Slave Office records indicate that a substantial number of slaves were resident on the farm Hartenbosch and employed by Esias Engelbrecht Meyer, farm owner and son of first recipient of this farm in 1734, which theme is considered of high local significance, though it is possible to confirm to what degree said theme is pertinent to the subject property.

From the research it would appear that the portion of land on which Erf 3122 is situated was used primarily for agricultural purposes. The property is therefore associated with early occupation and agricultural activity within the Mossel Bay area.

6.2 Archaeology

An archaeological impact assessment (AIA), undertaken by Dr Peter Nilssen, included a desktop study, literature review, examination of aerial photographs and comprehensive archaeological foot surveys during 2010, 2017 and May 2022. Key findings emanating from the AIA are reflected below and the full AIA report is attached to the HIA as **Annexure 5**.

Description of archaeological occurrences noted during field survey:

The AIA report provides a highly comprehensive description of at least 136 Stone Age archaeological occurrences identified during fieldwork, most of which were of Middle Stone Age origin followed by Early Stone Age and Later Stone Age artefact, the latter of which were rare (Nilssen, 2022:3):

The contexts of these finds are mostly disturbed and therefore they are of low to no significance, and Not Conservation Worthy. Two archaeological occurrences, one of mainly Middle Stone Age implements and another of mostly Early Stone Age specimens are considered to be of medium significance at the local level (field rating: Grade III B) and recommendations for their protection and conservation are made. No tangible heritage resources of the historic period were identified.

In addition to the archaeological occurrences identified in the AIA the following two (Figure 3) are graded of moderate cultural significance (refer to AIA report for description with relation to occurrences noted but considered of no or low cultural significance) (Nilssen, 2022:34,36):

- **Waypoint 34** – “MSA scatter of stone artefacts recorded in close proximity to an existing reservoir and at one of the highest points on the property. While densities were not calculated, the scatter contains higher densities of stone artefacts than seen elsewhere on the property. On average, there is less than one artefact per square meter. This is a low to medium density scatter of materials roughly 250m² in extent and some artefacts are still imbedded in sediment. Specimens include hammer stones, a hammer stone/grindstone, various cores, blades, flakes, convergent flakes or points and chunks, and all these are in medium to fine grained quartzites of differing colour. Retouched pieces occur but are rare and no formal tools were identified.”
- **Waypoint 127** – “a medium to low density stone artefact scatter of ESA implements was identified and is situated on a high point of the property and near the miniature airfield. While the density of artefacts was not calculated, densities are higher than at other occurrences. On average, artefacts occur at less than one artefact per square meter. The occurrence is about 300m² in extent and is situated in formerly ploughed and cultivated fields. Artefacts include large cores, crude and finer bifacial hand axes, “chopper” tools (probably worn-out hammer stones and/or cores) and flakes. All specimens are in quartzite that is variably patinated and coloured. The site was revisited in 2017 and 2022 and despite thicker vegetation cover and a few dumps of garden refuse, the locality of the photographed artefacts was easily found.”

6.3 Palaeontology

A desktop palaeontological assessment (PIA) in relation to the proposal was undertaken by Dr. John Pether, the full report of which is attached to this HIA as **Annexure 6**.

Description of paleontological occurrences identified through desktop survey:

Due to the technical density of the report, the following is quoted *verbatim* from said report (Pether, 2021: i,ii):

“Most of the development affects the stony soil developed on the Cretaceous Buffelskloof Formation (Uitenhage Group) and the underlying conglomerates and interbedded sandstones and siltstones (Fig. A) [Figure 9, above]. Petrified fossil wood and other plant remains are expected. The fragmented bones and isolated teeth of dinosaurs could occur but are exceptionally rare. An outlier of Bredasdorp Group deposits underlies the summit of the hilltop in the north (Fig. A). The mid-Miocene marine De Hoopvlei

Formation is affected only by the construction of the perimeter fence (post holes) and the making of a perimeter service road. It is possible that fossil marine shells could be unearthed, particularly along the inner edge of the road cut-ins on the steeper slopes.

The most important change in the SDP relevant to potential impact on the later Miocene Wankoe Formation is the decision to create a conservation area in the northern area around the reservoir (Fig. A) [Figure 9, above], where previously 16 plots were laid out on top of the Wankoe Formation aeolianite, which is of Moderate palaeontological sensitivity. Not building in this area reduces the potential impact on this palaeontological resource. The Wankoe Formation is now also affected only by the construction of the perimeter fence (post holes) and the making of a perimeter service road. Sparse bones may occur and any such material, both small and larger, is of high value. The land snails in these old aeolianites are of interest. The partly-overlying, late Quaternary Qg coversand/soil rarely sequesters fossils, but material associated with buried archaeological remains could occur."

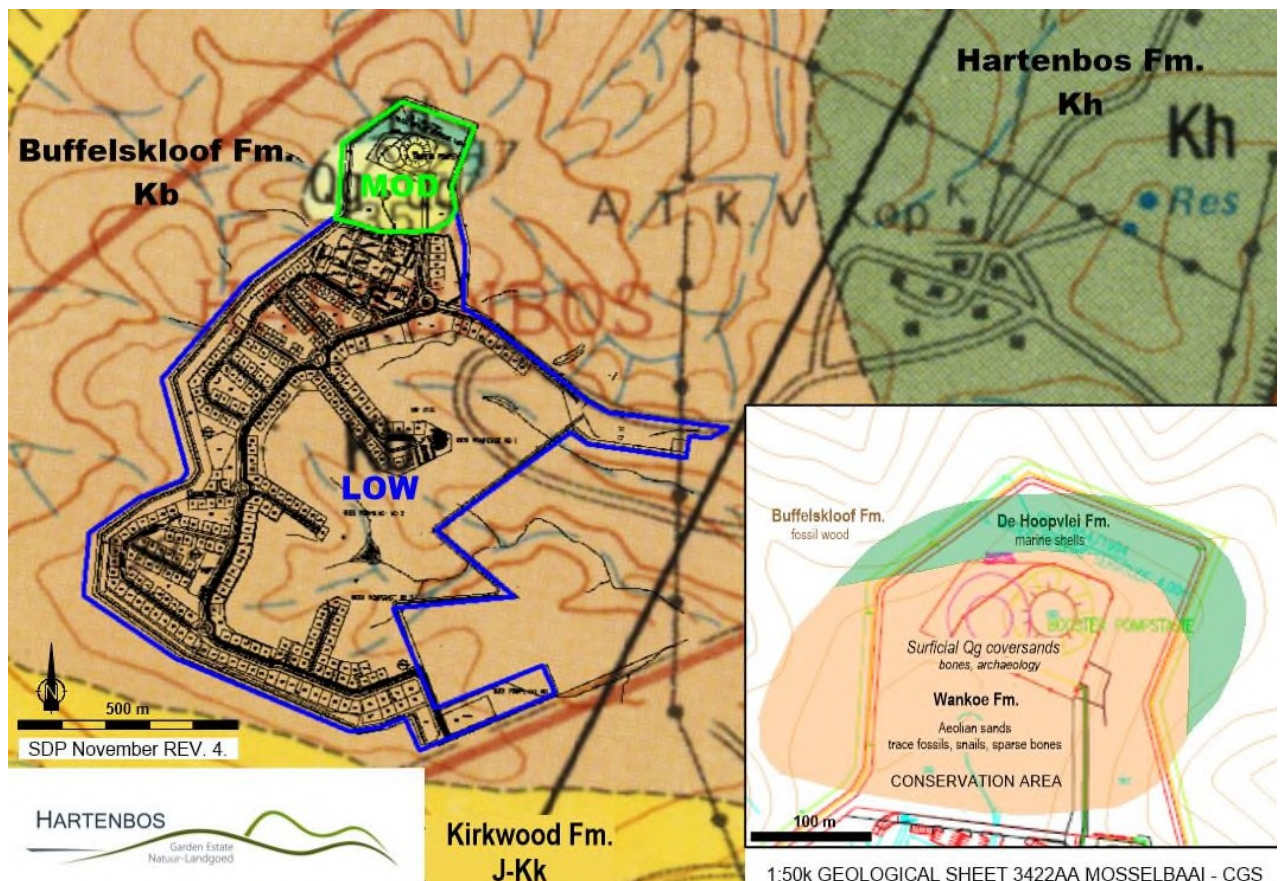


Figure 9: Geological map and palaeontological sensitivities in the Project Area. Inset: Detail of area of Moderate sensitivity. (Pether, 2021)

6.4 Cultural landscape context

While the Cape has been inhabited for many tens of thousands of years (pre-colonial history) prior to Western settlement (colonial history), the nomadic lifestyles of early inhabitants are not always as evident within the landscape than the significant imprints made by humans during the last two – three hundred years.

Unlike ancient landscapes in parts of the world where intensive cultivation over periods much longer than locally have allowed natural and cultural components of the landscape to become interwoven, climatic conditions prevailing with this Southern Cape coastal landscape mostly precluded large-scale cultivation, save within the proximity of perennial rivers or places with a reliable water source. Ultimately, definition of a cultural landscape is informed by the following elements, weighed through professional opinion, public values and statutory (legal) framework:

- Natural Landscape
- Public Memory
- Social History
- Historical Architecture
- Palaeontology
- Archaeology

6.4.1 Definitions

Although the NHRA does not clearly define the term "cultural landscape", it briefly refers to it in the schedule of definitions. A working definition suggested by Winter, S (2004) is:

"A place of cultural significance, which engenders qualities relating to its aesthetic, architectural, historical, scientific, social, spiritual, linguistic, technological, archaeological or palaeontological value"¹⁹

The following alternative definition offers insight into the complexity of cultural landscapes from a broader, holistic perspective (Green, B.H., 1995):

"The concept of landscape gives expression to the products and processes of the spatial and temporal interaction of people with the environment. It may thus be conceived as a particular configuration of topography, vegetation cover, land use and settlement pattern which establishes some coherence of natural and cultural processes and activities".

Cultural landscapes relate to the imprint created on a natural landscape through human habitation and cultivation over an extended period of time, as defined by a human geographer (Carl O. Sauer, 1925):

"The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural area is the medium, the cultural landscape is the result".

Cultural landscapes may therefore be considered as broad (spatial and temporal) relational frameworks within which all other heritage resources are rooted. The analysis and interpretation of cultural landscapes therefore enables broader understanding of the spatial and spiritual evolution of a landscape over time as expressed through perceivable "patterns" or associations relating to aspects such as socio-historic aspects, land use, settlement pattern, built form, vegetation cover, topography etc.

6.4.2 Historic aerial imagery

Analysis of 1939 aerial photography series for the Mossel Bay (Flight Series 140 of 1939) reveals the following traditional (i.e. Pre-Modern) cultural landscape patterns in the vicinity of the property and broader Hartenbos area (**Figure 10**) outlined below:



Figure 10: Erf 3122 within context of 1939 aerial photography for the coastline (Source: Aerial survey 140, Flight strip 41, Image 34249, NGSi, as edited)

- This aerial series pre-dates construction of the N2 National Road but alignment of the current R328 (inland route) is visible;

¹⁹ Baumann & Winter Heritage Consultants (2004)

- At location of present day Hartenbos village, the existing railway line swings eastward, almost meeting the coastline and intersecting with a prominent access road (Kaap de Goede Hoop Avenue) to the coastline;
- Many areas inland from the railway line were transformed through agriculture but some indigenous vegetation remains along deeper inland valleys west of the railway line as well as the coastal strip between the railway line and the coast;
- Clearing of indigenous vegetation in preparation for construction of new road grid layouts, which were to become the beginnings of Hartenbos village are visible directly north and south of the access road/railway line intersection referred to above;
- Notwithstanding undulating landscape characteristics of the landscape, a large percentage of the upper, more level portion of the property had been transformed to cultivated fields at this time;
- A narrow track, following roughly the same alignment of the current narrow gravel road traversing the property, is visible;
- Railway line – westbound from Hartenbos strand is visible directly south of the property.

Analysis of subsequent (1957) aerial photography highlighted the following traditional (Pre-Modern) land use patterns relevant to the property and its direct environs (**Figure 11**):

- Gradual expansion of Hartenbos village underway showing high concentration of modest holiday cottages north of Kaap de Goede Hoop Avenue (known as "Karooorp"). (Kaljee, 1997:55);
- Seemingly haphazard development of larger residential properties throughout the remainder of the entire village (north and south of Kaap de Goede Hoop Avenue) is evident;
- This image also predates construction of the N2 National Road but the alignment of the coastal road (R102, or Louis Fourie Road) as well as the inland road towards Oudtshoorn (R328) is noted;
- A single circular track, the alignment of which coincides with that used during fieldwork, traverses the property. No structures are evident;
- Save for the northernmost portion (site of current municipal water reservoir), the property had been cleared of vegetation, used for agricultural purposes.

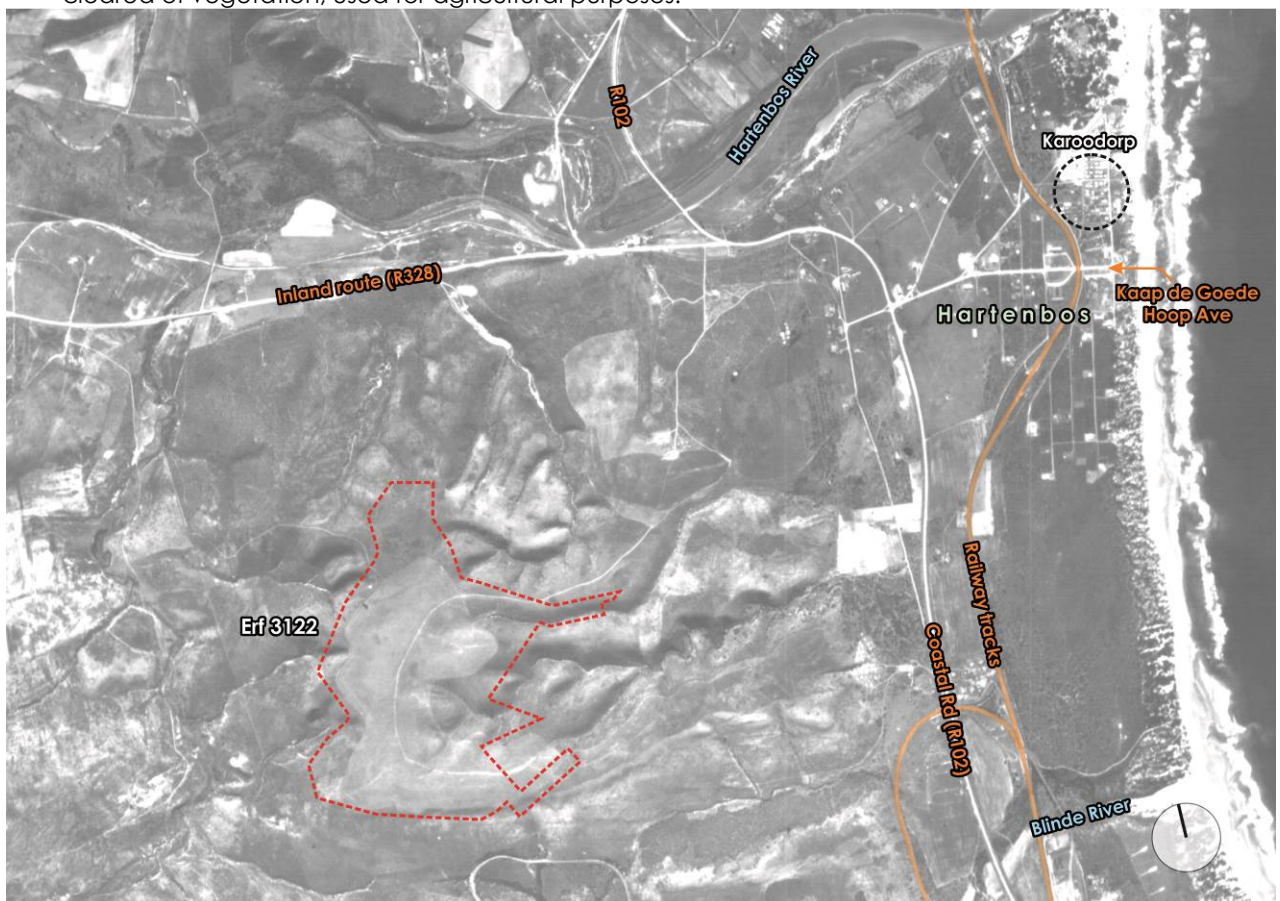


Figure 11: Erf 3122 within context of 1957 aerial photography for the coastline (Source: Aerial survey 403, Flight strip 15,

6.4.3 Current landscape context

As evident from recent aerial imagery (Figure 2), the property is bound by recent medium density urban expansion within the Sonskynvallei settlement to the north (albeit separated from by undeveloped rural lands), the well-established Hartenbos Heuwels" suburb to the northeast as well as numerous low density "estate" developments (some currently under construction) directly to the east and south. However, lands directly to the west and southwest comprise undeveloped rural and/or cultivated agricultural lands.

The Mossel Bay area has in recent years been under considerable development pressure, the results of which are clearly evident travelling along the N2 National Road where urban development (mostly

“estates”) occur along both sides of the highway. Spatial planning policies and strategies for the town have included Erf 3122, Hartenbos within the urban edge and earmarked the property for urban development. As discussed in Section 5 of this report, this designation remains the place with the current MB MSDF (2022). With developable land east of the N2 National Road becoming scarce, urban development is inevitably expanding onto areas situated WEST of the N2, which includes the Aalwyndal smallholding complex located south of the subject property.

6.4.4 Conclusions

Findings emanating from the archaeological impact assessment include several Middle Stone Age but fewer Early Stone Age and Later Stone Age artefacts, only two of which are considered of moderate significance (Nilssen, 2022:3) and furthermore states, “*The archaeological record has shown that indigenous societies and predecessors of modern humans have occupied the area for more than a million years since the Early Stone Age.*” (Nilssen, 2022:26).

Archival research (Section 6.1) confirms that the original farm Hartenbosch was one of the first freehold farms to be granted in the Mossel Bay district. While we know that initial transfer to Esias Meyer took place in 1734, it is most likely that first colonial occupation and agricultural use of the farm commenced well before this date. The extent to which the subject property, in its present cadastral layout and form, contributed to agriculture and cultivation as a form of historic land use cannot be confirmed. Given its location and orientation along a higher lying plateau, some distance southeast of the former historic farmstead, it is possible that early agricultural use (if any) would have related primarily to grazing.

The property, together with the rural cultural landscape to the west, may therefore be considered as remnant of said pre-colonial and subsequent colonial occupation.

While presently undeveloped, Erf 3122, Hartenbos is bound by existing (and approved) urban development to the northeast, east and south. Future development of the property is therefore likely to be visible from surrounding urban areas though it will be viewed within the context of the aforementioned urban expansion. Forming part of an elevated plateau, future development is however likely to visually encroach onto predominantly rural/ agricultural landscape to the west.

6.5 Visual – Spatial Issues

This Section should be read in conjunction with the Visual Impact Assessment (VIA) compiled by Bapela Cave Klapwijk (BCK), attached to this report as **Annexure 7**. Given the technical density of the VIA, the following text is quoted *verbatim*:

6.5.1 Description of receiving environment

Geology and Topography – The flatter landform of the top of the remnant terrace is suitable for development and good distant views will be possible from houses that are on the outer edge of the development. Conversely the houses on the edge will be visible from nearby and from a distance. These houses will form the skyline in all views of the proposed development. Earthworks for roads will be minimal on the flatter land and therefore there will be little or no visible scarring of the landform that will be seen from surrounding areas. However, even on sloping landform will require more earthwork to provide the access and platform for building.

Vegetation – The retention of as much indigenous vegetation as possible will assist in visually integrating the development into the landscape and setting and ensure the conservation as a unique type of fynbos.

Hydrology – The open space provided on the plateau and around the drainage lines are important elements in the landscape as this area retains some of the local character of the setting.

6.5.2 Visual characteristics

Character – The features of the site that impart its character are the plateau from where distant all-round views are possible and the first order stream drainage lines that flow eastward to the coast and westward inland to the Hartenbos river. Indigenous vegetation covers the side slopes of these drainage lines that can provide natural parkways into the development. The characteristics of the setting are defined by the absence of trees and the indigenous shrub on the low (1.5 m) plateau and the drainage line side slopes. The scale and density of the residential units along the edge of the site will be seen on the horizon from views lower down the landform from all sides. Views from the north will view the site.

Visual quality – The Fynbos area of the site needs to be retained where possible and practical so that the residential units can fit visually more easily into the site and thereby retain some of the visual quality that exists in the undeveloped state of the site.

Visibility of the site – The visibility of the developed site from surrounding residential area will be mostly of the housing on the site's edge. These units will form the horizon in views toward the site.

Sense of place – The particular sense of place of the site is created by sparse vegetation, high elevation in the landform and the extensive views in all directions from within the site but particularly from the edges. The Sense of Place is one of partial remoteness of a windswept natural hill. The strong sense of place will be altered as the houses will completely change the existing ambience of the site.

6.5.3 Identification of risk sources

A visual risk source is considered to be a future action, structure or a road that will significantly alter the visual impact of the proposed development negatively in the context of the setting. This will apply as well to those areas beyond the site boundary. The following potential visual risk sources have been identified:

- The construction of a new bulk supply transmission line on or near to the ridgelines that are near to or are located on the property. This is unlikely in the near future as there is a transmission line that is south and east of the southern boundary.
- The inappropriate location of a local electrical substation and electricity lines on the property.
- A significant change in the landform to accommodate the platforms for buildings and roads on the steep side slopes of the drainage ways near the eastern boundary.
- Structures having a height of greater than 2 storeys.

7. SIGNIFICANCE AND GRADING

7.1 Archaeology

The following findings and recommendations with relation to the significance of findings recorded at Waypoints 34 and 127 (Section 6.2) were transposed from the archaeological impact assessment undertaken by Dr. Peter Nilssen.

Waypoint 34 – “The context of this occurrence is disturbed, but due to the higher density and wider variety of stone artefacts than seen at other occurrences, it is considered to be of medium significance at the local level (Grade IIIB). Although the site does not warrant sampling via archaeological excavation or the collection of specimens under a work plan or permit from HWC, the extent was mapped via GPS which includes a buffer of about 5 m around the scatter (Figure 3). Due to the presence of an endangered species of butterfly, this northern part of Erf 3122 is a conservation area and will not be developed, but the installation of a perimeter fence and construction of a service road should be monitored to minimize unnecessary damage or disturbance of artefacts” (Nilssen, 2022:34).

Waypoint 127 – “Although these artefacts are in a disturbed context, they occur in higher frequencies than seen elsewhere in the study area and are almost exclusively of ESA origin. A variety of artefacts were identified, representing a range of ESA tools that are indicative of the stone tool technology used at that time. As such, the site is considered to be of medium significance at the local level (Grade IIIB) and as described above for waypoint 34, the extent of the occurrence was mapped via GPS which includes a buffer of roughly 5 m around the scatter (Figure 3). After recommendations made in the initial AIA and subsequent mapping (Nilssen 2010 and 2017), this locality has been incorporated into the design of the development and will be conserved in perpetuity. A temporary fence should be erected around the scatter to ensure that this No-Go zone is protected during the construction phase of development. The erection of the temporary fence prior to construction should be supervised by a suitably qualified and informed archaeologist” (Nilssen, 2022:35).

7.2 Palaeontology

The following findings and recommendations in relation to paleontological sensitivity applicable to the study area were transposed from the desktop study undertaken by Dr. John Pether.

7.2.1 De Hoop Formation

“The patch of De Hoopvlei Formation forming the summit of ATKV Kop is considered similar to an analogous occurrence on a hilltop on Vaale Valley 219 (~5 km to the NE). This is a poorly sorted marine conglomerate in which oyster shells are preserved (Viljoen & Malan, 1993). Other fossil shells are not mentioned, but moulds of shells are often present in such occurrences.

These shelly marine conglomerates are at the highest elevation at which such beds are recorded (~120 m asl.). However, the mid-Miocene fossil fauna is poorly recorded due to poor preservation and the difficulties of studying shell moulds. Most of the shelly fauna recorded from the De Hoopvlei Formation has been sourced from the younger, lower-lying, Pliocene parts in which the shell content is better preserved. A study of the cryptic fossils in the high elevation outcrops of the De Hoopvlei Formation is likely to reveal an assemblage that differs from the existing, “bulk” species assemblage recorded hitherto.

Consequently, the high-elevation outcrops of the De Hoopvlei Formation, such as on Erf 3122, are accorded MODERATE palaeontological sensitivity (Figure 9).” (Pether, 2021:10)

7.2.2 Wankoe Formation

"Hitherto only fossil land snails have been reported from the Wankoe Formation (*Trigonephrus*, *Trachycystis*, *Achatina*, *Tropidophora*). Due to post depositional alteration occurrences tend mainly to be poorly preserved or moulds of the dissolved shells. Such processes, together with relatively few good exposures, apparently account for the few observations of the presence of fossils. However, there is no reason why the Wankoe aeolianites should differ markedly in their fossil content from that typical of the other aeolianites of the coastal plains, other than that the fossils have been rendered more obscure and require closer observations to discover them.

The Wankoe Formation is expected to have included an ambient fossil background typical of aeolianites. Trace fossils such as plant root casts, insect burrows, termitaria, mole burrows and tracks of animals are associated with the palaeosols and buried surfaces which also include various land snails, tortoises and micromammals such as rodent and mole bones. Fragments of ostrich eggshell may occur. The small land snails and tiny rodent fossils reflect the local palaeoenvironment such as the vegetation type. Larger animal bones (antelopes, zebra, rhino, elephant, pigs, ostrich etc.) are sparsely scattered on the palaeosurface formed on the underlying eroded marine deposits, on the subsequent palaeosurfaces within the aeolianites, and in the capping pedogenic calcrete. The interdune areas between dune ridges host deposits associated with vleis, pans and springs which are richly fossiliferous, including fossil plant material and aquatic snails and frogs.

However, given the summit context of the aeolianite preserved on ATKV Kop, interdune deposits are not expected. The aeolianite on ATKV Kop is assumed to be an older part of the Wankoe Formation and, as is the case with older aeolianites on the West Coast, if preserved the fossils are likely to be extinct forms. This high-elevation patch of the Wankoe Formation on Erf 3122 is accorded MODERATE palaeontological sensitivity (Figure 11). Although its considerable age (later Miocene?) and concomitant higher degree of post depositional alteration are unfavourable for fossil preservation, a fossil content may remain as moulds and replacements/petrifactions." (Pether, 2021:10,11)

7.3 Visual – Spatial Issues

The following findings are transposed from the visual impact assessment undertaken by BCK (2022).

"The visual assessment describes the visual intrusion of the proposed development on the existing and future setting of the site and the adjacent land. All visual change that results from the construction of houses, roads and the installation of services on a greenfield site (natural areas) are regarded as having a negative effect on the status quo. The rating of the assessed visual criteria is defined as follows:

High	-	Obviously noticeable in a view towards the site dominant in view
Moderate	-	Noticeable, but not dominant in the view
Low	-	Partly noticeable and merges into the overall view

An analysis of the site was carried out to identify the characteristics and attributes that will have an influence on visual quality of the setting and that are visually sensitive to change. The viewshed analysis provides a graphic representation of the areas from where it is possible to see the site (Figure 12, overleaf). This viewshed map is based on contours and does not consider local screening elements such as trees and houses."

7.3.1 Site visibility

"There is no existing vegetation that will change the visibility of the site from views towards it from surrounding land. However, some of the coastal fynbos vegetation will be removed to make way for the roads and buildings and the site will become more visible from certain viewpoints.

The visual scale of the structures or objects in the landscape will be reduced in visual prominence by the square of the distance between the observer and the site. This means that as the distance doubles, the visibility in scale of the object reduces by four times (Hull & Bishop, 1988). This has significance with respect to the visual intrusion of the proposed development for distances greater than 1000m away. This distance has been selected because the visible structures are much less prominent in the general view.

In the area to the east, between the site boundary and 1000m, most of the housing has their views of the site screened by the landform that slopes eastward and by other houses higher up the slope. The houses in the valleys will not have views of the site except where views up a drainage line is possible.

Between the 1km and 2km radial the site is in the cone vision of drivers travelling south along the N2.

At this distance the site is visible but is not intrusive in the view. However the northern edge of the proposed development will form the horizon line of the top of the landform. There will be no natural landform that forms the horizon as there is at present without the proposed development.

The visibility and visual intrusion are considered to be moderate because the site is viewed in the context of the other residential development on the side slopes of that prominent landform.

In this context the visual intrusion of the scale and the extent of the proposed development are not considered to be intrusive beyond the 1000m radial from the site boundary because of the existing pattern of housing on the hillside of Hartenbos Heuwels."

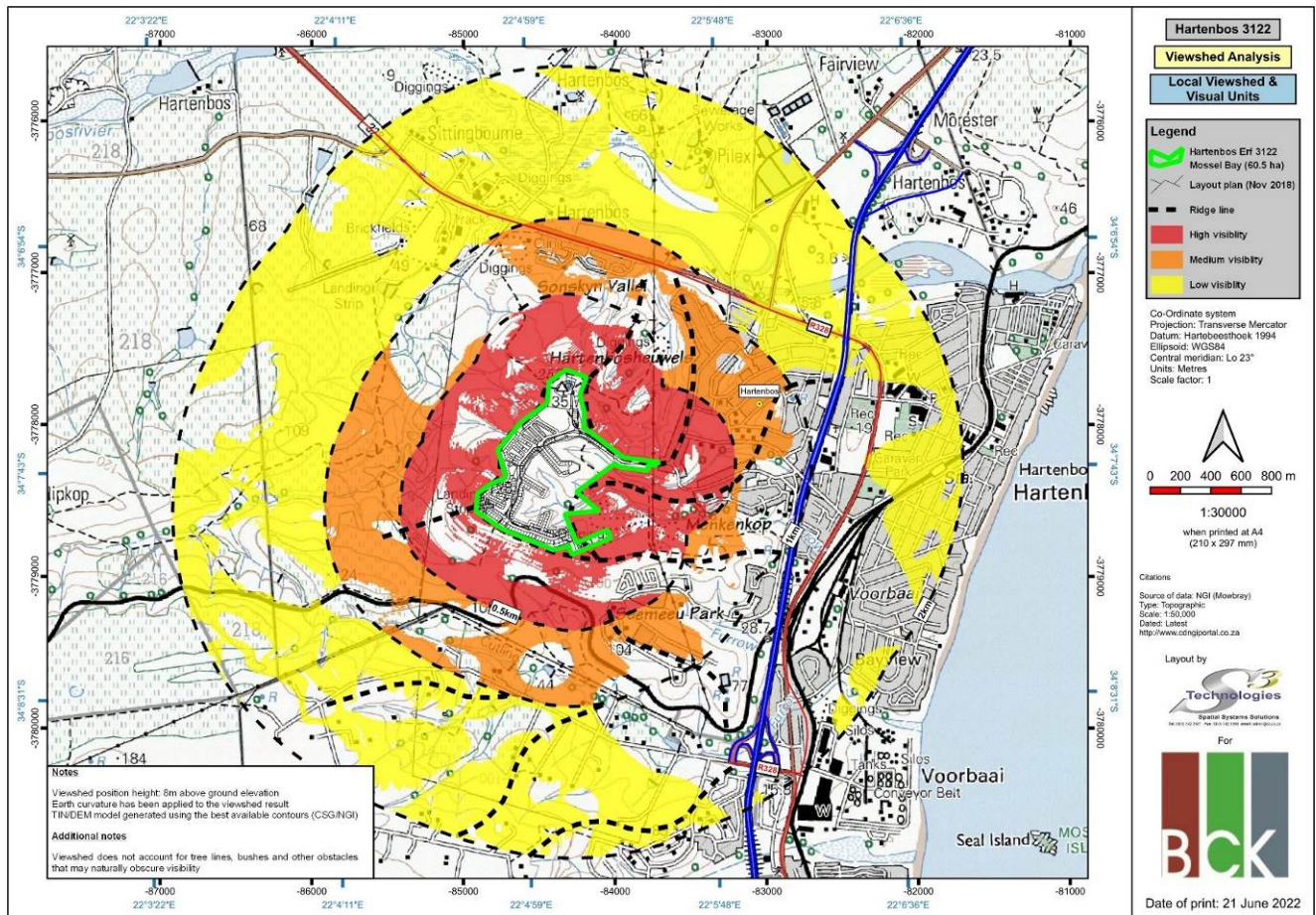


Figure 12: Viewshed Catchment Determination (BCK, 2022:51)

7.3.2 Visual intrusion

Sense of place – The medium density and group housing development will be set on the top of the highest landform of Hartenbos. The undeveloped hilltop provides a sense of place that is connected to the natural feature, and which forms a view horizon and a backdrop to existing housing surrounding the site. This will be lost once the area is built up despite the area of existing vegetation left in the centre of site. There will be a change in the sense of place of the site and for the area within the 500m radial that will have a view of the natural horizon line. The change in sense of place is rated as moderate because of the existing residential areas that surround the site on the north, east and south.

Character – The rural character of the site will change once construction of the development commences. The natural character of the site will be changed from a fynbos covered plateau in to two groups of residential units. The landform will need to be substantially altered in areas where the housing is on steep slopes to accommodate the internal roads and access to erven. The central open spaces will retain some character of the site if it remains in its natural state. The change in the character of the site is rated as high.

Scale – The visible scale of the site is visually reduced because of the location on top of a plateau. The scale of the houses that are visible from the lower existing houses will be presented as a row along the edge of the plateau. The areal extent of the development will be seen from the higher landform to the south-west along the Aalwyndal Road. The scale of the residential units will be two storey units. The housing along the north-eastern edge will be visually intrusive by their scale as the units will appear on the horizon when viewed from the northeast.

Form – The form and style of the development consists of two storey units on the development periphery and three storey units more towards the centre of the development. Stone cladding will be used in conjunction with painted facades which help to visually break up the planes into smaller visual units which assists in reducing the visual impact.

Density – The density of the group housing residential units will not be in visual contrast to the density of the residential areas to the north-east, east and south-east. Most existing higher density housing is lower down the landform.

Landform change – Some of the residential units that are on land that is steep will require the road and the driveways to be either cut or filled to meet the gradient standards. This can alter the landform and its stability. Measures will need to be taken to stabilise cuts and fills. This will have a local visual implication within and outside the site. Buildings built on erven that are located on the edge of the plateau may need to be built on columns and this solution will have a visual consequence. The visual intrusion as a result of landform change can be a significant element of the development along the edge of the plateau, one that can change and add to the visual intrusion of the project. The visual change to the site, caused by landform change is rated as medium on the flatter areas and on sloping landform it is rated as high."

7.3.3 Significance of Cultural landscape context

The occurrence of archaeological artefacts on the property confirms its association with an early cultural landscape marked by pre-colonial occupation though in the same token this holds true for much of the surrounding coastal landscape. The AIA found that with the exception of two sites (which will not be disturbed), most artefacts noted during fieldwork are not conservation worthy (Nilssen, 2022:38).

Livestock quantities, wheat and barley production figures and the number of slaves reflected on the 1816 census records for the farm Hartenbosch further highlights the property's possible association with early agriculture as well as socio-historic themes pertinent to the Mossel Bay area. Important however is that the extent to which this particular may be associated with said themes could not be confirmed.

Traditional (Pre-Modern) landscape patterns identified include transformation/ cultivation of the higher-lying, flatter portions of the property. In present day these traditional land use patterns remain evident within the rural landscape situated west of the property, though future development of the Aalwyndal area (directly to the south) and e.g. implementation of at least one already approved renewable energy facilities (wind farm) within the rural landscape between Aalwyndal and the PetroSA site is likely to significantly alter the existing character of the rural cultural landscape.

Whilst holding a prominent location along the western periphery of existing and approved urban development, bordered primarily by a rural (agricultural) landscape to the west, this observation therefore has to be viewed within the context of the degree of landscape transformation likely to be associated with future development within a broader landscape context as briefly pointed out above. Within this in mind, the property is therefore considered part of a cultural landscape in transition, being of contextual (moderate to low) local cultural significance (Grade 3C).

8. ASSESSMENT OF IMPACTS

8.1 Archaeology

The AIA indicates that, impacts to archaeological resources will occur during the construction phase of development, will be restricted to the property and will be permanent. "Because they are a non-renewable resource, impacts to archaeological resources will be permanent and will occur during the construction phase of development. It is not anticipated that significant archaeological resources will be uncovered during construction, but the nature and content of sub-surface sediments are unknown. Because the Grade III B archaeological resources are avoided by the development, these resources will not be impacted during the construction or operational phases of development. There are no fatal flaws regarding impacts to identified archaeological resources provided that the recommended management measures are implemented.

For the **isolated & low-density Stone Age artefacts** the cultural significance is considered to be low (Grade III C and NCW), an intensity rating of low is given. The overall impact significance without mitigation is considered to be medium negative but given the NCW status of the resource this significance rating is not really meaningful" (Table 3).

Nature of Impact: loss of Isolated & low-density Stone Age artefacts from excavations and construction							
	Extent	Duration	Intensity	Status	Probability	Significance	Confidence
Without mitigation	Local 1	Permanent 5	Low 4	Negative	Definite 5	MEDIUM 50	High
Mitigation & Notes:							
<ul style="list-style-type: none"> Mitigation is not feasible due to their Grade III C and NCW status, the loss of these resources will have a negligible negative impact on the archaeological value of the area 							
With mitigation	NA	NA	NA	NA	NA	NA	High

Table 3: Assessment of Impacts on Archaeological Resources – Isolated & low-density Stone Age artefacts (Nilssen, 2022:40)

For the **MSA scatter of stone artefacts at waypoint 34** the cultural significance is considered to be medium at the local level (Grade IIIB), an intensity rating of medium is given. The overall impact significance without mitigation is considered to be medium negative while the overall impact significance with mitigation is considered to be low positive (Table 4). Given that waypoint 34 falls within a conservation area and outside the development footprint, the impact of the development is positive in providing an opportunity to conserve an archaeological resource. Provided that the recommended management measures are implemented there are no further concerns.

Nature of Impact: loss of Isolated & low-density Stone Age artefacts from excavations and construction							
	Extent	Duration	Intensity	Status	Probability	Significance	Confidence
Without mitigation	Study area 2	Permanent 5	Medium 6	Negative	Highly probable 4	MEDIUM 52	High
Mitigation & Notes:							
<ul style="list-style-type: none"> Because this resource is given Grade IIIB status, it is recommended that it be conserved – it falls in a conservation area and outside the development footprint but may be impacted by installation of the perimeter fence and construction of the service road Installation of perimeter fence and construction of service road should be monitored by a suitably qualified and informed archaeologist to avoid or minimize damage or disturbance to artefacts 							
With mitigation	Local 1	Permanent 5	Medium 6	Positive	Improbable 2	LOW 24	High

Table 4: Assessment of Impacts on Archaeological Resources – MSA scatter of stone artefacts at waypoint 34

For the **ESA scatter of stone artefacts at waypoint 127** the cultural significance is considered to be medium at the local level (Grade IIIB), an intensity rating of medium is given. The overall impact significance without mitigation is considered to be high negative while the overall impact significance with mitigation is considered to be low positive (Table 5). In accordance with recommendations made in the initial AIA and subsequent mapping of this resource (Nilssen 2010 and 2017), the extent of waypoint 127 was incorporated into the layout of the development and hence the impact of the development is positive in providing an opportunity to conserve an archaeological resource. Provided that the recommended management measures are implemented there are no further concerns.

Nature of Impact: loss of Isolated & low-density Stone Age artefacts from excavations and construction							
	Extent	Duration	Intensity	Status	Probability	Significance	Confidence
Without mitigation	Study area 2	Permanent 5	Medium 6	Negative	Definite 6	HIGH 78	High
Mitigation & Notes:							
<ul style="list-style-type: none"> Because this resource is given Grade IIIB status, it is recommended that it be conserved – in accordance with recommendations made in the initial AIA (Nilssen 2010), this locality has been incorporated into the development layout and will be protected and conserved in perpetuity. A temporary fence should be installed to protect this No-Go area during the construction phase of development. The fence should be erected under the supervision of a suitably informed and qualified archaeologist. 							
With mitigation	Local 1	Permanent 5	Medium 6	Positive	Improbable 2	LOW 24	High

Table 5: Assessment of Impacts on Archaeological Resources – ESA scatter of stone artefacts at waypoint 127

8.1.1 Recommendations: Archaeology

If an **Environmental Management Program** (EMPr) is applicable to the project, then it should make provision for the following (Nilssen, 2022:43,44):

- “Because the Early and Middle Stone Age artefact scatters at waypoints 127 and 34 are considered to be of medium significance at the local level (Grade IIIB), their extents - including 5 m buffers - were mapped (via GPS) and these are No-Go areas that are already incorporated into the revised development layout.
- Waypoint 127 should be enclosed with a temporary boundary fence prior to the construction phase and under an archaeologist's supervision to ensure that this No-Go area is avoided during the construction phase of development.
- Waypoint 34 falls within a conservation area and outside the development footprint, but the installation of a perimeter fence and construction of the service road should be monitored by a suitably qualified and informed archaeologist to avoid or minimize the disturbance or destruction of artefacts.
- If any human remains or significant archaeological materials are exposed during development activities, then the find should be protected from further disturbance and work in the immediate area should be halted and Heritage Western Cape must be notified immediately. These heritage resources are protected by Section 36(3)(a) and Section 35(4) of the NHRA (Act 25 of 1999) respectively and may not be damaged or disturbed in any way without a work plan and permit from the heritage authorities. Any work in mitigation, if deemed appropriate, should be commissioned and completed before construction continues in the affected area and will be at the expense of the developer.
- If an EMPr is not developed for the project, then the above recommendations must be implemented by the applicant or developer.”

8.2 Palaeontology

The following recommendations were transposed from the desktop study undertaken by Dr. John Pether (2021:iii).

8.2.1 Recommendations: Palaeontology

The Fossil Chance Find Protocol should be added to the EMP. If fossils are found by the environmental officer, or other responsible person once excavations have commenced, then they should be rescued, and a palaeontologist called to assess and collect a representative sample.

A practical monitoring and mitigation programme must be implemented during the Construction Phases of the proposed housing development. The following measures apply to all earthworks affecting all four formations listed above:

- The field supervisor/foreman and workers involved in digging excavations must be informed of the need to watch for fossils and buried potential archaeological material. Section 8.2 of the PIA provides measures for inclusion in the Construction Phase EMP and the **Fossil Finds Procedure** included as Appendix 3 of the PIA provides guidelines to be followed in the event of fossil finds.
- It is also recommended that fresh exposures of the marine beds that may be created during construction, such as along the perimeter road, are recorded and sampled by a palaeontologist. To this end the ECO must liaise with the contracted palaeontologist as to the progress of road construction earthworks.
- It is proposed that exposures of the De Hoopvlei Formation Miocene beds and the overlying Wankoe Formation that may be created along the perimeter road are highlighted by explanatory signage. Should the fossil content indeed indicate a mid-Miocene age for the De Hoopvlei Formation this site will be an important, new stratotype locality. This would represent a positive outcome of regional to national consequence."

8.2.2 Summary Fossil Finds Procedure

Should fossil bones and teeth be encountered in the deposits, work must cease at the site and the works foreman and the ECO for the project must be informed immediately. Scattered, unearthed parts/fragments of the find must be retrieved and returned to the main find site which must be protected from further disturbance. Heritage Western Cape must be informed and supplied with contextual information:

- A description of the nature of the find.
- Detailed images of the finds (with scale included).
- Position of the find (GPS) and depth.
- Digital images of the context. i.e. the excavation (with scales).

HWC and an appropriate specialist palaeontologist will assess the information and liaise with the owner, the environmental consultants and the ECO and a suitable response will be established. In the event of a significant fossil find, a professional palaeontologist must be appointed to undertake the excavation of the fossils and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphy and sedimentary geometry of the exposures and must undertake the compilation of the detailed report.

A permit from HWC is required to excavate fossils. The applicant should be the qualified specialist responsible for assessment, collection, and reporting (palaeontologist). Should fossils be found that require rapid collecting, application for a palaeontological permit will immediately be made to HWC. The application requires details of the registered owners of the sites, their permission, and a site-plan map. All fossil finds must be recorded, and the fossils and their contextual information (a report) must be deposited at a SAHRA/HWC-approved institution.

8.3 Impacts from Visual – Spatial perspective

The VIA indicates that the "visual density of the proposed development will only be experienced from the south-west sector and from higher ground. However this view is from 1km but nevertheless the rural view over the valley to the hill is picturesque and this scene will alter in views from this position. The visual intrusion is related to the visibility factor and distance.

The visual intrusion in views from the north-eastern sector is considered moderate within the 1000 m radial and low beyond. This is due to the landform that falls away to the north. The visual intrusion on the quality of view from the south-western section is considered to be moderate because the view is downward onto the site."

8.3.1 Visibility

"The proposed residential development on the site will be visible from the sector north to east. This view will be of the row of houses that will form a line on the horizon. The development will be seen in its entirety from the higher ground in the area to the south-west along the Aalwyndal Road. The development will not be seen from the sector east to south because the landform is lower than the site and there are existing houses that will block views. The views from the west, agricultural land use, will be

of the housing that will be on the western edge of the site. The greatest visibility of the proposed residential development will be experienced from within the 1 km radial in the north-east sector and near the 1 km radial in the south-west sector.

The visibility of the proposed development is considered to be moderate to high, because of the location on top of a plateau."

8.3.2 Visual prominence

"The proposed residential development will have a high visual prominence within the 500 m radial and moderate within the 1000 m radial from the north-eastern sector. The visual prominence will be high in views towards the site from the west within the 1000 m radial."

8.3.3 Sense of place

"The sense of place is affected by the visual prominence of the proposed development in the setting. The rural and natural ambience and character of that setting of the visual units will be changed by the high visual prominence of the residential area from views within the visual unit.

The change in the sense of place of the hill view is considered to be high for those areas that have a view of the plateau and its edge as these views will be converted from a natural to a built scene. The units on the edge have been limited to two storeys and have been set back by 20m to reduce the visual silhouette. However, the area to the east is already built up and abuts the site. This existing urban image already detracts from the rural and natural image of the site."

8.3.4 Landform change

"The gently sloping to flat areas of the plateau will not require significant cuts into the landform for both roads and buildings. However, for those roads and units on the steeper sloping areas at the head of the valleys that drain eastward some earthworks will be required that will require large cut and fill areas for roads and to give access to erven.

The exposure of the cut and fill sections will have limited visibility in views from the east. This visibility of earthworks will endure, particularly during the construction phase and will include the trenching for underground services. This is rated as low-medium."

8.3.5 Phasing of the development

"The three development phases are construction, operation, and decommissioning. The construction phase will cause significant visual change to the site as a result of the necessary earthworks for roads and the trenching for water, sewerage, and electrical services. The individual development of erven will also result in localised visual change due to the necessary landform change to accommodate the new structures. This development phase is rated as having a low visual.

The visual intrusion of dust during earthworks and the visual nuisance of construction vehicles up and down the access roads will be significant, but of short duration, 6 months to a year. This phase will become less significantly visually intrusive in that setting as the rehabilitation measures take full effect.

The operational phase is taken to be the completed development. The visual image of the development will be stable and new vegetation planted will soften the form of the residential units particularly those that form the horizon on the plateau edge.

The decommissioning phase of the whole development area is if the development is to be demolished. This will form part of another study at that time for any new or alternative development."

8.3.6 Nocturnal footprint

"The proposed development will add to the area of light in that setting. While the view of the development on the edge of the plateau will result in a night horizon that is lit, the view obliquely down from the higher ground to the south-west and south-east will include two large lit areas linked by a row of lights along the road. This relatively intense grouping of lights along the roads and from the houses will change the night scene of that area in views towards the site.

The lights of the proposed development will extend the illumination of Hartenbos Heuwels suburb to include the entire hill. This is rated as moderate given the existing and lit surrounding area. The view of this hill from the western and southwestern sector will change from dark to highly illuminated. This is rated as high because of the view across the proposed development. This will alter the night-time sense of place from a rural ambience to an urban ambience.

This new condition is not significant in views of the site from the north-eastern, eastern and south-eastern sector. However it will have an effect on the night-time ambience of views from the southwest and western sector. The visual impact of the night scene is considered to be moderate to low."

8.3.7 No Go Alternative

"The site is currently undeveloped and is situated on the crest of the Hartenbos Heuwels Hill. Any development on top of the hill will be highly visible from the surrounding areas. As a result of this potential impact the building structures on the periphery have been limited to two storeys and set back by 20m which has reduced their visibility.

However, should the 'No-Go' alternative (i.e., the status quo with no development) be maintained the integrity of the hill has already been compromised visually by the current development just below the site especially on the southeast to southwest which is already visually urban in nature. There already exists streetlights on the hill that are highly visible at night. The proposed development would only add to the existing urban quality rather than altering an undisturbed Greenfields area."

8.3.8 Summary of Visual Impacts

Impact	Nature	Extent	Duration	Intensity	Reversibility	Impact on Irreplaceable Resources	Consequence	Probability	Significance	Confidence
Impact 1: The visual intrusion of the development on the setting in the context of the existing surrounding land use										
Impact Description: Visual intrusion of the proposed development due to its position on the top of a flat-topped hill that is a prominent in views toward the site.										
Without Mitigation	Negative	Medium	High	Medium	Medium	High	Medium	High	Medium	High
Mitigation Description: Keep housing out of areas of steep slopes, drainage lines and away 20m from the edge of the top of slopes. Building height should be limited to 2 storeys with pitched roof. On the edges ensure that site lighting is directed downward and no flood lights. No sodium or mercury vapour light and light colour to be white incandescent or fluorescent.										
With Mitigation	Negative	Medium	High	Low	Medium	Medium	Medium	High	Medium	High
Cumulative Impact: More housing will be developed in the area on rising landforms to the south as this area is under development. The addition of the proposed development lies within the Urban Edge and is zoned for this use therefore the cumulative effect on the existing setting will not have been in conflict with the existing planned development for Hartenbos. Significance: Medium										
Impact 2: The prominence of the buildings in the landscape setting										
Impact Description: The buildings on the site's edges can, as a result of their location on the top edge of the plateau's rim, be highly visually prominent.										
Without Mitigation	Negative	Medium	High	High	High	Medium	High	Medium	High	High
Mitigation Description: Building maximum height is to be 2 stories excluding a pitched roof on the edges. The building should not be closer than 20m to the start of the steep of the steep downslope. Set the building back from the edge of the down slope by 20m										
With Mitigation	Negative	Local	Medium	Low	Medium	Low	Low	Medium	Low	High
Cumulative Impact: No significant cumulative impact										
Impact 3: Change in Sense of Place										
Impact Description: The natural cover and form of the hill in views toward the proposed development on the hill will change the Sense of Place that exists for the surrounding houses and the setting of the suburb that has the natural landform as a background to views from close by and afar.										
Without Mitigation	Negative	Medium	High	Medium	Medium	Medium	Medium	Medium	Medium	High
Mitigation Description: Plant shrubs and small trees just down slope of the top to break the hard lines of the buildings on the top edge of the plateau. For internal softening of the building forms suitable trees and shrubs should be planted within the private open spaces as well as around the edge of the public open space.										
With Mitigation	Negative	Low	High	Low	Medium	Low	Low	Medium	Low	High
Cumulative Impact: No cumulative impact. Significance: N/a										
Impact 4: Landform change										
Impact Description: The earthworks for the roads, access to even and building platforms can be extensive and severe.										

Impact	Nature	Extent	Duration	Intensity	Reversibility	Impact on Irreplaceable Resources	Consequence	Probability	Significance	Confidence
Road on steeper sloping landforms will require larger volumes of earth to be moved. This is a visual impact on the internal area and on the edges of the plateau in particular.										
Without Mitigation	Negative	Low	High	Medium	Medium	Medium	Medium	Medium	Medium	High
Mitigation Description: Keep development and roads off slopes that are steeper than 1:5. Implement rehabilitation plans.										
With Mitigation	Negative	Low	High	Low	High	Low	Low	Medium	Low	High
Cumulative Impact: The cumulative impact could be more cut and fill slopes that will erode and deposit silt into drains and drainage ways. This can have long term implications of pipe blockage, gully erosion etc. Maintenance of the consequences is costly.										
Impact 5: Night scene										
Impact Description: The alteration of the night view of the hill lit by house and streetlights accentuates the new development and eliminates the ambience of the dark landform rising above the surrounding lit residential suburbs.										
Without Mitigation	Negative	Medium	High	Medium	Medium	Medium	Medium	Medium	Medium	High
Mitigation Description: The light source must be white, directed downward, and not be seen directly. No up lighting is to be allowed nor flood lighting of structures or buildings.										
With Mitigation	Negative	Low	High	Low	Medium	Low	Low	Medium	Medium	High
Cumulative Impact: Medium										

Table 6: Assessment of Visual Impacts (BPK, 2022)

8.3.9 Recommendations: VIA Mitigation measures

The VIA recommends that the following visual mitigations be implemented so as to reduce the identified visual impacts associated with the proposed development:

1.) Buildings on Slopes
<ul style="list-style-type: none"> Where a building is supported on columns on the downslope of the erf, the area underneath will need to be stabilised with a stone pitching. Low shrubs should be planted on the edge of the area to afford some screening of the void. Erven on the top edge of the steep slopes e.g., the drainage line and the plateau, should accommodate single storey buildings only. The row behind can accommodate double storey units. Refer to proposed erven below. The design of buildings on steeper slopes should be shown in sections in the Architectural Guidelines. This will ensure that only one storey and not two storey structures are constructed above the road level on the down-slope side of the road. All cut and fill soil surfaces should be adequately protected from erosion either by vegetation or a combination of block retaining walls and vegetation or rock cladding.
2.) Colours for Roofs and Buildings
<ul style="list-style-type: none"> Avoid bright reflective or contrasting colours for roofs and buildings. Tones and tints of selected complementary colours that fit the setting and vegetation should be considered. Subdued and complimentary natural shades and tints blend easily into a landscape setting.
3.) Roads and Pathways
<ul style="list-style-type: none"> Roads and pathways should be paved with a durable brick of brown/sand colour. The light brown colour is similar to the exposed earth in the area. The light colour will also not generate high surface temperatures as an asphalt or dark surface would. The cut and fill slopes should not be steeper than 1:2.5 vertical to horizontal as this allows vegetation to establish more easily. This will reduce erosion of the soil.
4.) Lighting
<ul style="list-style-type: none"> Avoid bright reflective or contrasting colours for roofs and buildings. External lights will increase the visual impact of the project at night therefore attention should be given to their selection for the specific function. All lighting therefore should be carefully considered with regard to the extent of illumination, the intensity and colour of lights and the luminaire. It is recommended that lighting is designed by a lighting engineer in collaboration with the landscape architect for the project. The aspects of the lighting solution should include the following: <ul style="list-style-type: none"> - Light fittings should have shields to eliminate sight of the light source.

- Down lighting of areas is preferred to up lighting.
- Any perimeter lights are to be directed downwards and inwards to the development.
- Emitted light colour should be a softer light than sodium (yellow) or mercury halide (blue-white). The light colour should also be chosen with knowledge of what colour will attract insects. It is important that a colour type and spread of light will not cause insects to be attracted to it and in so doing deplete the insect diversity of the region. For this purpose, an entomologist familiar with the effect of light frequencies on insects should be consulted.
- The use of flood lights to illuminate structures, large areas or features should not be considered. Rather incorporate concealed lights to shine downwards. Darker areas on the building elevations will provide a less visually noticeable structure.
- No light fittings should spill light upwards or be directed upwards from a distance towards the area or building to be illuminated.
- The lighting plan should strive to maximise the light energy use. This should include a hierarchy of light function. The function will determine the best light type to use. Some may be switched on only when needed by motion sensors.
- Security lights should not flood the area with light continuously but should be activated by a motion sensor.
- It is now accepted practice that lighting of new projects should be subdued and energy efficient.

Table 7: Proposed mitigation measures: VIA

8.4 Cumulative impacts

The AIA identified two archaeological occurrences/ sites considered of moderate local cultural significance (refer to Section 6.2 of this report) on Erf 3122, Hartenbos. Both of these were incorporated in the proposed development layout and will not be disturbed. The property has previously been transformed through agriculture/ cultivation and the proposal will therefore have negligible additional cumulative impacts on archaeological resources. The Fossil Chance Find Protocol will be added to the EMPr should the development be approved and thus put in place a mechanism to avoid cumulative impacts on possible palaeontological resources.

According to the VIA the proposal would be visible within a 1km radius from adjoining areas to the northeast as well as the southwest – mostly by ways of future housing located along the edge of the plateau upon which the property is located. Given the pattern of existing and approved urban development within the direct proximity of the property much of these visual impacts are however likely to be viewed within the context of said urban development. The proposed development would certainly have a cumulative impact on remnants of the rural cultural landscape context remaining to the west.

However, taken in conjunction with long-standing designation of Erf 3122, Hartenbos as being within the urban edge and having been earmarked for urban expansion as well as the low overall quality and moderate to low (contextual) significance rating of the cultural landscape, the proposal is supported subject to the conditions outlined in Section 10 below.

8.5 Socio-economic development

Section 38(3)(d) of the NHRA requires an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefit to be derived from the development. The proposal is likely to create limited temporary and possibly some permanent employment opportunities though this should be viewed within the context of the findings following from this HIA essentially concluding that the proposal is unlikely to negatively impact any significant heritage resources on Erf 3122, Hartenbos or its direct proximity.

9. PUBLIC PARTICIPATION PROCESS

The public participation process was conducted in accordance with requirements outlined in the HWC Public Consultation Guidelines, June 2019. The study area is situated within the jurisdiction of Mossel Bay Municipality and within an area covered by two local conservation bodies registered with HWC in terms of Section 25 of the National Heritage Resources Act, 1999 (Act 25 of 1999).

9.1 Scope of public participation

The public participation process extended over a period of more than 30 days (14th October 2022 – 16th November 2022) and incorporated the following components (proof attached as part of **Annexure 8**):

- Formal notice published in local press (Mossel Bay Advertiser, 14th October 2022)
- Draft HIA and Annexures circulated to the local planning authority (Mossel Bay Municipality);
- Draft HIA and Annexures circulated to the local conservation bodies (Mossel Bay Heritage and the Simon van der Stel Foundation: Southern Cape);
- A3 laminated public notice installed on the site for the duration of the PPP.

Contact details of interested and affected parties are listed in the table below.

Organisation / Department	Contact Person	E-mail
Mossel Bay Municipality (Planning & Building Control)	Mr. Raimo Fernandez	rfernandez@mosselbay.gov.za
Mossel Bay Heritage	Ms. Carina Wiggill	heritage@visitmosselbay.co.za
Simon v/d Stel Foundation (Southern Cape)	Dr. Natie de Swardt	natiedes@telkomsa.net

9.2 Comments and Responses

Comments received from Mossel Bay Municipality as well as the local conservation body, Mossel Bay Heritage, are quoted verbatim in the table below as are our responses to said comments. We received no other comments (written and/or verbal) up until the date of this report.

Mossel Bay Municipality Town Planning (email dated 08/11/2022):		
	Comment	Response
1.	The Town Planning Department has no Heritage related comments. The subject property is located within the Urban Edge and is in line with the Spatial Development Framework and Environmental Management Framework, 2022. Hence, there are no further Town Planning comments at this stage.	Noted with thanks.
Mossel Bay Heritage (letter dated 12/11/2022):		
	Comment	Response
1.	The coverage of social history, landscape and palaeontology sections were found extensive, but the lack of any comment on the flora and microfauna worrying, especially as there were casual comments such as the presence of a 'unique type of fynbos' and an 'endangered special of butterfly'.	The Draft Integrated HIA dealt with all heritage-related aspects likely to be impacted through the proposed development while the NEMA process currently also underway deals other aspects that do not relate to heritage/ falls within the mandate of the NHRA.
2.	The report refers to the archaeological study as an annexure although it was not attached. A description of the method used and a map showing the area investigated archaeologically should have been included in any case along with photos of the artefacts from both sites deemed of interest.	The very comprehensive Archaeological Impact Assessment (Nilssen, 2022) as well as all other heritage-related specialist reports referred to in the Draft Integrated HIA were in fact made available to stakeholders during the course of the public consultation period. Proof of the availability of the above are evident from screenshots of the Dropbox folders, as made available (attached as part of Annexure 8 to this report)
3.	It is also suggested that all construction excavations should be monitored by someone with the necessary skills to recognise objects and features as development elsewhere in Mossel Bay has often found ancient sites buried with or little evidence at the surface. We know nothing about the Early Stone Age of this area and our understanding of the Middle Stone Age is based solely on cave sites.	The Archaeological Impact Assessment (AIA) outlines how sites considered of archaeological sensitivity were identified, avoided, and incorporated into the site development plan put forward as part of this application. While the AIA does not recommend monitoring during construction, the standard HWC conditions pertaining to "chance finds" must be followed and will be included in the Environmental Management Plan, should the development be permitted.
4.	The Draft Report and prepared by yourselves, is commended on, and the finding and recommendations are supported for adoption by Heritage Western Cape.	Noted with thanks.

10. RECOMMENDATIONS

This report satisfies the requirements of Section 38(3) of the NHRA Act 25 of 1999 for a Heritage Impact Assessment, namely:


- 1) Identification and mapping of all heritage resources in the area affected;
- 2) 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;
- 3) Results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources.

It is recommended that HWC endorse the findings of this HIA report including the following Conditions of Approval, to be assimilated into future outcome(s) of the NEMA process currently underway:

No	Heritage Indicators/ Conditions of Approval
10.1	Conditions pertaining to Archaeology, as outlined in Section 8.1.1 of this report, must be adhered to.
10.2	Conditions pertaining to Palaeontology, as outlined in Section 8.2.1 of this report, must be adhered to.
10.3	Conditions pertaining to Visual – Spatial issues, as outlined in Section 8.3.9 of this report, must be adhered to.
10.4	If any human remains or significant archaeological materials are exposed during development activities, then the find should be protected from further disturbance and work in the immediate area should be halted and Heritage Western Cape must be notified immediately. These heritage resources are protected by Section 36(3)(a) and Section 35(4) of the NHRA (Act 25 of 1999) respectively and may not be damaged or disturbed in any way without a permit from the heritage authorities. Any work in mitigation, if deemed appropriate, should be commissioned and completed before construction continues in the affected area and will be at the

	expense of the developer. The above recommendations should be included in the Environmental Management Program (EMPr) for the proposed residential development.
10.5	The HWC Chance Fossil Finds Protocol to be implemented and included in the Environmental Management Programme Report.

PERCEPTION Planning
23rd November 2022



SE DE KOCK

Hons (TRP) EIA Mgmt (IRL) PrPln PHP

PROJECT TEAM AND STATEMENT OF INDEPENDENCE

With relation to the authors' appointment as an independent specialist responsible for the compilation of an Integrated Heritage Impact Assessment in terms of Section 38(3) of the National Heritage Resources Act, 1999 (Act 25 of 1999) for this project, it is hereby declared that the undersigned:

- Acts as an independent specialist in this application;
- Regards the information contained in this report as it relates to my specialist input/study to be true and correct;
- Have and will not have any vested interest in the proposed activity proceeding;
- Does not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act;
- Have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act;
- Is fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2014 (specifically in terms of regulation 13 of GN No. R. 982) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- Is aware that a false declaration is an offence in terms of regulation 48 of GN No. R. 982.

It is certified that SE de Kock has 25 years' professional experience as urban planner (3 years of which were abroad) and 15 years' experience as professional heritage practitioner. He is professionally registered/ affiliated as follows:

- Professional Heritage Practitioner (Association for Professional Heritage Practitioners)
- Professional Planner (South African Council for Planners, South African Planning Institute)

Dr Peter Nilssen holds a PhD in Archaeology (UCT, 2000); is a professional member of the Association of Southern African Professional Archaeologists (ASAPA) since 1989, including the Cultural Resource Management section of the same association (ASAPA professional member # 097). He is an accredited Principal Investigator for archaeozoology (specialist analysis), coastal & shell midden archaeology and Stone Age archaeology; Field Director for Colonial Period; Field Supervisor for Iron Age and Rock Art and is an Honorary Research Associate of Iziko – South African Museum, Cape Town.

Dr John Pether holds a PhD in Palaeontology and is an independent Consultant/Researcher recognized as an authority with 37 years' experience in the field of coastal-plain and continental-shelf palaeoenvironments, fossils and stratigraphy, mainly involving the West Coast/Shelf of southern Africa. He is a member of the South African Council of Natural Scientific Professions, Earth Science (Reg. No. 400094/95), Geological Society of South Africa, Palaeontological Society of Southern Africa, Southern African Society for Quaternary Research and Association of Professional Heritage Practitioners (APHP), Western Cape. Accredited (Member No. 48).

Contributing heritage specialists' Declarations of Independence are contained in their respective reports.

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